Clemson University

UNDERGRADUATE ANNOUNCEMENTS

2016-2017

2015-2016 Record
One Hundred Twenty Second Year
Volume 91
NOTIFICATION OF RIGHTS UNDER THE FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA)

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. These rights include:

1. The right to inspect and review the student’s education records within 45 days of the day the University receives a request for access.

A student should submit to the registrar, dean, head of the academic department, or other appropriate official, a written request that identifies the record(s) the student wishes to inspect. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the University official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

(2) The right to request the amendment of the student’s education records that the student believes are inaccurate, misleading, or otherwise in violation of the student’s privacy rights under FERPA.

A student who wishes to ask the University to amend a record should write the University official responsible for the record, clearly identify the part of the record the student wants changed, and specify why it should be changed.

If the University decides not to amend the record as requested, the University will notify the student in writing of the decision and the student’s right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

Note: The challenge of a student under this paragraph is limited to information which relates directly to the student and which the student asserts is inaccurate or misleading. With regard to a student’s grade, this right does not permit the student to contest a grade on the grounds that a higher grade is deserved, but only to show that the grade has been inaccurately recorded.

(3) The right to provide written consent before the University discloses personally identifiable information from the student’s education records, except to the extent that FERPA authorizes disclosure without consent.

The University discloses education records without a student’s prior written consent under the FERPA exception for disclosure to school officials with legitimate educational interests. A school official is a person employed by the University in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); contractors, consultants, volunteers and other outside parties to whom the institution has outsourced institutional services or functions instead of using University employees or officials (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for the University.

Upon request, the University also discloses education records without consent to officials of another school in which a student seeks or intends to enroll.

(4) The right to refuse to permit the designation of any or all of the following categories of personally-identifiable information as directory information, which is not subject to the above restrictions on disclosure: student’s full name, permanent address and telephone number, local address and telephone number, e-mail address, Clemson identification number (the number that begins with a C on the student ID card and is also referred to as a student's XID), username, state of residence, date and place of birth, marital status, academic class, class schedule and class roster, name of advisor, major field of study, including the college, division, department or program in which the student is enrolled, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance and graduation, degrees and honors and awards received including selection to a dean’s list or honorary organization and the grade point average of students selected, and the most previous educational institution attended. Photographic, video, or electronic images of students taken and maintained by the University are also considered directory information.

Directory information may be disclosed by the University for any purpose, at its discretion. Any student wishing to exercise his/her right to refuse to permit the designation of any or all of the above categories as directory information must give written notification to the Registration Services Office (E-206 Martin Hall) by the last day to register for the enrollment period concerned as published in the Clemson University calendar.

(5) The right to file a complaint with the U.S. Department of Education concerning alleged failures by the University to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue, SW, Washington, DC 20202-5901.
If the University determines that there is an articulable and significant threat to the health or safety of a student or other individuals, FERPA allows disclosure of information from education records to appropriate parties whose knowledge of the information is necessary to protect the health and safety of the student or other individuals. ¹

- “Articulable and significant threat” means that if a school official can explain why, based on all the information then available, he or she reasonably believes that a student poses a significant threat, such as a threat of substantial bodily harm, to any person, including the student, the University may disclose education records to any person whose knowledge of information from those records will assist in protecting a person from that threat.
- “Appropriate parties” include parents of the student; parents may be notified when there is a health or safety emergency involving their son or daughter.

In making a determination to disclose information, the University may take into account the totality of the circumstances pertaining to a threat to the safety or health of the student or other individuals. An emergency can be related to the threat of an actual, impending, or imminent emergency, such as a terrorist attack, a natural disaster, a campus shooting, or the outbreak of an epidemic such as e-coli. An emergency can also be a situation in which a student gives sufficient, cumulative warning signs that lead the school official to believe the student may harm himself at any moment.

The FERPA recordkeeping requirements require the University to record 1) the articulable and significant threat that formed the basis for the disclosure and 2) the parties to whom the information was disclosed. This record will demonstrate what circumstances led to the determination that a health or safety emergency existed and how the disclosure was justified. The record must be made within a reasonable period of time after the disclosure was made. The record must be maintained with the education records of the student for as long as the student’s education records are maintained. After disclosing information under the FERPA health and safety exception, employee(s) must document the following information and forward the records to the dean of students.

- Student’s name
- Name(s) of person(s) to whom the student posed a significant health or safety threat
- Description of the significant threat to health or safety
- Description of the circumstances and the information available (including relevant dates)
- Description of all the information that was disclosed
- Name(s) of person(s) to whom the information was disclosed (person(s) whose knowledge of the information would have assisted in protecting a person or persons from the threat; or student’s parents)
- Date(s) disclosure was made
- Name(s) of CU employee(s) who determined a health and safety emergency existed
- Name(s) of CU employee(s) who disclosed the information
- Date the record of disclosure was made

¹Note: The FERPA health and safety requirements do not apply to disclosures to a Clemson University employee with a legitimate educational interest in the information. Information from education records may be disclosed to University employee if the information is necessary for that employee to perform work appropriate to his or her position.
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# ACADEMIC CALENDAR 2016-2017

## Fall Semester 2016
- **Aug 15**: New Student Convocation
- **Aug 15-16, M-Tu**: Late enrollment
- **Aug 16, Tu**: University Convocation
- **Aug 17, W**: Classes begin
- **Aug 23, Tu**: Last day to register or add a class or declare Audit
- **Aug 30, Tu**: Last day to drop a class or withdraw from the University without a W grade
- **Sep 6, Tu**: Last day to apply for December graduation
- **Oct 7, F**: Last day for instructors to issue midterm evaluations
- **Oct 21, F**: Last day to drop a class or withdraw from the University without final grades
- **Nov 7-8, M-Tu**: Fall break
- **Nov 9, W**: Registration for spring and summer terms begins
- **Nov 23-25 W-F**: Thanksgiving holidays
- **Dec 1-2, Th-F**: Last day to apply for December graduation
- **Dec 5-9, M-F**: Examinations

## Spring Semester 2017
- **Jan 9, M**: Orientation
- **Jan 9-10, M-Tu**: Late enrollment
- **Jan 11, W**: Classes begin
- **Jan 16, M**: Martin Luther King Jr. holiday
- **Jan 18, W**: Last day to register or add a class or declare Audit
- **Jan 25, W**: Last day to drop a class or withdraw from the University without a W grade
- **Feb 1, W**: Last day to apply for May commencement
- **Mar 3, F**: Last day for instructors to issue midterm evaluations
- **Mar 17, F**: Last day to drop a class or withdraw from the University without final grades
- **Mar 20-24, M-F**: Spring break
- **Apr 3, M**: Registration for fall term begins
- **Apr 27-28, Th-F**: Classes meet; exams permitted in labs only
- **May 1-5, M-F**: Examinations
- **May 9, Tu**: 9:00 A.M.—Deadline to submit candidate grades
- **May 10, W**: 9:00 A.M.—Deadline to submit other grades
- **May 11, Th**: Candidates for graduation may access grades
- **May 12, F**: Commencement

## Summer 2017
- **May 16, Tu**: Late enrollment
- **May 17, W**: Classes begin
- **May 18, Th**: Last day to register or add a class or declare Audit
- **May 24, W**: Last day to drop a class or withdraw from the University without a W grade
- **Jun 6, Tu**: Last day to apply for August graduation
- **Jun 19-23, M-F**: Long summer break
- **Jul 4, Tu**: July 4th holiday
- **Jul 5, W**: Last day for instructors to issue midterm evaluations
- **Jul 11, Tu**: Last day to drop a class or withdraw from the University without final grades
- **Aug 2, W**: Last day of classes
- **Aug 3, Th**: Study day
- **Aug 4&7, F&M**: Examinations
- **Aug 8, Tu**: 2:00 P.M.—Deadline to submit candidate grades
- **Aug 9, W**: 9:00 A.M.—Deadline to submit other grades
- **Aug 10, Th**: Candidates for graduation may access grades
- **Aug 11, F**: Graduation

**NOTE:** Dates on this calendar were accurate at the time of printing. Dates, however, may change as conditions warrant. Current information is available at [www.registrar.clemson.edu/html/Acad_Cal.htm](http://www.registrar.clemson.edu/html/Acad_Cal.htm). Dates for half-terms and minimesters are posted on the website as well.
ADMINISTRATION

UNIVERSITY GOVERNANCE AND ADMINISTRATION

The University is governed by a board of 13 members, six selected by the state Legislature and seven self-perpetuating life members, in accord with the will of Thomas Green Clemson. The Board of Trustees is primarily responsible for adopting the long-range objectives of the University and the basic policies for achieving them; providing policy instruction for long-range planning; adopting the statutes of the University; electing the president of the University; employing the secretary of the board; maintaining ownership of University assets; and overseeing the evaluation of the University.

The president is the chief executive officer of the University, providing leadership to all phases of University activities, and directing the operations of all units of the University, carrying out major University public relations functions, evaluating the results of University plans, and appointing personnel with the approval of the president. The day-to-day operations of the University are administered by the president and executive officers for advancement, public service and agriculture, student affairs, and research and economic development.

The provost and vice president for academic affairs is the chief academic officer of the University. The provost is responsible directly to the president for all academic matters and has administrative jurisdiction over teaching and computing services. Vice provosts assist in administering and performing duties in coordinating graduate and undergraduate curricula; supervising computer information services, the libraries, scholarship and award programs; and other duties assigned by the provost.

Academic deans are the chief administrative officers of their individual colleges and report directly to the provost. They provide leadership in formulating and carrying out educational policy; review and make recommendations on personnel matters; and carry out and administer the academic and financial affairs of their colleges.

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Sam L. Erwin, Greenville
Fred Gilmer III, Greenville
Austin E. Gore, Aiken
Buddy Gore, Murrells Inlet
J. Tim Hance, Columbia
Craig S. Heath, Aiken
Elizabeth T. Hendrix, Greenville
Emory G. Hendrix Jr., Greenville
Annie W. Hunter, Greenwood
Danny F. Kassis, Charleston
Rick LaForge, St. Pete Beach, FL
Tracy Diane Lamb, Greenville
Tom B. LaRoche, Johns Island
Ronnie D. Lee, Aiken
Glenn S. McCarter, Huntersville, NC
L. Scott Melzer, Greenville
Tom F. Moran, Myrtle Beach
David L. Morrow, Myrtle Beach
Gregg F. Morton, Clemson
Bob M. Muldrow Jr., Myrtle Beach
Steve D. Odum, Columbia
James H. Owen Jr., Clover
Russell P. Parks, Easley
Joe M. Pazdan II, Greenville
M.J. Pizzella, Pinehurst, NC
Jason Puhlasky, Columbia
F. Rick Redden III, Charleston
Tim J. Reed, Greenville
Thomas Rhodes, Columbia
Missy B. Schumpert, Prosperity
Garrett Scott, Spartanburg
Lynette Lewis Seaton, Southlake, TX
Bob N. Shepard, Charleston
Adrienne Stenkowski, Atlanta, GA
Greg C. Smith, Six Mile
Mike J. Spitzmiller, Greenville
Darla Steele, Ridge Springs
Ted J. Swann, Clemson
Robbie E. Templeton Jr., Greenwood
Frank A. Townsend III, Aiken
Roger J. Troutman, Rock Hill
Steve K. Watt, Kennesaw, GA
David W. Wells, Columbia
John A. Wells Jr., Columbia
Robin B. Welsh, Columbia
Mottie Derrick Wieters, Charleston
Maggie K. Worsham, Clemson

2016-2017 Undergraduate Announcements
Clemson University is a selective, public, research university in a college-town setting. Clemson's desire is to attract a capable, dedicated and diverse student body of approximately 20,000 undergraduate and graduate students, with priority to students from South Carolina. The University offers a wide array of high quality baccalaureate programs built around a distinctive core curriculum. Graduate, continuing education, doctoral and research programs contribute to the state of knowledge and to the economic future of the state, nation and world. The University provides bachelor’s, master’s and doctoral degrees in more than 100 majors.

Clemson combines the benefits of a major research university with a strong commitment to undergraduate teaching and individual student success. Students, both undergraduate and graduate, have opportunities for unique educational experiences throughout South Carolina, as well as in other countries. Experiential learning is a valued component of the Clemson experience, and students are encouraged through Creative Inquiry, internships, and study abroad, to apply their learning beyond the classroom. Electronic delivery of courses and degree programs also provide a variety of learning opportunities. Clemson’s extended campus includes teaching sites in Greenville and Charleston, five research campuses, and five public service centers throughout the state of South Carolina, as well as four international sites.

The University is committed to exemplary teaching, research and public service in the context of general education, student engagement and development, and continuing education. In all areas, the goal is to attract a capable, dedicated and diverse student body; to provide bachelor’s, master’s and doctoral degrees in more than 100 majors; to offer opportunities for unique educational experiences throughout South Carolina, as well as in other countries; and to be responsible for completing all requirements within prescribed deadlines and time limits.

VISION STATEMENT
Clemson University will be one of the nation’s top-20 public universities.

MISSION STATEMENT
Clemson University was established to fulfill our founder’s vision of a “high seminary of learning” to develop “the material resources of the State” for the people of South Carolina. Nurtured by an abiding land grant commitment, Clemson has emerged as a research university with a global vision. Our primary purpose is educating undergraduate and graduate students to think deeply about and engage in social, scientific, economic, and professional challenges of our times. The foundation of this mission is the generation, preservation, communication, and application of knowledge. The University also is committed to the personal growth of the individual and promotes an environment of good decision making, healthy and ethical lifestyles, and tolerance and respect for others. Our distinctive character is shaped by a legacy of service, collaboration, and fellowship forged from and renewed by the spirit of Thomas Green Clemson’s covenant.

When he died on April 6, 1888, a series of events began that marked the start of a new era in higher education in the state of South Carolina, especially in the study of science, agriculture, and engineering. Mr. Clemson’s passing set the stage for the founding of the university that bears his name—the beginning of a true “people’s university,” which opened the doors of higher education to all South Carolinians, rich and poor alike. In his will, which he signed November 6, 1886, Mr. Clemson bequeathed the Fort Hill plantation and a considerable sum from his personal assets for the establishment of an educational institution of the kind he envisioned. He left a cash endowment of approximately $80,000, as well as the 814-acre Fort Hill estate, to South Carolina for such a college. The biggest obstacle in the creation of an agricultural college—the initial expense—was removed by Mr. Clemson’s bequest.

On November 27, 1889, Governor John Richardson signed the bill accepting Thomas Clemson’s gift. Soon after, a measure was introduced to establish the Clemson Agricultural College, with its trustees becoming custodians of Morrill Act and Hatch Act funds made available for agricultural education and research by federal legislative acts. The founding of Clemson Agricultural College supplanted the South Carolina College of Agriculture and Mechanics in Columbia, which had been designated in 1880.

Thomas Green Clemson came to South Carolina when he married Anna Maria Calhoun, daughter of South Carolina’s famous statesman John C. Calhoun. Born in Philadelphia, Mr. Clemson was educated at schools both in the United States and France, where he attended lectures at the Royal School of Mines, studied with prominent scientists in the private laboratories of the Sorbonne Royal College of France, and received his diploma as an assayer from the Royal Mint in Paris. Mr. Clemson, then in his mid-20s, returned to America greatly influenced by his European studies. He became a great advocate of the natural sciences, achieving a considerable reputation as a mining engineer and a theorist in agricultural chemistry. He also was a gifted writer whose articles were published in the leading scientific journals of his day, an artist and a diplomat who represented the U.S. government as chargé d’affaires to Belgium for almost seven years.

Mr. Clemson had a lifelong interest in farming and agricultural affairs. He served as the nation’s first superintendent of agricultural affairs (predecessor to the present secretary of agriculture position) and actively promoted the establishment and endowment of the Maryland Agricultural College in the 1850s. Though remembered today for these accomplishments, Thomas Clemson made his greatest historical contribution when, as a champion of formal scientific education, his life became intertwined with the destiny of educational and economic development in South Carolina. Although he never lived to see it, his dedicated efforts culminated in the founding of Clemson Agricultural College.

At the time of his death, Mr. Clemson was living at the Fort Hill homestead, which today is a national historic landmark and provides a historic centerpiece for the Clemson University campus. He had inherited the house and plantation lands upon the death of Mrs. Clemson in 1875.
Clemson College formally opened in July 1893, with an enrollment of 446. From the beginning, the college was an all-male military school. It remained this way until 1955, when the change was made to “civilian” status for students and Clemson became a coeducational institution. In 1964, the college was renamed Clemson University as the state legislature and the state courts formally recognized the school’s expanded academic offerings. Ph.D. granting status and research pursuits. On November 27, 1989, the University observed the 100th anniversary of the state’s acceptance of the terms and conditions of Mr. Clemson’s bequest.

The enrollment of Clemson has grown from 446 students at the opening of the University to 22,689 for the first semester 2015-2016. Since the opening of the University, 130,227 students have been awarded bachelor’s degrees. During this same period, 426 associate degrees, 36,579 master’s, 506 education specialist, and 4,595 doctor’s degrees have been awarded, a total of 172,333 degrees.

Today, more than a century later, the University is much more than its founder ever could have imagined. With its diverse learning and research facilities, the University provides an educational opportunity not only for the people of the state, as Mr. Clemson dreamed, but for thousands of young men and women throughout the country and the world.

THE CAMPUS

The 1,400-acre Clemson University campus is sited on the former homestead of statesman John C. Calhoun. Nestled in the foothills of the Blue Ridge Mountains and adjacent to Lake Hartwell, the campus commands an excellent view of the mountains to the north and west, some of which attain an altitude of over 5,000 feet above mean sea level.

The Norfolk and Southern Railway and U.S. highways 76 and 123 provide easy access to the city of Clemson and to the University. Oconee County Airport is four miles from the library. Both Atlanta and Charlotte are two hours driving time away.

Campus architecture is a pleasing blend of traditional and modern facilities enhanced by a beautiful landscape of towering trees, grassy expanses, and flowering plants. Academic, administrative, and student service buildings on campus represent an insured value of $627 million. Clemson University’s real estate holdings include more than 32,000 acres of forestry and agricultural lands throughout the state, the majority of which are dedicated to Clemson’s research and public-service missions.

Fort Hill, the former home of John C. Calhoun inherited by Thomas Clemson and the Hanover House are both listed on the National Register of Historic Places and are open to the public. The campus also has two recognized historic districts.

The Strom Thurmond Institute houses the institute offices, Senator Thurmond’s papers and memorabilia, and the special collections of the Cooper Library, including the papers of John C. Calhoun and James Byrnes, two of the most important South Carolinians since 1787. The institute is a part of an instructional and public-service district that includes the Brooks Center for the Performing Arts and the Madren Center for Continuing Education. Clemson offers limited graduate and undergraduate coursework in Greenville, SC. Also located in Greenville is the Clemson University International Center for Automotive Research (CU-ICAR), a 250-acre advanced-technology research campus where university, industry and government organizations collaborate.

ACREDITATION

Clemson University is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award bachelor’s, master’s, education specialist, and doctoral degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4000 for questions about the accreditation of Clemson University.

Curricula are accredited by the Association to Advance Collegiate Schools of Business (AACSB), Accrediting Board for Engineering and Technology (ABET), American Council for Construction Education, Accreditation Council for Education in Nutrition and Dietetics (ACEND), American Society of Landscape Architects, Commission on Accreditation of Allied Health Education Programs (CAAHEP), Commission on Collegiate Nursing Education (CCNE), Council for Accreditation of Counseling and Related Education Programs (CACREP), Council for the Accreditation of Educator Preparation (CAEP, formerly NCATE), National Architectural Accrediting Board (NAAB), National Association of Schools of Art and Design, Council for the Accreditation of Architecture Programs (NAAP), Planning Accreditation Board, Society of American Foresters. Documentation of accreditation is available in the college deans’ offices.

ADVISING POLICY

Academic advising is an ongoing educational process that connects the student to the University. Academic advising supports the University’s mission of preparing the student for learning beyond the confines of the academy. Academic advisors represent and interpret university policies and procedures to the student and help the student navigate the academic and organizational paths of the institution.

To ensure that students receive both personal and professional assistance in navigating through curricula and University requirements toward degree completion and graduation, each student is assigned to an academic advisor (either professional or faculty advisor). Advisors are available to assist students with issues related to degree planning, course selection, withdrawals, degree requirements, academic policies, academic difficulty, campus resources, internships/practicum opportunities, and career/graduate school planning. Students are responsible for adhering to academic policies, preparing for advising meetings and taking ownership for their educational experience. Students receive academic advising materials from their advisors during pre-registration advising meetings. Students uncertain of their assigned advisor are encouraged to seek assistance from the departmental office/advising center for their major.

For more information, visit http://www.clemson.edu/academics/advising/.

LIBRARIES

The Libraries on Clemson’s main campus are R.M. Cooper Library, Gunnin Architecture Library, Special Collections and Archives, and the Education Media Center. Other facilities include Charleston Architecture Library and the Depot, which houses remote storage and some staff. We also have collections in the Chemistry Reading Room in Hunter Hall and Campbell Graduate Engineering Center at CU-ICAR.

The Libraries’ website at http://libraries.clemson.edu provides access to a multitude of information resources, including library services, the library catalog, hundreds of databases, more than 65,000 ejournals, more than 400,000 eBooks, as well as downloadable audio and video.

R.M. Cooper Library, Clemson’s main library, is a sixfloor building located at the center of campus. Cooper Library is home to the Adobe Digital Studio, the Center for Geospatial Technologies, CCIT’s Support Center, as well as computer labs, a coffee shop, and a convenience store. Most of the books and journals are located there, as well as government publications, microforms and media. Services include an information desk where students can check out materials and technology, and receive research assistance. Also provided in Cooper are interlibrary loan, class instruction, reservable study rooms, and collaborative study spaces.

Gunnin Architecture Library in Lee Hall contains collections that focus on architecture, city and regional planning, construction science, landscape architecture, and visual arts. Special Collections and Archives, on the lower level of the Strom Thurmond Institute, houses the rare book collection, University Archives, and many manuscript collections, including the papers of John C. Calhoun, Thomas Green Clemson, James F. Byrnes and Strom Thurmond. It also holds the papers of the directors of the National Park Service, as well as numerous unique digital collections. The Education Media Center in Tillman Hall houses a curriculum labs and a media center that primarily supports the students, faculty and staff of the Eugene T. Moore College of Education at Clemson University.

Total holdings for the library system include more than 1.6 million items, including books, periodicals, government publications and patents, musical recordings, DVDs and videos, audiobooks, maps, and microforms.

COMPUTING RESOURCES

Clemson Computing and Information Technology (CCIT) provides comprehensive services to students and employees, including laptop support, training, printing and plotting, computer repair, software licenses, wireless access points, network and information security, course management system and more.

Public access computer labs across campus contain highend Windows PCs or Macs, and black and white laser printing equipment. Students receive a specified quota of color scans and plots per semester in these labs. Any printing and plotting beyond the limit is charged to the student. Lab computers provide the same access as personal student laptops using the Clemson software image. Software and access available in the labs include Internet, e-mail, Google Apps for Education, and the Microsoft Office Suite with Word, Excel, Access, Outlook, and PowerPoint applications, as well as other software. Clemson provides site licenses.
for several software packages, including Trend Micro virus protection, Microsoft Office and Adobe Creative Cloud. Visit the CCIT website for more details before purchasing expensive software that may be provided for all students.

**Getting Help**
The Customer Support Center, located on the second floor of Cooper Library, serves as a central point of contact for general computing assistance, laptop support and repair, and consulting services. Students may call 864-656-3494, e-mail ITHELP@clemson.edu, or walk in during hours of operation (check the CCIT website at http://www.clemson.edu/ccit). CCIT help is also available in the Cooper Library Learning Commons on Level 4.

**E-mail and Accessing Your Account**
Each student’s e-mail address is username@clemson.edu or teacher@school.edu. Clemson e-mail address while at Clemson and it allows students to use Google’s e-mail with Mail is the recommended student e-mail system, Calendar, Google Docs and Google Sites. Google functionality and large data storage, plus Google incoming students. Google Apps offers full e-mail help is also available in the Cooper Library Learning Commons.

**E-mail Forwarding**
Students can change and verify their e-mail forwarding preferences at http://www.clemson.edu/email_forwarding.

**Wireless Access**
The university computer network is accessible through Wired and Wireless Access, wireless network service, the Acceptable Use Policy for Students; and the Campus Computer Store. Incoming students are provided with a free loaner laptop if available. CCIT also services and repairs many other brands of computers for a fee, or under manufacturer’s warranty, if applicable.

**Distance-learning processes and technologies are**
also supported. A part-time tutor is available in the Cooper Library Learning Commons for individual and group assistance. Visit the CCIT website for a complete list of training resources.

**Security**
Clemson University requires all users to run virus protection and install the latest operating system patches on their computers for the security of all network users. Clemson has a site license for the Trend Micro virus protection products. These and other licensed software options are available on the CCIT website.

**Laptop Program**
Laptops are required for all undergraduate and MBA graduate students. While students may bring any laptop that meets the minimum specifications, recommended laptops are posted on the CCIT website. Clemson University works with vendors to offer recommended laptops with custom warranties at special prices. Students with recommended laptops receive priority support on campus for both software and hardware issues as a part of their purchase package. Repair technicians on campus can complete warranty repairs on these laptops. Students with recommended laptops kept in Hardware Repair for an extended period of time may be able to check out a loaner laptop if available. CCIT also services and repairs many other brands of computers for a fee, or under manufacturer’s warranty, if applicable.

**Additional Information**
Additional information—including information about Google Apps for Education (GAE); computing and research, software licensing; IT e-mail alerts; ClemsonGuest wireless access service; the Acceptable Use Policy for Students; and the Campus Computer Store—is available at http://www.clemson.edu/ccit or by emailing ITHELP@clemson.edu.

**CALHOUN HONORS COLLEGE**
Calhoun Honors College is established in 1962, the Calhoun Honors College strives to enrich the educational experience of highly motivated, academically talented students by providing opportunities for scholarship and research not always available to undergraduates. Honors students become part of a dynamic academic community dedicated to the study of ideas and the life of the mind. Calhoun Honors students are offered the opportunity to take a wide variety of specialized honors courses. These include a series of intensive honors seminars emphasizing multidisciplinary approaches and contemporary issues and numerous courses satisfying general education, major or minor requirements. Honors students are also encouraged to pursue research-based projects leading to departmental honors.

Freshman admission to Calhoun Honors College requires the submission of an application separate from and in addition to the application for undergraduate admission to Clemson University. In addition to the student’s application, the Honors College requires a copy of the student’s high school transcript and two letters of recommendation, one from a high school guidance counselor and one from a teacher. Admission is highly selective and is based, in part, on the quality of the applicant pool and the availability of space for freshmen in the Honors College. Currently-enrolled Clemson students may apply for membership if they are full-time, degree-seeking undergraduates and have earned a cumulative grade-point average of 3.50 or higher. In general, students must have at least four semesters remaining to complete their degree requirements.

Additional special opportunities for honors students include study programs in Brussels, Belgium, Strasbourg, France, and Berlin, Germany (EUREKA); a summer research program for entering freshmen, and the Dixon Fellows Program, which promotes cultural and intellectual engagement with leading faculty members. Each of these programs is competitive and requires a separate application.

The Calhoun Honors College is institutionally responsible for nationally competitive fellowships and awards, including Rhodes, Marshall, Truman, Goldwater and Fulbright.

In addition to the intellectual challenge of Honors, advantages of membership include priority course scheduling, honors residential college (on a space-available basis), extended library loan privileges, a series of discussion programs, and special lectures and cultural events. Visit www.clemson.edu/calhouns for more information.

**COOPERATIVE EDUCATION PROGRAM**
The Cooperative Education Program (Co-op) is an academic engaged-learning program and is one of three units which comprise the Center for Career and Professional Development. The program provides students with an opportunity to alternate semesters of academic study with semesters of paid, discipline-specific experience as they work and learn under mentors in their field of study. Co-op assignments add a contextual dimension to the curriculum and challenge students to think critically and creatively as they engage in problem-solving activities and projects within the work setting. Through this program, companies serve as teaching partners of the University and the co-op experience becomes an integral part of the student’s education. The student’s experience is closely monitored/evaluated by the program’s academic staff throughout his/her participation. Cooperative Education, as the term implies, represents a collaborative effort between the University and participating companies.

Students may qualify for the Cooperative Education Program after satisfactorily completing 30 credit hours of academic coursework and declaring a major. Transfer students may apply after one semester of coursework at the University. Students normally enter the program as sophomores or juniors and complete from two to five rotations in a co-op assignment. Engineering majors must do a minimum of three rotations to complete the program. Participation in the program is a curricular requirement for some majors, such as Packaging Science. Packaging Science students normally complete two back-to-back co-op rotations during a six-month period.

Students enrolled in the program register for the appropriate co-op course number (e.g. COOP 1010, 1020, etc.) for each rotation and receive a grade of Pass or No Pass. Students receive academic recognition on the transcript for each co-op course, although no credit hours are awarded. Students pay a program participation fee each academic term that coincides with a co-op rotation/course. In responding to questions about student status related to health insurance, taxes, loans, etc., the University classifies a student on a co-op rotation as a full-time continuing student.

Additional information is available at http://career.clemson.edu/cooperative_education/ or by calling 864-656-3150. The program shares space with its partner, the Michelin Career Center, located on the third floor of the Hendrix Student Center.
INTERNSHIP PROGRAMS

An internship is a form of experiential learning that integrates classroom knowledge with career-related work experience. Internships can be a vital link between college majors and the exploration of professional opportunities. Students are able to participate in on-campus internships, domestic internships, and international internships. Specific requirements vary depending on the type of internship and a student’s major. Internships are typically offered for a specific period of time during the spring or fall semesters (14-16 weeks) or during the summer (10-14 weeks). Depending on the type of internship, students are strongly advised to begin their searches at least four to eight months in advance. Students are also advised to contact their departments, visit with a career counselor, or attend a workshop at the beginning of each semester in order to determine all available internship opportunities.

Departments/Majors

Internships typically involve a structured project with a professional mentor that relates to a student’s major or career interests. Credit bearing internship courses may be available through a student’s academic college or department. Some majors may also require students to complete an internship as part of the curriculum. Further inquiries about departmental internship requirements should be directed to the specific department.

Center for Career and Professional Development

The Center for Career and Professional Development offers a variety of services to help students identify internship experiences. In addition to providing counseling and resources that aid in the internship search process, the Center also offers a three-credit international internship course (INT 3010), and part-time and full-time, zero-credit internship courses (which are denoted on students’ academic transcripts). The full-time INT courses allow students to maintain their University enrollment status while interning. Students enrolled in off-campus internships must register for the appropriate course and section number (e.g. INT 3010) for each rotation to receive a grade of Pass or No Pass. Students pay a participation fee each academic term that coincides with their internship rotation. Additional information is available at http://career.clemson.edu or by calling 864-656-6000.

UPIC

The University Professional Internship and Co-op (UPIC) Program offers students on-campus professional learning experiences. Students have the opportunity to work with Clemson faculty and staff on Clemson’s main campus, as well as other sites across the state, while receiving an academic internship notation on their transcripts. Enrollment in the appropriate INT course and payment of the corresponding fee is a requirement of the program (e.g. INT 1510). In order to be eligible for the program, a student must have completed at least one full semester at Clemson University and be an enrolled and matriculating undergraduate student in good standing. Available internships are typically listed in ClemsonJobLink halfway through the semester prior to the experience. Additional information is available at http://career.clemson.edu or by calling the program office at 864-656-0282.

CLEMSON ABROAD PROGRAMS

Through the Clemson Abroad Office, students may choose from a variety of study abroad programs, Clemson faculty-directed programs, and Clemson sponsored exchange programs. Program length ranges from short-term, such as during spring break, to a summer session, to a full semester or year abroad. Programs vary to fulfill the academic and discipline-specific needs of students. There are programs for every academic major at Clemson. Exchange programs are available with top institutions around the world, such as The University of Aberdeen in Scotland; Bond University and University of Newcastle in Australia; and University of Strathclyde in United Kingdom. Programs are available in virtually every country in the world: Argentina, Australia, Belgium, China, Costa Rica, Dominican Republic, France, Germany, Italy, Spain, United Kingdom, and many more.

Both Clemson sponsored programs and exchange programs allow students to enroll and pay fees directly to Clemson while they study abroad. Transfer credit normally applies within the major with prior department approval. Financial aid and scholarships also transfer for many of the programs abroad.

International internships and co-op programs are also available. Students should plan early for their study abroad experience. First priority application deadlines are usually in September/October for spring programs, in February/March for fall, academic year, and summer programs. Interested students should contact the Clemson Abroad Office, E-301 Martin Hall, at the beginning of each semester and throughout the academic year to explore opportunities abroad. Additional information is available at clemson.edu/study-abroad or by emailing abroad@clemson.edu.

HONOR ORGANIZATIONS

Clemson University has a number of academic honorary societies that recognize outstanding scholarship by students, faculty, and staff:

- Alpha Epsilon Delta (Preadtical)
- Alpha Epsilon Lambda (Graduate Students)
- Alpha Kappa Delta (Sociology)
- Alpha Lambda Delta (Freshmen)
- Alpha Pi Mu (Industrial Engineering)
- Alpha Zeta (Agriculture)
- Beta Alpha Psi (Accounting and Financial Management)
- Beta Gamma Sigma (Business)
- Blue Key (Juniors and Seniors)
- Calhoun Honors Society (Honors College)
- Chi Epsilon (Civil Engineering)
- Eta Kappa Nu (Electrical and Computer Engineering)
- Eta Sigma Gamma (Health Education)
- Gamma Epsilon Tau (Graphic Communications)
- Golden Key National Honor Society (Juniors/Seniors)
- Kappa Delta Pi (Education)
- Keramos (Ceramic and Materials Engineering)
- Lambda Pi Eta (Communication Studies)
- Mortar Board (Seniors)
- Mu Beta Psi (Music)
- Mu Kappa Tau (Marketing)
- Omicron Delta Epsilon (Economics)
- Omicron Delta Kappa (Leadership)
- Order of Omega (Seniors)
- Phi Beta Kappa
- Phi Kappa Phi
- Phi Psi (Textiles)
- Phi Sigma Pi (Honorary)
- Pi Delta Phi (French)
- Pi Sigma Alpha (Political Science)
- Pi Tau Sigma (Mechanical Engineering)
- Psi Chi (Psychology)
- Sigma Tau Delta (English)
- Tau Beta Pi (Engineering)
- Tau Sigma Delta
- Upsilon Pi Epsilon (Computer Science)
- Xi Sigma Pi (Forestry)

RESERVE OFFICERS TRAINING CORPS

Air Force and Army

The Departments of the Air Force and the Army maintain ROTC units at Clemson University. Their mission is to produce officers of high quality for technical and non technical careers in the U.S. Air Force and Army. Two-, three-, and four-year programs are available. The four-year program consists of the basic course for freshmen and sophomores and the advanced course for juniors and seniors.

Scholarships, available to selected ROTC students, pay for tuition, books, and laboratory expenses, in addition to a variable stipend ranging from $300–$500 (depending on their group) per month during the school year. Non-scholarship advanced Cadets also receive a stipend. Basic course credit may be awarded to students having prior military service. Reserve or National Guard duty can be guaranteed by the U.S. Army.

Cadets who complete the Advanced or Professional Course and satisfy commissioning requirements are appointed Second Lieutenants. Ample opportunity exists for graduate study in both services, with temporary deferments possible.
CLEMSON UNIVERSITY EXPERIMENT STATION
The Clemson University Experiment Station is part of a nationwide system of scientists working to improve the quality of life for people in their home states, the nation, and the world.

Both undergraduate and graduate students work with researchers to develop science-based information needed to address issues such as agricultural productivity and profitability, economic and community development, environmental conservation, food safety and nutrition and youth development. Clemson researchers have been involved in agricultural and forestry research since the University was founded in 1889. Today research is conducted in state-of-the-art laboratories, on farms and forests on Clemson’s campus, and at five research and education centers strategically located in the state’s distinct soil and climate regions.

Clemson researchers collaborate with colleagues on studies that span the globe. These include the genetic structure and functions for plants and animals, the impact of urban sprawl on the environment, techniques to reduce bullying in schools, the active ingredients in medicinal plants, and the use of nanotechnology in food packaging to detect contamination. Their work has produced more than 100 new varieties of food and fiber crops and more than 40 patents. Each year work is conducted on more than 150 projects funded through federal, state and private sources, including the U.S. Department of Agriculture, the U.S. Forest Service, the National Science Foundation, the South Carolina General Assembly, and corporate partners.

CLEMSON UNIVERSITY FOUNDATION
The Clemson University Foundation is a nonprofit organization that solicits, manages, and administers gifts from private sources for academic programs at Clemson University.

Chartered in 1933, the foundation is a primary component of the Advancement Division of the University. There are 41 elected members of the Board of Directors. The board also includes seven automatic directors; 16 ex officio directors, including a graduate and an undergraduate student representative; and 16 honorary directors.

The foundation operates through committees that report via an executive committee to the full board. These include the Audit, Finance, Development, Human Resources, Investment, Nominations, and Policy and Constitution Committees. Fund raising is in concert with the University and through the Development Committee and, as is currently the case, a Campaign Executive Committee. This includes solicitation of annual, major, planned, corporate and foundation gifts in support of University priorities and coordination of college-based fund-raising initiatives. Organizations affiliated with the Foundation include the Clemson University Continuing Education/Conference Complex Corporation, the Clemson University Land Stewardship Foundation, the Clemson University Real Estate Foundation, and the Wallace F. Pate Foundation for Environmental Research and Education. As of June 30, 2015, the Clemson University foundation managed over 1,780 endowments. As of December 31, 2015, the combined CUF-CU Endowment totaled approximately $606 million.

CLEMSON ALUMNI ASSOCIATION
The Clemson Alumni Association’s action phrase is “Your Lifelong Connection to Clemson.” Its mission is to serve, to inform, to involve. The Alumni Association works for the more than 112,000 alumni located around the world, sponsoring programs to provide a link between students of yesterday, today, and tomorrow.

In conjunction with volunteers and traveling University staff, Clemson Clubs and Clemson activities are conducted around the world. Alumni are kept informed through the award-winning Clemson World magazine and at alumni.clemson.edu. Students, alumni, and constituency programs, as well as publications and electronic resources, form the basis for an array of services offered to alumni, students, parents, and friends of the University.

All services of the Alumni Association are coordinated out of the Alumni Center, a campus focal point built, furnished, and equipped entirely by gifts from alumni specifically for that purpose. The University Visitors Center, a gift of the Class of 1944, is adjacent to the Alumni Center and is an excellent stop for anyone visiting or returning to campus.

Alumni-sponsored awards programs, such as the Distinguished Service Award, Alumni Fellows, professorships, scholarships, and awards for outstanding teaching, research, and public service, are among the prestigious awards given by the Clemson Alumni Association.

Alumni employees coordinate the Alumni Career Services program and the activities of the open-membership student organization, Student Alumni Association. From the Welcome Back Festival held each August to the Senior Picnic held each April, the Alumni Association provides a lifelong connection to Clemson.

CAMPUS VISITS AND TOURS
One of the best ways to discover all Clemson has to offer is through a visit to the campus. The Class of 1944 Visitors Center helps host the Clemson experience of prospective students. Information, audio-visuals, and tours are all easily accessible.

The Visitors Center is located just off of Highway 93 adjacent to the Alumni Center. Regular hours of operation are Monday–Friday, 8:00 a.m.–4:30 p.m.; Saturday, 9:00 a.m.–4:30 p.m.; and Sunday, 1:00–4:30 p.m. (during regular semesters). Hours vary according to the academic calendar, university holidays, and the home football schedule.

Walking tours, guided by volunteer student members of the University Guide Association, are available by reservation. Tour schedules also vary based on the academic calendar, university holidays, and the home football schedule. Tours are conducted rain or shine, last about two hours, and include an information segment at the beginning. Reservations are required and can be arranged online at www.clemson.edu/visitors/index.html or by calling 864-656-4789.
ADMISSION
Complete Admission information is available at www.clemson.edu/admission.

APPLICATION INFORMATION
Applicants should apply online at www.clemson.edu. Freshman candidates are especially encouraged to sit for the SAT or ACT, including the writing test, during the spring semester of their junior year.

Applicants should understand that admission is closed when all classroom space has been committed. The majority of freshman admission decisions are communicated during the middle of February. Transfer students seeking entrance in August are usually notified between February and July. Applicants must pay a nonrefundable application fee. This fee is not applicable to tuition and/or other University fees.

Application Deadlines

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<th>For Freshman Applicants</th>
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<th>For Transfer Applicants</th>
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<td>Spring semester</td>
<td>Dec</td>
<td>Spring semester</td>
<td>Dec</td>
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<td>Fall semester</td>
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<td>Fall semester</td>
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<tr>
<td>Priority deadline</td>
<td>Dec</td>
<td>Final deadline</td>
<td>May</td>
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<tr>
<td>Final deadline</td>
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</tbody>
</table>

FRESHMEN
Admission to the University is competitive and is based primarily upon high school curriculum, grades, class standing, and SAT or ACT scores. An applicant’s intended major and state residency also receive consideration. To apply for admission, a candidate must submit an official high school transcript through his/her counselor and have results of the SAT or ACT sent directly from the testing agency. In addition, all applicants for freshman admission should complete the following courses in high school:

- English—4 credits
  All four courses must have strong grammar and composition components, with at least one in English literature and at least one in American literature. College preparatory English I, II, III, and IV will meet these requirements.

- Mathematics—3 credits
  These include algebra I (for which applied mathematics I and II may count together as a substitute if a student successfully completes algebra II), algebra II, and geometry.

- Laboratory Science—3 credits
  Two must be selected from biology I, chemistry I, or physics I.

- Foreign Language—3 credits
  All three must be earned in the same language.

- Social Sciences—3 credits
  American history is required. One-half credit of government and one-half credit of economics are also recommended.

- Fine Arts—1 credit

Physical Education/ROTC—1 credit

Other—2 credits

One of these must be a fourth year of mathematics, laboratory science, or foreign language. Students interested in engineering are strongly encouraged to take a fourth year of mathematics. This course should be selected from precalculus, calculus, statistics, or discrete mathematics. The second credit must be in advanced mathematics, computer science, or a combination of these; or one unit of world history, world geography, or western civilization.

The SAT or ACT examination scores, rank in class, and academic preparation will be weighed carefully in the decision-making process. The applicant’s acceptance will be confirmed upon presentation of a final high school transcript indicating continued academic progress and graduation.

TRANSFER STUDENTS

Students should have official transcript(s) sent directly to Clemson’s Admissions Office from the registrar of each college or university where credit was earned. A transcript that states “Issued to Student” is considered unofficial. Unless so stated on the transcript, the applicant should also present statements of honorable dismissal and of eligibility to return to the institution last attended. Transfer admission is moderately competitive. To increase their chances for admission, applicants should have the following qualifications:

- Completion of a year of college study after high school graduation with 30 semester hours (or 45 quarter hours) of transferable credit
- A minimum 2.5 grade-point average (3.0 preferred). Note: Majors such as Communication; Construction Science and Management; General Engineering; Health Science; Nursing; Parks, Recreation, and Tourism Management; Production Studies in Performing Arts; Visual Arts; Early Childhood Education; Elementary Education; Special Education; and some of the Secondary Education majors may have more selective admission requirements. Students interested in these majors are encouraged to apply early and contact the Office of Admissions for current admission requirements.

- Freshman-level math, science, and English requirements for the intended major at Clemson

- Applicant must be in good standing and eligible to return to the institution last attended

Application deadlines are December 1 for consideration for the spring semester and July 1 for consideration for the fall semester. In most cases, admission decisions will be made once the year of college study is completed. Summer school applicants should have all credentials sent at least two weeks prior to the beginning of the term. Admission is closed when all classroom space has been committed. Information regarding transfer from a South Carolina technical college is contained in the brochure Advanced Standing, available through the Office of Admissions at the address below. Prospective transfer students are also encouraged to refer to the University’s website at www.clemson.edu or the South Carolina Commission on Higher Education’s website at www.ch400.state.sc.us.

Students who are unsure to which South Carolina college or university they would like to transfer after their initial coursework at a South Carolina technical college may follow the transfer block system. These transfer blocks are posted at www.clemson.edu/admissions/undergraduate/transfer/set/clemson.html. Depending on the student’s chosen major, some courses may not be applicable toward a Clemson degree. Contact the Office of Admissions for information.

Transfer Admissions Officers
Becky D. Pearson, Associate Director of Admissions
Kathryn Rice, Assistant Director of Admissions

105 Sikes Hall
Clemson University
Box 345124
Clemson, SC 29634-5124
Phone: 864-656-2287
Fax: 864-656-2464

Transfer Credit
Coursework completed with a grade of C or better at other regionally accredited institutions, including correspondence courses, telecourses, on-line courses, and exempted courses, will be evaluated for transfer credit. This does not guarantee that all courses taken at other institutions will be accepted for transfer. The acceptability of each course or exemption will be determined through an evaluation by the Office of Admissions, and will be based on content, level, comparability to Clemson courses, and applicability to Clemson degree requirements. Transfer courses are evaluated as a direct Clemson equivalent, elective credit, or not college transferable credit. Subject area electives are listed on the transfer course summary as 1999, 2999, 3999 or 4999. Courses that do not have direct Clemson equivalencies may possibly be substituted for required courses in a degree program with approval of the student’s major advisor. Questions about how a course has been evaluated should be directed to the department responsible for teaching the course. If a course does not have a direct Clemson equivalency, the following abbreviations are used: COT 0001 (Not College Transferable), ELEC 0001 (free elective credit), and 1999, 2999, 3999 or 4999 (subject area elective). To view a listing of how courses have been evaluated previously, visit the Transfer Course Equivalency List at http:// virtual.clemson.edu/groups/tcel. Coursework earned at different institutions will not be joined to equate with one Clemson course. No course taken at a nonbaccalaureate-degree granting institution may be used as an equivalent or substitute for any 3000- or 4000-level Clemson course. Students must submit a registrar’s explanation stating that a grade of P or S is equivalent to a C or better before transfer credit may be awarded.

Learning experiences including, but not limited to, military service schools, non-collegiate sponsored instruction, work-related experiences, etc. will not be evaluated for transfer; however, enrolled students may request credit by examination from the appropriate department for any non-transferable learning experience. For additional information, see Advanced Placement and Credit by Examination on page 25.
Students transferring may select the curriculum that was outlined in the Clemson University Undergraduate Announcements at the time they entered the sending institution, provided they have been in continuous enrollment. Further, transfer students may select any curriculum adopted subsequent to that initial curriculum. After enrolling at Clemson, if a transfer student changes from one major to another, the student will complete all of the requirements included in the new curriculum that are in effect at the time of the change. If all coursework toward a degree is not completed within six years after the initial enrollment at the sending institution, the student may be required to complete additional courses.

**GENERAL INFORMATION**

**Entrance Examinations**

All freshman candidates and some transfer students must submit scores from either the SAT or ACT. For August enrollment, it is recommended that students complete the SAT or ACT no later than the preceding December. Registration materials for these tests are readily available at high schools or by contacting the College Board at 609-771-7600 or 1-800-SATSCORE or www.collegeboard.com or the American College Testing Service at 319-337-1313 or www.act.org. The College Board’s institutional code for Clemson is 5111. The ACT code for Clemson is 3842. All candidates must have their scores reported directly to Clemson by contacting the appropriate testing agency. Photocopies of student test reports or those submitted by third parties, such as high schools and colleges, are not accepted.

**International Baccalaureate (IB) Credit Policy**

Clemson University endorses the International Baccalaureate (IB) Program and awards credit for IB Higher Level scores as indicated below.

**College Board Advanced Placement Program**

The College Board Advanced Placement Program (AP) gives highly motivated high school students an opportunity to begin their college careers during the last year or two of high school. AP participants take college-level courses in high school, sit for nationally administered examinations in the subjects concerned, and submit test grades to Clemson for credit. Credit is awarded to those earning grades of 3, 4, or 5 on AP exams.

Applicants should be sure to include their social security numbers when registering for AP examinations; this will save time and ensure that credit is automatically awarded to their Clemson academic records.

**Dual Enrollment**

Dual enrollment courses enable high school students to take college-level courses and earn college credit before graduating from high school. Students should have official transcript(s) sent directly to Clemson’s Admissions Office from the registrar of each college or university where credit was earned. A transcript that states “Issued to Student” is considered unofficial. Courses that have previously been evaluated are listed on the Transfer Course Equivalency List (TCEL) at virtual.clemson.edu/groups/tcel. If a student has taken a course not listed on the TCEL, the course will be evaluated by the Office of Admissions once the student has been accepted by Clemson. Students will be notified by letter of the credit they will receive at Clemson before they enroll in the fall.

**Placement Tests**

**Mathematics Placement—**All new freshman and transfer students are required to complete the Clemson Mathematics Placement Test (CMPT). Placement in a mathematics course is determined by each student’s CMPT score. Failure to complete the CMPT satisfactorily will result in placement in a preparatory work that, in most cases, will not apply toward the general education mathematics requirement. Placement will be adjusted as appropriate after AP and IB scores or credits for previous mathematics courses have been received by Clemson.

**Modern Language Placement—**The Department of Languages offers placement tests that students are required to take during summer orientation. Any student who has had at least one year of a modern language and who decides to continue with the same language at Clemson, must take one of these tests. Applicants desiring advanced placement in a modern language may take the College Board’s SAT Subject Test, Advanced Placement (AP) Examinations, or the International Baccalaureate (IB) Higher Level Examination. SAT Subject Test scores of 450 or higher enable students to exempt one or more language courses. These students will receive credit following the successful completion (grade of C or better) of a qualifying course at Clemson.

**IB Higher Level Examination Score Chart**

<table>
<thead>
<tr>
<th>IB Higher Level Examination</th>
<th>Score</th>
<th>Clemson Course(s) for Which Credit is Awarded</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>Biology</td>
<td>4, 5, 6, 7</td>
<td>BIOI 1030/1050, 1040/1060</td>
<td>8</td>
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<tr>
<td>Business and Management</td>
<td>4, 5, 6, 7</td>
<td>MGT 210</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry</td>
<td>4, 5, 6, 7</td>
<td>CH 101 (for majors requiring organic chemistry)</td>
<td>4</td>
</tr>
<tr>
<td>Computer Science</td>
<td></td>
<td>CPSC 111</td>
<td>3</td>
</tr>
<tr>
<td>Dance</td>
<td>4, 5, 6, 7</td>
<td>ELEC 1001</td>
<td>3</td>
</tr>
<tr>
<td>Design Technology</td>
<td>4, 5, 6, 7</td>
<td>ELEC 1001</td>
<td>3</td>
</tr>
<tr>
<td>Economics</td>
<td>4, 5, 6, 7</td>
<td>ECON 2110</td>
<td>3</td>
</tr>
<tr>
<td>English (Language A: Literature or Language and Literature)</td>
<td>4, 5, 6, 7</td>
<td>ENGL 1999</td>
<td>3</td>
</tr>
<tr>
<td>Film</td>
<td>4, 5, 6, 7</td>
<td>ELEC 1001</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language (Language B)</td>
<td>4, 5, 6, 7</td>
<td>ARAB 1010, CHIN 1010, FR 1010, GER 1010, ITAL 1010, JAP 1010, LATN 1010, PORT 1010, RUSS 1010, SPAN 1010 (dependent upon language)</td>
<td>8</td>
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<tr>
<td>Geography</td>
<td>4, 5, 6, 7</td>
<td>GEOG 1010</td>
<td>3</td>
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<tr>
<td>History</td>
<td>4, 5, 6, 7</td>
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<tr>
<td>Route 1: Higher Level Option—Europe and the Islamic World</td>
<td>4, 5, 6, 7</td>
<td>ELEC 1001</td>
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<tr>
<td>Route 2: Higher Level Option—Asia and Oceania</td>
<td>4, 5, 6, 7</td>
<td>HIST 1930</td>
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<tr>
<td>Africa</td>
<td>4, 5, 6, 7</td>
<td>ELEC 1001</td>
<td>3</td>
</tr>
<tr>
<td>Europe and the Middle East</td>
<td>4, 5, 6, 7</td>
<td>ELEC 1001</td>
<td>3</td>
</tr>
<tr>
<td>The Americas</td>
<td>4, 5, 6, 7</td>
<td>ELEC 1001</td>
<td>3</td>
</tr>
<tr>
<td>Information Technology in a Global Society</td>
<td>4, 5, 6, 7</td>
<td>STS 1200</td>
<td>3</td>
</tr>
<tr>
<td>Islamic History</td>
<td>4, 5, 6, 7</td>
<td>ELEC 1001</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4, 5, 6, 7</td>
<td>MATH 1060 or MATH 1020</td>
<td>4</td>
</tr>
<tr>
<td>Music</td>
<td>4, 5, 6, 7</td>
<td>ELEC 1001</td>
<td>3</td>
</tr>
<tr>
<td>Philosophy</td>
<td>4, 5, 6, 7</td>
<td>PHIL 1010</td>
<td>3</td>
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<td>Physics</td>
<td>4, 5, 6, 7</td>
<td>PHYS 2070/2090</td>
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<td>Psychology</td>
<td>4, 5, 6, 7</td>
<td>PSYC 1010</td>
<td>3</td>
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<tr>
<td>Social and Cultural Anthropology</td>
<td>4, 5, 6, 7</td>
<td>ELEC 1001</td>
<td>3</td>
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<tr>
<td>Theatre Arts</td>
<td>4, 5, 6, 7</td>
<td>ELEC 1001</td>
<td>3</td>
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<tr>
<td>Visual Arts</td>
<td>4, 5, 6, 7</td>
<td>ART 1030</td>
<td>3</td>
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1For students taking the calculus sequence, MATH 1060 and 1080, a score of 4 or 5 on the HL Mathematics examination earns placement in MATH 1080. Upon completion of MATH 1080 with a grade of C or better, credit will be given for MATH 1060. For students taking the MATH 1020 and 2070 calculus sequence, a score of 4 or 5 on the HL Mathematics examination earns placement in MATH 2070. Upon completion of MATH 2070 with a grade of C or better, credit will be given for MATH 1080. If the student does not enroll in MATH 1060 or 2070, or does not pass the sequential class (MATH 2070 or 1080) with a grade of C or higher, three credits of math credit (ELEC 1001) will be awarded for a score of 4 or 5 on the Mathematics HL exam. 2A score of 6 or 7 on the HL Mathematics examination earns credit for either MATH 1020 or 1060 but not both. Credit is awarded for a score of 4 or 5 on the Mathematics HL exam and the Sequential class or both. 3Students transferring may be required to complete additional courses. 4ENGL 1999 is an English elective credit.
GED
Candidates submitting General Educational Development (GED) credentials in lieu of a high school diploma must be 19 years of age or older. Official GED score results must be received directly from the General Educational Development Testing Service along with an official copy of the high school transcript and SAT or ACT scores. Applicants presenting the GED will be reviewed by the Undergraduate Admissions Committee.

Appeals
Any freshman or transfer candidate who is denied admission may appeal for reconsideration provided the student (1) presents new information, such as improved grades and/or class rank, improved SAT or ACT scores; and (2) submits an on-line appeal form outlining the rationale for the appeal. All appeals will be processed by the Office of Admissions and referred to the Undergraduate Admissions Committee.

ADMISSION DEPOSIT
All accepted freshman and transfer candidates for fall semester are required to submit a nonrefundable $200 admission deposit. This deposit is applicable toward tuition and other University fees and may be paid by credit card.

HOUSING
All freshmen who are under the age of 21 at the time of enrollment, who do not live with parent/guardian(s) [within a 50-mile radius of campus], are required to live in University housing for the fall and spring semesters.

For the purpose of this agreement, transfer students are not considered freshmen. Transfer students are housed on a space available basis.

ADVANCED PLACEMENT CREDIT CHART

<table>
<thead>
<tr>
<th>Discipline</th>
<th>AP Exam</th>
<th>Score</th>
<th>Clemson Course(s) for which credit is awarded</th>
<th>Credit Hours</th>
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<td>CAPSTONE</td>
<td>Research Seminar</td>
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<td>ELEC 0001</td>
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<td></td>
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<td>3, 4, 5</td>
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<td>ECONOMICS</td>
<td>Microeconomics</td>
<td>3, 4, 5</td>
<td>ECON 2110</td>
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<td>Macroeconomics</td>
<td>3, 4, 5</td>
<td>ECON 2120</td>
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<td>ENGLISH</td>
<td>Literature and Composition¹</td>
<td>3, 4</td>
<td>ENGL 1999</td>
<td>3</td>
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<td></td>
<td></td>
<td>5</td>
<td>ENGL 1999, 1030</td>
<td>6</td>
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<td></td>
<td>Language and Composition¹</td>
<td>3, 4</td>
<td>ENGL 1999</td>
<td>3</td>
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<td></td>
<td>5</td>
<td>ENGL 1999, 1030</td>
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<td></td>
<td>Both Tests</td>
<td>3, 4, 5</td>
<td>ENGL 1999, 1030</td>
<td>6</td>
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<td>GEOGRAPHY</td>
<td>Human Geography</td>
<td>3, 4, 5</td>
<td>GEOG 1010</td>
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<td>GOVERNMENT</td>
<td>Government &amp; Politics: United States</td>
<td>3, 4, 5</td>
<td>POSC 1010</td>
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<td>Government &amp; Politics: Comparative</td>
<td>3, 4, 5</td>
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<td>European History</td>
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<td>World History</td>
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<td>HIST 1730</td>
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<td>3, 4, 5</td>
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<td>HUMANITIES</td>
<td>Music Theory</td>
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<td>MUSC 1420, 1430</td>
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<td></td>
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<td>ART 2100</td>
<td>3</td>
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<td>Studio Art: Drawing</td>
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<td>ELEC 0001</td>
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<td></td>
<td></td>
<td>4</td>
<td>ART 1030</td>
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<td></td>
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<td>5</td>
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<td>Studio Art: 2-D Drawing</td>
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<td></td>
<td></td>
<td>4, 5</td>
<td>ART 1030</td>
<td>3</td>
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<tr>
<td></td>
<td>Studio Art: 3-D Drawing</td>
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<td>ELEC 0001</td>
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<tr>
<td>LANGUAGES</td>
<td>Chinese Language and Culture</td>
<td>3, 4</td>
<td>CHIN 1010, 1020, 2010</td>
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<td></td>
<td></td>
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<td>CHIN 1020, 2010, 2020</td>
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<td>French Language and Culture</td>
<td>3, 4, 5</td>
<td>FR 1010, 1020</td>
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<td>German Language and Culture</td>
<td>3, 4, 5</td>
<td>GER 1010, 1020</td>
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<td>Italian Language and Culture</td>
<td>3, 4</td>
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<td>Japanese Language and Culture</td>
<td>3, 4</td>
<td>ITAL 1020, 2010, 2020</td>
<td>14</td>
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<td></td>
<td>3, 4</td>
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<td></td>
<td>Latin</td>
<td>4, 5</td>
<td>LATN 1010, 1020, 2010</td>
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<td></td>
<td>Spanish Language</td>
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<td>SPAN 1010, 1020</td>
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<td></td>
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<td>SPAN 1010, 1020</td>
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<td>3</td>
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<td>SPAN 1010, 1020, 2020</td>
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<td>MATHEMATICS</td>
<td>Calculus AB</td>
<td>3, 4, 5</td>
<td>MATH 1060</td>
<td>4</td>
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<td></td>
<td>Calculus BC¹</td>
<td>3, 4, 5</td>
<td>MATH 1060, 1080</td>
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<td>Statistics</td>
<td>3, 4, 5</td>
<td>STAT 2300</td>
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<td>PSYCHOLOGY SCIENCES</td>
<td>Psychology</td>
<td>3, 4, 5</td>
<td>PSYC 2010</td>
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<td>Biology</td>
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<td>BIOL 1030/1050, 1040/1060</td>
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<td>4, 5</td>
<td>BIOL 1100, 1110</td>
<td>10</td>
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<td></td>
<td>Chemistry</td>
<td>3, 4</td>
<td>CH 1010</td>
<td>4</td>
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<td></td>
<td></td>
<td>5</td>
<td>CH 1010, 1020</td>
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<td>Computer Science A</td>
<td>3, 4, 5</td>
<td>CPSC 1060</td>
<td>4</td>
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<td>Computer Science Principles</td>
<td>3, 4, 5</td>
<td>CPSC 1210</td>
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<td>Environmental Science</td>
<td>3, 4, 5</td>
<td>ENSP 2000</td>
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<td>Physics 1</td>
<td>3, 4, 5</td>
<td>PHYS 2070/2100</td>
<td>4</td>
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<td>Physics 2</td>
<td>3, 4, 5</td>
<td>PHYS 2080/2100</td>
<td>4</td>
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<td>Physics C (Mechanics)</td>
<td>3, 4, 5</td>
<td>PHYS 1210/1240</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Physics C (E and M)</td>
<td>3, 4, 5</td>
<td>PHYS 2210/2230</td>
<td>4</td>
</tr>
</tbody>
</table>

¹Students who earn a score of 3 or 4 should register for ENGL 1030.
²Students who earn a score of 2 on the Calculus BC examination, but earn a score of 3 (or better) on the AB subscore of the BC examination, may receive credit for MATH 1060.
³Students enrolling in a degree program requiring calculus-based physics (PHYS 1220, 1240, 2210, 2220, 2230, 2240), who earn a grade of 5 on Physics B, will be asked to meet with a departmental representative for further evaluation and placement counseling.
⁴ELEC 0001 is a transfer elective credit
⁵ENGL 1999 is an English elective credit
ORIENTATION PROGRAMS
The University offers a series of orientation programs during the summer for freshmen and transfer students and their parents/guests. All accepted students are required to attend one of the sessions. During orientation, students will have an opportunity to discuss their educational objectives with an advisor, to register for the fall semester, and to learn about student life and other co-curricular activities. All new students will register for their first semester at Clemson during orientation. For more information about the orientation programs fee structure, visit www.clemson.edu/orientation.

2016 Summer Orientation Dates

<table>
<thead>
<tr>
<th>Freshmen</th>
<th>New Transfer</th>
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</thead>
<tbody>
<tr>
<td>June 13-14</td>
<td>June 15 (Bridge and Veterans Only)</td>
</tr>
<tr>
<td>June 16-17</td>
<td>June 22</td>
</tr>
<tr>
<td>June 20-21</td>
<td>June 29</td>
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<tr>
<td>June 23-24</td>
<td>July 13</td>
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<td>June 27-28</td>
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<td>June 30-July 1</td>
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<td>July 7-8</td>
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<td>July 11-12</td>
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<tr>
<td>July 14-15</td>
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</tbody>
</table>

International students are expected to attend an additional session, which is conducted by the International Services office. Additional information is available at www.clemson.edu/admissions/ia/services or by emailing is@clemson.edu. International undergraduate applicants for fall semester are encouraged to apply by December 1.

INTERNATIONAL UNDERGRADUATES
Admission services for undergraduate international students are provided by the Office of Admissions. International students who come from abroad or transfer from another school must meet academic language, and financial qualifications as determined by Clemson University. Transcripts, mark sheets, and academic records must be verified by a certified U.S. educational consultant agency. Prospective transfer students must provide translated course descriptions for coursework to be evaluated for Clemson academic credit. The SAT or ACT is required of all international applicants (freshman or transfer). The Test of English as a Foreign Language (TOEFL) is required of applicants from countries where English is not the native language. Financial qualifications are determined by the submission of a financial certification form and bank statements verifying adequate funding. The International Services office provides visa enabling documents and advising services. For more information, visit http://www.clemson.edu/admissions/undergraduate/index.html. For International Student Procedures and Requirements, visit http://www.clemson.edu/admissions/undergraduate/requirements/international.html.

SPECIAL STUDENT STATUS
Special students can enroll in a limited number of undergraduate credit hours and are classified with a non-degree status. Examples of special students include high school students wishing to dual enroll in preapproved courses, individuals wishing to take courses for personal enjoyment and professional development, and individuals needing prerequisites for professional schools. Students interested in graduate studies at Clemson who need undergraduate prerequisites courses should apply non-degree through the Clemson Graduate School.

The special student status is not a "trial admission" status and students who have been denied regular undergraduate admission are not eligible.

The number of undergraduate credit hours taken in this status may vary by program, but no more than 18 semester hours will be allowed. Once the credit hour limit has been reached, the student must apply to a degree seeking program if he wishes to take additional courses. Applicants should apply online at www.clemson.edu and supporting documents may be required if needed. Financial aid is not available.

READMISSION OF FORMER UNDERGRADUATES
Undergraduate students (not special or transient students) who have previously attended Clemson and are not currently enrolled in the current term and wish to return, must apply online at http://www.registrar.clemson.edu/forms/six.htm. The Undergraduate Application for Re-Admission fee is $25.00 and online instructions for payment are provided in the application. Acceptance letters and registration materials are emailed to returning students at the email address provided on the application once the student has been re-accepted. Students who have graduated from Clemson applying as former students returning are assigned a program of “Non-Degree Seeking Undergraduate.” These students must complete a Change of Academic Program form through the Office of Enrolled Student Services located in 104 Sikes Hall. Students who have not graduated from Clemson applying as former students returning to continue their undergraduate studies are readmitted into their previous major, but under the catalog year during which they are readmitted. Students with senior status—90+ hours—are readmitted into their previous major and the catalog year during which they last attended the University. If a student’s previous major has been discontinued, the student is assigned a program of “Non-Degree Seeking Undergraduate” and must complete a Change of Academic Program form and select a degree-granting program. Students are required to satisfy the University’s general education requirements in addition to curricular requirements. Any variations in curricular requirements will be considered under the substitution procedures. If all work toward a degree is not completed within six years after entrance, the student may be required to take additional courses. Other information can be obtained from the Registrar’s Office.

Any student who is classified as an in-state student for tuition and fees purposes must reaffirm his or her resident status upon application for readmission to the University. If the resident status of an individual changes, that student will be classified as out-of-state for tuition and fees purposes upon readmission to the University. If the resident status is not immediately clear, the student may be required to submit an application for resident status to the Office of Residency Classification.

ILLEGAL IMMIGRATION REFORM ACT PROCESS
Section 59-101-430 of the South Carolina Code of Laws states:

“(A) An alien unlawfully present in the United States is not eligible to attend a public institution of higher learning in this State, as defined in Section 59-103-5. The trustees of a public institution of higher learning in this State shall develop and institute a process by which lawful presence in the United States is verified. In doing so, institution personnel shall not attempt to independently verify the immigration status of any alien, but shall verify any alien’s immigration status with the federal government pursuant to 8 U.S.C. Section 1373 (c).

(B) An alien unlawfully present in the United States is not eligible on the basis of residence for a public higher education benefit including, but not limited to, scholarships, financial aid, grants, or resident tuition.”

In accordance with section 59-101-430 of the SC Code of Laws, also known as the South Carolina Illegal Immigration Reform Act, the Clemson University Board of Trustees hereby institutes the following process:

I. PROCESS
All applicants to Clemson University are required to verify on their application whether they are a U.S. citizen, Permanent Legal Resident or will be a U.S. citizen, Permanent Legal Resident by the time they are present in the United States at the time of enrollment on or before the first day of classes.

II. VERIFICATION OF ELIGIBILITY
The Board of Trustees delegates responsibility for administering the details of this process to the Provost and the Office of Academic Affairs.
The annual State Appropriation Act imposes the general requirement that student fees be fixed by the University Board of Trustees. The act imposes two specific requirements on the Board: (1) In fixing fees applicable to academic and general maintenance and operation costs, the board must maintain a minimum student fee not less than the fee charged the previous year. (2) In fixing fees applicable to residence hall rental, dining halls, laundry, infirmary, and all other personal subsistence expenses, the Board must charge students an amount sufficient to cover fully the cost of providing such facilities and services.

The tuition and fees for all students—full or part time and auditing—are available at www.clemson.edu/cfo/student-financials/. Satisfactory settlement of all expenses is a requirement for completing each semester’s class registration, and no student is officially enrolled until all past due accounts have been satisfied. Financial aid cannot be used to satisfy balances forward from a prior academic year.

Currently enrolled students who expect to continue enrollment may sign up for university housing and dining during the first half of the spring semester. For more information visit www.clemson.edu/housing-dining/.

Newly accepted students who plan to reside in on-campus housing may sign up at www.clemson.edu/housing-dining/. Please note the freshman housing requirement on page 14. When signing up for university housing and dining, newly accepted students are required to pay a one-time, nonrefundable housing application fee of $150, and must pay the $200 admission deposit prior to signing up for housing and dining. The admissions deposit is deducted from the amount otherwise due for the first semester expenses. (Note: Policies regarding priority to/offering of on-campus housing are subject to change.)

All College of Business majors and all students majoring in Anthropology, Justice Studies, Political Science, Psychology or Sociology, and other non-majors taking 3000- and 4000-level courses offered by the College of Business or the departments of Anthropology, Justice Studies, Political Science, Psychology or Sociology, are required to pay a differential fee to fund significant infrastructure and program enhancements. Additional information about this fee is available at http://www.clemson.edu/finance/student/financials/tuition-fees/index.html.

**TUITION AND FEES**

Detailed tuition and fee information is available at www.clemson.edu/cfo/student-financials/. Note: A late payment fee will be assessed if fees are not satisfied by published deadlines.

**Full-Time Fees**

Students must be enrolled in 12 semester hours to pay full-time fees. Students enrolled in less than 12 hours or who drop below 12 hours may become ineligible for some student services, financial aid, or other programs.

**Part-Time Fees**

Students taking less than 12 semester credit hours will be charged according to the schedule at www.clemson.edu/cfo/student-financials/. These fees do not provide for admission to athletic events, concert series, and other such activities.

**Notice to Customers Making Payment by Check**

If a check is mailed for payment, it may be converted into an electronic funds transfer (EFT). This means a copy of the check will be made and the account information will be used to debit the bank account electronically for the amount of the check. The debit from the bank account will usually occur within 24 hours and will be shown on the drawer’s bank account statement. The original check will not be returned to the drawer. It will be destroyed, but Student Financial Services will retain a copy of it. If the EFT cannot be processed for technical reasons, the drawer authorizes the University to process the copy in place of the original check. If the EFT cannot be completed due to insufficient funds, the University may try twice more to make the transfer. A returned item fee of $30 will be charged and collected by EFT.

**Returned Checks, EFTs, and Credit Card Payments**

A check, EFT, or credit card given in payment of University expenses that is returned unpaid by the bank creates an indebtedness to the University. Student Financial Services will represent returned items for payment of academic fees. A $30 fee will be charged for each returned item. If a check is returned or dishonored for any reason, the student’s account may be debited electronically for the amount of the check plus the $30 returned item fee.

If the item is returned to the University in a timely manner with no response from the student or drawer, a written request to disenroll the student will be made to the Registrar. If the request is approved, the percentage of refund will be applied to the debt. If the item is returned after the midpoint of the semester with no response, a decision will be made by the Director of Student Financial Services and the Registrar as to the effect of disenrollment. The University may restrict subsequent payment for academic and other fees by accepting only cash, certified checks, or money orders.

Any individual who uses a two-party check for payment of University expenses will be held responsible for that check if it is returned unpaid by the bank. Items used as payment for various University services such as meal plans, housing, etc., that are later returned unpaid by the bank, give the University the right to cancel such services and cause forfeiture of any refund.

Any returned items not collected by the above procedures may be turned over to a collection agency, the indebtedness reported to a credit bureau and collection fees will be added to the account. Transcripts and diplomas will be withheld pending payment, and the debt may be deducted from state income tax refunds.

**Refund of Academic Fees**

(Tuition, University Fee, and Health Fee) for Students Withdrawing, Dropping to Part Time, or Part-Time Students Dropping Credit Hours

No refunds will be made on a semester’s tuition and fees after four weeks from the last day to register. In the case of a withdrawal from the University, refunds will be based on the effective date of the withdrawal. In the case of a withdrawal from a course, refunds will be based on the date the student drops the course using the on-line registration system. To be eligible for a refund, the student’s request must be received by Student Financial Services prior to the beginning of the next fall/spring semester or subsequent summer term. Beginning with the day following the last day to register, refunds for periods of four weeks or less during fall/spring semester shall be made on the following basis. Students receiving Title IV Financial Aid follow a different policy.

<table>
<thead>
<tr>
<th>Period of Enrollment</th>
<th>Percent Refund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration day(s) in published calendar</td>
<td>100%</td>
</tr>
<tr>
<td>After last day to register:</td>
<td></td>
</tr>
<tr>
<td>One week or less</td>
<td>80%</td>
</tr>
<tr>
<td>More than 1 but not more than 2 weeks</td>
<td>60%</td>
</tr>
<tr>
<td>More than 2 but not more than 3 weeks</td>
<td>40%</td>
</tr>
<tr>
<td>More than 3 but not more than 4 weeks</td>
<td>20%</td>
</tr>
<tr>
<td>More than 4 weeks</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Summers Sessions**

<table>
<thead>
<tr>
<th>Length of Session</th>
<th>Percent Refund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period of Enrollment</td>
<td>Less Than 3 wks.</td>
</tr>
<tr>
<td>Registration day(s) in published calendar</td>
<td>100%</td>
</tr>
<tr>
<td>After last day to register:</td>
<td></td>
</tr>
<tr>
<td>One week or less</td>
<td>0%</td>
</tr>
<tr>
<td>More than 1 but not more than 2 weeks</td>
<td>0%</td>
</tr>
<tr>
<td>More than 2 but not more than 3 weeks</td>
<td>0%</td>
</tr>
<tr>
<td>More than 3 weeks</td>
<td>0%</td>
</tr>
</tbody>
</table>
Refund of Dining Hall Fees
See the section on Dining on page 21.

Cancellations of the Housing Contract for All New Students
Cancellation of the Contract Prior to May 15, 2015
Students who sign contracts after May 15, 2015 are subject to all cancellation procedures and charges outlined below.

New freshman may only use this option if commuting from home (living with parent/guardian(s) and only within a 50-mile radius of campus.

Cancellation of the Contract After May 15, 2015
The contract may be terminated after May 15, 2015 for the following reasons: withdrawal from school; marriage (no more than four weeks prior to the wedding date); or, circumstances determined by the University to be sufficiently extenuating as to warrant cancellation (documentary evidence will be required).

Appeals Committee
Please visit the Housing & Dining website and follow the navigation to the Appeals Process for forms and instructions.

Continuing students have the option to cancel their electronically signed contract within 72 hours of receiving their assignment notification, which is sent to the student’s Clemson University email address.

Appeals Committee
Students are encouraged first to contact the Assignments Office with concerns regarding the contract cancellation process. If the concerns are not resolved satisfactorily, the student is encouraged to submit such concerns to the Appeals Committee.

Proper Notice of Cancellation Request
Students who desire to request cancellation of this contract must contact University Housing and Dining at 864-656-2295 or clemsonhome@clemson.edu for instructions.

Refunds of Financial Aid for Students Withdrawing from the University
Refunds of academic fees are made in accordance with semester and summer session refund policies. University housing refunds are made according to the policy above. Meal plan refunds are made on a pro-rata basis.

Since financial aid is expected to meet or help meet educational costs, any academic fee, housing, or meal plan fee for students withdrawing from the University up to the amount of financial aid received for that semester or summer session, will be refunded to the Financial Aid Program(s) from which the student received assistance.

Students receiving Title IV Funds (Federal Pell Grant, Federal SEOG, Federal Perkins, Federal Direct Loans—unsub or sub) or Federal PLUS Loans who withdraw from the University are subject to the Return of Title IV Funds regulations. Students with funds from any of these programs earn their financial aid dollars while enrolled. If a student withdraws prior to completing more than 60% of a term, a prorated portion of the federal financial aid dollars must be considered unearned and returned to the federal programs and could cause students to owe the University a significant amount upon withdrawal.

In addition to the amount of federal aid that Clemson must return, students who received financial aid for other educational costs, including off-campus living expenses, may be required to repay a portion of those funds to the federal programs. Failure to return aid owed to the federal aid programs may result in loss of eligibility for federal aid assistance.

Federal aid funds to be returned are distributed to the programs in the following order:
- Unsubsidized Federal Direct Loan
- Subsidized Federal Direct Loan
- Federal Perkins Loan
- Federal PLUS Loan
- Federal Pell Grant
- Federal SEOG
- Other Title IV Programs
- Non-Title IV Programs

After the refund has been applied to the Title IV and non-Title IV programs, any refund balance will be refunded to the student.

If debts were incurred before withdrawing, such as bad checks, unpaid traffic or library fines, etc., the refund will cover these obligations first. Academic, fees, housing, and meal plan refunds for students withdrawing will be paid to the student.

RESIDENT TUITION AND FEES
Application for Resident Status
Any undergraduate student or prospective student whose status concerning entitlement to payment of in-state tuition and fees is uncertain has the responsibility of securing a ruling from the University by providing all relevant information on special application forms. These forms can be obtained online, and are to be completed and returned to that office prior to the first day of class for any semester or summer term for which the student is attempting to qualify for payment of the in-state tuition and fee rate. For more information, visit clemson.edu/financialaid/residency/index.html. Applications take several weeks to review once all documentation has been submitted. In order to receive a decision by the date bills are due, you must submit your application by the recommended deadlines: June 15 for fall, November 1 for spring, and April 15 for summer.

Entitlement
Eligibility for payment of in-state tuition and fees shall be determined under the provisions of Sections 59-112-10 through 59-112-100, South Carolina Code of Laws, 1976, as amended. This law is set forth in its entirety as follows (subject to further amendment by the General Assembly). The residency office uses the SC Regulations 62-600 through 62-612 and guidance from the South Carolina Commission on Higher Education to make determination of an application.

The federal government passed Section 702 of the Veterans Access, Choice and Accountability Act of 2014 (Choice Act) that required state compliance by July 2015. South Carolina Act 11 allows a student to pay in-state tuition if the student or parent is a veteran discharged within three years of college enrollment. The student must be using his/her or his/her parent’s Chapter 30 or 33 veteran’s benefits. Also, the student must document his/her domicile in the state if living off campus. Once approved, the student will be monitored each semester to determine that he/she is still using Chapter 30 or 33 veteran’s benefits. If the benefits are exhausted or are not used, the student will revert to nonresident status. Students paying in-state fees under Act 11 are ineligible for South Carolina state scholarships. The application and instructions can be found on the residency classification website.

Statutes
59-112-10—Definitions. As used in this chapter:
A. The words “State Institution” shall mean those post-secondary educational institutions under the jurisdiction of the following: (1) Board of Trustees, Clemson University; (2) Board of Trustees, Medical University of South Carolina; (3) Board of Trustees, South Carolina State College; (4) State College Board of Trustees; (5) Board of Visitors, The Citadel; (6) Board of Trustees, University of South Carolina; (7) Board of Trustees, Winthrop University; and (8) State Board of Technical and Comprehensive Education.

B. The word “student” shall mean any person enrolled for studies in any state institution.

C. The word “residence” or “reside” shall mean continuous and permanent physical presence within this State, provided, that temporary absences for short periods of time shall not affect the establishment of a residence.

D. The word “domicile” shall mean a person’s true, fixed, principal residence and place of habitation; it shall indicate the place where such person intends to remain, and to which such person expects to return upon leaving without establishing a new domicile in another state. For purposes of this section one may have only one legal domicile; one is presumed to abandon automatically an old domicile upon establishing a new one. Housing provided on an academic session basis for students at State institutions shall be presumed not to be a place of principal residence, as residency in such housing is by nature temporary.

E. The words “in-state rates” shall mean charges for tuition and fees established by State Institutions for persons who are domiciled in South Carolina in accordance with this act; the words “out-of-state rates” shall mean charges for tuition and fees established by State Institutions for persons who are not domiciled in South Carolina in accordance with this act.

F. The words “independent person” shall mean a person in his majority, or an emancipated minor, whose predominant source of income is his own earnings or income from employment, investments, or payments from trusts, grants, scholarships, loans, or payments of alimony or separate maintenance made pursuant to court order.

G. The words “dependent” or “dependent person” mean: (1) one whose financial support is provided not through his own earnings or entitlements, but whose predominant source of income or support is payments from a parent, spouse, or guardian, and
who qualifies as a dependent or an exemption on the federal tax return of the parent, spouse, or guardian; or (2) one for whom payments are made, under court order, for child support and the cost of his college education by an independent person meeting the provisions of Section 59-112-20 A or B. However, the words "dependent" or "dependent person" do not include a spouse or former spouse who is the recipient of alimony or separate maintenance payments made pursuant to court order.

H. The word "minor" shall mean a person who has not attained the age of eighteen years; and the words "emancipated minor" shall mean a minor whose parents have entirely surrendered the right to the care, custody and earnings of such minor and are no longer under any legal obligation to support or maintain such minor.

I. The word "parent" shall mean a person’s natural or adoptive father or mother; or if one parent has custody of the child, the parent having custody; or if there is a guardian or other legal custodian of such person, then such guardian or legal custodian; provided, however, that where circumstances indicate that such guardianship or custodianship was created primarily for the purpose of conferring South Carolina domicile for tuition and fee purposes on such child or dependent person, it shall not be given such effect.

J. The word "spouse" shall mean the husband or wife of a married person.

59-112-20—South Carolina Domicile Defined for Purposes of Rates of Tuition and Fees. South Carolina domicile for tuition and fee purposes shall be established as follows in determinations of rates of tuition and fees to be paid by students entering or attending State Institutions:

A. Independent persons who reside in and have been domiciled in South Carolina for a period of no less than twelve months with an intention of making a permanent home therein, and their dependents, may be considered eligible for in-state rates.

B. Independent persons who reside in and have been domiciled in South Carolina for fewer than twelve months but who have full-time employment in the State, and their dependents, may be considered eligible for in-state rates for as long as such independent person is employed on a full-time basis in the State.

C. Where an independent person meeting the provisions of Section 59-112-20 B above, is living apart from his spouse, or where such person and his spouse are separated or divorced, the spouse and dependents of such independent person shall have domiciliary status for tuition and fee purposes only under the following circumstances: (1) if the spouse requesting domiciliary status for tuition and fee purposes remains domiciled in South Carolina although living apart or separated from his or her employed spouse, (2) if the dependent requesting domiciliary status for tuition and fee purposes is under the legal custody or guardianship, as defined in Section 59-112-10A above, of an independent person who is domiciled in this State; or if such dependent is claimed as an income tax exemption by the parent not having legal custody but paying child-support, so long as either parent remains domiciled in South Carolina.

D. The residence and domicile of a dependent minor shall be presumed to be that of the parent of such dependent minor.

59-112-30—Effect of Change of Residence. When the domicile of a student or of the person upon whom a student is financially dependent changes after enrollment at a State Institution, tuition charges shall be adjusted as follows:

A. Except as provided in Section 59-112-20B above, when domicile is taken in South Carolina, a student shall not become eligible for in-state rates until the beginning of the next academic session after expiration of twelve months from date of domicile in this State.

B. When South Carolina domicile is lost, eligibility for in-state rates shall end on the last day of the academic session in which the loss occurs; however, application of this subsection shall be at the discretion of the institution involved.

C. Notwithstanding the other provisions of this section, any dependent person who has been domiciled with his family in South Carolina for a period of not less than three years immediately prior to his enrollment may enroll in a state-supported institution of higher learning at the in-state rate and may continue to be enrolled at such rate even if the parent, spouse, or guardian upon whom he is dependent moves his domicile from this State.

59-112-40—Effect of Marriage. Except as provided in Section 59-112-20B above, marriage shall affect determinations of domicile for tuition and fee purposes only insofar as it operates to evidence an intention by the parties to make a permanent home in South Carolina.

59-112-50—Military Personnel and Their Dependents. Notwithstanding other provisions of this act, during the period of their assignment to duty in South Carolina members of the armed services of the United States stationed in South Carolina and their dependents may be considered eligible for in-state rates. When such armed service personnel are ordered away from the State, their dependents may continue for an additional twelve months to have this eligibility at the State Institutions where they are enrolled at the time such assignment ends. Such persons and their dependents may be considered eligible for in-state rates for a period of twelve months after their discharge from the armed services even though they were not enrolled at a State Institution at the time of their discharge, if they have evinced an intent to establish domicile in South Carolina and if they have resided in South Carolina for a period of at least twelve months immediately preceding their discharge.

59-112-60—Faculty, Administrative Employees and Dependents Thereof. Full-time faculty and administrative employees of State Institutions, and the spouses and children of such persons, shall be excluded from the provisions of this act.

59-112-70—Abatement of Rates for Nonresidents on Scholarship. Notwithstanding other provisions of this act, the governing boards listed in Section 59-112-10A above, are authorized to adopt policies for the abatement of any part or all of the out-of-state rates for students who are recipients of scholarship aid.

59-112-80—Administrative of Chapter; Burden of Proving Eligibility of Students. Each State Institution shall designate an official to administer the provisions of this act. Students making application to pay tuition and fees at in-state rates shall have the burden of proving to the satisfaction of the aforesaid officials of State Institutions that they have fulfilled the requirements of this act before they shall be permitted to pay tuition and fees at such rate.

59-112-90—Penalties for Willful Misrepresentation. Where it appears to the satisfaction of officials charged with administration of these provisions that a person has gained domiciliary status improperly by making or presenting willful misrepresentations of fact, such persons should be charged tuition and fees past due and unpaid at the out-of-state rate, plus interest at a rate of eight percent per annum, plus a penalty amounting to twenty-five percent of the out-of-state rate for one semester; and until these charges have been paid no such student shall be allowed to receive transcripts or graduate from any State Institution.

59-112-100—Regulations. The Commission on Higher Education may prescribe uniform regulations for application of the provisions of this act and may provide for annual review of such regulations.

ARTICLE V

Determination of Rates of Tuition and Fees

(Statutory Authority: 1976 Code Sections 59-112-10 to 59-112-100)

62-600. Rates of Tuition and Fees.

A. Resident classification is an essential part of tuition and fee determination, admission regulations, scholarship eligibility, and other relevant policies of the state. It is important that institutions have fair and equitable regulations that can be administered consistently and are sensitive to the interests of both students and the state. The Commission on Higher Education hereby establishes regulations for the Statute Governing Residency for Tuition and Fee Purposes to be applied consistently by all South Carolina institutions of higher education. These regulations do not address residency matters relating to in county categories used within the State’s technical colleges.

B. Institutions of higher education are required by the Statute to determine the resident classification of applicants. The initial determination of one’s resident status is made at the time of admission. The determination made at that time, and any determination made thereafter, prevails for each subsequent semester until information becomes available that would impact the existing residency status and the determination is successfully challenged. The burden of proof rests with the students to show evidence as deemed necessary to establish and maintain their residency status.

62-601. Code of Laws Governing Residence. Rules regarding the establishment of legal residence for tuition and fee purposes for institutions of higher education are governed by Title 59, Chapter 112 of the 1976 South Carolina Code of Laws, as amended.
A. “Academic Session” is defined as a term or semester of enrollment. (62-607.B)

B. “Continue to be Enrolled” is defined as continuous enrollment without an interruption that would require the student to pursue a formal process of readmission to that institution. Formal petitions or applications for change of degree level shall be considered readmissions. (62-607.A)

C. “Dependent Person” is defined as one whose predominant source of income or support is from payments from a parent, spouse, or guardian, who claims the dependent person on his/her federal income tax return. In the case of those individuals who are supported by family members who do not earn enough reportable income for taxation purposes, a dependent person can be defined as one who qualifies as a dependent or exemption on the federal tax return of his or her parent, spouse, or guardian. A dependent person is also one for whom payments are made, under court order, for child support and the cost of the dependent person’s college education. A dependent person’s residency is based upon the residency of the person upon whom they are dependent. (62-602.G) (62-603.B) (62-605.C) (62-607.A)


E. “Family’s Domicile in this State is Terminally Defined” is defined as an employer directed transfer of the person upon whom the student is dependent and is not construed to mean a voluntary change in domicile. Also included is a relocation of the person upon whom the student is dependent who is laid off through no fault of their own, e.g., plant closure, downsizing, etc., who accepts employment in another state prior to relocating. (62-607.A)

F. “Full time employment” is defined as employment that consists of at least thirty seven and one half hours a week on a single job in a full time status, with gross earnings of at least minimum wage. However, a person who works less than thirty seven and one half hours a week but receives or is entitled to receive full time employee benefits shall be considered to be employed full time if such status is verified by the employer. A person who meets the eligibility requirements of the Americans with Disabilities Act must present acceptable evidence that they satisfy their prescribed employment specifications in order to qualify as having full time employment. (62-605.C.1) (62-609.A.2) (62-609.A.3)

G. “Guardian” is defined as one legally responsible for the care and management of the person or property of a minor child based upon the five tests for dependency prescribed by the Internal Revenue Service; provided, however, that where circumstances indicate that such guardianship or custodianship was created primarily for the purpose of conferring South Carolina domicile for tuition and fee purposes on such child or dependent person, it shall not be given such effect. (62-602.C) (62-602.E) (62-602.I) (62-602.K) (62-602.L) (62-603.B) (62-605.C)

H. “Immediately Prior” is defined as the period of time between the offer of admission and the first day of the term for which the offer was made, not to exceed one calendar year. (62-607.A)

I. “Independent Person” is defined as one in his/her majority (eighteen years of age or older) or an emancipated minor, whose predominant source of income is his/her own earnings or income from employment, investments, or payments from trusts, grants, scholarships, commercial loans, or payments made in accordance with court order. An independent person must provide more than half of his or her support during the twelve months immediately prior to the date that classes begin for the semester for which resident status is requested. An independent person cannot claim the domicile of another individual as their own for the purposes of establishing intent to become a South Carolina resident. An independent person must have established his/her own domicile for twelve months prior to receiving instate tuition and fees. An independent person cannot be claimed as a dependent or exemption on the federal tax return of his or her parent, spouse, or guardian for the year in which resident status is requested. (62-602.N) (62-603.A) (62-605.C) (62-607.B) (62-608.B)

J. “Minor” is defined as a person who has not attained the age of eighteen years. An “emancipated minor” shall mean a minor whose parents have entirely surrendered the right to the care, custody and support and claims or, only in the case of those individuals who are supported by family members who do not earn enough reportable income for taxation purposes, qualifies to claim the dependent person as a legal obligation to support or maintain such minor. (62-602.G) (62-603.B)

K. “Non-resident Alien” is defined as a person who is not a citizen or permanent resident of the United States. By virtue of their non-resident status “non-resident aliens” generally do not have the capacity to establish domicile in South Carolina. (62-602.M) (62-604.A)


M. “Reside” is defined as continuous and permanent physical presence within the State, provided that absences for short periods of time shall not affect the establishment of residence. Excluded are absences associated with requirements to complete a degree, absences for military training service, and like absences, provided South Carolina domicile is maintained. (62-603.A) (62-606.B) (62-609.A) (62-609.A.3) (62-609.A.4) (62-609.B)

N. “Resident” for tuition and fee purposes is defined as an independent person who has not previously resided and been domiciled in South Carolina for twelve continuous months immediately preceding the date the classes begin for the semester for which resident status is requested. (62-605.C) (62-606.A) (62-606.A.5) (62-606.B) (62-606.D) (62-607.A) (62-609.A)


P. “Temporary Absence” is defined as a break in enrollment during a fall or spring semester (or its equivalent) during which a student is not registered for class. (62-606.A)

Q. “Terminal Leave” is defined as a transition period following active employment and immediately preceding retirement (with a pension or annuity), during which the individual may use accumulated leave. (62-609.A.4)

R. “United States Armed Forces” is defined as the United States Air Force, Army, Marine Corps, Navy, and Coast Guard. (62-606.B) (62-609.A(1))

S. “Trust” is defined as a legal entity created by a grantor for the benefit of designated beneficiaries under the laws of the state and the valid trust instrument. However, that where circumstances indicate that such trust was created primarily for the purpose of conferring South Carolina domicile for tuition and fee purposes on such child or independent person, it shall not be given such effect.

A. Independent persons who have physically resided and been domiciled in South Carolina for twelve continuous months immediately preceding the date the classes begin for the semester for which resident status is requested may qualify to pay in state tuition and fees. The twelve month residency period starts when the independent person establishes the intent to become a South Carolina resident by providing proof of having resided in South Carolina continuously for at least twelve months immediately prior to the date that classes begin for the semester for which resident status is requested. (62-605.C) (62-606.A) (62-606.A.5) (62-606.B) (62-607.A) (62-609.A)

B. The resident status of a dependent person is based on the resident status of the person who provides more than half of the dependent person’s support and claims or, only in the case of those individuals who are supported by family members who do not earn enough reportable income for taxation purposes, qualities to claim the dependent person as a dependent for federal income tax purposes. Thus, the residence and domicile of a dependent person shall be presumed to be that of their parent, spouse, or guardian.

C. In the case of divorced or separated parents, the resident status of the dependent person may be based on the resident status of the parent who claims the dependent person as a dependent for tax purposes or based on the resident status of the parent who has legal custody or legal joint custody of the dependent person; or based on the resident status of the person who maintains payments under a court order for child support and at least the cost of his/her college tuition and fees.
62-604. Non-Resident Aliens, Non-Citizens, and Non-Permanent Residents. A. Except as otherwise specified in this section or as provided in Section 62-609 (1) & (2), independent non-citizens and non-permanent residents of the United States will be assessed tuition and fees at the non-resident, out of state rate. Independent non-resident aliens, including refugees, asylees, and parolees may be entitled to resident, in state classification once they have been awarded permanent resident status by the U.S. Department of Justice and meet all the statutory residency requirements provided that all other domiciliary requirements are met. Time spent living in South Carolina immediately prior to the awarding of permanent resident status does not count toward the twelve month residency period. Certain non-resident aliens present in the United States in specified visa classifications are eligible to receive in state residency status for tuition and fee purposes as prescribed by the Commission on Higher Education. They are not, however, eligible to receive state sponsored tuition assistance/scholarships.

B. Title 8 of the Code of Federal Regulations (CFR) serves as the primary resource for defining visa categories.

62-605. Establishing the Requisite Intent to Become a South Carolina Domiciliary. A. Resident status may not be acquired by an applicant or student while residing in South Carolina for the primary purpose of enrollment in an institution or for access to state supported programs designed to serve South Carolina residents. An applicant or student from another state who comes to South Carolina usually does so for the purpose of attending school. Therefore, an applicant or student who enrolls as a non-resident in an institution is presumed to remain a non-resident throughout his or her attendance and does not qualify under any of the residency provisions.

B. If a person asserts that his/her domicile has been established in this State, the individual has the burden of proof. Such persons should provide to the designated residency official of the institution to which they are applying any and all evidence the person believes satisfies the burden of proof. The residency official will consider any and all evidence provided concerning such claim of domicile, but will not necessarily regard any single item of evidence as conclusive evidence that domicile has been established.

C. For independent persons or the parent, spouse, or guardian of dependent persons, examples of intent to become a South Carolina resident may include, although any single indicator may not be conclusive, the following indicators:

1. Statement of full time employment;
2. Designating South Carolina as state of legal residence on military record;
3. Possession of a valid South Carolina driver’s license, or if a non-driver, a South Carolina identification card. Failure to obtain this within 90 days of the establishment of the intent to become a South Carolina resident will delay the beginning date of residency eligibility until a South Carolina driver’s license is obtained;
4. Possession of a valid South Carolina vehicle registration card. Failure to obtain this within 45 days of the establishment of the intent to become a South Carolina resident will delay the beginning date of residency eligibility until the applicant obtains a South Carolina vehicle registrations card;
5. Maintenance of domicile in South Carolina;
6. Payment of South Carolina income taxes as a resident during the past tax year, including income earned outside of South Carolina from the date South Carolina domicile was claimed;
7. Ownership of principal residence in South Carolina; and
8. Licensing for professional practice (if applicable) in South Carolina.

D. The absence of indicia in other states or countries is required before the student is eligible to pay in state rates.

62-606. Maintaining Residence. A. A person’s temporary absence from the State does not necessarily constitute loss of South Carolina residence unless the person has acted inconsistently with the claim of continued South Carolina residence during the person’s absence from the State. The burden is on the person to show retention of South Carolina residence during the person’s absence from the State. Steps a person should take to retain South Carolina resident status for tuition and fee purposes include:

1. Continuing to use a South Carolina permanent address on all records;
2. Maintaining South Carolina driver’s license;
3. Maintaining South Carolina vehicle registration;
4. Satisfying South Carolina resident income tax obligation. Individuals claiming permanent residence in South Carolina are liable for payment of income taxes on their total income from the date that they established South Carolina residence. This includes income earned in another state or country.

B. Active duty members of the United States Armed Forces and their dependents are eligible to pay in state tuition and fees as long as they continuously claim South Carolina as their state of legal residence during their military service. Documentation will be required in all cases to support this claim. South Carolina residents who change their state of legal residence while in the military lose their South Carolina resident status for tuition and fee purposes.

62-607. Effect of Change of Residence. A. Notwithstanding other provisions of this section, any dependent person of a legal resident of this state who has been domiciled with his/her family in South Carolina for a period of not less than three years and whose family’s domicile in this state is terminated immediately prior to his/her enrollment may enroll at the in state rate. Any dependent person of a legal resident of this state who has been domiciled with his/her family in South Carolina for a period of not less than three years and whose family’s domicile in this state is terminated after his/her enrollment may continue to receive in state rates, however, a student must continue to be enrolled and registered for classes (excluding summers) in order to maintain eligibility to pay in state rates in subsequent semesters. Transfers within or between South Carolina colleges and universities of a student seeking a certificate, diploma, associate, baccalaureate, or graduate level degree does not constitute a break in enrollment.

B. If a dependent or independent person voluntarily leaves the state, and information becomes available that would impact the existing residency status, eligibility for in state rates shall end on the last day of the academic session during which domicile is lost. Application of this provision shall be at the discretion of the institution involved. However, a student must continue to be enrolled and registered for classes (excluding summers) in order to maintain eligibility to pay in state rates in subsequent semesters.

62-608. Effect of Marriage. A. In ascertaining domicile of a married person, irrespective of gender, such a review shall be determined just as for an unmarried person by reference to all relevant evidence of domiciliary intent.

B. If a non-resident marries a South Carolina resident, the non-resident does not automatically acquire South Carolina resident status. The non-resident may acquire South Carolina resident status if the South Carolina resident is an independent person and the non-resident is a dependent of the South Carolina resident.

C. Marriage to a person domiciled outside South Carolina shall not be solely the reason for precluding a person from establishing or maintaining domicile in South Carolina and subsequently becoming eligible or continuing to be eligible for residency.

D. No person shall be deemed solely by reason of marriage to a person domiciled in South Carolina to have established or maintained domicile in South Carolina and consequently to be eligible for or to retain eligibility for South Carolina residency.

62-609. Exceptions. A. Persons in the following categories qualify to pay in state tuition and fees without having to establish a permanent home in the state for twelve months. Persons who qualify under any of these categories must meet the conditions of the specific category on or before the first day of class of the term for which payment of in state tuition and fees is requested. The following categories apply only to in state tuition and do not apply to State supported scholarships and grants. Individuals who qualify for in state tuition and fees under the following exceptions do not automatically qualify for LIFE, SC HOPE or Palmetto Fellows Scholarships.

1. “Military Personnel and their Dependents”: Members of the United States Armed Forces who are permanently assigned in South Carolina on active duty and their dependents are eligible to pay in state tuition and fees. When such personnel are transferred from the State, their dependents may continue to pay in state tuition and fees as long as they are continuously enrolled. Such persons (and their dependents) may also be eligible to pay in state tuition and fees as long as they are continuously enrolled after their discharge from the military, provided they have demonstrated an intent to establish a permanent home in South Carolina and become residents of South Carolina within 12 months immediately preceding their discharge. Military personnel who are not stationed in South Carolina and/or former military personnel who intend to establish South Carolina residency must fulfill the twelve month "physical presence" requirement for them or their dependents to qualify to pay in state tuition and fees.

2. “Faculty and Administrative Employees with Full Time Employment and their Dependents”: Full time faculty and administrative employees of South Carolina state supported colleges and universities...
and their dependents are eligible to pay in state tuition and fees.

(3) "Residents with Full Time Employment and their Dependents." Persons who reside, are domiciled, and are full time employed in the State and who continue to work full time until they meet the twelve month requirement and their dependents are eligible to pay in state tuition and fees, provided that they have taken steps to establish a permanent home in the State. Steps an independent person must take to establish residency in South Carolina are listed in Section 62-605 entitled ("Establishing the Requisite Intent to Become a South Carolina Domiciliary").

(4) "Retired Persons and their Dependents." Retired persons who are receiving a pension or annuity who reside in South Carolina and have been domiciled in South Carolina as prescribed in the Statute for less than a year may be eligible for in state rates if they maintain residence and domicile in this State. Persons on terminal leave who have established residency in South Carolina may be eligible for in state rates even if domiciled in the State for less than one year if they present documentary evidence from their employer showing they are on terminal leave. The evidence should show beginning and ending dates for the terminal leave period and that the person will receive a pension or annuity when he/she retires.

B. South Carolina residents who wish to participate in the Contract for Services program sponsored by the Southern Regional Education Board must have continuously resided in the State for other than educational purposes for at least two years immediately preceding application for consideration and must meet all other residency requirements during this two year period.


A. Persons applying for a change of resident classification must complete a residency application/petition and provide supporting documentation prior to a reclassification deadline as established by the institution.

B. The burden of proof rests with those persons applying for a change of resident classification who must show required evidence to document the change in resident status.

62-611. Incorrect classification.

A. Persons incorrectly classified as residents are subject to reclassification and to payment of all nonresident tuition and fees not paid. If incorrect classification results from false or concealed facts, such persons may be charged tuition and fees past due and unpaid at the out of state rate. The violator may also be subject to administrative, civil, and financial penalties. Until these charges are paid, such persons will not be allowed to receive transcripts or graduate from a South Carolina institution.

B. Residents whose resident status changes are responsible for notifying the Residency Official of the institution attended of such changes.

62-612. Inquiries and Appeals.

A. Inquiries regarding residency requirements and determinations should be directed to the institutional residency official. Each institution appeals process should be directed by that institutions primary residency officer, in conjunction with those individuals who practice the application of State residency regulations on a daily basis. The professional judgment of the residency officer and administrators will constitute the institutional appeal process. Neither the primary residency official nor appellate official(s) may waive the provisions of the Statute or regulation governing residency for tuition and fee purposes.

DINING

The University provides a variety of meal plans to meet student needs. The two residential dining halls available to meal plan patrons, Core Campus and Schilletter, are located in different areas of the campus and feature an all-you-care-to-eat policy per meal. Meals may also be purchased on a cash basis or by using a debit/credit card, Paw Points, or TigerStripe account. Meal Plans become effective when University Housing is opened for occupancy at the beginning of each semester. Meal Plans expire after the evening meal on the day of graduation at the end of each semester. Meal Plans are not effective during official University breaks.

Eastside Food Court, Canteen, Fernow Street Café, Einstein Bros. Bagels, and Starbucks provide a wide assortment of dining selections on an a la carte basis. Nationally branded concepts are available in dining locations on campus. For a complete list of dining locations, visit www.clemson.edu/housing/dining/. All retail dining facilities and dining halls accept cash, credit/debit, Paw Points, and TigerStripe.

All first-year students who live in University Housing, excluding apartments with kitchens, are required to subscribe to a first-year resident meal plan for their first two semesters. The meal plan selected for the fall semester is automatically added to the student’s spring bill. All other students may choose a meal plan on a semester basis or pay for individual meals. First-year students living in University Housing may terminate their meal plan for one of the following reasons ONLY:

• withdrawal from the University
• change in housing assignment to an apartment with kitchen facilities
• medical condition with dietary requirements that cannot be met by Dining. Documentation from a medical doctor must be provided along with specific dietary requirements. This documentation will be reviewed by University Housing and Dining’s Registered Dietician and Student Disability Services
• other circumstances determined by the University to be beyond the student’s control

First-year students must provide the necessary documentation for any of the above reasons before cancellation of their meal plan will be considered. Upperclassmen may terminate their meal plans for any reason on the prescribed dates listed on Housing & Dining’s website. Failure to participate in a meal plan does not automatically release a student from the first-year student requirements listed above; all first-year students who live on campus are required to participate in one of the three meal plans that meet the first-year requirement.

If a first-year student living on campus does not sign up for one of the required resident choices, a meal plan will be assigned. All meal plans for all meal plan participants will automatically rollover to the spring semester. If an upperclassmen chooses to not to subscribe to a meal plan for the spring semester they must opt out before payment of the spring tuition statement.

Students may change meal plans during certain periods. Visit the University Housing & Dining website for applicable dates and locations. All adjustments will be prorated. Students may upgrade meal plans at anytime.

The meals available charge applies to the meals that have been prepared, not those that have been eaten by the individual student. Paw Points are not refundable; however, they do carry forward to the next semester. Students will be responsible for all service charges related to changes or termination of a meal plan. Note: Meal plans may not be shared with other students. Only the meal plan purchaser may utilize his/her meal plan.

Information is available at www.clemson.edu/housing/dining or by calling 864-656-1237. More information is available at www.clemson.edu/tigero, by calling 864-656-0763, or e-mailing tigeronecard@lists.clemson.edu.

TIGERSTRIPE ACCOUNT

The TigerStripe account is a declining balance account students access using a TigerOne card and is accepted at more than 200 participating locations on and off campus. Participating merchants are listed at www.clemson.edu/tigero. There is no daily limit on the number of purchases that may be made; however, no charges shall exceed the amount of deposited funds.

Funds may be added to a TigerStripe account via iROAR under the optional fees option, and are limited to $2,500 per semester. In addition, deposits can be made online using the TigerOne Card Services website at t1online.clemson.edu, at the TigerOne Card Services office, or with cash at one of the Value Port Stations. Students can easily manage their accounts and view their balances and history using the online card office.

TigerStripe accounts are non-transferrable and non-refundable and remain open until a student graduates, transfers or withdraws from the university and notifies TigerOne Card Services. Any indebtedness to the University will be deducted from the balance remaining.

For more information about the TigerOne card and Terms and conditions, visit www.clemson.edu/tigero. TigerOne Card Services office is located at 111 Hendrix Center, Clemson, SC 29634. Office hours are Monday-Friday 8:00am-4:30pm.
FINANCIAL AID
The Office of Student Financial Aid administers and coordinates various types of undergraduate financial aid administered by Clemson University: scholarships, loans, grants, and work-study employment. The office works jointly with the University Scholarships and Awards Committee.

Students may apply after October 1 for financial assistance for the next academic year. Financial aid requests, based on financial need, must be supported by a processed Free Application for Federal Student Aid (FAFSA) and renewed annually. No application is required for the LIFE Scholarship.

The FAFSA must be submitted by April 1 for continuing students for need-based scholarships, Federal Supplemental Educational Opportunity Grant (FSEOG), Federal Work-Study, Federal Perkins Loan, and South Carolina State Need-Based Grant. April 1 is the suggested deadline for application for the Federal Pell Grant and the Federal Direct Loan. June 15 is the suggested deadline for application for private/alternative loans and the Federal PLUS Loan. PLUS and private loans require a separate online application.

Transfer students applying for student loans will be considered as entering freshmen in determining maximum loan limits. Following enrollment, after the credit evaluation process has been completed, students may submit a request for additional funds due to changes in class standing.

Information regarding financial aid programs at Clemson University is available at www.clemson.edu/finaid or from the Office of Student Financial Aid, G-01 Sikes Hall, Box 345123, Clemson, SC 29634-5123.

Satisfactory Academic Progress for Financial Aid Eligibility
Students must maintain satisfactory academic progress to be eligible for financial aid. This policy contains both qualitative (grade-point average) and quantitative (credit hours completed) requirements. Students must meet the grade-point average requirement as stated under the Academic Eligibility Policy and must complete their degrees within 150% of the published time frame. Details are available at www.clemson.edu/finaid. Students wishing to appeal their academic progress status may submit a letter to the Office of Student Financial Aid. This appeals process is separate from the Appeals Committee on Academic Eligibility.

Institutional Aid Policy for Suspended Students
An undergraduate student who has been suspended from the University for a violation of the Academic Integrity Policy, or suspended from the University due to a violation of any Student Regulation as defined and enforced by the Office of Community and Ethical Standards, becomes immediately ineligible for University merit or need-based scholarship or grant aid for the remainder of the student’s undergraduate enrollment at Clemson.

Educational Benefits for Veterans, War Orphans, and Children of Deceased or Disabled Law Enforcement Officers or Fire Fighters
The Veterans Administration provides educational assistance for veterans and children of deceased or totally disabled veterans who meet requirements of applicable laws and regulations. Any veteran or child of a deceased or totally disabled veteran should communicate with the nearest Veterans Administration Office to determine whether he/she is entitled to any educational benefits. Free tuition is available to children of South Carolina law enforcement officers or fire fighters who were totally disabled or killed in the line of duty. Certification is required from the agency of the parent’s employment. Upon presentation of proof of eligibility, a student shall not become eligible for educational assistance until the beginning of the next academic term.

Educational Benefits for Senior Citizens
South Carolina residents who are at least 60 year of age may qualify for free tuition. Applicants may obtain a waiver application and an audit card (if auditing courses) from the Registrar’s Office in 102 Sikes Hall. Seniors submit the waiver application and a photocopy of their SC driver’s license to the Office of Student Financial Aid in G-01 Sikes Hall. Seniors who are auditing courses must submit an audit card to 102 Sikes Hall each semester. The waiver application must be submitted prior to the first day of class and is not retroactive to prior terms. Questions may be directed to the Office of Student Financial Aid at 864-656-2280.
Counseling and Psychological Services (CAPS)
CAPS provides comprehensive mental health services from a holistic perspective. Students are seen within their context and developmental stages as psychotherapy/counseling is delivered in individual, group, or couples format. Specialized services are delivered by a psychiatrist and addictions counselors. All services are confidential.
CAPS offers a walk-in clinic Monday through Friday, from 10:00 a.m. – 2:30 p.m. for the initial access to services. Students complete paperwork and are seen for this initial brief evaluation on a first-come, first-served basis. Students who cannot meet the walk-in clinic times may call 656-2451 for an appointment during the 8:00 a.m. – 5:00 p.m. hours of operation.
The Assessment, Choices, Transitions and Training (ACTT) Program assists students with substance misuse/abuse concerns. CAPS also provides counseling, advocacy, referral, education, and support services for students with concerns about relationship and sexual violence.
Students with eating concerns/disorders are treated from a multidisciplinary approach that involves psychological, medical and nutritional perspectives.
In case of emergency, assistance and consultation are available by calling 656-2451 during regular business hours. After hours and on weekends, the on-call counselor can be reached through the University Police Department at 656-2222.

Healthy Campus
Our goal is for Clemson University to be a national model of health, safety and sustainability, and for students to experience a way of life at Clemson University that contributes to their lifelong health and wellbeing. We achieve this by providing exemplary services from a holistic perspective. Students are seen by Healthy Campus facilitators. This 70-minute dialogue covers areas key to maintaining a safe campus, including alcohol and other drug misuse, mental health and suicide prevention, and interpersonal violence prevention, while focusing on bystander intervention.
Presentations and information focused on the following areas are available as requested and online:
• alcohol and other drugs; anxiety, body image, building social connections, depression, eating disorders, interpersonal violence, mental health, nutrition, safety on social media, sexual health, sleep, stress, suicide, sustainability, tobacco and other health-related topics.

Health Fee
University policy requires that all students registered for six or more credit hours on campus during the fall or spring semester or three or more on-campus credit hours during a summer session pay the University health fee. The health fee provides access to the professional service of physicians, nurse practitioners, psychologists, counselors, and health educators at no additional cost; reduced costs for medical diagnostics; and an after-hours urgent care excess insurance benefit for injuries. Students pay for pharmaceuticals, orthopedic equipment, specialty clinics, and the psychiatrist. Payment is expected at the time of service and may be made by cash, check, most credit cards, or TigerStripe.

Health Insurance
The University offers a student health insurance plan to help cover major medical expenses. Information is available at www.studentinsurance.com/Apps/Schools/Default.aspx?ID=40. Students are strongly encouraged to have comprehensive health insurance coverage during their tenure at the University. Call the Student Insurance Office at 846-656-3561 or email redfern@clemson.edu with questions.

ACADEMIC SUCCESS CENTER
The Academic Success Center (ASC) supports undergraduate student success by delivering a diverse array of services designed to foster the skills and mindset students need to enhance their learning and achieve their educational goals. Through the delivery of its programs, the ASC strives to enhance student learning and development, meet the needs of students, and promote student success, continued enrollment and timely graduation. ASC programs include:
• Supplemental Instruction (SI) — SI is offered for historically difficult courses and provides students with the opportunity to engage in peer-based learning sessions facilitated by trained upperclassmen who have successfully completed the course.
• Tutoring — Course-specific tutoring is delivered on a drop-in basis and allows students to meet with trained upperclassmen who can assist them with questions about course content and provide helpful learning and study strategies.
• Success Strategy workshops — Workshops on a variety of topics are presented throughout the academic year. Participating in workshops gives students the opportunity to learn new strategies and approaches that enhance their learning and academic success.
• Academic counseling — Academic counseling is available by appointment and equips students with tools and strategies for improving their study and learning habits and behaviors.
• Academic coaching — Academic coaching is available by appointment and provides students with the opportunity to meet with a coach on an ongoing basis to enhance their self-management and life skills.
• Cross-college advising — Cross-college advising is available by appointment and provides exploratory/undeclared students and students in transition with guidance to develop an individualized academic plan compatible with their educational
and career goals, and that facilitates intentional academic decision making and planning, successful completion of degree requirements, and timely graduation.

- Academic recovery program — This program is delivered to students on academic probation and is designed to assist students with developing a plan for returning to good academic standing.

For additional information about the Academic Success Center, visit www.clemson.edu/asc or call 864-656-6452.

CENTER FOR CAREER AND PROFESSIONAL DEVELOPMENT

The Michelin® Career Center, in the Center for Career and Professional Development, assists undergraduate and graduate students in selecting appropriate fields of study, furthering their education, learning effective job searching strategies, and making connections with employers.

Career counselors are available to meet one-on-one with students to explore career or educational options, devise résumés and cover letters, hone interviewing techniques, conduct searches for internships and full-time jobs, and ready themselves for interviewing with employers. In addition, students may utilize ClemsonJobLink, the Career Center’s on-line recruiting system, to view part-time jobs, internships, and full-time job postings and to sign up for on-campus interviews.

Experiential learning opportunities are designed to provide students with an experience in which they are required to be active and intentional learners. The goal is for students to transfer their knowledge and experiences from the classroom and apply them in work environments outside the classroom. The Center’s Internship Program is geared to bringing students and employers together to facilitate an academically viable and mutually beneficial work experience. This program offers on-campus, off-campus and international internship options. Students may participate in either part-time or full-time internships.

The Center’s goal is to empower students with the skills and tools to find part-time jobs and internships while in school, as well as full-time jobs following graduation. More than 6,000 employers use the Center to connect with students through job postings, on-campus interviews, information sessions and career events via our on-line recruiting system ClemsonJobLink. The Center hosts a number of events throughout the year to further connect students and employers, including an all-majors career fair each spring and fall, and several fairs for specific fields such as education and construction.

Other information can be obtained from the Career Center’s website at career.clemson.edu or by calling 864-656-6000.

DISABILITY SERVICES

Student Disability Services (SDS) coordinates the provision of reasonable accommodations for students with physical, psychological, attentional, or learning disabilities. Accommodations are individualized, flexible, and confidential based on the nature of the disability and the academic environment in compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990.

Students are encouraged to consult with the Student Disability Services staff as early as possible, preferably prior to the first day of classes. Current documentation of a specific disability from a licensed professional is needed. For additional information or to schedule an appointment, contact Student Disability Services at 864-656-6848 or sds@clemson.edu. Details on policies and procedures are available at www.clemson.edu/sds.
ACADEMIC REGULATIONS

Proper discharge of all duties is required at Clemson University, and a student’s first duty is his/her scholastic work. All students should be thoroughly acquainted with these basic requirements.

CREDIT SYSTEM

The semester hour is the basis of all credits. Generally, one recitation hour or two–three laboratory hours a week for a semester constitute a semester hour. Thus, in HIST 1930 Modern World History 3(3), as this subject is listed in the Courses of Instruction section of this catalog, the student takes three semester hours. When the course is completed satisfactorily, three credit hours are entered on the student’s record. The notation “3(3)” means that the course carries three credits and has three clock hours of class time per week. CH 1010 General Chemistry 4(3) carries four semester hours, and has three clock hours of class time per week. However, CH 1010 has a required lab course associated with it (CH 1011), which carries no additional credit, but has three clock hours associated with it. CH 1011 would therefore read 0(3), and the three clock hours associated with CH 1011 account for the fourth credit CH 1010 carries.

Credit Load

Entering freshmen are restricted to the curriculum requirements of their majors. Credit loads for all other undergraduate students are determined in consultation with the student’s academic advisor, who will approve a credit load deemed in the best interest of the student based on such factors as course requirements, grade-point average, participation in other activities, and expected date of graduation.

For fall, spring and summer terms, 19 is the maximum number of hours in which a student may enroll during early registration (16 hours is the maximum credit load for those on probation). On the day before classes begin for a term, the maximum number of hours for all students, except those on probation, is automatically raised to 21 credits. Permission of a student’s academic advisor is required for all registration in more than 21 hours, or 16 hours for those on probation.

Students are not permitted to enroll in courses with overlapping class times.

Full-Time Enrollment

In fall and spring semesters, enrollment in 12 or more credit hours is considered full time, and combined enrollment in 12 or more hours in summer terms is considered full time for the summer. Enrollment in fewer than 12 credit hours is part time.

Advanced Placement and Credit by Examination

In addition to earning credit by the usual method involving classroom attendance, a student may receive credit toward his/her degree by completing a course successfully by examination only. Freshmen interested in exempting some elementary courses in this manner should participate in the College Board Advanced Placement or International Baccalaureate program and have the results of these tests sent to Clemson.

Certain departments will also grant credit for successful completion of College-Level Examination Program (CLEP) subject examinations, which are administered by the College Board.

Enrolled students may earn credit by means of a special examination without the necessity of class attendance subject to the following requirements:

1. The applicant must present evidence that he/she has received training or taken work which is approximately equivalent to that given in the course at Clemson for which an examination is requested.
2. The applicant must not have previously failed or audited the course at Clemson.
3. The applicant must apply in writing for the examination; the request must be approved by the instructor, chair of the department in which the course is taught, and the Enrolled Student Services Office. Application forms are available in the Enrolled Student Services Office, 104 Sikes Hall.

Credit (CR) will be awarded for acceptable work in lieu of letter grades in recognition of college-examined, institutional special program subject examinations, and similar instruments.

Transfer Credit

Coursework completed with a grade of C or better by currently enrolled Clemson students at other regionally accredited institutions, including correspondence courses, telecourses, online courses, and exempted courses, will be evaluated for transfer in terms of equivalent courses included in the Clemson curriculum of the student’s choice. This does not guarantee that all courses taken at other institutions will be accepted for transfer. The appropriateness of each course or exemption will be based on the evaluation by the Office of Admissions. Students should obtain approval from the academic advisor for a course prior to enrolling in the course. By obtaining advance approval, the student is assured of receiving proper credit at Clemson upon satisfactory completion of the course. Information and forms relative to this approval may be obtained in the Enrolled Student Services Office, 104 Sikes Hall. Coursework earned at different institutions will not be joined to equate with one Clemson course. No course taken at a nonbaccalaureate degree granting institution may be used as an equivalent or substitute for any 3000- or 4000-level Clemson course. Relative to academic eligibility, graduation, and transcripts, only grades earned at Clemson are in computing the student’s grade-point average. Grades earned in qualifying (i.e., nonremedial) transfer courses will be used in calculating the student’s grade-point average for South Carolina LIFE Scholarship awards. Non-remedial college classes completed while in high school are also included in this calculation.

Learning experiences including, but not limited to, military service schools, non-collegiate sponsored instruction, work-related experiences, etc., will not be evaluated for transfer; however, enrolled students may request credit by examination for any non-transferable learning experience. For additional information, see Advanced Placement and Credit by Examination above.

Learning Experiences

All “for credit” learning experiences conducted with organizations other than accredited higher education institutions must be regularly supervised by appropriate members of the Clemson University faculty or staff. The student must be enrolled at the time the credit is generated, and the level of credit (grade) is the responsibility of the faculty member(s) in the discipline from which the grade originates.

External Education Experiences

In all “for credit” external educational programs that Clemson University may have with professional, vocational, technical, clinical, and foreign study, the agreements are to be agreed to through signature of the provost and the president. In such cases, learning experiences for which credit is awarded must be under the ultimate control and supervision of Clemson University.

GRADING SYSTEM

The grading system is as follows:

A—Excellent indicates work of a very high character, the highest grade given.

B—Good indicates work that is definitely above average, though not of the highest quality.

C—Fair indicates work of average or medium character.

D—Pius indicates work below average and unsatisfactory, the lowest passing grade.

F—Failed indicates that a relatively small part of the semester’s work remains undone. Grade F is not given a student who made a grade F on his/her daily work. The incomplete grade is calculated as an F in the student’s grade-point average until the work is made up, and a final grade is assigned. Instructors and students will resolve the incomplete grade as soon as possible, but not to exceed thirty days from the first day of classes in the next scheduled session. In such cases, learning experiences in which credit is awarded must be under the ultimate control and supervision of Clemson University.
W—Withdrawn indicates that the student withdrew from the course or was withdrawn by the instructor after the first two weeks of classwork and prior to the last five weeks of classes, not including the examination period. Proportionate time periods apply during summer and other shortened sessions. For financial aid purposes, enrollment is defined and satisfactory academic progress levels are established as of midnight on the last day to drop without a W grade. Withdrawal can negatively impact financial aid eligibility if a student does not complete a sufficient number of hours. Details are available at www.clemson.edu/finaid.

P—Pass available at www.clemson.edu/finaid.
P—Pass or NP—No Pass indicates a student has either passed or not passed a course approved to be taken as Pass/No Pass only. Students are not permitted to take a letter-graded course as Pass/No Pass.

Grade-Point Average
In calculating a student’s grade-point average, the total number of quality points accumulated by the student is divided by the total number of GPA hours at Clemson during the semester, session, or other period for which the grade-point average is calculated. For each credit hour, the student receives quality points as follows: A–4, B–3, C–2, D–1. No quality points are assigned for grades F, I, P, NP or W.

Dropping Classwork
A subject dropped after the first two weeks of classwork and prior to the last five weeks during the fall and spring semesters is recorded as W—Withdrawn. Proportionate time periods apply during summer sessions and other shortened sessions.

MidTerm Evaluation
Once, near mid-term, but no later than ten days before the last day students can drop courses without receiving final grades, instructors of every undergraduate course shall make available for each student (a) that student’s numerical course grade or (b) that student’s letter ranking to date in that course (that student’s numerical course grade or (b) that student’s grade-point average based upon subsequent coursework performance(s). The policy includes all undergraduate courses and applies to all terms, including summer sessions.

Final Examinations
The standing of a student in his/her work at the end of a semester is based upon daily class work, tests or other work, and final examinations. Faculty members may excuse from final examinations all students having the grade of A on the coursework prior to the final examination. For all other students, examinations are required in all subjects at the end of each semester, except in courses in which final examinations are not deemed necessary as approved by the department faculty.

Final examinations must be given or due on the dates and at the times designated in the final examination schedule, except in laboratory and one-credit-hour courses for which the final exam will be given at the last class meeting.

Academic Eligibility Definitions
The following terms identify levels of academic difficulty pertinent to a student’s academic eligibility.

Academic Alert: A student who earns a semester grade-point average below 1.5, regardless of cumulative grade-point average, is placed on academic alert. No notation concerning academic alert will appear on the student’s permanent record.

Academic Probation: A student who fails to maintain a cumulative grade-point average of 2.0 or higher is placed on academic probation. No notation concerning academic probation will appear on the student’s permanent record. A student on academic probation may enroll in a maximum of 16 credit hours, unless permission for a higher course load is granted by the academic advisor. Students on academic probation are expected to participate in the Academic Recovery Program.

Academic Suspension: A suspended student is ineligible to enroll in classes for the fall or spring semester immediately following the suspension notification. Suspension is for one semester only, and the student is eligible to reenroll the following semester.

Academic Dismissal: A student who enrolls after a suspension is subject to dismissal at the end of the next semester in which he/she does not meet the academic eligibility criteria listed below. The period of dismissal is for one calendar year and readmission is by appeal only. A dismissed student who is readmitted and again fails to meet academic eligibility standards will be permanently dismissed. Permanent dismissal may not be appealed, and a student permanently dismissed may not apply for Academic Renewal.

A student on academic probation for two consecutively enrolled semesters is evaluated to determine academic eligibility. Eligibility for continued enrollment is evaluated at the end of each semester unless otherwise indicated in this policy. Students with only one complete semester will not be evaluated.

The evaluation for academic eligibility is separate from the evaluation for satisfactory academic progress required for Student Financial Aid. Further information on satisfactory academic progress for financial aid purposes is available in the Financial Information section of this catalog and at www.clemson.edu/finaid.

Academic Eligibility Standards
A student on academic probation (cumulative grade-point average below 2.0) will remain academically eligible if one of the following conditions is met.

1. The student passes at least 12 credit hours and earns a 2.4 or higher semester grade-point average. Duplicate credits do not count as credits passed unless otherwise required to meet an alternative departmental standard.

2. The student achieves the Minimum Cumulative Grade-Point Average (MCGPA) listed below.

<table>
<thead>
<tr>
<th>Total Attempted Hours</th>
<th>MCGPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-29</td>
<td>1.75</td>
</tr>
<tr>
<td>30-59</td>
<td>1.85</td>
</tr>
<tr>
<td>60-89</td>
<td>1.95</td>
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<tr>
<td>90+</td>
<td>2.00</td>
</tr>
</tbody>
</table>

*Total Attempted Hours includes all credit hours attempted at Clemson, plus any advanced standing received from transfer credits and credits based on approved examination programs. Only grade points earned at Clemson are used to calculate the MCGPA.

3. The student achieves a cumulative grade-point average of 2.0 or higher.

Academic Eligibility Evaluation
Academic eligibility criteria are different for students who have completed fewer than three semesters, students who have completed at least three semesters, students who have been suspended, and students returning on appeal, as described below. Conditions of academic eligibility standards are described in the previous section.

1. A student who has completed fewer than three fall and spring semesters will be evaluated at the end of his/her first fall semester, unless he/she entered the university that semester. If the student has two consecutive semesters on academic probation, he/she is eligible to enroll in the subsequent summer and fall semester, but must meet academic eligibility standards at the end of fall semester to avoid suspension for the following spring semester. This term of suspension is not appealable. First time students have three full semesters of eligibility. If a student withdraws for one or more semesters, those semesters are not counted as eligible semesters.

2. After a student has completed three regular (fall and spring) semesters, he/she will be evaluated at the end of each fall and spring semester. If the student has two consecutive semesters on academic probation and fails to meet academic eligibility standards, he/she will be suspended for the next regular (fall or spring) semester. A student subject to suspension at the end of spring semester may enroll in summer school and will avoid suspension if he/she meets academic eligibility standards.
3. A student enrolled after being suspended is evaluated at the end of each fall and spring semester until a cumulative grade-point average of 2.0 or higher is achieved. A previously suspended student on academic probation who fails to meet academic eligibility standards will be dismissed at the end of the following fall or spring term for one calendar year and permitted to enroll only as a result of a successful appeal.

4. A student permitted to reenroll does not reapply due to a successful appeal of suspension or dismissal is evaluated at the end of each fall and spring semester until a cumulative grade-point average of 2.0 or higher is achieved. A student who fails to meet academic eligibility standards will be suspended or dismissed, according to his/her academic situation.

Appealing Suspension or Dismissal
In the event a student subject to suspension or dismissal is unable to achieve one of the above outcomes as a result of extenuating circumstances, the student may file a written appeal with the Appeals Committee on Academic Eligibility. If this appeal is denied, the student may file subsequent appeals for readmission after any subsequent semester.

The Appeals Committee on Academic Eligibility meets approximately one week after final examinations in May and August. The committee meets in early January to read the appeals of students wishing to enroll for the spring semester. Students should contact the Office of Undergraduate Studies for further information on the appeals process. Appeals will be granted only in the most exceptional cases and may require the student to adhere to additional criteria in order to remain enrolled at the University.

Grade Protests
A student wishing to protest a final course grade must first try to resolve any disagreement with the instructor. If unable to reach a resolution, the student may follow the procedures listed under Academic Grievance Policy. Grievances must be filed within 30 calendar days (exclusive of summer vacation) of the date of the last exam for the term involved.

Repeating Courses Passed
A student may repeat a course passed with a grade lower than B. Repeating a course graded D or C does not erase the original D or C grade. If a student elects to apply Academic Forgiveness to a course graded D, the Academic Forgiveness Policy below will apply. Otherwise, both grades appear on the record and are computed in the cumulative grade-point average.

A course graded C cannot be forgiven. Credit for the same course will be counted only once toward the number of hours required for graduation. For academic eligibility purposes, duplicate credits do not count as credits passed. For financial aid purposes, duplicate credits do not count as credits completed for satisfactory progress. If a student repeats a course passed with grade of B or better, the credits and grade points earned in the repeat attempt will be removed from the cumulative summary.

Repeating Courses Failed
A student who has failed a course cannot receive credit for that course until it has been successfully repeated hour for hour in a class; except that in the case of co-related laboratory work, the number of hours to be taken shall be determined by the instructor.

Where separate grades for class and laboratory work are given, that part of the subject shall be repeated in which the failure occurs. Successfully repeating a course previously graded F does not erase the original F grade from the student’s record. If a student elects to apply Academic Forgiveness to a failed course, the Academic Forgiveness Policy below will apply. Otherwise, both grades appear on the record and are computed in the cumulative grade-point average.

Academic Forgiveness Policy
The Academic Forgiveness Policy (AFP) allows a student enrolled beginning Fall 2013 or after to eliminate from the GPA calculation up to three courses in which a D or F was earned. Students enrolled prior to Fall 2013 who were under the former Academic Redemption Policy will be allowed academic forgiveness on a modified scale. Detailed information is available at www.registrar.clemson.edu.

The following conditions apply: Courses taken prior to fall semester 2003 may not be considered for academic forgiveness.

While D or F grades in required courses may be eliminated before the course is repeated, any course used to meet a graduation requirement must be repeated satisfactorily at Clemson University. Both grades will remain on the transcript, degree progress report, and other official documents. For financial aid purposes, courses repeated under this policy resulting in duplicate credit do not count for satisfactory academic progress.

The AFP shall apply only to courses taken at Clemson University. Course substitutions are not permitted. Students may not invoke the AFP after they have graduated. After graduation, students may repeat coursework, but both grades will be calculated in the grade-point average.

The AFP may not be applied to a course taken on a Pass/No Pass basis or to any course in which the student was previously found in violation of the academic integrity policy.

Further information on specific questions related to the use of Academic Forgiveness can be found at http://www.registrar.clemson.edu/html/acadForgiveness.htm.

CLASSWORK
Academic Advising
Each student is assigned an academic advisor in his/her major area. It is the responsibility of the student to consult with his/her advisor during registration. The advisor will assist the student in scheduling courses so as to fulfill the requirements of the degree program; nevertheless, it is the responsibility of the student to fulfill the relevant requirements of the degree. For more information, visit http://www.clemson.edu/academics/advising/.

Course Prerequisites
Prerequisites for each course are enumerated in the Courses of Instruction section of this catalog. In addition to these requirements, colleges and departments may also establish other standards as conditions for enrollment. It is the student’s responsibility to refer to individual college and curricular information for specific standards.

Course Substitutions
A student may request substitution of a course, whether Clemson credits or transfer credits, for a curriculum requirement in the major, the minor, or General Education. Course substitutions will be applied toward degree requirements only after approval by all the appropriate academic signatories. Students should initiate the request with their assigned academic advisor using the Form to Request Substitution for an Academic Requirement, available on the Registrar’s website, www.registrar.clemson.edu.

All requests for course/requirement substitutions must be submitted and approved as early as possible and prior to the start of the student’s final semester at Clemson University (i.e., the graduation semester). It is the student’s responsibility to ensure that the necessary forms have been processed and signed. Failure to follow these guidelines may result in the student’s graduation being delayed to at least the following semester.

Modern Language Requirement
A number of Clemson University degree programs require the completion of a modern language through a specific course level. Modern languages taught at Clemson University or accepted for transfer credit include American Sign Language, Arabic, Chinese, French, German, Italian, Japanese, Latin, Portuguese, Russian and Spanish. While many degree programs accept any of these modern languages for the requirement, certain programs may have specific modern language requirements. Students should consult their program’s curriculum map for details.

Attendance Policy
The academic resources of Clemson University are provided for the intellectual growth and development of students. Class attendance is critical to the educational process; therefore, students should attend scheduled courses regularly if they are to attain their academic goals.

In the event of an emergency, the student should make direct contact with the course instructor, preferably before a class or an exam takes place. Students should speak with their course instructors regarding any scheduled absence as soon as possible and develop a plan for any make-up work. It is the student’s responsibility to secure documentation of emergencies, if required. A student with an excessive number of absences may be withdrawn at the discretion of the course instructor.

Course instructors must implement fair grading procedures and provide an opportunity to make up missed assignments and examinations that does not unfairly penalize the student when an excused absence is accepted. Such make-up work shall be at the same level of difficulty with the missed assignment or examination. Course instructors shall hold all students with excused absences to the same standard for making up missed assignments or examinations. While course instructors should seek to make reasonable accommodation for a student involved in University-sponsored activities, students should understand that not every course can accommodate absences and that absences do not lessen the need to meet all course objectives.
Absence from class is detrimental to the learning process, so course instructors may use reasonable academic penalties which reflect the importance of work missed because of unexcused absences. Course instructors who penalize students for unexcused absences must specify attendance requirements as related to grading in the course syllabus and must keep accurate attendance records. Course instructors are obligated to honor exceptions to the university attendance policy for students covered by the Americans with Disabilities Act, as verified through paperwork issued by Student Disability Services.

Enrollment

Only students who are officially registered and have paid appropriate fees may attend classes. Students have the responsibility to insure that drop/add transactions are completed in a timely manner. Registered students who cease attending class will be assigned a failing grade.

All students are required to attend the first scheduled day of classes and labs. Students who cannot attend the first class are responsible for contacting the instructor to indicate their intent to remain in that class. If a student does not attend the first class meeting or contact the course instructor by the second meeting or the last day to add, whichever comes first, the course instructor has the option of dropping that student from the roll. Students must not assume that course instructors are obligated to drop them if they fail to attend the first few days of class.

Anticipated Absences

Students should use the Notification of Absence module in Blackboard, or other reasonable means, to notify the course instructor of a future absence from class. This communication is only for information and does not verify the student’s reason for absence or impact the course instructor’s evaluation of the student’s academic work. The student must make personal contact with the course instructor as soon as possible.

If a student realizes in the first two weeks of classes that an anticipated number of absences will exceed the number of excused absences permitted in the course, the student should discuss the situation with the course instructor, the student’s adviser, and/or the academic Associate Dean in the college in which the student is enrolled. A suitable resolution should be reached before the end of the second week of the semester.

Students are encouraged to inform course instructors of known conflicts as soon as possible, but no later than one week before the date of any assignment or exam.

Unanticipated Absences

Students should use the Notification of Absence module in Blackboard to notify the course instructor. This communication is only for information and does not verify the student’s reason for absence or impact the course instructor’s evaluation of the student’s academic work. If the student is unable to contact course instructors, the student (or representative) should contact the Office of the Dean of Students, who will notify the course instructors of the circumstances, providing a liaison in cases limited by medical confidentiality. A student may be excused from attending class in cases of emergency or other compelling reasons deemed appropriate by the course instructor. Excuses for emergency absences must be reported to the course instructor as soon as possible (for example, through e-mail), but not more than one week after the return to class. In certain cases, the Dean of Undergraduate Studies (or designee) may provide a letter verifying the student’s absence as excused. Course instructors are expected to excuse absences for reasons including:

1. A medical complication (pregnancy/childbirth-related, physical injury, illness, etc.) too severe or contagious for the student to attend class, when certified by an attending physician. Physicians and staff at Redfern Health Center do not provide written excuses; however, students should retain paperwork of medical visits affirming date and time. Whenever possible, students should visit Redfern as outpatients without missing class. An absence for a non-acute medical service does not constitute an excused absence. Course instructors may, at their discretion, require documentation of medical absences.

2. Death, serious illness, or emergency in a student’s immediate family (course instructors may require documentation).

3. Participation in authorized University-sponsored activities, not to include practices or the activities. Course instructors may require documentation from the course instructors or staff advisor of the sponsored University group.

4. Religious observances and practices which prevent the student from being present during a class period (advanced consultation/approval by the instructor is necessary).

5. Participation in court-imposed legal proceedings (e.g., jury duty or subpoena).

6. Required participation in military obligations as certified by the student’s commanding officer.

In the event of a regional or national emergency (e.g., pandemic, hurricane, etc.), students missing classes may not be charged with unexcused absences if the nature and extent of the emergency is defined and disseminated by the Provost (or designee).

Appeals

Any student who feels that a grade has been affected by a legitimate absence that an instructor did not excuse may appeal the grade through the Academic Grievance process. Students may appeal, in writing, a course instructor’s decision not to excuse an absence to the academic Associate Dean of the academic unit offering the course. Before taking action, the Associate Dean should request that the course instructor explain his or her denial in writing.

Dead Days

During the last two class days of the fall and spring semesters, commonly referred to as Dead Days, all regularly scheduled classes are conducted; however, course testing on these days is limited to scheduled laboratory and one-semester-hour course final exams and make-up tests. Dead Days are observed during fall and spring semesters only. Dead Days do not apply to courses numbered 6000 or above.

Auditing Policies

Qualified students may audit courses upon written approval of the instructor. Auditors are under no obligation of regular attendance, preparation, recitation, or examination and receive no credit. Participation in classroom discussion and laboratory exercises by auditors is at the discretion of the instructor. A student who has previously audited a course is ineligible for credit by examination.

Undergraduate and graduate students enrolled in 12 or more hours may audit courses at no additional charge. Others interested in auditing should verify their eligibility through the Registrar’s Office.

Combined Bachelor’s/Master’s Plan

Students may reduce the time necessary to earn both degrees by applying graduate credits to both undergraduate and graduate program requirements. To be eligible, the student must have completed the bachelor’s curriculum through the junior year (minimum 90 credits) and have a minimum overall grade-point average of 3.4. A maximum of 12 credit hours of graduate courses in the master’s program may be applied to the bachelor’s program. The combined bachelor’s/master’s degree (documented on GS6BS/MS) must have a minimum combined total of 150 credit hours. This total may contain a maximum of six credit hours of master’s thesis research and all credit hours taken after receiving the baccalaureate degree must be at the 6000 level or higher. As determined by the participating bachelor’s program, graduate courses may be applied to the bachelor’s degree as electives or technical requirements or by substitution of 7000- or 8000-level courses for required undergraduate courses. Under no circumstances may 6000-level counterparts of 4000-level courses required for the bachelor’s degree be counted toward master’s requirements. Combined bachelor’s/master’s plan students are not eligible for graduate appointments for financial aid until their bachelor’s degrees have been awarded.

Procedure for Students

Since neither all undergraduate nor graduate programs participate in this academic option, seniors should consult both their academic advisor and the graduate program coordinator of the master’s program they wish to pursue. Students must officially request participation in the combined bachelor’s/master’s program by completion of Form GS6BS/MS, “Request for Combined Bachelor’s/Master’s Education Plan,” available online at www.grad.clemson.edu/forms/GeneralForms.php. Endorsements by the program coordinator or department chair of both programs are required.

Procedure for Departments

Departments and graduate programs desiring to participate in the combined bachelor’s/master’s program should submit a written notification to the dean of the Graduate School identifying the date on which they intend to make this option available to their students.
Senior Enrollment in Graduate Courses
Clemson University seniors meeting the accepted academic standard for graduate work (3.0 cumulative grade-point average) are eligible to request enrollment in graduate level courses. Enrollment of seniors in any graduate course is subject to approval by the department offering the course and the Graduate School. The total course workload for the semester must not exceed 18 hours, and the cumulative graduate credits earned by seniors shall not exceed 12 semester hours. The credits and quality points associated with senior enrollment in graduate courses will be part of the undergraduate record. Graduate courses that are not satisfying undergraduate requirements cannot be used to meet enrollment requirements for financial aid.

Seniors with a 3.4 or Higher GPA
Seniors with 3.4 or higher grade-point averages are eligible for participation in the combined bachelor's/master’s plan (see “Combined Bachelor’s/Master’s Plan”).

Seniors with a 3.0 or Higher GPA
Seniors with 3.0 or higher grade-point averages are eligible to request enrollment in graduate level courses to meet requirements for the bachelor’s degree; however, courses used for this purpose cannot be counted later towards an advanced degree. Alternatively, these students may also take courses in excess of the requirements for their undergraduate degrees and may request that these courses be included as a part of their graduate program if they are subsequently admitted to the Graduate School. Courses cannot be taken at the 6000 level if their 4000-level counterparts are required for the undergraduate degree in the same academic major as the proposed graduate degree.

Procedure for Students
Prior to registration, the Graduate School will approve and register the student in the graduate level courses requested on the GS6 or GS6 BS/MS. Senior enrollment forms, GS6, Request for Senior Enrollment, and GS6BS/MS, are available at www.grad.clemson.edu/forms/GeneralForms.php.

GRADUATION REQUIREMENTS
A candidate for an undergraduate degree is a student who has submitted a completed diploma application by the deadline prescribed in the University calendar for a particular graduation date. Candidates who do not apply by the deadline will be subject to a late fee.

A student may specify up to two completed majors, two minors, and if applicable, two concentration/emphasis areas per degree when applying for graduation. Second (double) majors and additional fields of study (i.e., minors, emphasis areas or areas of concentration) will not be retroactively added to a student’s record once the degree is conferred.

Only candidates who have completed all graduation requirements are permitted to participate in the graduation ceremony.

Residence Requirement
To qualify for an undergraduate degree, a student must complete through instruction from Clemson a minimum of 37 of the last 43 credits presented for the degree. A waiver may be obtained for approved study abroad experiences through the Undergraduate Studies Office, E-103 Martin Hall.

Makeup of Incompletes Received in Last Semester
The 30 day makeup period does not apply to candidates who receive an I in the semester of graduation. All final grades for candidates must be submitted by the deadline (including all makeup grades for Incompletes) in order for a candidate to graduate on the date of graduation for that semester.

Special Requirements
A cumulative grade-point average of 2.0 is required for graduation. Candidates for graduation must be officially accepted in the major in which they are applying for a degree no later than the date applications for diplomas are due.

Bachelor of Arts degree programs require completion of a minor and four semesters (through 2020) of a modern foreign language.

Awarding of Degrees Posthumously
An undergraduate student may be awarded a degree posthumously on the recommendation of the faculty of the college concerned subject to the following conditions:
1. The student had at least a 2.0 grade-point average at the date of last enrollment; 2. Including credits scheduled in the term of last enrollment, the student (a) had satisfied 75% of the degree requirements and (b) met the residence requirement for a degree, which requires that 37 of the last 43 credits presented for a degree be earned at Clemson University; and 3. The student’s death occurred within two years of the end of the term of last enrollment at Clemson University.

Credit Limitation
If all work toward a degree is not completed within six years after entrance, the student may be required to take additional courses.

Academic Honors
Honor Graduates
To be graduated with honors, a student must have a minimum cumulative grade-point average as follows: Cum Laude—3.70, Magna Cum Laude—3.85, Summa Cum Laude—3.95.

Honor Lists
At the end of the fall and spring semesters, the following lists shall be compiled of undergraduate students who have achieved grade-point averages of 3.50–4.00 on a minimum of 12 semester hours, exclusive of Pass/No Pass coursework.
Dean’s List—3.50 to 3.99 grade-point average
President’s List—4.00 grade-point average

Honors and Awards
The University offers a number of awards for outstanding achievement in specific fields and endeavors. Recipients are chosen by selection committees and are announced at the annual Honors and Awards Day program or other appropriate ceremonies. Detailed information relating to such awards is available in the offices of the academic deans and department chairs.

Preprofessional Studies
Clemson University will award the degree of Bachelor of Arts or Bachelor of Science in Preprofessional Studies to a student who is pursuing a degree in a professional school. The student must have also satisfactorily completed three years of undergraduate work in an appropriate curriculum and the first year of work in an accredited medical, dental, veterinary, or other accredited professional school, provided the student fulfills the requirements for the three-year program as follows and the other specified conditions are met.

1. At least two of the three years of preprofessional work, including the third year, must be taken in residence at this University.
2. A minimum of three years of undergraduate work (i.e., preprofessional school credit) must be presented.
3. Normal progress must have been made toward fulfilling the degree requirement of the curriculum in which the student is enrolled at Clemson.
4. The student applying for the Bachelor of Arts or Bachelor of Science in Preprofessional Studies must be recommended by the college at Clemson in which the curriculum that he/she is majoring as a Clemson student is located or by the college in which three years of normal progress toward a degree can be identified.
5. If the combination of preprofessional work taken and the work in the first year of professional school is equivalent to that which is required in some other bachelor’s degree program at Clemson, the college concerned may recommend the other bachelor’s degree.

The above requirements and conditions became effective July 1, 1974, and will apply to all students who satisfy these requirements and conditions after that date.

A Clemson student having left the University before receiving the bachelor’s degree (prior to July 1, 1974) and having enrolled immediately in an accredited professional postgraduate school may apply for a bachelor’s degree from Clemson and have his/her application considered on an individual basis. The college(s) at Clemson considering the application is authorized to examine the student’s entire record in both preprofessional and professional studies and exercise its own judgment concerning the three-year requirement for Preprofessional Studies.

Second Baccalaureate Degree
To complete a second baccalaureate degree, a student must complete a minimum of 30 semester hours at Clemson in addition to the greater number of hours required for either degree and satisfy all course and grade requirements for the second degree.
Double Major
A student in a Bachelor of Arts degree program may be awarded a single baccalaureate degree with a double major. The two majors may be within a single college or may involve two colleges but are limited to Bachelor of Arts degree programs. All major requirements for both programs must be satisfied.

Graduate Degrees
Graduate degrees are available from all seven colleges in addition to several interdisciplinary programs. Clemson University offers more than 100 graduate degrees. The degrees of Doctor of Philosophy, Education Specialist, Master of Arts, Master of Science, Master of Agricultural Education, Master of Architecture, Master of Arts in Teaching, Master of Business Administration, Master of City and Regional Planning, Master of Construction Science and Management, Master of Education, Master of Fine Arts, Master of Forest Resources, Master of Human Resource Development, Master of Landscape Architecture, Master of Parks, Recreation and Tourism Management, Master of Professional Accountancy, Master of Public Administration, and Master of Real Estate Development are awarded to students who complete prescribed graduate programs. Additional information is available from the Graduate School.

ACADEMIC RECORDS
The student’s permanent academic record is maintained in the Registrar’s Office and contains personal identifying information, grades, and credits. Where appropriate, statements of a corrective nature, withdrawals, suspension for failure to meet academic standards, suspension for disciplinary reasons, and graduation data are added. The academic record is a historical record of the student’s academic progress.

Classification
All new students are classified as freshmen unless they have attended another college prior to entrance. Students who have completed college work elsewhere will be classified on the basis of semester hours accepted at Clemson rather than the amount of work presented. To be classified as a member of any class other than freshman, students must meet the credit-hour requirements below:

- Sophomore—minimum 30 credit hours
- Junior—minimum 60 credit hours
- Senior—minimum 90 credit hours

Change of Major
Any undergraduate student who meets the Academic Eligibility Policy after attempting 12 credit hours at Clemson University (or who is allowed to continue by virtue of a semester 2.4 grade-point average on 12 earned credits or who is allowed to continue through appeal to the Appeals Committee on Academic Eligibility or by other authorization of this committee) may transfer from one major to another. Any college or department that seeks an exception to this policy must have the approval of the collegiate dean and the provost.

Withdrawal from the University
A student may withdraw from the University subject to the restrictions in the section on W—Withdraw. Prior to the last day to withdraw from the University without final grades, students may withdraw via the iROAR registration portal. All military service or medical withdrawals must be processed by the Associate Dean of Undergraduate Studies. Students should report to E-103 Martin Hall.

Students receiving financial aid who withdraw from the University may have to repay significant portions of their financial aid. Students should report to G-01 Sikes Hall to determine the amount. For financial aid purposes, enrollment is defined and satisfactory academic progress levels are established as of midnight on the last day to drop without a W grade. Withdrawal from the University can negatively impact financial aid eligibility if a student has not completed a sufficient number of hours. Details are available at www.clemson.edu/finaid.

Academic Renewal
The student who has not enrolled at Clemson for a period of two or more academic years may apply to the Appeals Committee on Academic Eligibility for readmission under special conditions known as academic renewal, unless the student has been permanently dismissed. Under the academic renewal conditions, the previous credits attempted and grade-point deficit will not constitute a liability in a new grade-point computation; however, no credits passed or their attending grade points will be available to the student for a degree at Clemson and any courses previously passed may not be verified by special examination. The previous record will appear on the permanent record as well as the notation of readmission under the policy of academic renewal. Students returning under the academic renewal policy who apply for financial aid should submit written notification. The student’s status will be reviewed by the Office of Student Financial Aid in order to update their academic progress records. For financial aid purposes, terms enrolled in prior to academic renewal are still counted when evaluating satisfactory academic progress.

Transcripts
Official transcripts are issued only at the authorized, written request of the student. Requests should be directed to Transcripts, 104 Sikes Hall, Box 345125, Clemson, SC 29634-5125. Transcript Request forms may be downloaded at http://www.registrar.clemson.edu/html/transcript.htm. Payment in advance is required and may be made by check or money order. The following must be included with the transcript request: full name (including any names used while at Clemson), social security number, current address, date of birth, date the student last attended Clemson, where the transcript is to be sent, student signature, and payment of $12 per transcript. Telephone requests will not be honored. Transcript requests are normally processed within 48 hours, but additional processing time may be required at the end of a semester. Information is available from the Enrolled Student Services Office at the address above or by telephone at 864-656-2173. Official transcripts are not issued for those who are indebted to the University.

UNDERGRADUATE ACADEMIC INTEGRITY
As members of the Clemson University community, we have inherited Thomas Green Clemson’s vision of this institution as a “high seminary of learning.” Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form.

I. Academic Integrity Policy
A. Any breach of the principles outlined in the Academic Integrity Statement is considered an act of academic dishonesty.

B. Academic dishonesty is further defined as:
   1. Giving, receiving, or using unauthorized aid, including the inappropriate use of electronic devices, on any work submitted to fulfill academic requirements. In examination situations all electronic devices must be off and stowed unless otherwise authorized by the instructor;
   2. Plagiarism, which includes the intentional or unintentional copying of language, structure, or ideas of another and attributing the work to one’s own efforts;
   3. Attempts to copy, edit, or delete computer files that belong to another person or use of computer accounts that belong to another person without the permission of the file owner or account owner;
   C. All academic work submitted for grading or to fulfill academic requirements contains an implicit pledge and may contain, at the request of an instructor, an explicit pledge by the student that no unauthorized aid has been received.
   D. It is the responsibility of every member of the Clemson University community to enforce the Academic Integrity Policy.

II. Academic Integrity Committee
The power to hear cases of academic dishonesty is vested in an Academic Integrity Committee.

A. Structure—The Academic Integrity Committee is composed as follows:
   1. Two tenured faculty members from each college elected by their respective collegiate faculties. Faculty members will be elected on a staggered term basis, serving for a period of two years after initiation of staggered terms. Terms commence with fall semester late registration.
   2. Two undergraduate students from each college. Student members are nominated by the Student Body President, through an application and interview process in the spring semester, approved by the Student Senate, and appointed by the provost for terms of two years. Students must have a 3.0 grade-point average at the time of appointment and must have completed 30 hours by the end of the spring semester. Nominations will be made in the spring semester with terms of service commencing with fall semester late registration.
   3. The committee is divided into four standing hearing boards, which will hear the cases of academic dishonesty.
dishing. Hearing boards convene on a weekly, rotational basis unless there are no cases to be heard. For summer sessions, the Associate Dean of Undergraduate Studies must maintain at least one hearing board to hear cases.

4. Hearing boards are composed of two faculty members, two students, and one chairperson. Quorum, for a hearing board, is one student, one faculty member, and a chairperson. Decisions by the hearing board will be by majority vote.

5. Chairpersons will be elected from within the Committee’s membership. Two chairpersons are selected from the faculty membership and two from the student membership.

6. Before hearing any cases, a new member of the committee must undergo a training session(s) with the Associate Dean of Undergraduate Studies.

7. The Associate Dean of Undergraduate Studies is the administrative coordinator of the Academic Integrity Committee.

B. Procedures

1. When, in the opinion of a course instructor, there is evidence that a student has committed an act of academic dishonesty, that person must make a formal written charge of academic dishonesty, including a description of the misconduct, to the Associate Dean of Undergraduate Studies. The reporting person may, at his/her discretion, inform each involved student privately of the nature of the alleged charge. In cases of plagiarism (I.B.2.) instructors may use, as an option, the Plagiarism Resolution Form available from the Office of Undergraduate Studies.

2. When, in the opinion of a student, there is evidence that another student has committed an act of academic dishonesty, he/she should contact the instructor for the course to discuss the incident. After being contacted, if, in the opinion of the instructor, there is evidence that a student has committed an act of academic dishonesty, the instructor must make a formal written charge of academic dishonesty, including a description of the misconduct, to the Associate Dean of Undergraduate Studies. The instructor may, at his/her discretion, inform each student involved privately of the nature of the alleged charge.

3. If, for any reason, the person who first discovered an integrity violation is not available to present a charge, the department chair (or designee) or college Associate Dean for the department in which the course is taught may submit the charge to the Associate Dean of Undergraduate Studies.

4. When the Associate Dean of Undergraduate Studies has received a formal charge of an alleged violation, he/she will contact the student involved privately to notify him/her of the charge and will provide the student with a copy of the charge and a copy of the procedures that the Academic Integrity Committee has adopted, pursuant to number 7 below. If a student is charged with academic dishonesty, he/she may not withdraw from the course unless he/she is exonerated of the charge. If a student is found in violation of the academic integrity policy and receives a forgivable grade, he/she will not be allowed to have that grade forgiven under the Academic Forgiveness Policy. If the student fails to respond to the Associate Dean’s requests for a meeting within ten university working days, the student is considered to have waived his/her right to a hearing, thus admitting to being in violation of the Academic Integrity Policy.

5. After informing the student involved, the Associate Dean of Undergraduate Studies will convene one of the boards of the Academic Integrity Committee within 14 calendar days (exclusive of University holidays) from the date that the accused student provides a written rebuttal to the charge. The student will provide the rebuttal no later than five university working days following notification of the change from Undergraduate Studies. (Students charged in the spring term, but not enrolled in summer sessions, may be given a continuance to the next fall term. Should the University schedule be interrupted due to emergency circumstances, academic integrity cases will be resolved as soon as possible once classes resume.) All students will be presumed not in violation of a charge until found in violation by a hearing board. Each party is responsible for having present at the hearing all witnesses that he/she wishes to speak on his/her behalf. Witnesses must have firsthand knowledge of the events under discussion.

6. A charge of academic dishonesty in a course must be made within thirty days after the beginning of the next term, exclusive of summer vacation. For cases that are not resolved before course grades are due, instructors will assign an Incomplete as a placeholder for the grade. This Incomplete grade will be replaced with the course grade once the case is resolved.

7. The Academic Integrity Committee will adopt its procedures, to be followed by all hearing boards, prior to the first case heard by a hearing board. In addition to providing the student with a copy of the procedures, as stated in number 4 above, the Associate Dean of Undergraduate Studies will provide a copy of the procedures to the involved course instructor and also the hearing board members. The Associate Dean of Undergraduate Studies will also retain copies of these procedures. The procedures must afford both instructors and students the opportunity to present their cases and the opportunity for rebuttal.

8. In cases in which there is a finding of “in violation,” the course instructor may consult with the Academic Integrity Committee to consider any penalty established regarding academic penalties levied in similar cases. Instructors must inform the Academic Integrity Committee of the academic penalty for a student found “in violation” by a hearing board.

9. The Associate Dean of Undergraduate Studies is responsible for notifying the registrar and all appropriate University personnel of the finding of “in violation” and the academic penalty. The Academic Integrity Committee reviews all records of academic dishonesty cases and their findings in accordance with the University’s Records Retention Policy.

C. Penalties

1. Upon a finding of “not in violation” by a hearing board, the student’s record will not reflect the incident.

2. Upon a finding of “in violation” by a hearing board, the Associate Dean of Undergraduate Studies will notify the student and course instructor of the decision immediately. If the offense is the first for the student, then the instructor has the ability to determine the academic penalty, which shall not exceed a grade of F for the course.

3. If the finding of “in violation” is not the student’s first offense, the student will receive a grade of F in the instance of coursework, and, in all cases, will be suspended from the University for one or more full semesters, and may be permanently dismissed from the University. The hearing board will determine the period for which the student will be suspended or, if applicable, permanently dismissed. If the accused student waives his/her right to a hearing and the incident is not a first offense, the student will receive a grade of F in the case of coursework and, in all cases, will be suspended from the University for one or more semesters or will be permanently dismissed, at the discretion of the Associate Dean of Undergraduate Studies.

4. An undergraduate student who has been suspended from the University for a violation of the Academic Integrity Policy becomes immediately ineligible for University merit or need-based scholarship or grant aid for the remainder of the student’s undergraduate at Clemson. (See complete policy in Financial Aid section, page 22.)

D. Appeals

1. Students do not have the option to appeal a decision rendered by the hearing board, whether it is the first, second, or any subsequent offense. Students do not have the option to appeal the penalty determined by the course instructor for first offenses or to appeal the grade of F for the course given for second offenses.

2. For offenses resulting in suspension of two or more semesters or permanent dismissal, students have the option to present written information to the Dean of Undergraduate Studies to appeal the length of the suspension or to appeal a decision of permanent dismissal. Students must present information in their defense, as allowed in this paragraph, to the Dean within five university working days after receipt of written notification of the suspension or dismissal. However, as stated in number 1 above, students cannot appeal a decision rendered by the hearing board.

ACADEMIC GRIEVANCE POLICY

I. Purpose

Clemson University is dedicated to the fair and impartial review of grievances by students against faculty and staff. The Academic Grievance Board is responsible for reviewing and adjudicating allegations by undergraduate students of unfairness or inequity in the assigning of final grades. Only grievances that contest a final grade are considered by the Academic Grievance Board.

II. Structure

The Academic Grievance Board comprises three separate entities: an Academic Grievance Panel, an Academic Grievance Committee, and an Academic Grievance Expedited Committee.

The Academic Grievance Panel is responsible for the initial review of grievances and for determining which grievances will go forward to the Academic Grievance Committee (see section IV.A below). There are faculty representatives to the Academic Grievance Panel from each college. The faculty members of the Academic Grievance Panel are appointed by the
Dean of Undergraduate Studies for three-year terms. In addition, there are two undergraduate student representatives to the panel appointed for two-year terms. Undergraduate student representatives are selected on a rotating basis from each of the colleges. The student representatives are appointed to the Academic Grievance Panel by the President of the Student Senate. The Academic Grievance Panel will elect a chair each year, chosen from among the faculty members on the Academic Grievance Panel.

The Academic Grievance Committee is responsible for hearing student grievances, proposing resolutions to grievances, and, in the case of appeals, forwarding recommendations to the Dean of Undergraduate Studies. Grievances are heard by three-person subcommittees, appointed by the Chair of the Academic Grievance Committee. The Academic Grievance Committee may hear a grievance only if a recommendation for a hearing is made by the Academic Grievance Panel. The Academic Grievance Committee consists of faculty representatives, three from each college, and student representatives, two from each college. Faculty representatives are elected by their colleges and serve three-year terms. Student representatives are appointed by the President of the Student Senate and serve two-year terms. The Chair of the Academic Grievance Committee is appointed by the Dean of Undergraduate Studies. Before hearing any cases, a new member of the Academic Grievance Board must undergo a training session(s) with the Associate Dean of Undergraduate Studies.

The Academic Grievance Expedited Committee is responsible for hearing certain grievances for students that are to be graduating in the same semester the contested grade is presented to the committee (see section V). The Academic Grievance Expedited Committee comprises the Dean of Undergraduate Studies, and two available members (one faculty, one student) of the Academic Grievance Committee. The Academic Grievance Expedited Committee will only follow the procedure established under "Supplementary Procedure for Graduating Seniors" (see section V below).

III. Grounds for Academic Grievances

The Academic Grievance Board provides for hearings on academic grievances that are based on either or both of the following claims:

A. The method used for arriving at a student’s final grade was in clear violation of the method described in the instructor’s course syllabus.

B. The method used for arriving at a student’s final grade was in clear violation of departmental, college or university policy.

The Academic Grievance Board will not attempt to substitute its judgment for an instructor’s on such matters as a) quality of the instructor’s teaching, b) quality of the student’s work, or c) quality of course content. The Academic Grievance Committee shall not hear any grievances including allegations of discrimination based on age, color, disability, gender, national origin, race, religion, sexual orientation, or veteran’s status even if the grievance falls within one of the categories noted above. All such discrimination complaints should be submitted to the Office of Access and Equity. The Academic Grievance Committee shall refer any such discrimination complaints it receives to the Office of Access and Equity.

IV. Rules and Procedures for Academic Grievances

1. Any student filing a grievance must first attempt to resolve it by consulting with the involved faculty member. In the event that the student and faculty member cannot arrive at a resolution, the student shall consult with the department chair of the faculty member and the Dean of the college of the faculty member. The department chair and Dean shall make every effort to help the student and the faculty member arrive at a resolution to the problem. Until a formal complaint is filed, the student may consult with the Undergraduate Student Ombudsman.

2. If the grievance remains unresolved, the student may bring the grievance before the Academic Grievance Board. The student must first meet with the Associate Dean in the Office of Undergraduate Studies. The Associate Dean will describe the grievance process to the student. If the student wishes to proceed with the grievance, the student will provide a written statement detailing the grievance to the Associate Dean. The written statement must specify the criteria for “Grounds for Academic Grievances” (III above), the names of those persons consulted, and the signature of the collegiate Dean attesting that no resolution could be reached. The completed checklist form will then be returned to the Associate Dean for signature. Both the written statement and the completed checklist form must be delivered to the Office of Undergraduate Studies within the first 30 calendar days (exclusive of summer vacation) of the term following that in which the student alleges to have been aggrieved. The failure of a student to file a grievance within the 30-day period will cause the student to forfeit his/her right to file a grievance under this procedure.

3. When all procedures described in item IV.2 have been completed, the Office of Undergraduate Studies will forward a copy of the grievance to the chair of the Academic Grievance Panel. The chair of the Academic Grievance Panel shall, upon receipt of the grievance, convene the Academic Grievance Panel to review the grievance. The Office of Undergraduate Studies shall retain the original documents.

4. The Academic Grievance Panel will review the grievance and ascertain whether the complaint meets the criteria for “Grounds for Academic Grievances” (III above). The Academic Grievance Panel will handle each case in a confidential manner.

5. Following the complaint review, the Academic Grievance Panel, within 14 days of receiving the complaint, will (a) make a written recommendation to the Associate Dean to dismiss the grievance, with the grievance identified by complaint number, or (b) make a written recommendation to the Academic Grievance Committee to hear the grievance and arrive at a recommendation. In the case that the Academic Grievance Panel recommends that the grievance be heard by the Academic Grievance Committee, a copy of the recommendation, identified by complaint number, will be forwarded to the Office of Undergraduate Studies.

6. If the Academic Grievance Panel recommends dismissal of the case, the Associate Dean will notify the student, the involved faculty member, the department chair of the involved faculty member, and the involved collegiate Dean.

7. If the Academic Grievance Panel recommends a hearing, the Chair of the Academic Grievance Committee shall, upon receipt of the recommendation from the Academic Grievance Panel and all relevant documents, appoint a three-person subcommittee to hold a hearing on the grievance. The subcommittee will be selected from among the members of the Academic Grievance Committee. The subcommittee will consist of a faculty member assigned to serve as the subcommittee chairperson, another faculty member, and a student representative to the subcommittee. If possible, the subcommittee shall include members who are not in the same college as the grievant or the faculty member against whom the grievance has been filed.

8. Prior to a hearing (see item 9 below) a representative of Undergraduate Studies will contact the student who has filed the grievance as well as the faculty member against whom the grievances have been filed. Undergraduate Studies will provide copies of the grievance to both parties, answer any procedural questions that the parties have, and also ask each party if they have anything to add to the written record prior to the hearing. If additional written materials are submitted prior to the hearing, copies will be distributed to all subcommittee members and to all parties to the grievance. The subcommittee will, to the extent possible, handle each case in a confidential manner.

9. Academic Grievance hearings shall convene at a standardized location and time, as defined by the Office of Undergraduate Studies. The hearing shall take place during the next available standard meeting time after the subcommittee has received the necessary materials.

10. The hearing of the grievance will be informal and shall be closed to the public. The Associate Dean of Undergraduate Studies shall, as facilitator, take whatever action is necessary to ensure an equitable, orderly and expeditious hearing. All parties to the grievance shall be given an opportunity to be heard. In addition, the chairperson may request the presence of any other person who can supply information pertinent to the grievance. Witnesses shall not be present during the hearing proceedings except when they are called to speak before the committee. The parties shall be permitted to question all individuals who are heard by the committee. If any witness is unable to be present at the hearing, the chairperson may, at his/her discretion, accept a written statement from that witness to be presented at the hearing. The parties shall be accorded the right to assistance of counsel of their own choice; however, counsel shall not be permitted to participate actively in the proceedings.

11. Upon conclusion of the hearing, the subcommittee shall reach, by majority vote, a posed solution to the grievance. The subcommittee chairperson shall then formulate the findings in writing. Copies of the written findings and recommended solutions will be forwarded to both parties to the grievance for acceptance. Each party will be asked to indicate...
acceptance of the posed solution within 14 calendar days of its date. Failure to respond within 14 calendar days will constitute acceptance. In the event that both parties agree to a change in grade, the Associate Dean of Undergraduate Studies will also notify the Office of Records and Registration of the decision.

12. If, after the conclusion of the hearing on the grievance, acceptance of the posed solution cannot be secured, the grievance shall be referred to the Dean of Undergraduate Studies. When grievances are referred in this manner, the Dean of Undergraduate Studies, on behalf of the University, shall make the final decision on the solution to the grievance and will then notify the student, the involved faculty member, the department chair of the involved faculty member, the involved collegiate Dean, and the Associate Dean of Undergraduate Studies of the University’s final decision. In the event that the Dean of Undergraduate Studies decides in favor of a change in grade, the Dean of Undergraduate Studies will also notify the Office of Records and Registration of the University’s decision.

13. To the extent permitted by law, the Associate Dean of Undergraduate Studies shall keep in confidence all records pertinent to grievances.

14. The Academic Grievance Committee shall make every reasonable effort to resolve each grievance by the end of the semester that follows the semester in which the student received the grade that is being contested (summers not included).

15. These procedures can be changed by the Academic Council. Such changes shall not affect any case under consideration at the time of the change. Notification of any changes to the procedure shall be given to the Dean of Undergraduate Studies of the University via the Academic Council.

V. Supplementary Procedure for Graduating Seniors

The purpose of this supplementary procedure is to offer an expedited method for graduating students to file an academic grievance that would impact their ability to graduate, as determined by the Dean of Undergraduate Studies. To be eligible for the following procedure, the student must file an academic grievance with the Office of Undergraduate Studies no later than noon the day after final grades are posted. The following procedure shall be made available for Fall, Spring, and Summer graduations.

1. Any student filing an expedited grievance should first attempt to resolve it by consulting with the involved faculty member. Until a formal complaint is filed, the student may consult with the Undergraduate Student Ombudsman.

2. In the event that the student and faculty member cannot arrive at a resolution, the student may bring the grievance before the Academic Grievance Expedited Committee. The student must first meet with the Associate Dean in the Office of Undergraduate Studies. If the student wishes to proceed with the grievance, the student will provide a written statement and grievance checklist form (IV.2 above).

3. The student and involved faculty member shall be notified of the time and place of the hearing by 6:00 pm, two days prior to graduation. Hearings will begin at 2:00 pm, one day prior to graduation. In the case that the involved faculty member cannot attend the hearing, he or she may appoint an appropriate representative.

4. Hearings shall follow the same format as established in IV. 10.

5. Following the hearing, the Academic Grievance Expedited Committee shall vote on a proposed resolution. A majority vote constitutes as a passed resolution. This decision is final, and the student and involved faculty member will be notified of the resolution. In the event that the Academic Grievance Expedited Committee decides in favor of a change in grade, the Dean of Undergraduate Studies will also notify the Office of Records and Registration of the university’s decision.

ACADEMIC MISCONDUCT BY FORMER STUDENTS

It is possible that an act of academic misconduct will remain undiscovered until after a degree is awarded. In such a case, Clemson University reserves the right to revoke any degree based on new revelations about scholarly issues including, but not restricted to, admissions credentials, all forms of coursework, research, theses, dissertations, or other final projects.

I. Submission of Fraudulent Admissions Credentials

The submission of fraudulent admissions credentials in the student’s application or any other documents submitted for admission to Clemson University may result in initiation of action under the Policy and Procedure on Revocation of Academic Degrees.

II. Academic Dishonesty in Coursework

A. In the event that the act is alleged to have occurred within the context of a course and is consistent with the general definition of academic dishonesty presented in Sections I of the Academic Integrity Policy, the same procedures in that policy will apply except for academic misconduct listed in III below.

B. Graduate Students—If the resulting penalty is either the assignment of a grade of D or F in a required graduate course, or the issuance of any grade that causes the student not to possess a cumulative B average in both graduate courses and in all courses, action under the Policy and Procedures on Revocation of Academic Degrees may be initiated.

C. Undergraduate Students—If the resulting penalty causes the student to no longer have the necessary credit hours, coursework, or grade average for receiving a degree, action under the Policy and Procedures on Revocation of Academic Degrees may be initiated.

III. Falsification of Data and Plagiarism in Theses, Dissertations, or Other Final Projects

Data falsification, plagiarism (as defined in the Academic Integrity Policy) and other acts of academic dishonesty in a thesis, dissertation, or other final project are serious acts of misconduct. Allegations of this type of misconduct may result in initiation of action under the Policy and Procedure on Revocation of Academic Degrees.

REVOCA TION OF ACADEMIC DEGREES

Preamble

Academic institutions have a critical responsibility to provide an environment that promotes integrity, while at the same time encouraging openness and creativity among scholars. Care must be taken to ensure that honest error and ambiguities of interpretation of scholarly activities are distinguishable from outright misconduct. This policy is applicable to fraudulent or other misconduct in obtaining an academic degree which is so egregious that a mechanism for revoking an academic degree, either graduate or undergraduate, must be undertaken. The Clemson University Board of Trustees has the sole authority to revoke any degree previously awarded.

Definitions

As used herein, the following terms shall apply:

A. When the degree holder was an undergraduate student:

1. “Dean” shall mean the Dean of the academic college where student was enrolled.

2. “Committee of Investigation and Recommendation” shall be composed of the members of the standing University Undergraduate Academic Eligibility Appeals Committee. An undergraduate student will be appointed to the Committee of Investigation and Recommendation by the President of the Student Body within ten (10) calendar days of notification by the President of the Faculty Senate. Any member of the Academic Eligibility Appeals Committee who is a faculty member in the department which awarded the degree involved shall not be a member of the Committee of Investigation and Recommendation for that particular investigation. If there are fewer than three (3) non-disqualified faculty members, the President of the Faculty Senate shall appoint additional faculty members to bring the number of faculty committee members up to three (3). If the President of the Faculty Senate is from the same department that awarded the degree involved, the President-Elect of the Faculty Senate shall appoint the additional member.

B. When the degree holder was a graduate student:

1. “Dean” shall mean the Dean of the Graduate School.

2. “Committee of Investigation and Recommendation” shall be composed of the members of the standing University Graduate Admissions and Continuing Enrollment Appeals Committee, except for the Associate Dean of the Graduate School who shall not be a member of the Committee of Investigation and Recommendation. A graduate student will be appointed to the Committee of Investigations and Recommendation by the President of Graduate Student Government within ten (10) calendar days of notification by the President of the Faculty Senate. Any member of the Graduate Admissions and Continuing Enrollment Appeals Committee who is a faculty member in the department which awarded the degree involved shall not be a member of the Committee of Investigation and Recommendation for that particular investigation. If there are fewer than three (3) non-disqualified faculty members, the President of the Faculty Senate shall appoint additional faculty members to bring the number of faculty committee members up to three (3). If the President of the Faculty Senate is from the same
Complaint
An allegation or complaint involving the possibility of misconduct can be raised by anyone. The allegation should be made in writing to the Dean.

Initial Review
The Dean will conduct the initial review to determine whether or not the allegation has merit. The Dean may discuss the matter with the former student’s advisory committee (if any) and other faculty as appropriate. The Dean may also contact persons outside the University who may be able to provide factual information on the alleged misconduct or who may otherwise have expertise concerning issues involved in the alleged misconduct. If the Dean determines that the allegation has no merit, he/she will terminate the investigation. If the Dean determines that serious academic misconduct is suspected, the Dean will notify the President of the Faculty Senate in writing in a confidential manner. The Dean shall also notify the Executive Vice President for Academic Affairs and Provost of the charge but will not discuss any details of the charge.

Committee of Inquiry
The President of the Faculty Senate shall, within (10) calendar days of receipt of the notification from the Dean, appoint three (3) faculty members to the Committee of Inquiry and notify the President of Graduate Student Government or the President of the Student Body, as appropriate, who shall appoint a graduate or undergraduate student, as appropriate, to the Committee of Inquiry within ten (10) calendar days of notification. The President of the Faculty Senate shall also notify the degree holder of the formation of a Committee of Inquiry.

If the Faculty Senate President is from the same department that awarded the degree involved, the President-Elect of the Faculty Senate shall appoint the Committee of Inquiry. The faculty members will be appointed from departments which did not award the degree involved. The Committee will elect its chairman from the faculty members on the Committee.

For each allegation, the Committee of Inquiry will review the complaint and any other information provided by the Dean and determine whether there is sufficient evidence to warrant a formal charge of academic misconduct and further investigation under this policy. While the Committee of Inquiry shall not make a recommendation as to whether a degree should be revoked, the purpose is to provide a review to separate frivolous, unjustified or mistaken allegations from those requiring a more detailed and formal investigation. The Committee of Inquiry will review the evidence and must determine that the alleged misconduct more probably than not occurred in order for the committee to recommend a formal charge and further investigation.

Within thirty (30) calendar days of the formation of the Committee of Inquiry, the Committee of Inquiry will submit a written report to the President of the Faculty Senate. If the Committee of Inquiry’s report finds that the investigation should not proceed, the President of the Faculty Senate shall terminate the investigation and notify the appropriate persons. If the Committee of Inquiry’s report finds that a formal charge and further investigation are warranted, the President of the Faculty Senate shall, within ten (10) calendar days of receipt of the report of the Committee of Inquiry, send a copy of that report to the Dean and to the Committee of Investigation and Recommendation. The President of the Faculty Senate shall also immediately notify the President of Graduate Student Government or President of the Student Body (whichever is appropriate) that a student representative needs to be appointed to the Committee of Investigation and Recommendation. The President of the Faculty Senate shall also notify the Executive Vice President for Academic Affairs and Provost of the Committee of Inquiry’s recommendation. No details of the charge will be discussed. Note: A majority vote of the Committee of Inquiry is necessary to recommend that a formal charge and further investigation are warranted. A tie vote means that the investigation is terminated as stated herein.

Notification to Degree Holder
The Dean shall issue in writing, within ten (10) calendar days of receipt of the report of the Committee of Inquiry, a formal charge of academic misconduct to the degree holder. This written notice shall detail the factual allegations for the charge and the evidence supporting the charge. This written notice shall also inform the degree holder that if the charges are substantiated, the degree holder’s degree could be revoked. This written notice shall also inform the degree holder of his/her right to appear at a hearing as stated in this policy. The Dean shall also send with this notice a copy of this Policy and Procedure on Revocation of Academic Degrees to the degree holder. This notice shall be delivered to the accused in person or sent by certified mail, return receipt requested.

Committee of Investigation and Recommendation
The Committee of Investigation and Recommendation shall extend to the degree holder the following process:
1. Notice of the nature of the complaint
2. Notice of the evidence supporting the complaint
3. Notice of the hearing
4. The opportunity to present evidence, including testimony
5. The opportunity to hear the testimony against the degree holder
6. The opportunity to ask questions of all witnesses
7. The opportunity to have an attorney or advisor present at the hearing; however, the role of the attorney or advisor shall be solely to assist the party, and the attorney or advisor shall not be permitted to participate actively in the proceedings.

The degree holder shall not be entitled to know the identity of the person(s) who originally made the complaint unless that person agrees that his/her identity can be revealed.

The chair of the Committee of Investigation and Recommendation shall inform the degree holder of the time and date of the hearing.

The Dean or his/her designee shall present the accusation against the degree holder at the hearing and may have one additional representative present during the hearing. Under this section the term “Dean” is understood to include the Dean’s designee, if such a designation is made.

The degree holder and the Dean may submit written materials to the Committee of Investigation and Recommendation prior to the hearing. The chair of the Committee of Investigation and Recommendation shall make available the materials received to the other party and to all committee members.

The hearing before the Committee of Investigation and Recommendation shall be held no sooner than thirty (30) calendar days and no later than ninety (90) calendar days after receipt of the report of the Committee of Inquiry unless the degree holder and the Dean agree to a different date. All matters pertaining to the hearing shall be kept as confidential as possible and the hearing shall be closed to the public. A verbatim record of the hearing will be made and shall be made a part of the hearing record. The degree holder and the Dean shall be responsible for having any witnesses they wish to testify in attendance at the hearing. Witnesses will be present only while testifying.

The chair of the Committee of Investigation and Recommendation shall take whatever action is necessary during the hearing to ensure a fair, orderly, and expeditious hearing. No formal rules of evidence will be followed. If any objection is made to any evidence being offered, the decision of the majority of the committee shall govern. Irrelevant, immaterial, or unduly repetitious evidence should be excluded.

The degree holder and the Dean shall be permitted to offer evidence and witnesses pertinent to the issues.

The Dean shall present the case against the accused first. The accused shall then present his/her response.

The chair will allow each party to ask questions of the other party and will allow each party to ask questions of the other party’s witnesses at the appropriate time during the hearing as determined by the chair. Members of the committee may ask questions of any party or any witness at any time during the hearing.

Within fifteen (15) calendar days of the conclusion of the hearing, the Committee of Investigation and Recommendation shall submit a written report to the Executive Vice President for Academic Affairs and Provost. The report shall contain findings and a recommendation as to whether the degree holder’s degree should be revoked. The Committee of Investigation and Recommendation must find clear and convincing evidence that serious academic misconduct has been committed in order to recommend the revocation of the degree holder’s degree. If the Committee of Investigation and Recommendation does not find clear and convincing evidence of serious academic misconduct, the Committee of Investigation and Recommendation cannot recommend revocation of the degree holder’s degree and the matter shall be closed. Note: A majority vote of the Committee of Investigation and Recommendation is necessary to recommend the revocation of a degree holder’s degree. This means that a tie vote will result in the matter being closed.

At the same time that the report is sent to the Executive Vice President for Academic Affairs and Provost, the chair of the Committee of Investigation and Recommendation shall send a copy of the report to
the degree holder, the Dean, and other appropriate persons involved in the process.

If the Committee of Investigation and Recommendation recommends that the degree holder’s degree be revoked, the chair shall also send a complete copy of the hearing record to the Executive Vice President for Academic Affairs and Provost. The hearing record shall consist of the transcript of the hearing and all documents that were submitted to the committee. The chair of the Committee of Investigation and Recommendation shall label which documents were submitted by each party when forwarding this information to the Executive Vice President for Academic Affairs and Provost.

If the Committee of Investigation and Recommendation recommends that the degree holder’s degree be revoked, the chair shall also send a copy of the transcript of the hearing to the degree holder and the Dean at the same time that it is sent to the Executive Vice President for Academic Affairs and Provost.

Executive Vice President for Academic Affairs and Provost
If the Committee of Investigation and Recommendation recommends that the degree be revoked, the Executive Vice President for Academic Affairs and Provost shall review the hearing record and the report of the Committee of Investigation and Recommendation. If the Executive Vice President for Academic Affairs and Provost decides that the degree holder’s degree should not be revoked, he/she shall notify the degree holder, the Dean, the Committee of Investigation and Recommendation and other appropriate persons involved in the process, in writing, within twenty-one (21) calendar days of receipt of the transcript of the hearing, and the matter shall be closed. If the Executive Vice President for Academic Affairs and Provost decides to recommend that the degree holder’s degree should be revoked, the Executive Vice President for Academic Affairs and Provost shall send that recommendation in writing to the President of the University within twenty-one (21) calendar days of receipt of the transcript of the hearing. The Executive Vice President for Academic Affairs and Provost shall notify the President, along with his/her recommendation, the Committee of Investigation and Recommendation’s report and the hearing record. The Executive Vice President for Academic Affairs and Provost shall send a copy of his/her recommendation to the degree holder, the Dean, the Committee of Investigation and Recommendation, and other appropriate persons involved in the process.

If the Executive Vice President for Academic Affairs and Provost is disqualified from reviewing the case, the Dean of Undergraduate Studies shall be substituted for the Executive Vice President for Academic Affairs and Provost.

President
If the Executive Vice President for Academic Affairs and Provost recommends to the President that the degree holder’s degree should be revoked, the President shall transmit that recommendation along with the report of the Committee of Investigation and Recommendation and the hearing record to the Executive Secretary of the Board of Trustees within thirty (30) calendar days of receipt. If the President wishes to make a recommendation, he/she shall review the recommendation of the Executive Vice President for Academic Affairs and Provost, the report of the Committee of Investigation and Recommendation, and the hearing record and forward his recommendation to the Executive Secretary of the Board of Trustees within thirty (30) calendar days of receiving the recommendation of the Executive Vice President for Academic Affairs and Provost.

Board of Trustees
The Executive Secretary of the Board of Trustees shall send to all trustees the hearing record, the recommendation of the Executive Vice President for Academic Affairs and Provost, the report of the Committee of Investigation and Recommendation, and the recommendation of the President, if any. A majority vote by the Board of Trustees, at a duly constituted Board meeting, is required to revoke an academic degree. The decision of the Board of Trustees shall be final.

Guiding Principles
All actions taken by committees shall be effective by a majority vote.

All investigations, hearings, and actions shall be kept as confidential as possible except for notice of any revocation approved by the Board of Trustees.

A decision not to proceed at any stage of the proceedings set forth in this policy does not necessarily mean that the original complaint was groundless.

For good cause shown, at the request of either party and the approval of the other, the Executive Vice President for Academic Affairs and Provost shall extend any time limit set forth in this policy. Any such time extension shall be communicated in writing to all appropriate parties.

Administrative Action if Degree is Revoked
If a degree is revoked by the Board of Trustees, the former student’s transcript will be modified to reflect that the degree was revoked, and the former student will be informed of the revocation and requested to return the diploma. If the former student was enrolled in a program requiring a thesis or dissertation, all bound copies will be removed from the Clemson University Library. In addition, for doctoral students, University Microfilms, Inc. will be notified and requested to take appropriate action.

Students whose degrees have been revoked may be eligible to reapply for admission according to normal University procedures and policies in effect at the time of reapplication.
GENERAL EDUCATION

An undergraduate student whose enrollment in a curriculum occurs after May 15, 2005, must fulfill the general education requirements in effect at that time. If a student withdraws from the University and subsequently returns or does not remain continuously enrolled (summers excluded), the requirements in effect at the time of return will normally prevail. Any variation in curricular or general education requirements shall be considered under the curriculum year change or the substitution procedure.

MISSION STATEMENT

Academic institutions exist for the transmission of knowledge, the pursuit of truth, the intellectual and ethical development of students, and the general well-being of society. Undergraduate students must be broadly educated and technically skilled to be informed and productive citizens. As citizens, they need to be able to think critically about significant issues. Students also need to be prepared to complete undergraduate work and a major course of study. The mission requires a high level of knowledge about and competence in the following areas:

General Education Competencies

A. Arts and Humanities
Demonstrate an ability to analyze and/or interpret the arts and humanities.

B. Mathematics
Demonstrate mathematical literacy through solving problems, communicating concepts, reasoning mathematically, and applying mathematical or statistical methods, using multiple representations where applicable.

C. Natural Sciences
Demonstrate the process of scientific reasoning by performing an experiment and thoroughly discussing the results with reference to the scientific literature, or by studying a question through critical analysis of the evidence in the scientific literature.

D. Social Sciences
Describe and explain human actions using social science concepts and evidence.

E. Cross-Cultural Awareness
Explain how aspects of culture are integrated into a comprehensive worldview; and then demonstrate how culture influences human behavior.

F. Science and Technology in Society
Demonstrate an understanding of issues created by the complex interactions among science, technology, and society.

G. Communication
Effective oral and written communication is the means by which all competencies will be demonstrated.

H. Critical Thinking
Demonstrate the ability to assemble information relevant to a significant, complex issue, evaluate the quality and utility of the information, and use the outcome of the analysis to reach a logical conclusion about the issue.

I. Ethical Judgment
Demonstrate an ability to identify, comprehend, and deal with ethical problems and their ramifications in a systematic, thorough, and responsible way.

REQUIREMENTS—33 credit hours

To meet general education competencies, 33 total credit hours are required, distributed as follows: I. General Education Coursework—31 credit hours; II. Distributed Coursework—2 credit hours.

I. General Education Coursework—31 hours required

General education requirements in some curricula are more restrictive than those shown below. Science and Technology in Society and Cross-Cultural Awareness requirements may be satisfied by other General Education courses, as indicated in the footnotes below, as long as the student completes a total of 31 hours in area I. and satisfies requirements A-F below:

A. Communication: at least 6 credits

English Composition ......................................................... 3 credits
ENGL 1030 (ENGL 1020 for transfer students)

Oral Communication ....................................................... 3 credits
COMM 1500, 2500, HON 2230, or an approved cluster of courses such as AS 3090, 3100, 4090, 4100; or ML 1010, 1020

*May be satisfied either by the courses above or by an approved departmental cluster of course, see II. Distributed Coursework. Students taking clusters must still earn at least 31 hours from the General Education Coursework list.

B. Mathematical, Scientific, and Technological Literacy: at least 10 credits

Mathematics ................................................................. 3 credits
MATH 1010, 1020, 1060, 1070, 1080, 2070, STAT 2220, 2300, 3090, 3300. For Early Childhood Education, Elementary Education, and Special Education majors only, the approved cluster of MATH 1150, 1160 and 2160 satisfies the requirement.

Natural Science with Lab .................................................. 4 credits
ASTR 1010/1030, 1020/1040, BIOL 1030/1050, 1040/1060, 1090, 1100, 1110, 1200/1220, 1200/1230, CH 1010, 1020, 1050, 1060, GEOL 1010/1030, 1120/1140, 2020, PHSC 1070, 1080, 1170, 1180, PHYS 1220/1240, 2000, 2070/2090, 2080/2100, 2210/2230, 2220/2240

Mathematics or Natural Science ....................................... 3 credits
Any general education Mathematics or Natural Science course listed above or BIOL 2000, 2010, 2030, 2040, 2050, 2200, ENT 2000, ENSP 2000, GEOL 1200, 3000, 3005, PES (ENSP) 3150, PHYS 2400, 2450, 2800, PLPA 2130, STS 2160*.

C. Arts and Humanities: at least 6 credits

Literature ................................................................. 3 credits
Any 2000-level ENGL literature course (ENGL 2020, 2120, 2130, 2140, 2150), CHIN 4010, FR 3000, 3040, GER 2600, 3060, 3600, HON 1900, 2210, ITAL 3010, 3020, JAPN 4010, 4060, RUSS 3600, 3610, SPAN 3040, 3110, 3130

Non-Literature ............................................................ 3 credits
AAH 1010, ART 2100, 3750, ASL 3050, CAAH 2010, CHIN (PHIL) 3120, (PHIL) 3130, 4990, COMM 1800, 3030, 3080, 3090, 4020, ENGL (GW) 3010, 3550, 3570, (LANG) 4540, FR 3070, GW (ENGL) 3010, 4050, GER 3400, HON 1910, 2010, 2030, 2030, 2100, 2220, HUM 3010, 3020, 3060, 3090, JAPN 3070, 3080, LANG 3400, 3420, 3560, (ENGL) 4540, LARC 1160, MUSC 2100, 3080, 3090, 3100, 3120, 3130, 3140, 3170, 3610, 3620, 3630, 3640, 3690, 3700, 3710, 3720, PHIL 1010, 1020, 1030, 1240, 2100, (CHIN) 3120, (CHIN) 3130, 3160, 3170, 3180, 3230, 3240, 3250, 3260, 3270, 3440, 3450, REL 1010, 1020, 1030, 2010, 3020, 3030, 3060, 3070, 3090, 3120, 3130, 3150, RUSS 3400, SPAN 3070, 3080, STS 2101, 2120, 2150, 3010, 3030, THEA 2100, 2790, 3080, 3090, 3150, 3160, 3170, WS 3010
D. Social Sciences: at least 6 credits

Selected from two different fields.................................................. 6 credits

Note: AGRB and ECON are considered the same field.

NOTE: Science and Technology in Society and Cross-Cultural Awareness requirements may be satisfied by other General Education courses, as indicated in the footnotes below, as long as the student completes a total of 31 hours in area I.

E. Cross-Cultural Awareness: at least 3 credits

AAH 1020, AGRB 2050\(^1\), ANTH 2010, ART 2100, ASL 3050, CAAH 2010, COMM 1800, GEOG 1030, HIST 1720, 1730, 1930, HON 1930, 2090, HUM 3090, IS 1010, 2100, LANG 2500, 2540, MUSC 2100, 3140, PAS 3010, POSC 1020, 1040, PSYC 2500, REL 1010, 1020, WS 1030, or through a University-approved cross-cultural experience

F. Science and Technology in Society: at least 3 credits

AGED (EDF) 4800, AGRB 2050\(^2\), (ECON) 4570, AVS 3150, 4150, BIOL 2000, 2010, 2030, 2040, 2100, 2110, 2200, 4730, CH 1050, 1060, COMM 1070, 3070, CPSC 2920, CTE 1150, 2210, ECE 1010, ECON 3190, (AGRB) 4570, EDF (AGED) 4800, ENGL 3490, ENGR 2200, 2210, ENR 3120, (FOR) 4160, ENSP (GEOL) 1250, 2000, (PES) 3150, 4000, ENT 2000, FDSC 2140, FOR (ENR) 4160, GEOL 1120, 1200, (ENSP) 1250, 2700, 3000, HCG (NURS) 3330, HIST 1220, 1240, 3210, 3220, 3320, 3920, 4240, 4910, HLTH 4310, HON 1940, 2010, 2060, IE 4580, LARC 1160, MKT 4450, MUSC 3180, NURS 1400, (HCG) 3330, NUTR 2030, 2100, PES (ENSP) 3150, PHIL 1240, 2100, 3240, 3260, 3280, 3400, 3450, PHYS 2450, PKSC 3680, PLPA 2130, PRTM 2110, PSYC 2750, RS (SOC) 4010, SOC (RS) 4010, 4030, STAT 2220, STS 1010, 1020, 1200, 1710, 2150, 2160, 3010, 3030, 4980, 4990

\(^1\)This course also satisfies the Science and Technology in Society Requirement.

\(^2\)This course also satisfies the Cross-Cultural Awareness Requirement.

II. Distributed Coursework: 2 credits

A. Academic and Professional Development: at least 2 credits

Departmental courses approved by the Undergraduate Curriculum Committee addressing the general academic and professional development of the student.

B. Distributed Competencies Coursework

Courses in general education and the disciplines incorporate critical thinking, ethical judgment, and both written and oral communication skills into the curriculum. Some curricula use a cluster of courses to meet the oral communication competency.
MINORS

A minor consists of at least 15 semester hours, with no fewer than nine credits at the 3000 level or higher.* A student cannot major and minor in the same field or acquire a minor that is not allowed by the degree program. In programs that require a minor, courses may not be used to fulfill both the major and minor requirements. Courses that count towards a student’s major, but are outside the major’s course rubric, may also be used to fulfill minor requirements. Students are encouraged to contact the department offering the minor for advising. Specific requirements are detailed below.

Fulfilling Course Prerequisites
A number of courses in the minors have prerequisite courses. Students should select a minor and take any prerequisite courses as early as possible in their academic careers. Please consult individual course listings for prerequisites.

Accounting (18 credits minimum)
A minor in Accounting requires ACCT 2010, 3110, 3120, and nine hours selected from 3000- or 4000-level accounting courses. Students planning to pursue the Master of Professional Accountancy degree program should select courses in consultation with the school’s graduate coordinator.

Adult/Extension Education (15 credits minimum)
A minor in Adult/Extension Education requires AGED 4030, 4400, and nine additional credits selected from the following: AGED 4070, 4280, EDF (AGED) 4820, PRTM 3080.

Aerospace Studies (24 credits minimum)
A minor in Aerospace Studies requires AS 1090, 1100, 2090, 2100, 3090, 3100, 4090, and 4100. Completion of AS Leadership Laboratory and participation in cadre activities are mandatory. Students must compete for an allocation and be accepted into the Professional Officer Course before enrolling in AS 3090.

Agricultural Business Management (15 credits minimum)
A minor in Agricultural Business Management requires AGRB 3020, 3080, 3190, and at least two courses selected from AGRB 3090, 3510, 4020, 4080, 4090, 4520, 4560, 4600.

Agricultural Mechanization and Business (15 credits minimum)
A minor in Agricultural Mechanization and Business requires six credit hours selected from AGM 2050, 2060, 2210, 2220, 3010, AGED 3030; and nine credit hours from AGM 4020, 4050, 4060, 4100, 4520, 4600, 4720.

American Sign Language Studies (15 credits minimum)
A minor in American Sign Language Studies requires 15 credit hours in ASL at the 3000 or 4000 level.

Animal and Veterinary Sciences (15 credits minimum)
A minor in Animal and Veterinary Sciences requires AVS 1500 and 1510; one course selected from AVS 2000, 2010, 2030, 2040, 2060, 2090, 2110, 3020, 3090, 3110, 3230, 4050, or 4550; and nine additional hours selected from any 3000- or 4000-level AVS courses. A maximum of three credits of AVS 3600, 3900, 4410, 4420, 4430 or 4910 may be used.

Anthropology (18 credits minimum)
A minor in Anthropology requires ANTH 3100 and at least six hours selected from ANTH 3110, 3310, (BIOL) 3510, LANG (ANTH) 3710. Nine additional hours may be selected from any Anthropology course, but at least three hours must be from a 4000-level course. No more than three credits of ANTH 4960 may be counted toward the minor.

Architecture (15 credits minimum)
A minor in Architecture requires ARCH 1010, 4710, 4720, and DSGN 3700. ARCH 4710, 4720, and DSGN 3700 are only offered during the summer at study abroad locations.

Art (15 credits minimum)
A minor in Art requires ART 1030, 1510, 1520; AAH 1010, 1020 or ART 2100; at least six hours of ART or AAH courses at the 2000 level or above; and at least three hours of ART or AAH courses at the 3000 or 4000 level.

Athletic Leadership (17 credits minimum)
A minor in Athletic Leadership requires 17 credit hours arranged as follows: AL 3490, 3500, 3530, 3610, 3620, 3760, and one of the following: AL 3710, 3720, 3740, 3740, 3750, 3750. Students must complete a coaching internship or athletic administration internship (AL 4000) with the approval of the Athletic Leadership Coordinator.

Biochemistry (15 credits minimum)
A minor in Biochemistry requires three credits of GEN 3000 or 3020, three credits of BCHM 3010 or 3050 and nine credits of 4000-level Biochemistry courses.

Biological Sciences (20 credits minimum)
A minor in Biological Sciences requires either BIOL 1030/1050 or BIOL 1100; and either 1040/1060 or 1110; plus 12 additional credits selected from BIOL courses at the 3000 level or above, BCHM 3050, GEN 3000, or MICR 3050.

Brand Communications (15 credits minimum)
A minor in Brand Communications requires COMM 3700 and 3760; and nine additional credits selected from COMM 3560, 3710, 3720, 3730, or 3740.

British and Irish Studies (15 credits minimum)
A minor in British and Irish Studies requires 15 credits at the 3000-4000 level, with at least six credits selected from Group I, at least six credits selected from Group II, and the remaining three credits selected from either group at the student’s option.

Business Administration (21 credits minimum)
A minor in Business Administration requires ACCT 2110, 2120, FIN 3060, LAW 3220, MGT 2010, MKT 3010. Please note that ECON 2120 requires ECON 2110 as a prerequisite. Also, FIN 3060 has prerequisites of ACCT 2110 and a statistics course. See FIN 3060 course description for courses that currently fulfill the statistics requirement. Additionally, these statistics courses may have prerequisites of their own. MKT 3010 requires one of ECON 2000, 2110, 2120 or any 2000-level AGRB class as a prerequisite.

Chemistry (23 credits minimum)
A minor in Chemistry requires CH 1010, 1020, and 15 additional credits in Chemistry, at least nine of which must be at the 3000 or 4000 level, selected in consultation with the Department of Chemistry.

Chinese Studies (15 credits minimum)
A minor in Chinese Studies requires 15 credits selected from 3000- or 4000-level CHIN courses, including CHIN 3505 and 3060 and at least one 4000-level literature course.

Clustering (15 credits minimum)
The Cluster minor allows students a somewhat wider choice of course materials than is possible with the conventional subject-matter minor. The general requirement for the Cluster minor is 15 credits in courses numbered higher than 3000, except where noted differently, chosen according to one of the plans below. Courses within the student’s major course rubric may not be included in the Cluster minor.

Group I–Social Sciences: anthropology, economics, geography, history, justice studies, political science, psychology, sociology

Group II–Life Sciences: biochemistry, biological sciences, genetics, microbiology

Group III–Physical Sciences: chemistry, geology, physics

Group IV–Engineering: courses in all engineering majors plus engineering mechanics and engineering graphics

No course in the 1000 series is acceptable toward the minor and not more than six hours in the 2000 series are acceptable.

Communication Studies
(16 credits minimum)
A minor in Communication Studies requires completion of one of the following options:

General—COMM 2100 (with a C or better) and 12 additional credits in communication studies at the 3000 level or higher.

Sports Communication—COMM 2100 (with a C or better) and 12 additional credits in sports communication selected from COMM 3240, 3250, 3260, 3270, 4250, 4260, 4270 or 4280.

Computer Science (16 credits minimum)
A minor in Computer Science requires CPSC 2120 and 12 additional credits in computer science of which at least nine credits must be at the 3000 level or higher.

*Note: Nine credits at the 3000/4000 level are not required for a minor in Art, as approved by the University Undergraduate Curriculum Committee 2010.
Creative Writing (15 credits minimum)
A minor in Creative Writing requires 15 credits, consisting of the following:
- Three credits selected from ENGJR 3450, 3460, 3470 or 3480
- Six credits selected from ENGL 4450, 4460, 4470, or 4480
- Three credits selected from ENGL 2220 or 2320
- Three credits selected from ENGL 3560, 4190, 4260, 4280, 4310, 4320, 4650, or 4830

Crop and Soil Environmental Science (16 credits minimum)
A minor in Crop and Soil Environmental Science requires PES 1040, 2020, and nine or more PES credits at the 3000 level or higher.

Digital Production Arts (15 credits minimum)
A minor in Digital Production Arts requires DPA 3070 and completion of one of the following options:
Group I (for Architecture or Visual Arts majors):
- DPA 4000, 4010, and six credits selected from CPSC 4040, 4050, 4160, PKSC 2200, 3200, THEA 2880, 4870, 4970.
Group II (for Computer Science, Computer Engineering, and Computer Information Systems majors):
- DPA 4020, 4030, and six credits selected from ART 2050, 2130, 4210, GC 3400, PKSC 2200, 3200, THEA 2880, 4870, 4970.
Group III (for all other majors):
- DPA 4020, 4010, 4020, and three credits selected from CPSC 4040, 4050, 4160, PKSC 2200.

East Asian Studies (15 credits minimum)
A minor in East Asian Studies requires 15 credits, of which at least six credits must be at the 4000 level, distributed as follows:
- Three credits selected from BIOL 4100, 4140, 4240, 4430, 4460
- CH 4130, EES 4010, 4020, 4300, 4580
- ENGL 3950, ETOX 4200, 4210, 4300, FOR 2020, PES 2020, (BE) 4860, 4900, WFB 4140
- Group II–Resource Management: at least two credits selected from AGRB 3570, BE 4540, ECON 3190, EES (BE) 4840, FOR 4060, GEOG 3800, MEE 4330, PES (ENSP) 3150, (BIOL) 3130, 3590, 4120, 4620
- Group III–Environmental Policy and Social Impacts: at least two credits selected from ENSP 4720, HIST 3920, HLTH 4310, PHIL 3450, RS (SOC) 4010, WFB 4300

Equine Industry (15 credits minimum)
A minor in Equine Industry requires AVS 1500 and 1510, three hours from any 3000- or 4000-level AVS courses, and eight additional hours from AVS 2040, 2050, 2080, 3590, 3850, 4120, 4610, or 4170.

Film Studies (15 credits minimum)
A minor in Film Studies requires 15 credits in English at or above the sophomore level, arranged as follows:
- ENGL 3570, 4500, (COMM) 4510, 4520, and one of the following:
- ART 2130, 3130, ENGL 3480, (THEA) 4300, ENGL 4530, 4590, 4830, or other course approved by the Departmental Director of Undergraduate Studies.

Financial Management (15 credits minimum)
A minor in Financial Management requires FIN 3050, 3070, 3080, 3210, and either FIN 3060 or 3110. Please note that both FIN 3060 and 3110 have prerequisites of ACCT 2010 and a statistics course. See course descriptions for courses that currently fulfill the statistics requirement. Additionally, these statistics courses may have prerequisites of their own. All of the other FIN courses required for the minor require either FIN 3060 or 3110 with a C or better as a prerequisite.

Food Science (15 credits minimum)
A minor in Food Science requires FDSC 2140, 4010, and nine additional credits in FDSC or NUTR courses numbered 3000 or higher.

Forest Products (15 credits minimum)
A minor in Forest Products requires 15 credits, which must include at least four courses selected from FOR 3410, 4410, 4420, 4440, 4470. Other courses at the 3000 level or above may be selected with a Forest Products advisor’s approval.

Forest Resource Management (15 credits minimum)
A minor in Forest Resource Management requires FOR 2350, 2060, and at least ten additional credits of forestry courses at the 3000 level or higher, excluding FOR 4100 and 4470.

French Studies (15 credits minimum)
A minor in French Studies requires 15 credits of 3000- and 4000-level FR courses, including FR 3050 and at least one 4000-level literature course. FR 4380 and 4390 may not be used to satisfy requirements for the French Studies minor.

Gender, Sexuality and Women’s Studies (15 Credits minimum)
A minor in Gender, Sexuality and Women’s Studies requires 15 credits with no more than three credits at the 1000 level, selected in consultation with the Gender, Sexuality and Women’s Studies Coordinator.

Genetics (15 credits minimum)
A minor in Genetics requires three credits of GEN 3000 or 3020, three credits of BCHM 3010 or 3050, and nine credits of 4000 level Genetics courses.

Geography (18 credits minimum)
The Geography minor consists of three credits of geography at the 3000 level and 15 credits of geography at the 3000 or 4000 level. At least one 4000-level geography course must be taken. One of the following courses may be taken as part of the 15-credit, upper-level requirements but may not be substituted for the required 4000-level geography course: BIOI 4420, SOC 4710.

Geology (20 credits minimum)
A minor in Geology requires GEOG 1010/1030, 2020, and 12 additional credits in geology, at least nine of which must be drawn from 3000-4000 level geology courses.

German Studies (15 credits minimum)
A minor in German Studies requires 15 credits of 3000- and 4000-level GER courses, including at least one 3000- or 4000-level literature course and one 3000- or 4000-level film or culture course.

Global Politics (18 credits minimum)
A minor in Global Politics requires POSC 1020 or 1040, 3610, and 12 additional credits chosen from the list below. At least three of these credits must be from Group I and at least three credits must be from Group II.
Group I–Comparative Politics: POSC 3710, 3720, 4660, 4710, 4720, 4770, (LANG) 4850
Group II–International Relations: POSC 3620, 3630, 3750, 4280, 4290, 4470, 4480, 4560, 4570, 4590, 4610
With the approval of the Political Science department, a maximum of three credits from POSC 3050, 3110, 3130, or 4100 also may be applied toward a Global Politics minor. Students majoring in Political Science may not minor in Global Politics.
Great Works (18 credits minimum)
The Great Works minor requires GW (ENGL) 3010 plus one course from each of the following groups. A minimum of nine credits must be at the 4000 level.

Group I—Classical Civilization: Three credits from ENGL 4300, (THEA) 4290, (COMM) 4910, HIST 3540, 3550, 4500, PHIL 3150

Group II—Post-Classical Literature: Three credits from ENGL 4080, 4110, 4140, 4160, FR 4000, GW 4030, SPAN 3130, 4010

Group III—Philosophy, Religion, and Social Thought: Three credits from ENGL 3500, HIST 4950, PHIL 3160, 3170, POSC 4500, REL 3010, 3020, 4010

Group IV—The Arts: Three credits from AAH 4230, 4240, HUM 3010, 3020, MUSC 4150, 4160, THEA 3150, 3160

Group V—The Sciences: BIOL 4860, ENGL 4340, GW 4020, 4050

History (15 credits minimum)
A minor in History requires 15 credits in history at the 3000 and 4000 level. Three credits at the 4000 level must be included.

Horticulture (15 credits minimum)
A minor in Horticulture requires HORT 1010 and 12 additional credits of horticulture courses (excluding HORT 4080 and 4710), nine credits of which must be at the 3000 level or higher. HORT 2710 is highly recommended.

Human Resource Management (15 credits minimum)
A minor in Human Resource Management requires 15 credit hours, including MGT 3070, 4000, 4310 and 4350, and three additional credit hours selected from MGT 4160 or 4250.

International Engineering and Science (15 credits minimum)
The minor in International Engineering and Science is open to students in any major in the College of Engineering, Computing and Applied Sciences or the College of Science, and requires
1. Completion of a modern language through at least 2020
2. Either (a) nine credits of engineering or science courses at the 3000 level or higher transferred from a foreign institution during an approved study abroad program of at least three months or (b) an approved international internship or research program in engineering or science of at least three months duration, plus nine credits chosen from the following list: 3000-level or higher modern language courses; ECON 3100, 4120, 4130; POSC 3610, 3620, 3710, 3750, 4270, 4720, 4780.

Japanese Studies (15 credits minimum)
A minor in Japanese Studies requires 15 credits of 3000- and 4000-level JAPN courses, including at least one 4000-level literature course. JAPN 4010, (ANTH) 4170, and 4990 may not be used to satisfy requirements for the Japanese Studies minor.

Legal Studies (15 credits minimum)
A minor in Legal Studies requires 15 credits at the 3000-4000 level selected from any law course, or COMM 4300, 4310, ECON 4020, ENR 4280, HIST 3190, 3280, 3290, 3960, 4010, 4020, 4060, 4810, 4820, 4910, 4920, and 4990, and STAT 3090. Students may not use both MATH 3650 and MATH 4600.

Management (15 credits minimum)
A minor in Management requires 15 credits as follows: MGT 2010, 3070, 3100, 3180, 3900.

Management Information Systems (15 credits minimum)
A minor in Management Information Systems requires 15 credits as follows: ACCT 3220 or MGT 3180; MGT 4110, 4520, and two of the following: MGT 3120, 4540, 4550, 4560.

Mathematical Sciences (16 credits minimum)
A minor in Mathematical Sciences requires MATH 2080 and 12 additional credits in MATH or STAT courses numbered 3000 or higher, excluding MATH 3080, 3150, 3160, 3820, 3960, 3990, 4020, 4320, 4810, 4820, 4910, 4920, and 4990, and STAT 3990. Students may not use both MATH 3650 and MATH 4600.

Microbiology (15 credits minimum)
A minor in Microbiology requires MICR 3050 and 12 additional credits selected from 4000-level microbiology courses.

Middle Eastern Studies (15 credits minimum)
A minor in Middle Eastern Studies requires 15 credits, three of which must be in Arabic language courses at the 2000 level or higher. The remaining 12 credits must be distributed as follows: Group I: three credits selected from REL 3030, 3060, 3150, or 3510; Group II: three credits selected from HIST 3510, 3520, 3960, 3970, 4720, or POSC 4760; Group III: six additional credits selected from any of the courses listed in Group I or II.

Military Leadership (19 credits minimum)
A minor in Military Leadership requires at least 19 credits, including ML 3010, 3020, 4010, 4020, and one of the following: HIST 3900, ML 3900, POSC 4580, or POSC 6580. Completion of Leadership Laboratory and participation in cadet activities are mandatory. (ML 1000 and 2000 levels may be taken concurrently in the sophomore year.)

Music (18 credits minimum)
A minor in Music requires MUSC 1420, 1430, 1510, 1520, 2510, 2520, 4150 or 4160; four semesters of ensemble, totaling four credits, selected from MUSC 3230, 3610, 3620, 3630, 3690, 3700, 3710, 3720; and one three-hour MUSC course at the 3000-4000 level. All four semesters of applied music and large ensemble must be on the student’s primary instrument.

Natural Resource Economics (15 credits minimum)
A minor in Natural Resource Economics requires AGRB 3570, 4570; and three courses selected from AGRB 3520, 4090, 4120, 4520, 4750, ECON 3190.

Nonprofit Leadership (18 credits minimum)
A minor in Nonprofit Leadership requires completion of 18 credits: NPL 3000, 3010, 3020, 3030, 3040, 4900.

Nuclear Engineering and Radiological Sciences (15 credits minimum)
A minor in Nuclear Engineering and Radiological Sciences (NERS) requires 15 credits: EES 3100, 4100, 4120, and ME 4260; and one course selected from: EES 4110, 4800, PHYS 4520, or another course approved by a NERS advisor.

Packaging Science (19 credits minimum)
A minor in Packaging Science requires PKSC 1020, 2020, 2040, and 2060; and at least nine credits selected from the following: FDSC 4010, 4020, FOR 410, 4420, GC 4060, PKSC 3200, 3680, 4010, 4160, 4200, 4300, 4400, 4500, 4640, 4640.

Pan African Studies (18 credits minimum)
A minor in Pan African Studies requires 18 credits as follows: HIST 3110 or 3120, PAS 3010, and 12 credits arranged as follows:

Group I—Three credits from GEOG 3300, HIST 3370, 3380, 3390, 4300, PAS 1010, 4980

Group II—Three credits from ENGL 4820, 4830, POSC 3810, SOC 4600, THEA 3170

Group III—Three credits in any 3000–4000-level course in the social sciences approved by the Director of the Pan African Studies Program

Group IV—Three credits in any 3000–4000-level course in the humanities approved by the Director of the Pan African Studies Program

Courses are to be scheduled in consultation with the appropriate advisors. Pan African Studies advisors will provide all affected advisors with a list of approved courses prior to registration.

Park and Protected Area Management (15 credits minimum)
A minor in Park and Protected Area Management requires PRTM 2700, 4740 and nine additional credits from PRTM 3200, 3210, 3300, 4030, (GEOG) 4300, 4310.

Philosophy (15 credits minimum)
A minor in Philosophy requires 15 credits in philosophy, nine of which must be at the 3000 level or above.

Physics (18 credits minimum)
A minor in Physics requires PHYS 1220, 2210, 2220, and nine additional credits in physics courses at the 3000 level or higher.

Plant Pathology (15 credits minimum)
A minor in Plant Pathology requires PLPA 3100 and 12 credits from the following: BIOL (PLPA) 4250, PLPA 4260, IPM 4010, MICR 3050, or any 3000–4000-level PLPA courses.
Political Science (18 credits minimum)
A minor in Political Science requires POSC 1010 or 1020 or 1030 or 1040 and 15 additional credits at the 3000-4000 level, nine of which must be selected from three different fields of political science as follows:
American Politics—POSC 4030, 4050, 4160, 4360, 4420
Comparative Politics—POSC 3710, 3720, 4660, 4710, 4760, 4770, 4780
International Relations—POSC 3610, 3620, 3630, 3750, 4290, 4470, 4480
Political Theory—POSC 4490, 4500, 4530, 4550
Public Policy and Public Administration—POSC 3020, 3210, 4210, 4230, 4240, 4300
No more than a total of three credits from POSC 3050, 3100, 3110, 3120, 3130, 4090, 4100 may be applied to the requirements for a Political Science minor.

Precision Agriculture (18 credits minimum)
A minor in Precision Agriculture requires AGM 2060 and 4110; and FOR 4340 or GEOL 4210; and at least nine credits selected from the following: AGRB 3020 or 4020; ENT 4070; FOR 4330; IPM 4010; or PES 4210, 4220, 4230, 4260, 4330, 4460 or 4520.

Psychology (18 credits minimum)
A minor in Psychology requires PSYC 2030 and 15 credits from PSYC 2750 and/or 3000- and 4000-level psychology courses. At least nine hours from courses other than PSYC 4970 and 4980 must be taken.

Public Policy (18 credits minimum)
A minor in Public Policy requires POSC 3210, 4210, and 4300, plus nine credit hours in courses dealing with specific policy domains and approved by the Department of Political Science. Students majoring in Political Science may not minor in Public Policy.

Race, Ethnicity and Migration (18 credits minimum)
A minor in Race, Ethnicity and Migration requires 18 credits as follows:
Literary Group—Six credits selected from ENGL 3530, 3540, 4030, 4190, 4430, 4560, 4820, 4850
Social Group—Six credits selected from ANTH 3200, POSC 3810, RS 3010, SOC 4310, 4600, 4710
Historical Group—Three credits selected from HIST 3000, 3100, 3120, 3950, 3960, 3970
Spatial Group—Three credits selected from GEOG 3050, 4100, POSC 4230

Recreational Therapy (16 credits minimum)
A minor in Recreational Therapy requires PRTM 2600, 3220, 3240, 3260, and 3270.

Religious Studies (15 credits minimum)
A minor in Religious Studies requires 15 credits as follows: REL 3000; and 12 additional credits, nine of which must be at the 3000 level or above. PHIL 3030, POSC 4070, and SOC 4320 may be included.

Russian Area Studies (15 credits minimum)
A minor in Russian Area Studies requires 15 credit hours of which three credits must be in Russian language courses at the 2000 level or above. The remaining twelve credits are distributed as follows: Group I—Three credits from RUSS 3070, 3400, 3600, 3610, 3980, 4600

Group II—Three credits from HIST 3850, 3860, 3870, 4940
Group III—Three credits from POSC 4710, 4730
Group IV—Three additional credits from any of the courses listed above

Science and Technology in Society (15 credits minimum)
A minor in Science and Technology in Society requires 15 credits, at least six of which must be at the 4000 level. See History Department advisor for list of approved courses.

Screenwriting (15 credits minimum)
A minor in Screenwriting requires 15 credits in ENGL above the sophomore level as follows: ENGL 3480, 3570, 4480 (six credits); and one of the following: ENGL 4500, (COMM) 4510, 4520, 4530, THEA (ENGL) 3470, or other course approved by the Department of Undergraduate Studies.

Sociology (18 credits minimum)
A minor in Sociology requires SOC 2010 and 15 credits from sociology and rural sociology courses numbered 3000 or higher. At least one 4000-level course must be included.

Spanish Studies (15 credits minimum)
A minor in Spanish Studies requires 15 credits of 3000- and 4000-level SPAN courses, including at least one 4000-level literature course. SPAN 4380 and 4390 may not be used to satisfy requirements for the Spanish Studies minor.

Spanish-American Area Studies (18 credits minimum)
A minor in Spanish-American Area Studies requires the equivalent of SPAN 2020, ECON 4000, and 12 credits distributed as follows: six credits from GEOG 3400, HIST 3400, 3410, 3420, 4400; and six credits from SPAN 3080, 3100, 3820, 4030, 4220, 4350.

Sustainability (18 credits minimum)
A minor in Sustainability requires 18 credits, including CU 2010; three credits of approved engagement activities, such as creative inquiry, study abroad, independent research, co-ops, or capstone projects; and 12 credits of courses that focus on sustainability issues, and at least one 4000-level literature course. SPAN 4380, 4390, ENSP 1250, 2000, 4000*; ENSP 4450, 4460, 4470, 4980.

Theatre (20 credits minimum)
A minor in Theatre requires 20 credits arranged as follows: three credits of dramatic literature (ENGL 4100, 4110, THEA 4150); THEA (ENGL) 3470; three credits of theatre history (THEA 3150, 3160, 3170, 3180); six credits in a sequence (THEA 2780/4790, THEA (ENGL) 3470/4470, THEA 3670/4670, THEA 3720/4720, 3760/4760, 2880 or 3770 and one of the following: 4770, 4870 or 4970); six credits in THEA at the 3000-4000 level; and two credits of THEA 2790.

Travel and Tourism (15 credits minimum)
A minor in Travel and Tourism requires PRMT 3010, 3420, and nine additional credits from PRMT 3430, 3440, 3490, 3920, 3980, (EGEO) 4300, 4410, 4440, 4450, 4460, 4470, 4980.

Turfgrass (16 credits minimum)
A minor in Turfgrass requirements HORT 2120, 4120, PES 2020, and two of the following: AGM 4020, HORT (PES) 4330, PLPA (ENT) 4060.

Urban Forestry (16 credits minimum)
A minor in Urban Forestry requires HORT 3030 and a minimum of 13 additional credits, distributed as follows:
Group I—FOR (HORT) 4270, 4500, 4800, HORT 2080
Group II—A minimum of three credits selected from CFR 4100, HORT 3080

Wildlife and Fisheries Biology (15 credits minimum)
A minor in Wildlife and Fisheries Biology requires WFB 3000, 3950; and nine additional hours selected from 3000-level or higher WFB courses, except 4630.

Women’s Leadership (18 credits minimum)
A minor in Women’s Leadership requires HEHD 4100; WS 1030 or 3010; WS 2300; WS 3900 or 4010; and six additional credits selected in consultation with a departmental advisor.

Writing (15 credits minimum)
A minor in Writing requires 15 credits as follows: Business and Technical Option—AGR 3510 or GC 1040, CPSC 1200, ENGL 3040 or 3140, 4900, 4950 Media Studies Option—ENGL 2310, 3320, 3330, 4780, and one of the following: ENGL 4750, 4890, (COMM) 4910, (COMM) 4920, or any course approved by the Chair of the English Department Writing Pedagogy Option—ENGL 3120, 4000, 4300, 4980, (EDSC) 4850, and any 3000- or 4000-level writing course offered by the Department of English

Creative Writing Options
Drama—ENGL (THEA) 3400, THEA (ENGL) 3470, (ENGL) 4470 (six credits), and one of the following: ENGL 3120, 4100, 4110
Fiction—ENGL 3450, 4320, 4450 (six credits), and one of the following: ENGL 3120, 4180, 4250, 4260, 4280
Poetry—ENGL 3460, 4310, 4460 (six credits), and one of: ENGL 3120, 4160, 4170, 4280, 4440

Youth Development Studies (15 credits minimum)
A minor in Youth Development Studies requires YDP 3000 or 3050; YDP 3100, 3150, or 3200; YDP 3350, 3350, or 3400; and six additional credits selected from YDP courses. YDP courses are offered online in an accelerated seven-week format. Students meet weekly through a synchronous web conference for discussion and interaction.
COLLEGE OF AGRICULTURE, FORESTRY AND LIFE SCIENCES

The College of Agriculture, Forestry and Life Sciences (CAFLS) supports Clemson University's land-grant mission to provide education, research and service to the public. The College of Agriculture, Forestry and Life Sciences serves more than 2,000 graduate and undergraduate students.

The College of Agriculture, Forestry and Life Sciences is a multi-disciplinary college of life-based sciences that prepares students to be leaders and innovators in their chosen careers. The shared biological foundation of the CAFLS Departments stimulates student learning and undergraduate research across disciplines; increases opportunities for team-based faculty research across departments, colleges and institutions; and makes available the latest scientific knowledge for the greater benefit of society.

To assist students in achieving these goals, the William B. Bookhart Jr. Student Services Center provides academic advising and developmental services to promote success for students in the related degree programs. These services involve recruitment and retention, academic advising, multicultural affairs, study abroad, career development, and placement.

The College of Agriculture, Forestry and Life Sciences is impacting the world one graduate at a time—from cell research to food production to packaged materials to the globe—developing partnerships for the future to make the world greener, healthier, tastier, and wealthier.

Modern Language Requirement

A number of Clemson University degree programs require the completion of a modern language through a specific course level. Modern languages taught at Clemson University or accepted for transfer credit include American Sign Language, Arabic, Chinese, French, German, Italian, Japanese, Latin, Portuguese, Russian and Spanish. While many degree programs accept any of these modern languages for the requirement, certain programs may have specific modern language requirements. Students should consult their program’s curriculum map for details.

AGRIBUSINESS

Bachelor of Science

The Agribusiness curriculum provides strong training in economic and business principles as applied in agribusiness enterprises. Core classes in the major focus on agribusiness economics and management, leadership, marketing and sales, finance, accounting, and business skill development. Employment opportunities for graduates are many and diverse. Private sector opportunities include national and international careers in agribusiness management, banking, finance, sales, marketing, and public relations. Public sector opportunities include positions in organizations that promote food, agriculture, and natural resource interests; government agencies; and educational institutions. Moreover, the curriculum design provides graduates with the skills necessary to successfully establish their own businesses. By completing this curriculum, graduates will have fulfilled the requirements for an approved minor in the college, allowing students to tailor the program to meet specific career objectives.

The curriculum also emphasizes training on globalization, information technology, and interdisciplinary skills needed to analyze the complex interrelationships between business, the environment and society. Students are encouraged to participate on a creative inquiry student research team and to take advantage of an internship and/or study abroad opportunity. The program provides an excellent background for professional or graduate study in several disciplines.

Freshman Year

First Semester
3 - AGRB 2050 Agriculture and Society
3 - MATH 1020 Business Calculus I
3 - STAT 2220 Statistics in Everyday Life
4 - Natural Science Requirement1
3 - Oral Communication Requirement
16
Second Semester
3 - AGRB 2020 Agricultural Economics
3 - ENGL 1030 Accelerated Composition
3 - STAT 2300 Statistical Methods I
3 - Arts and Humanities (Non-Lit.) Requirement1
3 - Elective
15
Sophomore Year

First Semester
3 - ACCT 2010 Financial Accounting Concepts
3 - AGRB 3020 Economics of Farm Management
3 - ECON 2120 Principles of Macroeconomics
3 - MGFT 3018 Principles of Management
3 - Arts and Humanities (Literature) Requirement1
3 - Elective
15
Second Semester
3 - ACCT 2020 Managerial Accounting Concepts
3 - AGRB 3570 Natural Resource Economics
3 - Leadership Requirement2
3 - Minor Requirement1
3 - Social Science Requirement1
15
Junior Year

First Semester
3 - AGRB 3080 Quant. Agribusiness Analysis I
3 - AGRB 3090 Econ. of Agricultural Marketing
3 - ECON (MGFT) 3060 Managerial Economics or
3 - ECON 3140 Intermediate Microeconomics
3 - ENGL 3140 Technical Writing
3 - Minor Requirement1
15
Second Semester
3 - AGRB 3190 Agribusiness Management
3 - AGRB 3510 Principles of Advertising
3 - AGRB 4210 Globalization or
3 - ECON 3000 International Economy
3 - ECON 3020 Money and Banking or
3 - ECON 3510 Intermediate Macroeconomics
3 - Minor Requirement1
15
Senior Year

First Semester
3 - AGRB 4090 Commodity Futures Markets
3 - AGRB 4120 Regional Economic Dev.
3 - AGRB 4600 Agricultural Finance
3 - LAW 3220 Legal Environment of Business
3 - Minor Requirement1
15
Second Semester
3 - AGRB 4080 Quant. Agribusiness Analysis II
3 - AGRB 4520 Agricultural Policy
3 - AGRB 4560 Prices
3 - Internship, Creative Inquiry or Selected Topics4
3 - Minor Requirement1
15
121 Total Semester Hours

1See General Education Requirements.
2Select from AGED 3550, 4150
3See CAFLS approved minors on page 55
4AGRB 4900, 4910, 4940

AGRICULTURAL EDUCATION

Bachelor of Science

Agricultural Education provides broad preparation in agricultural sciences and professional education, including communications and human relations skills. In addition to required courses, students may select a minor (see page 55).

The Bachelor’s degree prepares students for professional education positions in the mainstream of agriculture, including teaching, cooperative extension service, and government agricultural agencies. The Agricultural Education degree also prepares students for other educational work, such as agricultural missionary, public relations, and training officers in agricultural industry.

In consultation with the departmental advisor, students choose one of the following emphasis areas: Communications, Leadership, or Teaching.

Admission to Teaching Emphasis Students

Professional application to the professional level of a program is processed during the term in which a candidate is to complete 60 semester hours of work. At that time, the candidate is notified of his/her status. Prior to admission, the candidate must have passed all areas of the Praxis CORE and have a minimum cumulative grade-point average of 2.75. A candidate may exempt the CORE by meeting minimum ACT or SAT requirements as determined by the South Carolina Department of Education.

Directed Teaching/Teaching Internship—A candidate shall apply to the field experience director prior to the semester in which block methods courses are scheduled. The following conditions must be met prior to registration for directed teaching; (1) admission to the professional level of a program; (2) completion of at least 95 semester hours; (3) a minimum cumulative grade point average of 2.75.
Freshman Year
First Semester
1 - AGED 1020 Agric. Ed. Freshman Seminar
3 - AGED 3650 Multiculturalism in Agric. Ed.
3 - AVS 1500 Introduction to Animal Science
1 - AVS 1510 Introduction to Animal Science Lab.
3 - BIOL 1030 General Biology I
1 - BIOL 1050 General Biology Lab. I
3 - HORT 1010 Horticulture
3 - Mathematics Requirement

Second Semester
1 - AGED 1000 Orientation and Field Experience
3 - AGM 2050 Principles of Fabrication
3 - BIOL 1040 General Biology II
1 - BIOL 1060 General Biology Lab. II
3 - ENGL 1030 Accelerated Composition
6 - Social Science Requirement
3 - Technical Requirement

Sophomore Year
First Semester
3 - AGED 2010 Intro. to Agricultural Education
3 - AGED 2040 Applied Agriculture Calculations
3 - BT 2200 Biosystems Technology I
4 - CH 1010 General Chemistry
3 - HORT 2120 Introduction to Turfgrass Culture
1 - HORT 2130 Turfgrass Culture Lab.
17

Second Semester
4 - CH 1020 General Chemistry
1 - COMM 1010 Communication Academic and Professional Development I
3 - EDSP 3700 Introduction to Special Education
3 - PHYS 2070 General Physics I
3 - STAT 2300 Statistical Methods I
3 - Technical Requirement
16

Junior Year
First Semester
3 - AGED 3030 Mechanical Technology for Agriculture Education
3 - AGM 2210 Surveying
3 - HORT 3030 Landscape Plants
4 - PES 2020 Soils
3 - Advanced Writing Requirement
3 - Arts and Humanities (Non-Lit.) Requirement
17

Second Semester
3 - EDF 3020 Educational Psychology
3 - ENR 3020 Natural Resources Measurements
3 - HORT 4040 Plant Propagation
1 - HORT 4050 Plant Propagation Techniques Lab.
3 - Oral Communication Requirement
3 - Technical Requirement
16

Senior Year
First Semester
3 - ENGL 2310 Introduction to Journalism
3 - HORT 3030 Landscape Plants
3 - Arts and Humanities (Literature) Requirement
6 - Departmental Communication Requirement
3 - Technical Requirement
18

Second Semester
12 - AGED 4070 Internship in Extension and Leadership Education
12
135 Total Semester Hours

COMMUNICATIONS EMPHASIS AREA

Sophomore Year
First Semester
3 - AGED 2010 Intro. to Agricultural Education
3 - AGED 2040 Applied Agriculture Calculations
3 - BT 2200 Biosystems Technology I
4 - CH 1010 General Chemistry
3 - HORT 2120 Introduction to Turfgrass Culture
1 - HORT 2130 Turfgrass Culture Lab.
17

Second Semester
4 - CH 1020 General Chemistry
1 - COMM 1010 Communication Academic and Professional Development I
3 - EDSP 3700 Introduction to Special Education
3 - PHYS 2070 General Physics I
3 - STAT 2300 Statistical Methods I
3 - Technical Requirement
16

Junior Year
First Semester
3 - AGED 3030 Mechanical Technology for Agriculture Education
3 - AGM 2210 Surveying
3 - HORT 3030 Landscape Plants
4 - PES 2020 Soils
3 - Advanced Writing Requirement
3 - Arts and Humanities (Non-Lit.) Requirement
19

Second Semester
3 - EDF 3020 Educational Psychology
3 - ENR 3020 Natural Resources Measurements
3 - HORT 4040 Plant Propagation
1 - HORT 4050 Plant Propagation Techniques Lab.
3 - Oral Communication Requirement
3 - Technical Requirement
16

Senior Year
First Semester
3 - AGED 4150 Leadership of Volunteers
3 - AGED 4160 Ethics and Issues in Agriculture and the Food and Fiber System
3 - MGT 2010 Principles of Management
3 - Arts and Humanities (Literature) Requirement
3 - Technical Requirement
18

Second Semester
12 - AGED 4070 Internship in Extension and Leadership Education
12
133 Total Semester Hours

LEADERSHIP EMPHASIS AREA

Sophomore Year
First Semester
3 - AGED 2010 Intro. to Agricultural Education
3 - AGED 2040 Applied Agriculture Calculations
3 - BT 2200 Biosystems Technology I
4 - CH 1010 General Chemistry
3 - HORT 2120 Introduction to Turfgrass Culture
1 - HORT 2130 Turfgrass Culture Lab.
17

Second Semester
4 - CH 1020 General Chemistry
1 - COMM 1010 Communication Academic and Professional Development I
3 - EDSP 3700 Introduction to Special Education
3 - PHYS 2070 General Physics I
3 - STAT 2300 Statistical Methods I
3 - Technical Requirement
16

Junior Year
First Semester
3 - AGED 3030 Mechanical Technology for Agriculture Education
3 - AGM 2210 Surveying
3 - HORT 3030 Landscape Plants
4 - PES 2020 Soils
3 - Advanced Writing Requirement
3 - Arts and Humanities (Non-Lit.) Requirement
19

Second Semester
3 - EDF 3020 Educational Psychology
3 - ENR 3020 Natural Resources Measurements
3 - HORT 4040 Plant Propagation
1 - HORT 4050 Plant Propagation Techniques Lab.
3 - Oral Communication Requirement
3 - Technical Requirement
16

TEACHING EMPHASIS AREA

Sophomore Year
First Semester
3 - AGED 2010 Intro. to Agricultural Education
3 - AGED 2040 Applied Agriculture Calculations
3 - BT 2200 Biosystems Technology I
4 - CH 1010 General Chemistry
3 - HORT 2120 Introduction to Turfgrass Culture
1 - HORT 2130 Turfgrass Culture Lab.
17

Second Semester
4 - CH 1020 General Chemistry
1 - COMM 1010 Communication Academic and Professional Development I
3 - EDSP 3700 Introduction to Special Education
3 - PHYS 2070 General Physics I
3 - STAT 2300 Statistical Methods I
3 - Technical Requirement
16

Junior Year
First Semester
3 - AGED 3030 Mechanical Technology for Agriculture Education
3 - AGM 2210 Surveying
3 - HORT 3030 Landscape Plants
4 - PES 2020 Soils
3 - Advanced Writing Requirement
3 - Arts and Humanities (Non-Lit.) Requirement
19

Second Semester
3 - EDF 3020 Educational Psychology
3 - ENR 3020 Natural Resources Measurements
3 - HORT 4040 Plant Propagation
1 - HORT 4050 Plant Propagation Techniques Lab.
3 - Oral Communication Requirement
3 - Technical Requirement
16

Senior Year
First Semester
3 - AGED 4150 Leadership of Volunteers
3 - AGED 4160 Ethics and Issues in Agriculture and the Food and Fiber System
3 - MGT 2010 Principles of Management
3 - Arts and Humanities (Literature) Requirement
3 - Technical Requirement
18

Second Semester
12 - AGED 4070 Internship in Extension and Leadership Education
12
133 Total Semester Hours
College of Agriculture, Forestry and Life Sciences
2016-2017 Undergraduate Announcements

Senior Year
First Semester
1 - AGED 4000 Supervised Field Experience II
3 - AGED 4010 Instructional Methods in Ag. Ed.
3 - AGED 4030 Principles of Adult/Ext. Education
3 - AGED 4230 Curriculum
3 - EDLT 4980 Secondary Content Area Reading
3 - Arts and Humanities (Literature) Requirement
1
16

Second Semester
12 - AGED 4060 Directed Teaching
2 - AGED 4250 Teaching Agricultural Mechanics
14
130 Total Semester Hours

1 See General Education Requirements. Three of these credits must also satisfy the Science and Technology in Society General Education Requirement.
2 ENGL 3040 or 3140 is recommended.
3 See General Education Requirements. COMM 1500 or 2500 is recommended.

AGRICULTURAL MECHANIZATION AND BUSINESS

Bachelor of Science
The Agricultural Mechanization and Business major provides a program for students who desire training in areas relevant to dynamic agricultural enterprises. The program is organized with strength in both business management and technical support of agriculture and agribusiness. To produce well rounded individuals with good communication skills, the curriculum includes courses in the humanities, social sciences, English composition, and public speaking.

Graduates in Agricultural Mechanization and Business find meaningful and remunerative employment in a variety of situations directly and indirectly related to agricultural production, processing, marketing, and the many services connected therewith. Farming and technical sales in the agricultural, industrial, and heavy equipment industries are frequently chosen careers.

By completing this curriculum, graduates will have fulfilled the requirements for an Agricultural Business Management minor or other selected minor. Contact the Enrolled Student Services Office to have the minor recorded.

Additional information is available from the departmental offices or can be found at www.clemson.edu/cafls/safes/agmac/index.html.

Freshman Year
First Semester
1 - AGM 1010 Intro. to Ag. Mech. and Business
3 - AGM 2050 Principles of Fabrication
3 - AGRB 2020 Agricultural Economics or
3 - ECON 2110 Principles of Microeconomics
1 - BIOL 1030 General Biology I
1 - BIOL 1050 General Biology Lab. I
3 - MATH 1020 Business Calculus I
14

Second Semester
3 - ACCT 2010 Financial Accounting Concepts
3 - BIOL 1040 General Biology II
1 - BIOL 1060 General Biology Lab. II
3 - ENGL 1030 Accelerated Composition
3 - STAT 2300 Statistical Methods I
2 - Elective
16

Sophomore Year
First Semester
3 - AGM 2190 Agribusiness and Food Systems
3 - AGM 2210 Surveying
4 - CH 1010 General Chemistry
2 - ENGR 2080 Engineering Graphics and Machine Design or
2 - ENGR 2090 Introduction to Engineering Computer Graphics or
2 - ENGR 2100 Comp. Aided Design/Engr. Apps.
4 - PHYS 2000 Introductory Physics or
3 - PHYS 2070 General Physics I and
1 - PHYS 2090 General Physics I Lab.
16

Second Semester
3 - AGM 2060 Machinery Management
3 - AGM 2220 Calculations for Mechanized Agric.
4 - CH 1020 General Chemistry
3 - Arts and Humanities (Literature) Requirement
3 - Plant/Crop Science Requirement
1,3
16

Junior Year
First Semester
3 - AGM 3010 Soil and Water Conservation
3 - AGM 3190 Agribusiness Decision Analysis
3 - AGM 4600 Electrical Systems
3 - AGRB 3200 Economics of Farm Management or
3 - MGT 2100 Principles of Management
4 - PES 2020 Soils
16

Second Semester
3 - AGM 4220 Drainage and Irrigation
3 - AGM 4520 Mobile Power
3 - COMM 1500 Intro. to Human Comm. or
3 - COMM 2500 Public Speaking
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Minor Requirement
13

Senior Year
First Semester
3 - AGM 4000 Senior Seminar in Agricultural Mechanization and Business
3 - AGM 4050 Environmental Control in Animal Structures
3 - AGM 4060 Mechanical and Hydraulic Systems
3 - AGRB 3190 Agribusiness Management or
3 - MGT 2100 Principles of Management
3 - AGRB 3090 Econ. of Agricultural Marketing or
3 - MKT 3010 Principles of Marketing
3 - Minor Requirement
16

Second Semester
3 - AGM 4100 Precision Agriculture Technology
3 - AGM 4720 Capstone
3 - Minor Requirement
3 - Plant/Crop Science or Soil Science Req.
3 - Social Science Requirement
15
124 Total Semester Hours

1 Required for students minoring in Business Administration.
3 See General Education Requirements. Three of these credits must also satisfy the Science and Technology in Society General Education Requirement.
5 ENGL 3040 or 3140 is recommended.
6 See General Education Requirements. COMM 1500 or 2500 is recommended.

ANIMAL AND VETERINARY SCIENCES

Bachelor of Science
The Animal and Veterinary Sciences curriculum provides students with both a basic and applied understanding of the scientific principles needed for successful careers in the scientific, technical, and business phases of livestock and poultry production, processing, and marketing. Strengths of this program include extensive hands-on instruction at Clemson’s six animal farms, personalized advising, and the opportunity for valued-added experiences, including involvement in research, teaching, extension, international travel, and internships. Students choose from three concentrations.

The Animal Agribusiness Concentration prepares students for careers in a variety of situations directly and indirectly related to agricultural production, processing, marketing, and the many services connected therewith. Farming and technical sales in the agricultural, industrial, and heavy equipment industries are frequently chosen careers.

The Animal and Veterinary Sciences curriculum provides students with both a basic and applied understanding of the scientific principles needed for successful careers in the scientific, technical, and business phases of livestock and poultry production, processing, and marketing. Strengths of this program include extensive hands-on instruction at Clemson’s six animal farms, personalized advising, and the opportunity for valued-added experiences, including involvement in research, teaching, extension, international travel, and internships. Students choose from three concentrations.

The Animal Agribusiness Concentration prepares students for careers in the many facets of the animal industries, including production, sales and marketing, business management, advertising, and extension. The Equine Business Concentration prepares students for such professions as trainers, managers, riding instructors, sales or media representatives, breed association representatives or for equine entrepreneurial careers such as owners of tack shops, boarding facilities, or riding schools. The Preveterinary and Science Concentration prepares students to meet the requirements for most veterinary schools, graduate schools, and medical and dental schools. Students with South Carolina residency may compete for contract seats at Mississippi State, Tuskegee, and University of Georgia Colleges of Veterinary Medicine. Experienced preprofessional advising is provided for all students pursuing advanced degrees.

Change of Major into Animal and Veterinary Sciences
Students who change majors into Animal and Veterinary Sciences must have a 2.5 minimum cumulative grade-point average.
ANIMAL AGRIBUSINESS CONCENTRATION

Freshman Year
First Semester
3 - AVS 1500 Introduction to Animal Science
1 - AVS 1510 Introduction to Animal Science Lab.
3 - BIOL 1030 General Biology I and
1 - BIOL 1050 General Biology Lab. I or
5 - BIOL 1100 Principles of Biology I
4 - CH 1010 General Chemistry
3 - Arts and Humanities (Non-Lit.) Requirement1
15-16
Second Semester
3 - BIOL 1040 General Biology II and
1 - BIOL 1060 General Biology Lab. II or
5 - BIOL 1110 Principles of Biology II
4 - CH 1020 General Chemistry
3 - ENGL 1030 Accelerated Composition
3 - MATH 1010 Essendon Math. for Inform. Soc. or
3 - MATH 1020 Business Calculus I or
4 - MATH 1060 Calculus of One Variable I
1 - Elective
15-17
Sophomore Year
First Semester
3 - ACCT 2010 Financial Accounting Concepts
3 - COMM 1500 Intro. to Human Comm or
3 - COMM 2500 Public Speaking
3 - MGT 2010 Principles of Management
3 - STAT 2300 Statistical Methods I
2 - AVS Hands On Requirement1,2,3
1 - Elective
15
Second Semester
3 - ECON 2110 Principles of Microeconomics
3 - FIN 3060 Corporation Finance
3 - ECON 2110 Principles of Microeconomics
3 - MATH 1060 Calculus of One Variable I
3 - Elective
15
Junior Year
First Semester
4 - AVS 2010 Domestic Animal Nutrition
4 - AVS 3700 Principles of Animal Nutrition
3 - GEN 3000 Fundamental Genetics
3 - GEN 3000 Molecular/General Genetics
3 - ECON 2120 Principles of Macroeconomics
3 - Elective
14
Second Semester
3 - LAW 1320 Legal Environment of Business
3 - MGT 3010 Principles of Marketing
3 - Advanced AVS Nutrition/Physiology Req.1,4
3 - Animal-Human Interaction Requirement1,5
2 - AVS Hands-On Requirement6,8
14
Senior Year
First Semester
3 - AVS 4100 Domestic Animal Behavior
3 - Advanced AVS Nutrition/Physiology Req.1,5
3 - AVS Products or Production Req.1,6
3 - Capstone Course Requirement1,6
3 - Science and Technology in Society Req.1,3
15
Second Semester
3 - ECON 2110 Principles of Microeconomics
3 - FIN 3060 Corporation Finance
3 - GEN 3000 Fundamental Genetics
3 - GEN 3000 Molecular/General Genetics
3 - Elective
15

EQUINE BUSINESS CONCENTRATION

Freshman Year
First Semester
3 - AVS 1500 Introduction to Animal Science
1 - AVS 1510 Introduction to Animal Science Lab.
3 - BIOL 1030 General Biology I and
1 - BIOL 1050 General Biology Lab. I or
5 - BIOL 1100 Principles of Biology I
4 - CH 1010 General Chemistry
3 - Arts and Humanities (Non-Lit.) Requirement1
15-17
Second Semester
3 - AVS 1500 Introduction to Animal Science
1 - AVS 1510 Introduction to Animal Science Lab.
3 - BIOL 1030 General Biology I and
1 - BIOL 1050 General Biology Lab. I or
5 - BIOL 1100 Principles of Biology I
4 - CH 1010 General Chemistry
3 - Arts and Humanities (Non-Lit.) Requirement1
15-17
Sophomore Year
First Semester
3 - ACCT 2010 Financial Accounting Concepts
2 - AVS Hands On Requirement1,2,3
1 - Elective
15
Second Semester
3 - BIOL 1040 General Biology II and
1 - BIOL 1060 General Biology Lab. II or
5 - BIOL 1110 Principles of Biology II
4 - CH 1020 General Chemistry
3 - ENGL 1030 Accelerated Composition
3 - MATH 1010 Essendon Math. for Inform. Soc. or
3 - MATH 1020 Business Calculus I or
4 - MATH 1060 Calculus of One Variable I
1 - Elective
15-17
Junior Year
First Semester
4 - AVS 3700 Principles of Animal Nutrition
3 - GEN 3000 Fundamental Genetics
3 - GEN 3000 Molecular/General Genetics
3 - ECON 2120 Principles of Macroeconomics
3 - Elective
14
Second Semester
3 - LAW 1320 Legal Environment of Business
3 - MGT 3010 Principles of Marketing
3 - Advanced AVS Nutrition/Physiology Req.1,4
3 - Animal-Human Interaction Requirement1,5
2 - AVS Hands-On Requirement6,8
14
Senior Year
First Semester
3 - AVS 4100 Domestic Animal Behavior
3 - Advanced AVS Nutrition/Physiology Req.1,5
3 - AVS Products or Production Req.1,6
3 - Capstone Course Requirement1,6
3 - Science and Technology in Society Req.1,3
15
Second Semester
3 - ECON 2110 Principles of Microeconomics
3 - FIN 3060 Corporation Finance
3 - GEN 3000 Fundamental Genetics
3 - GEN 3000 Molecular/General Genetics
3 - Elective
15

PREVETERINARY AND SCIENCE CONCENTRATION

Freshman Year
First Semester
3 - AVS 1500 Introduction to Animal Science
1 - AVS 1510 Intro. to Animal Science Lab.
3 - BIOL 1030 General Biology I and
1 - BIOL 1050 General Biology Lab. I or
5 - BIOL 1100 Principles of Biology I
4 - CH 1010 General Chemistry
3 - Arts and Humanities (Non-Lit.) Requirement1
15-17
Second Semester
3 - BIOL 1040 General Biology II and
1 - BIOL 1060 General Biology Lab. II or
5 - BIOL 1110 Principles of Biology II
4 - CH 1020 General Chemistry
3 - ENGL 1030 Accelerated Composition
3 - MATH 1020 Business Calculus I or
4 - MATH 1060 Calculus of One Variable I
1 - Elective
15-17
Sophomore Year
First Semester
3 - CH 2230 Organic Chemistry
1 - CH 2270 Organic Chemistry Lab.
3 - PHYS 2070 General Physics I
1 - PHYS 2090 General Physics I Lab.
3 - Arts and Humanities (Literature) Requirement
1 - AVS Hands-On Requirement
2 - Elective
15
Second Semester
3 - CH 2240 Organic Chemistry
1 - CH 2280 Organic Chemistry Lab.
3 - COMM 1500 Intro to Human Comm or
3 - COMM 2500 Public Speaking
3 - PHYS 2080 General Physics II
1 - PHYS 2100 General Physics II Lab.
3 - STAT 2300 Statistical Methods I
1 - Elective
15
Junior Year
First Semester
4 - AVS 3100 Anat. and Phys. of Domestic Animals
3 - AVS 3700 Principles of Animal Nutrition
2 - BCHM 3010 Molecular Biochemistry
3 - BCHM 3050 Essential Elements of Bioch.
3 - BCHM 4060 Physiological Chemistry
3 - General Advanced Science Requirement
2 - Elective
15
Second Semester
3 - GEN 3000 Fundamental Genetics
4 - MICR 3050 General Microbiology
3 - Advanced AVS Nutrition/Physiology Req.
3 - Animal-Human Interaction Req.
3 - Social Science Requirement
16
Senior Year
First Semester
3 - AVS 4100 Domestic Animal Behavior
3 - Capstone Requirement
3 - General Advanced Science Requirement
3 - Social Science Requirement
3 - Science and Technology in Society Req.
15
Second Semester
3 - Advanced AVS Nutrition/Physiology Req.
2 - AVS Hands-On Requirement
3 - AVS Products or Production Requirement
3 - General Advanced Science Requirement
3 - Elective
14
120–123 Total Semester Hours

See General Education Requirements. Social Science courses must be selected from two different fields. AGRB and ECON are considered the same field. Three of these General Education credit hours must also satisfy the Cross-Cultural Awareness Requirement.

1Select from AVS 2000, 2100, 2030, 2040, 2050, 2060, 2080, 2090, 2110, 2120, 3020, 3090, 3110, 3230, 3600, 3900, 4110, 4420, 4550 or 4910
2Course may be taken in either the fall or spring semester
3See General Education Requirements. Social Science courses must be selected from two different fields. AGRB and ECON are considered the same field. Three of these General Education credit hours must also satisfy the Cross-Cultural Awareness Requirement.
4Select from AVS 3750, (BIOL, MICR) 4140, 4150, 4530, 4650, 4670, 4700, or (BIOL) 4800
5Select from AVS 3100, 3150, or 3850
6Select from AVS 4000, 4060, 4150, or 4170
7Select from AVS 4010, 4110, 4120, 4130, 4200, or 4500

PREPROFESSIONAL HEALTH SCIENCES— VETERINARY MEDICINE

Under a regional plan, the South Carolina Pre- veterinary Advisory Committee coordinates a program for South Carolina residents who are interested in pursuing careers in veterinary medicine. South Carolina residents attending any college or university may apply through the Veterinary Medical College Application Service (VMCAS) to the University of Georgia College of Veterinary Medicine. Currently the University of Georgia admits up to 17 students each year through arrangements with the Southern Regional Education Board. The State of South Carolina has a contract with Mississippi State University to admit up to five South Carolina residents. The State of South Carolina also has a contract with Tuskegee University to admit up to four South Carolina residents. Application must be made directly to Tuskegee University.

Minimum requirements for admission to a college of veterinary medicine generally include the satisfactory completion of prescribed courses in a well-rounded undergraduate degree program. Specific requirements for admission to the University of Georgia College of Veterinary Medicine include the following undergraduate courses: six credits of English, 14 credits of humanities and social studies, eight credits of physics, eight credits of general biology, eight credits of advanced biology, three credits of biochemistry, and 16 credits of organic and inorganic chemistry. Minimum produces professionals who have a broad-based knowledge in natural resources and the ability to interact with other resource professionals to provide thoughtful solutions to environmental and natural resource problems. The world is blessed with an abundance of natural resources, but the problems associated with their conservation are immense. Protection of rare and endangered species, preventing and controlling invasions of exotics, protecting old growth forests, restoring degraded ecosystems, and balancing the resource demands of industry and the public are some of the environmental issues which are enmeshed in politized environments.

Three concentrations are offered within the Environmental and Natural Resources major, which is administered by the Department of Forestry and Environmental Conservation. The Conservation Biology Concentration is oriented toward students who desire a greater exposure to taxa, their habitats, and their interrelationships. The Natural Resources Management Concentration emphasizes both resource management and negotiation skills. The Natural Resource and Economic Policy Concentration provides more in-depth study in economics and policy applications.

Grades in Environmental and Natural Resources are well prepared for further graduate studies in natural resources and related fields. Potential public sector employers of graduates include federal, state, and municipal resource management agencies, private industries impacting land and water resources, and environmental management consulting firms, and various environmental advocacy groups.

Freshman Year
First Semester
3 - BIOL 1030 General Biology I
1 - BIOL 1050 General Biology Lab. I
4 - CH 1010 General Chemistry or
4 - CH 1050 Chemistry in Context I
1 - ENR 1010 Introduction to Environmental and Natural Resources I
3 - MATH 1020 Business Calculus I
3 - Oral Communications Requirement
15

ENVIRONMENTAL AND NATURAL RESOURCES

Bachelor of Science

The Environmental and Natural Resources curriculum produces professionals who have a broad-based knowledge in natural resources and an ability to interact with other resource professionals to provide thoughtful solutions to environmental and natural resource problems. The world is blessed with an abundance of natural resources, but the problems associated with their conservation are immense. Protection of rare and endangered species, preventing and controlling invasions of exotics, protecting old growth forests, restoring degraded ecosystems, and balancing the resource demands of industry and the public are some of the environmental issues which are enmeshed in politized environments.

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Freshman Year
First Semester
3 - BIOL 1030 General Biology I
1 - BIOL 1050 General Biology Lab. I
4 - CH 1010 General Chemistry or
4 - CH 1050 Chemistry in Context I
1 - ENR 1010 Introduction to Environmental and Natural Resources I
3 - MATH 1020 Business Calculus I
3 - Oral Communications Requirement
15

ENVIRONMENTAL AND NATURAL RESOURCES

Bachelor of Science

The Environmental and Natural Resources curriculum produces professionals who have a broad-based knowledge in natural resources and an ability to interact with other resource professionals to provide thoughtful solutions to environmental and natural resource problems. The world is blessed with an abundance of natural resources, but the problems associated with their conservation are immense. Protection of rare and endangered species, preventing and controlling invasions of exotics, protecting old growth forests, restoring degraded ecosystems, and balancing the resource demands of industry and the public are some of the environmental issues which are enmeshed in politized environments.

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Grades in Environmental and Natural Resources are well prepared for further graduate studies in natural resources and related fields. Potential public sector employers of graduates include federal, state, and municipal resource management agencies, private industries impacting land and water resources, environmental management consulting firms, and various environmental advocacy groups.
Second Semester
3 - BIOL 1040 General Biology II
1 - BIOL 1060 General Biology Lab. II
4 - CH 1020 General Chemistry or
4 - CH 1060 Chemistry in Context II
3 - ENGL 1030 Accelerated Composition
1 - ENR 1020 Introduction to Environmental and Natural Resources II
3 - STAT 2300 Statistical Methods I
15
Note: See footnotes after each Concentration.

CONSERVATION BIOLOGY CONCENTRATION
Sophomore Year
First Semester
3 - AGRB 2020 Agricultural Economics or
3 - ECON 2110 Principles of Microeconomics
4 - BIOL 3200 Field Botany and
1 - Elective or
2 - FOR 2050 Dendrology and
3 - FOR 2210 Forest Biology
3 - CH 2010 Survey Organic Chemistry
4 - FNR 2040 Soil Information Systems or
4 - PES 2020 Soils
15
Second Semester
3 - GEN 3000 Fundamental Genetics
3 - WFB (BIOL) 3130 Conservation Biology
3 - Arts and Humanities (Literature) Requirement
3 - Physical Environment Requirement
1 - Taxonomy/Habitat Requirement
15
Junior Year
First Semester
3 - BIOL 3350 Evolutionary Biology
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Ecology Requirement
3 - Natural Resource Economics Requirement
1 - Taxonomy/Habitat Requirement
15
Second Semester
3 - ENGL 3140 Technical Writing
3 - ENR 3020 Natural Resources Measurements
3 - Ecology Requirement
1 - Physiology Requirement
1 - Taxonomy/Habitat Requirement
15
Senior Year
First Semester
3 - FOR (ENR) 4340 GIS for Natural Resources
3 - Conservation Policy/Law Requirement
3 - Internship, Creative Inquiry or Directed Research Requirement
3 - Social Science Requirement
1 - Taxonomy/Habitat Requirement
15
Second Semester
3 - ENR (BIOL) 4130 Restoration Ecology
3 - ENR 4550 Conservation Issues
3 - Taxonomy/Habitat Requirement
1 - Elective
15
120 Total Semester Hours

Conservation Biology Concentration and Natural Resources Management Concentration students or students planning to take organic chemistry must take CH 1010 and CH 1020 and must satisfy the General Education Science and Technology in Society Requirement through another course.

See General Education Requirements. Three of these credit hours must also satisfy the Cross-Cultural Awareness Requirement. Three of these credit hours must satisfy the General Education Science and Technology in Society requirement, if not satisfied by another course. (Note: Social Science Requirement must be in an area other than economics or agribusiness.)

GEOL 1010, or PHYS 2400
AGM 3010, BIOL 3020/3060, 3030/3070, 3040/3080, 3050/3090, 3200, 4060/4070, 4100/4110, 4170, 4240, 4640, 4680, 4720, 4770, 4860, ENT (BIOL) 3010, (ENT, WFB) 4690, FOR 2510, 4690, GEOG 1120, 1140, 2100, 4350, MICR 4030, WFB 3000, 4180, 4460, 4620 or 4760. At least four of the courses must be laboratories or courses with a required laboratory component.

BIOL 4410, 4420, 4430, 4460, 4770, or FOR 4660
AGR 3570, 4750, or FOR 3040
ENR 4290, FOR (ENR) 4160, or WFB 4300
Internship (FOR 4900), Creative Inquiry (FOR 4700), Directed Research (WFB 4630); or Senior Honors Thesis (ENR 4940)

NATURAL RESOURCE AND ECONOMIC POLICY CONCENTRATION
Sophomore Year
First Semester
3 - AGRB 2020 Agricultural Economics or
3 - ECON 2110 Principles of Microeconomics
3 - Arts and Humanities (Non-Lit.) Requirement
3 - ENR 3020 Natural Resources Measurements
1 - Elective
15
Second Semester
3 - POSC 1010 American National Government
3 - AGRB 2020 Agricultural Economics
Sophomore Year
CONCENTRATION

1 - BIOL 1060 General Biology Lab. II
3 - BIOL 1040 General Biology II
1 - Macroeconomics Requirement
3 - STAT 3300 Statistical Methods II
3 - ECON 4050 Intro to Econometrics or
3 - STAT 3300 Statistical Methods II
3 - ENSP 4000 Studies in Environmental Science
3 - Microeconomics Requirement
3 - Natural Science or Minor Requirement
15

Junior Year
First Semester
3 - ECON 4750 Econ of Wildlife Mgr & Policy or
3 - FOR 3040 Forest Resource Economics
3 - ECON 4050 Intro to Econometrics or
3 - STAT 3300 Statistical Methods II
3 - ENR 4290 Environmental Law and Policy
3 - AGRB 2020 Agricultural Economics or
3 - ECON 2110 Principles of Microeconomics
4 - BIOL 3200 Field Botany or
3 - BIOL 4060 Intro. Plant Taxonomy and
1 - BIOL 4070 Plant Taxonomy Lab.
3 - ENR 4290 Environmental Law and Policy
3 - Minor Requirement
1 - Elective
15

120 Total Semester Hours

Students planning to take organic chemistry must take CH 1010 and CH 1020 and must satisfy the General Education Science and Technology in Society General Education Requirement through another course.

See General Education Requirements. Students must also select a course to satisfy the Cross-Cultural Awareness General Education Requirement.

GEOL 1010, 1030, or 1060
Select from BIOL, ENR, EES, ENSP, ETOX, FOR, GEOL, PES, or WFB 3000- or 4000-level courses
See Advisor
Select from 3000- or 4000-level AGRB courses.
ECON 3020, 3030 or 3150
Internship (AGRB 4910); Creative Inquiry (AGRB 4940); or Directed Research (PES 4910 or 4920)
RS (SOC) 4010 or RS (SOC) 4590

NATURAL RESOURCES MANAGEMENT CONCENTRATION
Sophomore Year
First Semester
4 - FNR 2040 Soil Information Systems or
4 - PES 2020 Soils
2 - FOR 2050 Dendrology
3 - FOR 2210 Forest Biology
3 - WFB 3000 Wildlife Biology
3 - Arts and Humanities (Literature) Requirement
15
Second Semester
3 - ENR 3020 Natural Resources Measurements
3 - FOR 2060 Forest Ecology
3 - WFB 3500 Principles of Fish and Wildlife Biol.
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Social Science Requirement
15
Junior Year
First Semester
3 - AGRB 2020 Agricultural Economics or
3 - ECON 2110 Principles of Microeconomics
4 - BIOL 3200 Field Botany or
3 - BIOL 4060 Intro. Plant Taxonomy and
1 - BIOL 4070 Plant Taxonomy Lab.
3 - ENR 4290 Environmental Law and Policy
3 - Minor Requirement
1 - Elective
15

120 Total Semester Hours

See footnotes after each Concentration.
Opportunities for employment include a wide variety of career paths, such as new food product research and development, design of sustainable food systems, quality assurance management, analytical testing, operations management, food packaging applications, marketing, customer services and technical sales. Local, state and federal agencies also need graduates for positions in sustainability food safety administration.

In the Nutrition Concentration, students choose to focus their program of study in one of four emphasis areas: (1) Dietetics; (2) Basic and Behavioral Science; (3) Community Health and Wellness; or (4) Food Industry. The same course plan is followed the first two years with the junior and senior years varying according to the emphasis plan. Students normally choose the emphasis by the beginning of the spring semester of the sophomore year so as not to delay graduation. The Dietetics emphasis prepares students for an ACEND-accredited dietetic internship program to become a Registered Dietitian or Registered Dietitian Nutritionist (RD or RDN). The curriculum for the Nutrition concentration with a Dietetics emphasis is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) as a Didactic Program in Dietetics. The Basic and Behavioral Science emphasis prepares students for graduate study in nutrition and health professions. The Community Health and Wellness emphasis prepares students for careers in community nutrition interacting with healthy populations. The Food Industry emphasis allows students to combine nutrition and food science knowledge for job opportunities in food product development.

To become a RD or RDN, students must complete three main steps. Information on these steps is available at http://www.eatrightacend.org/ACEND/content.aspx?id=6442535357. Successful completion of Clemson University’s B.S. in Food Science and Human Nutrition with a concentration in Nutrition and an emphasis in Dietetics fulfills only the first step of the three step process to become a RD or RDN. Students who select the Dietetics emphasis must complete a formal application process and meet specific criteria for acceptance into the emphasis. The demand for dietetic internship positions greatly exceeds the number of available positions. Due to the competitive nature of dietetic internship acceptance, minimum grade criteria in specific courses are required for Dietetics emphasis acceptance. Two application times for admission into the Dietetics emphasis are available, one at the beginning of the spring semester and one at the beginning of the fall semester. Acceptance and successful completion of the Dietetics emphasis curriculum will not guarantee acceptance into an ACEND-accredited dietetic internship program, step two in the process of becoming a RD or RDN. Students who complete the Dietetics emphasis, a student may complete the internship requirement by the beginning of either spring semester or fall semester.

Students with a GPA of less than 3.20 GPA but greater than 3.00 are conditionally accepted with final acceptance based on posted semester grades. Students are allowed to apply up to two times. Once in the Dietetics emphasis, a student may complete the curriculum, but must maintain a minimum GPA of 2.00. To receive a signed Declaration of Intent and Verification Statement, students must comply with the GPA, grade and other requirements indicated in the “Declaration of Intent and Verification Statement Policy.” A signed Verification Statement is required for admission to an ACEND-accredited dietetic internship program, but receipt of a Verification Statement does not guarantee acceptance into an ACEND-accredited dietetic internship program. (See the FNPS Handbook for more details.)

To receive a signed Declaration of Intent and Verification Statement, a student must meet the following academic and professional requirements:
1. Earn a minimum of a baccalaureate degree from a U.S. regionally accredited college/university;
2. Complete all the academic requirements of a dietetics education program accredited by ACEND;
3. Demonstrate an overall minimum GPA of 3.00 based on all completed college coursework;
4. Complete all DPD-required NUTR and FDSC courses with a B or better;
5. Complete all other DPD-required coursework with a C or better; and
6. Adhere to Clemson University’s Academic Integrity Policy and the Student Code of Conduct.

Combined Bachelor of Science/Master of Science Degree Program
The Department of Food, Nutrition and Packaging Sciences also offers an accelerated five-year combined bachelor’s/master’s program that allows students to count up to twelve hours of graduate credit toward both the BS degree in Food Science and Human Nutrition and the MS degree in Food, Nutrition and Culinary Sciences. Details are available from the Department of Food, Nutrition and Packaging Sciences or at www.clemson.edu/fnps.

FOOD SCIENCE AND TECHNOLOGY CONCENTRATION
Freshman Year
First Semester
3 - BIOL 1030 General Biology I or
1 - BIOL 1050 General Biology Lab, I or
5 - BIOL 1100 Principles of Biology I
4 - CH 1010 General Chemistry
3 - COMM 2500 Public Speaking
1 - FDS 1010 Intro. to Food Sci & Human Nutr
3 - MATH 1020 Business Calculus I or
4 - MATH 1060 Calculus of One Variable I
Second Semester
3 - BIOL 1040 General Biology II or
1 - BIOL 1060 General Biology Lab, I or
5 - BIOL 1100 Principles of Biology II
4 - CH 1020 General Chemistry
3 - ENGL 1030 Accelerated Composition
1 - FDS 1020 Perspectives in Food and Nutrition Sciences
1 - FDS 4500 Creative Inquiry
3 - PSYC 2010 Introduction to Psychology
Sophomore Year
First Semester
3 - CH 2100 Survey of Organic Chemistry and
1 - CH 2200 Survey of Organic Chemistry Lab. or
3 - CH 2230 Organic Chemistry and
1 - CH 2270 Organic Chemistry Lab.
2 - FDSC 3010 Food Regulations and Policy
1 - FDSC 4500 Creative Inquiry
3 - PHYS 1220 Physics with Calculus I and
1 - PHYS 1240 Physics Lab. I or
4 - PHYS 2000 Introductory Physics or
3 - PHYS 2070 General Physics I and
1 - PHYS 2090 General Physics I Lab.
3 - STAT 2300 Statistical Methods I
1
Second Semester
3 - BCHM 3050 Essential Elements of Biochem.
3 - FDSC 2140 Food Resources and Society
2 - FDSC 3040 Evaluation of Dairy Products
3 - FDSC 4090 Total Qual Mgt for Food & Pckg
1 - FDSC 4170 Seminar
1 - FDSC 4500 Creative Inquiry
3 - Social Science Requirement2,3
1
Junior Year
First Semester
3 - FDSC 4010 Food Chemistry I
1 - FDSC 4500 Creative Inquiry
4 - MICR 3050 General Microbiology
3 - NUTR 2040 Nutrition Across the Life Cycle
2 - Elective
7 - Emphasis Area Requirement3
15-16
Second Semester
3 - FDSC 4020 Food Chemistry II
2 - FDSC 4030 Food Chemistry and Analysis
1 - FDSC 4500 Creative Inquiry
4 - MICR 4070 Food and Dairy Microbiology
3 - STAT 3300 Statistical Methods II
3 - Emphasis Area Requirement4
16
Senior Year
First Semester
3 - ENGL 3040 Business Writing
2 - Elective
5 - Emphasis Area Requirement3
16
Second Semester
3 - CH 2270 Organic Chemistry Lab.
1 - CH 2230 Organic Chemistry
2 - Elective
2 - Elective
6 - Emphasis Area Requirement4
6
FOREST RESOURCE MANAGEMENT
Bachelor of Science
The Forest Resource Management curriculum combines a broad education in the arts and sciences with applied forest sciences. This combination provides the necessary foundation for the scientific management of forest resources, products, and services. Foresters are qualified for a broad spectrum of employment opportunities in the public and private sectors. They may be engaged as managers, administrators, or owners of forest lands or forest-based businesses; as technical specialists in the production of timber, usable water, wildlife, and aesthetic values, and in the recreational use of the forest; or as professionals in other areas where the conservation of natural resources is a concern. Foresters earning advanced degrees find employment in academic work and in research conducted by public and private agencies.

The curriculum, accredited by the Society of American Foresters, provides a strong program in the basic knowledge and skills required of a professional forester. Forest Resource Management majors will select a minor (see page 55). The curriculum also provides the necessary prerequisites for graduate study. For students interested in conservation biology, water, and natural resources, the Department of For-

1See General Education Requirements. Three of these credits must also satisfy the Cross-Cultural Awareness General Education Requirement.
2NUTR 4180 is required for Dietetics emphasis area students.
3See General Education Requirements. Three of these credits must also satisfy the Cross-Cultural Awareness General Education Requirement.
4See advisor. Each emphasis area consists of 17 credits selected from one of the following areas: (1) Forest Resource Management; (2) Fisheries and Aquatic Science; (3) Wildlife and Aquatic Science; (4) Forest Industries. The approved course list for the four emphasis areas is available in the department undergraduate student handbook or the department office. To be accepted into the Dietetics emphasis area, students must have a minimum GPA of 3.2, have earned a C or better in science and social science coursework, and a B or better in food science and nutrition coursework. Refer to Dietetics Program Admission Policy in the FNPS Handbook.
### Freshman Year

**First Semester**
- FOR 1010 Introduction to Forestry
- ENGL 1030 Accelerated Composition
- BIOL 1060 General Biology Lab. II
- ECON 2000, 2110, or 2120.
- STAT 2300 Statistical Methods I
- Oral Communication Requirement
- Departmental Science Requirement
  
**Second Semester**
- FOR 2040 Soil Information Systems
- FOR 2520 Forest Operations
- FOR 2530 Forest Management
- FOR 2540 Forest Products
- Arts and Humanities (Non-Lit.) Requirement
- Economics Requirement

### Sophomore Year

**First Semester**
- FOR 2060 Forest Ecology
- Arts and Humanities (Non-Lit.) Requirement
- Social Science Requirement
- Minor Requirement

**Second Semester**
- ENGL 3140 Technical Writing
- FOR 2210 Forest Biometrics
- Arts and Humanities (Literature) Requirement
- Economics Requirement

### Forestry Summer Camp
- FOR 2510 Forest Communities
- FOR 2520 Forest Operations
- FOR 2530 Forest Management
- FOR 2540 Forest Products

### Junior Year

**First Semester**
- FOR 3020 Forest Biometrics
- FOR 3040 Forest Resource Economics
- FOR 3410 Wood Procurement Practices in the Forest Industry
- FOR 4130 Integrated Forest Pest Management
- FOR (ENR) 4340 GIS for Natural Resources
- Social Science Requirement

**Second Semester**
- AGM 2210 Surveying: Earthwork and Area Measurements
- FOR 4080 Wood and Paper Products
- FOR 4150 Forest Resource Valuation
- FOR 4650 Silviculture

### Summer
- FOR 4900 Field Training in Natural Resources

### Senior Year

**First Semester**
- FOR 4100 Harvesting Processes
- FOR (ENR) 4160 Forest Policy and Admin.
- FOR 4170 Forest Resource Mgt. and Regulation
- FOR (ENR) 4340 GIS for Natural Resources
- Social Science Requirement

**Second Semester**
- ENR 1010 Intro. to Environ. and Natural Res.
- STAT 2300 Statistical Methods I
- Arts and Humanities (Literature) Requirement
- Economics Requirement

### Land Surveying Emphasis Area

### Freshman Year

**First Semester**
- FOR 1010 Introduction to Forestry
- ENGL 1030 Accelerated Composition
- BIOL 1060 General Biology Lab. II
- CH 1010 General Chemistry
- ENGR 2100 Engr. Graphics for Civil Engr.
- Arts and Humanities (Non-Lit.) Requirement
- Social Science Requirement

**Second Semester**
- FOR 2060 Forest Ecology
- Arts and Humanities (Non-Lit.) Requirement
- Economics Requirement

### Sophomore Year

**First Semester**
- ENGR 2100 Engr. Graphics for Civil Engr.
- ENGL 3140 Technical Writing
- Arts and Humanities (Non-Lit.) Requirement
- Social Science Requirement

**Second Semester**
- AGM 2210 Surveying: Earthwork and Area Measurements
- FOR 2210 Forest Biometrics
- Arts and Humanities (Literature) Requirement
- Economics Requirement

### HORTICULTURE Bachelor of Science

Horticulture connects plants and people to improve our world, by it through the enhancement of the foods we eat, the creation of healthy natural living spaces, the economic and aesthetic enhancement of our homes and communities, or the application of green solutions to the challenges of environmental quality. The plants of horticulture are the foundation of human and environmental well being, and it is horticulture professionals who have the knowledge,
skills, and passion to utilize those plants for the betterment of humankind.

The Horticulture degree program includes courses in science, mathematics, business, leadership, law, and communication, combined with a strong foundation in horticultural sciences and arts. The curriculum provides the flexibility to choose courses within those categories that best support the student's personal interests, goals, and success. Career opportunities are endless.

Students work closely with faculty in creative inquiry groups to investigate and implement solutions to real problems. Internships are excellent opportunities to learn and explore potential careers.

Freshman Year
First Semester
3 - BIOL 1030 General Biology I
1 - BIOL 1050 General Biology Lab. I
4 - CH 1010 General Chemistry
3 - HORT 1010 Horticulture
4 - Elective
15

Second Semester
3 - BIOL 1040 General Biology II
1 - BIOL 1060 General Biology Lab II
4 - CH 1020 General Chemistry
3 - ENGL 1030 Accelerated Composition
3 - MATH 1020 Business Calculus I
3 - Business Requirement
17

Sophomore Year
First Semester
3 - HORT 2100 Growing Garden Plants in the Fall
3 - HORT 3030 Landscape Plants
3 - MATH 1010 Essential Math. for Informed Soc.
4 - Arts and Humanities (Non-Lit.) Requirement
4 - Plant Biology Requirement
16

Second Semester
3 - HORT 2110 Growing Plants in the Spring
4 - PES 2020 Soils
3 - Arts and Humanities (Literature) Requirement
3 - Social Science Requirement
13

Summer
3 - HORT 2710 Internship
3 - HORT 4710 Advanced Internship

Junior Year
First Semester
3 - HORT 3080 Sustainable Landscape Garden Design
3 - Business Requirement
3 - Horticulture Specialization Requirement
3 - Oral Communication Requirement
3 - Related Science Requirement
15

Second Semester
3 - BIOL 4010 Plant Physiology
1 - BIOL 4020 Plant Physiology Lab
3 - HORT 4040 Plant Propagation
1 - HORT 4050 Plant Propagation Techniques Lab.
3 - Horticulture Specialization Requirement
3 - Social Science Requirement
1 - Elective
15

Senior Year
First Semester
3 - HORT 4090 Senior Capstone Course
3 - Business Requirement
3 - Horticulture Specialization Requirement
3 - Related Science Requirement
3 - Elective
15

Second Semester
3 - Horticulture Specialization Requirement
6 - Related Science Requirement
3 - Elective
12

121 Total Semester Hours

See advisor. Select from department-approved list.

1See General Education Requirements. The Cross-Cultural Awareness Requirement and Science and Technology in Society General Education requirements must also be satisfied through these courses.

Internship must be completed in one or two semesters. Internship may be done Fall, Spring, or summer after completing HORT 3030. Prior approval is required for internships, and a 2.0 grade-point average is required for registration. Note: Horticulture majors must earn a C or better in all HORT classes.

PACKAGING SCIENCE
Bachelor of Science
The Bachelor of Science degree in Packaging Science prepares students for careers in industries producing and utilizing packages for all types of products. Packaging is an essential part of industrialized economies, protecting, preserving, and helping to market products. The field of packaging is highly competitive and highly innovative, requiring an ever-increasing number of professional positions.

Opportunities for employment include a wide variety of career paths such as manufacturing, marketing, sales, design, purchasing, quality assurance, and customer services. Most career opportunities are in positions requiring technical knowledge combined with marketing and management skills.

The core curriculum assures graduates of having the skills and knowledge required by most entry-level packaging positions. Emphasis area choices or minors allow students to select courses to improve career preparation for specific industry segments, including: Distribution, Transportation and Engineering Technology; Food and Health Care Packaging; Materials; and Package Design and Graphics. Alternatively, any University-approved minor may be completed.

Students changing majors into Packaging Science must:
1. have an overall minimum GPA of 2.0; and
2. have completed four of the following courses with an average GPA of 2.7:
   BIOL 1030, 1040, CH 1010, 1020, MATH 1060, PHYS 1220, 2070, 2080, 2210; or both MATH 1040 and 1070; and
3. have completed PKSC 1020 with a grade of B or higher.

Combined Bachelor of Science/Master of Science Degree Program
The Department of Food, Nutrition and Packaging Sciences also offers an accelerated five-year combined bachelor’s/master’s program that allows students to count up to twelve hours of graduate credit toward both the BS degree in Packaging Science and the MS degree in Packaging Science. Details are available from the Department of Food, Nutrition and Packaging Sciences or at www.clemson.edu/fnps.

Freshman Year
First Semester
3 - BIOL 1030 General Biology I
1 - BIOL 1050 General Biology Lab. I
4 - CH 1010 General Chemistry
3 - MATH 1020 Business Calculus I
3 - Business Requirement
17

Second Semester
3 - BIOL 1040 General Biology II
1 - BIOL 1060 General Biology Lab II
4 - CH 1020 General Chemistry
3 - ENGL 1030 Accelerated Composition
3 - MATH 1020 Business Calculus I
3 - Business Requirement
17

Sophomore Year
First Semester
3 - PKSC 1010 Packaging Orientation
2 - PKSC 1020 Intro. to Packaging Science
4 - PHYS 1240 Physics Lab. II
1 - PHYS 2230 Physics Lab. II
3 - PHYS 2020 Soils
3 - PHYS 2070 General Physics II or
3 - PHYS 2070 General Physics II and
3 - PHYS 2070 General Physics II or
1 - PHYS 2070 General Physics II and
1 - PHYS 2090 General Physics I Lab.
4 - PKSC 2020 Packaging Materials and Manufacturing
4 - PKSC 2200 Product/Package Design and Prototyping
16

Second Semester
3 - CH 2010 Survey of Organic Chemistry
1 - CH 2020 Survey of Organic Chemistry Lab. or
3 - CH 2230 Organic Chemistry and
1 - CH 2270 Organic Chemistry Lab.
3 - PHYS 1210 Physics with Calculus I and
1 - PHYS 1240 Physics Lab. II or
1 - PHYS 1240 Physics Lab. II or
3 - PHYS 2070 General Physics I and
1 - PHYS 2090 General Physics I Lab.
4 - PKSC 2020 Packaging Materials and Manuf.
4 - PKSC 2200 Product/Package Design and Prototyping
16

Sophomore Year
First Semester
3 - PHYS 2080 General Physics II and
1 - PHYS 2100 General Physics II Lab. or
3 - PHYS 2210 Physics with Calculus II and
1 - PHYS 2230 Physics Lab. II
3 - PKSC 2010 Packaging Perishable Products
3 - PKSC 2040 Container Systems
1 - PKSC 2060 Container Systems Lab.
3 - Arts and Humanities (Literature) Requirement
14

Summer
0 - COOP 1010 Cooperative Education

College of Agriculture, Forestry and Life Sciences
Junior Year
First Semester
3 - ENGL 3140 Technical Writing
4 - GC 1030 Graphic Comm. I for Packaging Sci.
3 - PKSC 4010 Packaging Machinery
3 - PKSC 4040 Mechanical Properties of Packages and Principles of Protective Packaging
1 - PKSC 4540 Product and Package Eval. Lab.
3 - Emphasis Area Requirement
17
Second Semester
3 - PKSC 3200 Package Design Theory
3 - PKSC 3680 Packaging and Society
3 - PKSC 4300 Converting for Flexible Packaging
3 - PKSC 4400 Packaging for Distribution
3 - Emphasis Area Requirement
15
Senior Year
First Semester
4 - PKSC 4160 Appl. of Polymers in Packaging
4 - PKSC 4640 Food and Health Care Pkg. Syst.
3 - STAT 2300 Statistical Methods I
3 - Emphasis Area Requirement
14
Second Semester
3 - AGRB 2020 Agricultural Economics or
3 - ECON 2110 Principles of Microeconomics
1 - PKSC 4030 Packaging Career Preparation
3 - PKSC 4200 Package Design and Development
3 - Arts and Humanities (Non-Lit.) Requirement
6 - Emphasis Area Requirement
16
124 Total Semester Hours

Student with a concentration in Agriculture will graduate with comprehensive knowledge to increase farm profits by decreasing the costs of crop production; build soil fertility and fertility through rotations, multiple cropping, and nutrient cycling; protect the environment by minimizing or more efficiently using synthetic agrochemicals; manage crop pests and weeds with integrated, ecologically sound strategies; develop strategies for profitable marketing of agricultural commodities and create a strong, diversified agriculture that is stable through market and weather fluctuations. Graduates can assume positions as self-employed farmers, farm managers, state and federal natural resource managers, research technicians, agricultural industry employees, greenhouse managers, consultants in pest management and sustainable agriculture, field ecology professionals, agritourism industry specialists, extension personnel, or regulatory officers.

Students with a concentration in Soil and Water Science can address compelling problems such as land application of agricultural and industrial wastes, reduction of contamination of ground and surface waters, establishment of functional septic drain fields, and production of food and fiber crops. Graduates will be able to establish careers as professionals in agrarian fields such as soil scientists and conservationists, extension agents, and farm consultants, and in the broader environmental areas of DHEC, consulting engineering firms, and environmental consulting. Graduates will be well prepared for graduate work in fields ranging from soil science to environmental engineering and law.

Freshman Year
First Semester
3 - BIOL 1030 General Biology
1 - BIOL 1050 General Biology Lab
4 - CH 1010 General Chemistry
3 - MATH 1020 Business Calculus I or
4 - MATH 1060 Calculus of One Variable I
3 - PES 1040 Introduction to Plant Science
14-15
Second Semester
3 - BIOL 1040 General Biology II
1 - BIOL 1060 General Biology Lab II
4 - CH 1020 General Chemistry
3 - ENGL 1030 Accelerated Composition
3 - STAT 2300 Statistical Methods I
3 - Arts and Humanities (Non-Lit.) Requirement
17

PLANT AND ENVIRONMENTAL SCIENCES
Bachelor of Science
The BS degree program in Plant and Environmental Sciences is a multidisciplinary program that educates students with expertise in soils, crops sciences, and applied agricultural biotechnology. It offers students a rigorous, science-based degree with educational opportunities related to management of agricultural commodities and natural resources, as well as soil and water resources. Students can tailor the program to fit their professional and academic goals by selecting one of three concentrations.

The Agricultural Biotechnology Concentration integrates conventional disciplines with molecular advances in plants, pathogens, and biosystem interactions and responds to the educational void between the rapid adoption of biotechnology products into agricultural production and the intermediate and end-users, farmers, and consumers. Graduates in this concentration will be competitive as scientists in emerging agricultural biotechnology industries, as educators, and as policy makers and officers in regulatory agencies.

Students with a concentration in Agriculture will graduate with comprehensive knowledge to increase farm profits by decreasing the costs of crop production; build soil fertility and fertility through rotations, multiple cropping, and nutrient cycling; protect the environment by minimizing or more efficiently using synthetic agrochemicals; manage crop pests and weeds with integrated, ecologically sound strategies; develop strategies for profitable marketing of agricultural commodities and create a strong, diversified agriculture that is stable through market and weather fluctuations. Graduates can assume positions as self-employed farmers, farm managers, state and federal natural resource managers, research technicians, agricultural industry employees, greenhouse managers, consultants in pest management and sustainable agriculture, field ecology professionals, agritourism industry specialists, extension personnel, or regulatory officers.

Students with a concentration in Soil and Water Science can address compelling problems such as land application of agricultural and industrial wastes, reduction of contamination of ground and surface waters, establishment of functional septic drain fields, and production of food and fiber crops. Graduates will be able to establish careers in traditional agrarian fields such as soil scientists and conservationists, extension agents, and farm consultants, and in the broader environmental areas of DHEC, consulting engineering firms, and environmental consulting. Graduates will be well prepared for graduate work in fields ranging from soil science to environmental engineering and law.

AGRICULTURAL BIOTECHNOLOGY CONCENTRATION
Sophomore Year
First Semester
3 - BIOL 3040 Biology of Plants
3 - CH 2010 Survey of Organic Chemistry
4 - ENT 3100 Insect Biology and Diversity
3 - PES 3100 Principles of Plant Pathology
14
Second Semester
3 - AGRB 2050 Agriculture and Society
3 - BIC 2050 Evolutionary Biology
3 - COMM 1500 Intro. to Human Comm. or
3 - COMM 2500 Public Speaking
3 - GEN 3000 Fundamental Genetics
4 - MICR 3050 General Microbiology
1 - PES 4550 Seminar
17
Junior Year
First Semester
3 - BCHM 3050 Essential Elements of Biochem.
2 - BIOL 4340 Biological Chem. Lab. Tech
3 - ECON 2000 Economic Concepts or
3 - ECON 2110 Principles of Microeconomics
3 - PES 3350 Agricultural Biotechnology
3 - PES 4220 Major World Crops
3 - Social Science Requirement
17
Second Semester
3 - BIOL 4010 Plant Physiology
1 - BIOL 4020 Plant Physiology Lab.
3 - ENGL 3150 Scientific Writing and Comm.
1 - PES 4010 Academic and Professional Dev.
3 - PES 4050 Plant Breeding
3 - PES 4090 Biology of Invasive Plants
14
Senior Year
First Semester
2 - PES 4450 Regulatory Issues and Policies
3 - PES 4900 Beneficial Soil Organisms in Plant Growth
3 - Arts and Humanities (Literature) Requirement
6 - Concentration Requirement
14
Second Semester
3 - PES 3500 Practicum
3 - PES 3400 Medical Botany
9 - Concentration Requirement
15

122–123 Total Semester Hours

See General Education Requirements.

A GR O N O M Y C O N C E N T R A T I O N
S o p h o m o r e Y e a r
F i r s t S e m e s t e r
3 - CH 2010 Survey of Organic Chemistry
4 - ENT 3010 Insect Biology and Diversity
3 - PES 2020 Soils
3 - PLPA 3100 Principles of Plant Pathology
15

S e c o n d S e m e s t e r
3 - AGRB 2050 Agriculture and Society
3 - COMM 1500 Intro to Human Comm. or
3 - COMM 2500 Public Speaking
3 - GEN 3000 Fundamental Genetics
4 - MICR 3050 General Microbiology
13

S u m m e r
3 - ENT 4070 Applied Agricultural Entomology
3 - PLPA 4110 Plant Disease Diagnosis
6

J u n i o r Y e a r
F i r s t S e m e s t e r
3 - AGRB 2050 Agricultural Economics or
3 - ECON 2110 Principles of Microeconomics
3 - BCHM 3050 Essential Elements of Bioch.
2 - BIOL 4340 Biol. Lab Techniques
3 - IPM 4010 Principles of Integrated Pest Mgt.
3 - PES 4220 Major World Crops
3 - Concentration Requirement
17

S e c o n d S e m e s t e r
3 - BIOL 4010 Plant Physiology
1 - BIOL 4020 Plant Physiology Lab.
3 - ENGL 3150 Scientific Writing and Comm.
1 - PES 4010 Academic and Professional Dev.
3 - PES 4050 Plant Breeding
3 - PES 4090 Biology of Invasive Plants
1 - PES 4550 Seminar
15

S e n i o r Y e a r
F i r s t S e m e s t e r
2 - PES 4450 Regulatory Issues and Policies
3 - PES 4900 Beneficial Soil Organisms in Plant Growth
3 - Arts and Humanities (Literature) Requirement
3 - Social Science Requirement
14

S e c o n d S e m e s t e r
3 - PES 3500 Practicum
3 - PES 4520 Soil Fertility and Management
1 - PES 4530 Soil Fertility Lab.
6 - Concentration Requirement
13

124–125 Total Semester Hours

See General Education Requirements.

S O I L A N D W A T E R S C I E N C E
C O N C E N T R A T I O N
S o p h o m o r e Y e a r
F i r s t S e m e s t e r
3 - CH 2010 Survey of Organic Chemistry
3 - GEOB 1010 Physical Geology
1 - GEOB 1030 Physical Geology Lab.
4 - PES 2020 Soils
3 - PHYS 2070 General Physics I
1 - PHYS 2090 General Physics I Lab.
16

S e c o n d S e m e s t e r
3 - AGRB 2050 Agriculture and Society
3 - COMM 1500 Intro to Human Comm. or
3 - COMM 2500 Public Speaking
4 - MICR 3050 General Microbiology
3 - PHYS 2080 General Physics II
1 - PHYS 2100 General Physics II Lab.
14

J u n i o r Y e a r
F i r s t S e m e s t e r
3 - AGM 3010 Soil and Water Conservation
3 - PES 4220 Major World Crops
9 - Concentration Requirement
15

S e c o n d S e m e s t e r
3 - AGM 4020, GEOL 4090, or other course approved by advisor.
3 - AGM 4100, FOR 4330, GEOL 4210, or other course approved by advisor.

S e n i o r Y e a r
F i r s t S e m e s t e r
3 - PES 3500 Practicum
3 - PES 4050 Plant Physiology and
1 - PES 4070 Plant Physiology Lab.
3 - ENGL 3150 Scientific Writing and Comm.
3 - PES 3150 Environment and Agric.
1 - PES 4010 Academic and Professional Dev.
3 - Concentration Requirement
3 - Social Science Requirement
17

S e c o n d S e m e s t e r
3 - BIOL 1030 General Biology I
1 - BIOL 1050 General Biology Lab I
4 - CH 1010 General Chemistry
3 - HORT 1010 Horticulture
3 - MATH 1020 Business Calculus I
3 - Arts and Humanities (Non-Lit) Requirement
17

S e n i o r Y e a r
F i r s t S e m e s t e r
3 - AGM 3010 Soil and Water Conservation
3 - PES 4220 Major World Crops
9 - Concentration Requirement
15

S e c o n d S e m e s t e r
3 - AGM 4020, GEOL 4090, or other course approved by advisor.
3 - AGM 4100, FOR 4330, GEOL 4210, or other course approved by advisor.

T U R F G R A S S
B a c h e l o r o f S c i e n c e
Turfgrass is a major part of our built environment and daily life, including home lawns, sports fields, and golf courses. Grassed areas are aesthetically attractive and provide many environmental benefits, including the prevention of soil erosion, noise reduction, improved water quality, and reduced injuries from sports.

Graduates pursue careers in management of professional golf courses and sports fields and in lawn care; production and sale of seed, sod, supplies, and equipment; or as technicians for businesses or government agencies. The curriculum provides a strong foundation in science, advanced business, and environmental and leadership skills that are needed for success in today’s competitive environment. Courses in horticulture also provide a background for turfgrass managers who may have responsibilities for landscaped areas.

Students work closely with faculty in creative inquiry groups to investigate and implement solutions to real problems. Student interns experience a wide range of turf facilities, businesses, and public institutions to develop skills and experience needed for successful careers. In addition, the University’s golf course (Walker Golf Course) and athletic fields offer great employment and learning opportunities.

F r e s h m a n Y e a r
F i r s t S e m e s t e r
3 - BIOL 1030 General Biology I
1 - BIOL 1050 General Biology Lab I
4 - CH 1010 General Chemistry
3 - HORT 1010 Horticulture
3 - MATH 1020 Business Calculus I
3 - Arts and Humanities (Non-Lit) Requirement
17

S e c o n d S e m e s t e r
3 - BIOL 1040 General Biology II
1 - BIOL 1060 General Biology Laboratory II
4 - CH 1020 General Chemistry
3 - ENGL 1030 Accelerated Composition
3 - MATH 1010 Essential Math for Informed Soc.
14

S o p h o m o r e Y e a r
F i r s t S e m e s t e r
3 - BIOL 3040 Biology of Plants
1 - BIOL 3080 Biology of Plants Lab
3 - HORT 2120 Introduction to Turfgrass Culture
1 - HORT 2130 Turfgrass Culture Lab.
3 - HORT 3030 Landscape Plants
3 - Social Science Requirement
14
Second Semester
3 - HORT 4270 Urban Tree Care
4 - PES 2020 Soils
3 - Arts and Humanities (Literature) Requirement
3 - Oral Communications Requirement
3 - Social Science Requirement
16

Summer
3 - HORT 2710 Internship or 4710 Advanced Internship
3

Junior Year
First Semester
4 - ENT 3010 Insect Biology and Diversity
3 - PLPA 3100 Principles of Plant Pathology
3 - Business Requirement
3 - Horticulture Specialization Requirement
3 - Soil Science Requirement
16

Second Semester
3 - AGM 4020 Irrigation System Design
3 - BIOL 4010 Plant Physiology
1 - BIOL 4020 Plant Physiology Lab.
3 - HORT 4200 Applied Turfgrass Physiology
2 - PLPA (ENT) 4060 Diseases and Insects of Turfgrasses
3 - Horticulture Specialization Requirement
15

Summer
1 - PLPA (ENT) 4080 Diseases and Insects of Turfgrasses Laboratory

Senior Year
First Semester
3 - HORT 4090 Senior Capstone Course
3 - HORT 4120 Advanced Turfgrass Management
3 - PES 4460 Soil Management
3 - Business Requirement
3 - Related Science Requirement
15

Second Semester
3 - HORT (PES) 4330 Landscape and Turf Weed Management
3 - PES 4520 Soil Fertility
1 - PES 4530 Soil Fertility Lab
3 - Business Requirement
6 - Related Science Requirement
16

123 Total Semester Hours

*Choose nine hours from the recommended list of courses.

*Note: Turfgrass majors must earn a C or better in all HORT courses. Courses may be repeated as often as necessary to achieve the minimum grade.

WILDLIFE AND FISHERIES BIOLOGY
Bachelor of Science
Increased interest in conservation of natural resources and the environment and demand for seafood products has resulted in these areas becoming increasingly technical and requiring highly qualified wildlife and fisheries biologists. Greatest demands for graduates are in the areas of management, research, survey, and regulatory positions with state and federal agencies; industrial research and quality control laboratories; conservation, recreation, and other public service agencies; and private enterprises.

The Bachelor of Science degree program in Wildlife and Fisheries Biology provides a solid foundation for many careers in the sciences. The curriculum is strong in basic and applied sciences, communication skills, and the social sciences. In addition, three credit hours are available for field training with appropriate natural resource agencies. Students may satisfy coursework requirements for professional certification by the Wildlife Society and/or the American Fisheries Society.

For students interested in conservation biology, water, and natural resources, the Department of Forestry and Environmental Conservation also administers the Conservation Biology and Natural Resources Management Concentrations within the Environmental and Natural Resources degree program. See pages 4648 for program details.

Combined Bachelor of Science/Master of Science Degree Program
Under this plan, students may reduce the time necessary to earn both degrees by applying graduate credits to both undergraduate and graduate program requirements. Students are encouraged to obtain the specific requirements for the dual degree from the Department of Forestry and Environmental Conservation as early as possible in their undergraduate program, as a number of required courses have prerequisites not normally taken by Wildlife and Fisheries Biology majors. Enrollment guidelines and procedures can be found under Academic Regulations in this catalog.

Freshman Year
First Semester
3 - BIOL 1030 General Biology I
1 - BIOL 1050 General Biology Lab. I
4 - CH 1010 General Chemistry
1 - ENR 1010 Intro. to Env. and Natural Res. I
3 - MATH 1020 Business Calculus I
3 - Oral Communication Requirement
15

Second Semester
3 - BIOL 1040 General Biology II
1 - BIOL 1060 General Biology Lab. II
4 - CH 1020 General Chemistry or
4 - PHYS 2000 Introductory Physics
3 - ENGL 1030 Accelerated Composition
3 - STAT 2300 Statistical Methods I
1 - Elective
15

Sophomore Year
First Semester
4 - FNR 2040 Soil Information Systems
2 - FOR 2050 Dendrology
3 - FOR 2210 Forest Biology
3 - WFB 3000 Wildlife Biology
1 - WFB 3010 Wildlife Biology Lab.
3 - Arts and Humanities (Non-Lit.) Requirement
16

Second Semester
3 - ENGL 3140 Technical Writing
3 - FOR 2060 Forestry Ecology
3 - GEN 1000 Fundamental Genetics
3 - WFB 1500 Principles of Fish and Wildlife Biol.
3 - Social Science Requirement
15

Junior Year
First Semester
3 - BIOL 3030 Vertebrate Biology
3 - WFB 3000 Wildlife Biology
3 - WFB (BIOL) 3130 Conservation Biology
3 - WFB 4100 Wildlife Management Techniques
3 - Approved Requirement
2 - Arts and Humanities (Literature) Requirement
16

Second Semester
3 - WFB (BIOL) 3130 Conservation Biology
3 - WFB 4120 Wildlife Management
3 - WFB 4160 Fishery Biology
3 - WFB 4620 Wetland Wildlife Biology
3 - Approved Requirement
15

Senior Year
First Semester
3 - AGRB 2020 Agricultural Economics or
3 - ECON 2110 Principles of Microeconomics
4 - AVS 3010 Anat. and Phys. of Domestic Animals
3 - FOR (ENR) 4340 GIS for Natural Resources
6 - Approved Requirement
16

Second Semester
1 - FNR 4990 Natural Resources Seminar
3 - WFB 4140 Wildlife Conservation Policy
6 - Approved Requirement
2 - Policy and Law Requirement
13

121 Total Semester Hours

*See General Education Requirements. Six of these credit hours must also satisfy the Cross-Cultural Awareness and the Science and Technology in Society Requirements.

*Internship must be completed in one or two semesters. First internship must be completed within one year after successfully passing HORT 2120/2130. Prior approval is required for internships, and a GPA of 2.0 is required for registration. Students are strongly encouraged to take multiple internships.

*See advisor. Select from approved departmental list. A total of nine hours is required.

*Turfgrass majors are required to take six hours of HORT specialization courses. Turfgrass internship courses do not count as HORT specialization courses.

*In addition to PES 2020, 4460, 4520, and 4530, students must select one additional soils course from PES 4010, 4280 or 4900.
MINORS

Following are minors acceptable for students in the College of Agriculture, Forestry and Life Sciences. Students cannot major and minor in the same field or acquire a minor that is not allowed by the degree program.

Accounting
Adult/Extension Education
Aerospace Studies
Agricultural Business Management
Agricultural Mechanization and Business
American Sign Language Studies
Animal and Veterinary Sciences
Anthropology
Architecture
Art
Athletic Leadership
Biochemistry
Biological Sciences
Brand Communications
British and Irish Studies
Business Administration
Chemistry
Chinese Studies
Cluster
Communication Studies
Computer Science
Creative Writing
Crop and Soil Environmental Science
Digital Production Arts
East Asian Studies
Economics
English
Entomology
Entrepreneurship
Environmental Science and Policy
Equine Industry—not open to Animal and Veterinary Sciences majors
Film Studies
Financial Management
Food Science
Forest Products—not open to Forestry majors
Forest Resource Management
French Studies
Gender, Sexuality and Women’s Studies
Genetics
Geography
Geology
German Studies
Global Politics
Great Works
History

Horticulture—not open to Turfgrass majors
Human Resource Management
Italian Studies
Japanese Studies
Legal Studies
Management
Management Information Systems
Mathematical Sciences
Microbiology
Middle Eastern Studies
Military Leadership
Music
Natural Resource Economics
Nonprofit Leadership
Nuclear Engineering and Radiological Sciences
Packaging Science
Pan African Studies
Park and Protected Area Management
Philosophy
Physics
Plant Pathology
Political Science
Precision Agriculture
Psychology
Public Policy
Race, Ethnicity and Migration
Recreational Therapy
Religious Studies
Russian Area Studies
Science and Technology in Society
Screenwriting
Sociology
Spanish Studies
Spanish-American Area Studies
Sustainability
Theatre
Travel and Tourism
Turfgrass—not open to Horticulture majors
Urban Forestry
Wildlife and Fisheries Biology
Women’s Leadership
Writing
Youth Development Studies

See pages 38-41 for details.
By uniting the humanities with the disciplines of design and building and the arts, the College of Architecture, Arts and Humanities offers one-of-a-kind opportunities for interdisciplinary exploration and achievement—opportunities that are at once rigorous and imaginative, classical and innovative. Students and faculty see their ideas expressed in a myriad of forms—as buildings and landscapes, as the written word, as music and drama, as paintings, pots, prints and photographs. They work in the very oldest media and the very newest. They work alone. They work together. They seek not only the imaginative answers, but the enduring questions.

The College of Architecture, Arts and Humanities is organized into three schools. The School of the Arts includes the departments of Art and Performing Arts. The School of Design and Building includes the School of Architecture, the Department of Construction Science and Management, and the Department of Planning and Landscape Architecture. The School of the Humanities includes the departments of English, History, Languages, and Philosophy and Religion. In addition to the undergraduate and graduate degrees offered by the ten departments, an array of interdisciplinary programs is housed in the Office of the Dean, including the doctoral programs in Planning, Design and the Built Environment; and in Rhetorics, Communication and Information Design.

Modern Language Requirement
A number of Clemson University degree programs require the completion of a modern language through a specific course level. Modern languages taught at Clemson University or accepted for transfer credit include American Sign Language, Arabic, Chinese, French, German, Italian, Japanese, Latin, Portuguese, Russian and Spanish. While many degree programs accept any of these modern languages for the requirement, certain programs may have specific modern language requirements. Students should consult their program's curriculum map for details.

SCHOOL OF DESIGN AND BUILDING AND SCHOOL OF THE ARTS
The Bachelor of Arts in Architecture degree is the preprofessional preparation for graduate study leading to the Master of Architecture degree, which is the fully accredited professional degree in the field. The accredited Bachelor of Science in Construction Science and Management program prepares students for careers as professional managers in the construction industry. A graduate program is also offered leading to the Master of Construction Science and Management. The Visual Arts program offers professional study in the studio visual arts leading to the Bachelor of Fine Arts degree. A graduate program leading to the Master of Fine Arts is also offered. The accredited four-year Bachelor of Landscape Architecture and three-year Master of Landscape Architecture degree programs prepare students for careers as professional landscape architects and are offered by the Department of Landscape Architecture. The Bachelor of Arts in Production Studies in Performing Arts is a distinctive degree program that combines practical hands-on experiences in performing arts production technologies with classes in music and theatre performance, history, and theory.

A graduate program in City and Regional Planning is housed within the school and accepts graduates from a variety of baccalaureate programs and prepares them for careers in both public and private sector planning through its Master of City and Regional Planning degree. The Master of Science in Historic Preservation design degree is a professional degree program designed for students who will specialize in working with historic buildings, landscapes, and the decorative arts. The Master of Real Estate Development is a full-time, two-year professional degree jointly offered by the Department of Planning, Development and Preservation and the Department of Finance in the College of Business.

In addition to the facilities housed on the Clemson campus, the College offers third- and fourth-year Architecture and third-year Landscape Architecture students the opportunity to earn credit toward their degrees at three off-campus sites. Students may spend a semester at the Charleston Architecture Center, earning credit from both Clemson University and the College of Charleston. Additionally, the Charles E. Daniel Center for Building Research and Urban Studies in Genoa, Italy, and the Barcelona Program in Barcelona, Spain, provide students with an intensive program of study and travel in Europe.

Architecture Overseas Program
Located in Charleston, South Carolina, this program is available to qualified undergraduates in Architecture, Construction Science and Management, Landscape Architecture, and Visual Arts. Studio work is oriented toward design within the historic seaport setting. Students also enroll in classes at the College of Charleston campus. The program is enriched by visiting scholars and professionals from the area.

Architecture Charleton Program
The Daniel Center for Building Research and Urban Studies in Genoa, Italy, is available to qualified Bachelor of Arts in Architecture, Master of Architecture, Construction Science and Management, Fine Arts, City and Regional Planning, and professional year Landscape Architecture students. The Barcelona program in Barcelona, Spain, is available to qualified Bachelor of Arts in Architecture and professional year Landscape Architecture students. In both Genoa and Barcelona, studio and classroom work is enriched by visiting scholars and complemented by scheduled field trips in the country of program origin and in continental Europe.

Entrance Requirements
Admission to degree programs in the School of Design and Building and the School of the Arts is based on academic performance and is limited based on space availability in the various programs. Students seeking admission are advised to apply to the Admissions Office early in the fall of their senior year in high school. They are also encouraged to visit the school during their senior year. Faculty are available to meet with them and their parents informally and answer questions and discuss individual programs in more detail. Prospective students may schedule appointments by calling the individual department.

Advancement in Architecture
Students enrolled in second-, third-, or fourth-year design studies and theory courses must attain at least a 2.0 grade-point average in each year level (by repeating one or both semesters, if necessary) to qualify for advancement to the next year level or, in the case of fourth-year Architecture studios, to qualify for the Architecture degree, or in Landscape Architecture at the final year, to qualify for the Bachelor of Landscape Architecture degree.

SCHOOL OF HUMANITIES
The Bachelor of Arts degree is offered in English, History, Language and International Trade, Modern Languages, Pan African Studies, Philosophy, Religious Studies, Women’s Leadership, and World Cinema. The Bachelor of Science degree is offered in Language and International Health.

To achieve depth as well as breadth in their education experiences, students majoring in English, History, Modern Languages, Pan African Studies, Philosophy, Religious Studies, or Women’s Leadership complete at least 24 semester hours from courses above the sophomore level. As soon as feasible and not later than the end of the sophomore year, students in these fields also select a minor consisting of at least 15 additional semester hours. Courses satisfying the major may not also be included in the minor. A second major (a double major) may substitute for the minor, provided all requirements are fulfilled for each major.

The modern language requirement is a proficiency requirement. Students must complete through 2020 in Arabic, Chinese, French, German, Italian, Japanese, Latin, Portuguese, Russian, Spanish. Some majors allow American Sign Language to fulfill the modern language requirement.

Students enrolled in degree programs offered in the humanities who expect to teach in the public schools may elect education courses required for teaching certificates by the South Carolina Department of Education. Such courses are to be approved by their own department advisors.

Students may transfer into the Undeclared category in the humanities only if they have completed 45 or fewer credit hours. For more information, contact the College of Architecture, Arts and Humanities Advisement Center in 101 Strode Tower.

ARCHITECTURE
Bachelor of Arts
The Bachelor of Arts in Architecture prepares students for subsequent professional education by providing a sound general education, focused design studies, complementary support courses, and the requirement to study in an off-campus location. The School of Architecture emphasizes the relationship of buildings to the rest of the environment: built, natural, and cultural. The curriculum includes seven semesters of studio in addition to complementary
courses in architectural history and theory and building technology. The first three studios are collaborative, taught by faculty in Architecture, and Communication Studies. The Bachelor of Arts also includes requirements for a minor and modern language.

In the first two years of the program, students learn to apply the thinking and communications skills needed to pursue higher-level work in the discipline. The curriculum in the first two years also allows students to complete most of the University's general education requirements. In the junior year, students must select an off-campus, location-specific studio and co-required coursework in order to fulfill their off-campus study requirement. The final studio focuses on reflection and synthesis.

Accreditation and Registration

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards.

Doctor of Architecture and Master of Architecture degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

Clemson University, College of Architecture, Arts and Humanities, School of Architecture offers the following NAAB-accredited degree programs:

M.Arch. (pre-professional degree + 60 graduate credits)
M.Arch. (pre-professional degree + 61 credits)
M.Arch. (non-pre-professional degree + 90 credits)
M.Arch (non-pre-professional degree + 91 credits)
Architecture + Health

The next accreditation visit for all programs will be in 2017.

Freshman Year

First Semester
3 - AAH 1010 Survey of Art and Arch. History I
3 - ARCH 1010 Introduction to Architecture
3 - ENGL 1030 Accelerated Composition
4 - MATH 1060 Calculus of One Variable I
1 - PHYS 2070 General Physics I
1 - PHYS 2090 General Physics I Lab.
17

Second Semester
3 - AAH 1020 Survey of Art and Arch. History II
5 - ARCH 1510 Architecture Communication
3 - BIOL 2040 Environment, Energy and Society
4 - Modern Language Requirement
15

Sophomore Year

First Semester
3 - ARCH 2040 History and Theory of Mod. Arch
6 - ARCH 2510 Architecture Foundations I
3 - ENGL 2120 World Literature
3 - Modern Language Requirement
15

Second Semester
6 - ARCH 2520 Architecture Foundations II
3 - ARCH 2700 Structures I
3 - Modern Language Requirement
3 - Social Science Requirement
15

Junior Year

First Semester
6 - ARCH 3500 Introduction to Urban Contexts
3 - ARCH 4010 Architectural Portfolio
3 - Minor Requirement
15

Second Semester
6 - ARCH 4520 Synthesis Studio
3 - Minor Requirement
3 - Elective
15

Senior Year

First Semester
6 - Minor Requirement
3 - Social Science Requirement
6 - Studio Requirement
15

Second Semester
6 - ARCH 4530 Synthesis Studio
3 - Minor Requirement
3 - Elective
15

122 Total Semester Hours

advanced language requirements (through 2020) in the same modern language as required. See Modern Language Requirement at Clemson University statement on page 27.
See General Education Requirements. Three of these credits must also satisfy the Cross-Cultural Awareness Requirement.

3 - ENGL 3140 Technical Writing
3 - ENGL 3040 Business Writing
3 - CSM 3040 Environmental Systems I
3 - MATH 1060 Calculus of One Variable I
3 - PHYS 2070 General Physics I
1 - PHYS 2090 General Physics I Lab.
17

Second Semester
3 - ART 2100 Art Appreciation
3 - CSM 1500 Construction Problem Solving
3 - COMM 2500 Public Speaking
3 - PHYS 2080 General Physics II
1 - PHYS 2100 General Physics II Lab.
3 - STAT 3090 Introductory Business Statistics
16

Sophomore Year

First Semester
3 - AGM 2210 Surveying
3 - CSM 2010 Structures I
3 - CSM 2030 Materials and Methods of Constr. I
3 - ECON 2110 Principles of Microeconomics
3 - Arts and Humanities (Literature) Requirement
15

Second Semester
3 - ACCT 2010 Financial Accounting Concepts
4 - CSM 2020 Structures II
3 - CSM 2040 Contract Documents
3 - CSM 2050 Materials and Methods of Constr. II
3 - ECON 2120 Principles of Macroeconomics
16

Junior Year

First Semester
3 - CSM 3030 Soils and Foundations
3 - CSM 3040 Environmental Systems I
3 - CSM 3510 Construction Estimating
3 - ENGL 3040 Business Writing
3 - ENGL 3140 Technical Writing
3 - Social Science Requirement
15

CONSTRUCTION SCIENCE AND MANAGEMENT

Bachelor of Science
As the largest single industry in the United States and one of the most important, construction offers unlimited opportunities to highly motivated and professionally educated men and women. Future professionals must be skilled in managing people, equipment, and capital, in addition to having a thorough knowledge of construction materials and methods and the complex technologies of modern construction. The Bachelor of Science in Construction Science and Management curriculum is the basis for a career in construction or as a developer or building management specialist.

Change of major requests are considered only once a year, in late May or early June. Students who wish to change their major to Construction Science and Management must have completed at least 30 credit hours (with a minimum of 24 credit hours taken at Clemson University) with a minimum grade-point average of 2.7; and must have successfully completed ENGL 1030, PHYS 2070/2090, and the mathematics requirement (MATH 1020 or 1060) by the end of the spring semester of the year the change-of-major request is made. Students should contact the Construction Science and Management Department, 122 Lee Hall. The Department's Faculty Admissions Committee will consider all requests in late May or early June and select the top students by cumulative grade-point average based on space availability. Students who do not meet the minimum requirements at the end of spring semester will not be considered.

Freshman Year

First Semester
3 - CSM 1000 Intro. to Construction Sci. and Mgt.
3 - ENGL 1030 Accelerated Composition
5 - MGT 2180 Management Personal Computer Applications
4 - MATH 1060 Calculus of One Variable I
3 - PHYS 2070 General Physics I
1 - PHYS 2090 General Physics I Lab.
17

Second Semester
3 - ART 1500 Intro. to Human Comm. or
3 - COMM 2500 Public Speaking
3 - PHYS 2080 General Physics II
1 - PHYS 2090 General Physics II Lab.
3 - STAT 3090 Introductory Business Statistics
16

Sophomore Year

First Semester
3 - ACCT 2010 Financial Accounting Concepts
4 - CSM 2020 Structures II
3 - CSM 2040 Contract Documents
3 - CSM 2050 Materials and Methods of Constr. II
3 - ECON 2120 Principles of Macroeconomics
3 - Arts and Humanities (Literature) Requirement
15

Second Semester
3 - ACCT 2010 Financial Accounting Concepts
4 - CSM 2020 Structures II
3 - CSM 2040 Contract Documents
3 - CSM 2050 Materials and Methods of Constr. II
3 - ECON 2120 Principles of Macroeconomics
16

Junior Year

First Semester
3 - CSM 3030 Soils and Foundations
3 - CSM 3040 Environmental Systems I
3 - CSM 3510 Construction Estimating
3 - ENGL 3040 Business Writing
3 - ENGL 3140 Technical Writing
3 - Social Science Requirement
15
Second Semester  
3 - CSM 3050 Environmental Systems II  
3 - CSM 3520 Construction Scheduling  
3 - CSM 3530 Construction Estimating II  
3 - LAW 3220 Legal Environment of Business  
3 - MGT 3070 Human Resource Management  
15  
Senior Year  
First Semester  
3 - CSM 4110 Safety in Building Construction  
1 - CSM 4520 Construction Internship  
3 - CSM 4530 Construction Project Management  
3 - CSM 4610 Construction Economics Seminar  
6 - Major Requirement  
16  
Second Semester  
6 - CSM 4540 Construction Capstone  
6 - Major Requirement  
3 - Science and Tech. in Society Requirement  
15  
125 Total Semester Hours  
1A sequence of MATH 1020 and 2070 may be substituted.  
2See General Education Requirements.  
3Select from department-approved list or as approved in writing by advisor and department chair. Note: Six credit hours must be in business.  
Note: A minimum of 800 hours of construction experience will be required prior to graduation.

**ENGLISH**

**Bachelor of Arts**
The core courses of the English major help students acquire an understanding of literature as a humanistic study; develop an appreciation and practical knowledge of the modes of literary expression, research, and criticism; and improve the ability to communicate effectively and intelligently.

By the end of the sophomore year, students choose between two emphasis areas: Literature or Writing and Publication Studies. The Literature Emphasis Area offers an extensive exploration of American and British literature, literary theory, and related disciplines such as creative writing and film. The Writing and Publication Studies Emphasis Area focuses on digital publishing, professional communication, rhetoric, creative writing, and writing about the arts. By teaching students to read closely, think critically, and communicate effectively, both emphasis areas prepare English majors for work in a variety of professional and academic fields.

The standard program of study consists of courses stipulated in the map below, which includes 27 credit hours of core courses and 15 hours chosen from one of the two emphasis areas.

**Double Major in English/Secondary Education—English**
The Bachelor of Arts Degree in English and Secondary Education—English prepares students for teaching at the secondary school level and for graduate studies in English. See page 116 for the curriculum.

Note: To receive a double major in English and Secondary Education—English, the student must complete a Request to Change Academic Program form to declare both majors.

**Core Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENGL 3100</td>
<td>Three credits</td>
<td></td>
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<tr>
<td>Literature Survey Requirement—Six credits selected from ENGL 3960, 3970, 3980, 3990</td>
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<td></td>
</tr>
<tr>
<td>Diversity—Three credits selected from ENGL 3530, 3800, 4190 (HUM) 4560, 4820, 4830</td>
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<tr>
<td>Shakespeare—ENGL 4110—Three credits</td>
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</tbody>
</table>

**Literature, Criticism, and Theory—Three credits selected from ENGL 4000, 4010, 4350, (WS) 4360, 4400, 4420, 4430, (COMM) 4510, 4880, (COMM) 4910, (COMM) 4920**

**Advanced Writing—Three credits selected from ENGL 3040, 3120, 3140, 3150, 3450, 3460, (THEA) 3470, 3480, 4450, 4460, (THEA) 4470, 4480, 4490, 4900, 4940**

**Major Electives—Three credits selected from 3000- or 4000-level ENGL courses**

**Capstone Seminar—Three credits—ENGL 4960**

**Literature Emphasis Area**

<table>
<thead>
<tr>
<th>courses</th>
<th>credits</th>
<th>requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature I (to 1699)—Three credits selected from ENGL 4030, 4070, 4080, 4100, 4140, 4200, (THEA) 4290, 4440, 4630</td>
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<tr>
<td>Literature II (1700–1899)—Three credits selected from ENGL 4150, 4160, 4170, 4180, 4210, 4250, 4260, 4640</td>
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<tr>
<td>Literature III (from 1900)—Three credits selected from ENGL 4280, (THEA) 4300, 4310, 4320, 4330, 4340, 4550, 4650</td>
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**Writing and Publication Studies Emphasis Area**

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<th>courses</th>
<th>credits</th>
<th>requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language, Criticism, and Theory—Three credits, in addition to Core Advanced Writing requirement, selected from ENGL 3040, 3120, 3140, 3150, 3450, 3460, (THEA) 3470, 3480, 4450, 4460, (THEA) 4470, 4480, 4490, 4900, 4940</td>
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</tbody>
</table>

**WPS Courses—Six credits selected from ENGL 3320, 3330, 3490, 4410, 4600, 4750, 4780, 4870, 4890, 4950**

**Major Electives—Three additional credits selected from 3000- or 4000-level ENGL courses**

**Freshman Year**

**First Semester**

<table>
<thead>
<tr>
<th>courses</th>
<th>credits</th>
<th>requirement</th>
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<tbody>
<tr>
<td>3 - ENGL 1030 Accelerated Composition</td>
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<tr>
<td>3 - HIST 1720 The West and the World I</td>
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<tr>
<td>4 - Modern Language Requirement</td>
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<tr>
<td>3 - Mathematics Requirement</td>
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<td>3 - Mathematics or Natural Science Requirement</td>
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**Second Semester**

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<th>requirement</th>
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<tr>
<td>3 - ENGL 2120 World Literature</td>
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<tr>
<td>3 - HIST 1730 The West and the World II</td>
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<tr>
<td>4 - Modern Language Requirement</td>
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<td>4 - Natural Science Requirement</td>
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<tr>
<td>3 - Social Science Non-History Requirement</td>
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**Sophomore Year**

**First Semester**

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<td>3 - ENGL 3100 Critical Writing About Literature</td>
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<tr>
<td>3 - Arts and Humanities (Non-Lit.) Requirement</td>
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<tr>
<td>3 - English Literature Survey Requirement</td>
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<tr>
<td>3 - Modern Language Requirement</td>
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<td>3 - Elective</td>
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**Second Semester**

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<tr>
<td>3 - COMM 1500 Intro. to Human Comm. or 3 - COMM 2500 Public Speaking</td>
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<tr>
<td>3 - English Literature Survey Requirement</td>
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<tr>
<td>3 - Fine Arts Requirement</td>
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<tr>
<td>3 - Modern Language Requirement</td>
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<tr>
<td>3 - History/Philosophy Requirement</td>
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**Junior Year**

**First Semester**

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<td>9 - Major Requirement</td>
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<td>3 - Minor Requirement</td>
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<tr>
<td>3 - Science and Tech. in Society Requirement</td>
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**Second Semester**

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<tr>
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<td>6 - Major Requirement</td>
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<td>6 - Minor Requirement</td>
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<td>3 - Elective</td>
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**Senior Year**

**First Semester**

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<tr>
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<th>credits</th>
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<tbody>
<tr>
<td>9 - Major Requirement</td>
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<td>3 - Minor Requirement</td>
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<tr>
<td>3 - Elective</td>
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**Second Semester**

<table>
<thead>
<tr>
<th>courses</th>
<th>credits</th>
<th>requirement</th>
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<tbody>
<tr>
<td>3 - ENGL 4960 Senior Seminar</td>
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<tr>
<td>6 - Major Requirement</td>
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<td>3 - Minor Requirement</td>
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<tr>
<td>12</td>
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</tbody>
</table>

120 Total Semester Hours

1Students must complete through 2020 in a modern language. See Modern Languages Requirement at Clemson University statement on page 27.

2See General Education Requirements.

3See Social Science General Education Requirements. Must be in a subject other than HIST. One of the following is recommended: ANTH 2010, ECON 2000, 2110, GEOG 1010, 1030, 1060, POSC 1010, 1020, 1040, PSYC 2010, or SOC 2100.

4See General Education Requirements. Select from courses in philosophy.

5ENGL 3960, 3970, 3980, or 3990

6AAH 1010, ART 2100, ENGL 3570, HUM 3010, 3020, 3060, MUSC 2100, 310, 4150, 4160, or THEA 2100

7Any 3000- or 4000-level HIST or PHIL course

8See major requirements in program description above.
**HISTORY**

**Bachelor of Arts**

The History major provides students with flexibility to pursue their particular interests in history. The major includes 33 credit hours in history, in addition to HIST 1720 and 1730, as outlined below.

History Major—HIST 2990, 4900 or 4980 and 27 additional credits in History. Students must take three hours each of United States history, European history, and non-Western history, in addition to three hours of history at the 4000 level. No more than six hours of 1000- and 2000-level history courses (in addition to HIST 2990) may be counted towards the Major Requirements.

History Major (Public History Emphasis Area)—HIST 2990; HIST 4900 or HIST 4980; HIST 4140; HIST 4800; HIST 2020; GEOG 4400; HIST 4150, 4170, 4180 or another course approved by the emphasis area coordinator; and 12 additional credits in History. Students must take three hours each of United States history, European history, and non-Western history, in addition to three hours of history at the 4000 level. No more than six hours of 1000- and 2000-level history courses (in addition to HIST 2020 and 2990) may be counted towards the Major Requirements.

Pre-law students majoring in History should consult the pre-law advisor for a recommended program.

Students who change majors into History must have completed at least 12 credit hours at Clemson and have either a minimum 2.0 cumulative grade-point average or have earned a B or better in HIST 1720 or 1730, taken at Clemson.

**Double Major in History/Secondary Education—Social Studies (History)**

The Bachelor of Arts Degree in History and Secondary Education—Social Studies (History) prepares students for teaching at the secondary school level and for graduate studies in History. See pages 117-118 for the curriculum.

Note: To receive a double major in History and Secondary Education—Social Studies (History), the student must complete a change-of-program form to declare both majors.

**Freshman Year**

First Semester
- ENG 1030 Accelerated Composition
- HIST 1720 The West and the World I
- Modern Language Requirement
- Natural Science Requirement
- Elective

Second Semester
- HIST 1730 The West and the World II
- Modern Language Requirement
- Geography Requirement
- Mathematics Requirement
- Mathematics or Natural Science Requirement

**Sophomore Year**

First Semester
- Arts and Humanities (Literature) Requirement
- Arts and Humanities (Non-Lit.) Requirement
- Modern Language Requirement
- Major Requirement
- Elective

Second Semester
- HIST 2990 Seminar: The Historian’s Craft
- Advanced Humanities Requirement
- Modern Language Requirement
- Major Requirement
- Minor Requirement

**Junior Year**

First Semester
- Advanced Humanities Requirement
- Major Requirement
- Minor Requirement
- Elective

Second Semester
- Literature Requirement
- Major Requirement
- Minor Requirement
- Elective

**Senior Year**

First Semester
- Advanced Humanities Requirement
- Modern Language Requirement
- Elective

Second Semester
- HIST 4900 Senior Seminar or
- HIST 4980 Senior Honors Thesis
- Major Requirement
- Minor Requirement
- Elective

120 Total Semester Hours

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**LANDSCAPE ARCHITECTURE**

**Bachelor of Landscape Architecture**

The profession of landscape architecture is broad and complex, and deals with multiple scales that range from the site to the region. Practicing landscape architects work on a wide range of project types, including, but not limited to, urban design, community design, historic preservation, ecological restoration, parks and park systems, infrastructure and storm water management, institutional landscapes, memorials, cemeteries, industrial site reclamation, golf courses, wilderness areas and trails, residential landscapes, and gardens.

The profession is both an art and a science. Successful landscape architects are creative professionals who hold an environmental imperative and a social conscience. They are also excellent facilitators, able to bring numerous disciplines and professions together to work on complex projects in the landscape. In the first two years of the program, students learn critical thinking, core principles and communications skills needed to pursue higher level work. In the junior year, students are required to select an off-campus, location-specific studio and co-required course work in order to fulfill their off-campus studio requirement. In the students’ spring semester of their senior year, the final studio focuses on the synthesis of a final independent project.

Clemson’s Landscape Architecture program is noted for a special emphasis on the art of design. Consequently, the landscape architecture design studio experience is at the center of the student’s education—42 hours of studio are required. The program leads to a nationally accredited Bachelor of Landscape Architecture degree. The program is generalist, covering the major areas of practice and building from design basics to sophisticated studio experiences, such as large scale landscape planning; parks, recreation, and open space planning; and regional, urban, and community design. The studio experience is supported by other courses inside and outside the Landscape Architecture curriculum that provide the necessary grounding in landscape history and social, cultural, environmental, and aesthetic theories. Outstanding final year students may apply for admission into a shortened Master of City and Regional Planning, Master of Landscape Architecture, or Master of Real Estate Development program.

**Accreditation and Registration**

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The Landscape Architectural Accreditation Board (LAAB), which is the sole agency authorized to accredit U.S. professional degrees in landscape architecture, recognizes two types of degrees, the First Professional Bachelor of Landscape Architecture (BLA) and the First Professional Master of Landscape Architecture (MLA).

The Clemson University College of Architecture, Arts and Humanities, Department of Landscape Architecture, offers both LAAB accredited First Professional programs: BLA (124 credits) and MLA (81 credits).
The next BLA accreditation takes place fall 2019 and the next MLA accreditation takes place fall 2016.

Any undergraduate student who meets the Academic Eligibility Policy after attempting 12 credit hours at Clemson University for whom is allowed to continue by virtue of a semester 2.4 grade-point average on 12 earned credits or who is allowed to continue through appeal to the Appeals Committee on Academic Eligibility or by other authorization of this committee may transfer from one major to another. Any college or department that seeks an exception to this policy must have the approval of the collegiate dean and the provost.

**Freshman Year**

**First Semester**
- 3 - ART 2100 Art Appreciation
- 3 - ENGL 1030 Accelerated Composition
- 3 - LARC 1150 Intro. to Landscape Architecture
- 3 - LARC 1280 Technical Graphics
- 3 - LARC 1510 Basic Design I
- 15

**Second Semester**
- 3 - LARC 1160 History of Landscape Arch.
- 6 - LARC 1520 Basic Design II
- 3 - LARC 4280 Landscape Architecture Computer-Aided Design
- 3 - MATH 1020 Business Calculus I
- 15

**Sophomore Year**

**First Semester**
- 3 - COMM 1500 Intro. to Human Comm. or
- 3 - COMM 2500 Public Speaking
- 3 - HORT 3030 Landscape Plants
- 6 - LARC 2510 Landscape Architecture Design Fundamentals
- 3 - LARC 2620 Design Implementation I
- 15

**Second Semester**
- 3 - BIOL 1030 General Biology I
- 1 - BIOL 1050 General Biology Lab. I
- 3 - FOR (HORT) 4270 Urban Tree Care
- 6 - LARC 2550 Community Design
- 3 - LARC 3190 Off Campus Field Studies
- 6 - LARC 3550 Off Campus Studio
- 3 - Elective
- 18

**Junior Year**

**First Semester**
- 6 - LARC 3510 Regional Design & Ecology Studio
- 3 - LARC 4620 Design Implementation III
- 3 - Mathematics or Natural Science Requirement
- 3 - Social Science Requirement
- 3 - Elective
- 18

**Second Semester**
- 3 - LARC 3190 Off Campus Field Studies
- 3 - LARC 3210 Landscape Architectural Seminar
- 6 - LARC 3550 Off Campus Studio
- 3 - Elective
- 15

**Senior Year**

**First Semester**
- 6 - LARC 4540 Urban Design Studio
- 3 - LARC 4530 Key Issues in Landscape Arch.
- 3 - Arts and Humanities (Literature) Requirement
- 3 - Elective
- 15

**Second Semester**
- 6 - LARC 4550 Landscape Architecture Exit Project
- 3 - LARC 4810 Professional Practice
- 3 - Cross-Cultural Awareness Requirement
- 3 - Elective
- 15

**124 Total Semester Hours**

*See General Education Requirements.

**LANGUAGE AND INTERNATIONAL HEALTH**

**Bachelor of Science**

The Bachelor of Science program in Language and International Health is jointly administered by the Department of Languages and the Department of Public Health Sciences in the College of Behavioral, Social and Health Sciences. Students acquire knowledge in public health theory and practice, including the history and philosophy of public health and medicine; the organization, management, and financing of health services; the social and behavioral aspects of health, epidemiology, health evaluation methods, and health communications. Students also acquire communicative competence in the target language and its culture, literatures, health environments, and multicultural issues.

The program requires the completion of a semester internship abroad. Graduates will be qualified to assume positions in a variety of settings, including integrated hospital systems, consulting firms, managed care organizations, pharmaceutical companies, as well as multicultural community centers. They can also pursue graduate degrees in community health, epidemiology/biostatistics, health administration, health systems, and research.

In addition to the curriculum requirements below, students in the Language and International Health program will be required to pass a noncredit examination and submit a noncredit senior dossier to assess their language competence in various areas. Both assessments take place in the student’s last full semester at the University.

Students who have completed fewer than 50 credit hours may change majors into Language and International Health with a minimum cumulative grade-point average of 2.5. Students with 50 or more credit hours may apply for a change of major into Language and International Health, based on space availability, with a minimum cumulative grade-point average of 2.75.

**Freshman Year**

**First Semester**
- 3 - BIOL 1030 General Biology I
- 1 - BIOL 1050 General Biology Lab. I
- 4 - CHIN 1010 Elementary Chinese or
- 4 - SPAN 1020 Elementary Spanish or
- 4 - SPAN 1040 Basic Spanish
- 3 - ENGL 1030 Accelerated Composition
- 3 - HLTH 2020 Introduction to Public Health
- 1 - LIH 1270 Introduction to LIH
- 15

**Second Semester**
- 4 - CHIN 1020 Elementary Chinese or
- 3 - SPAN 2100 Intermediate Spanish
- 3 - HLTH 2980 Human Health and Disease
- 3 - STAT 2300 Statistical Methods I
- 3 - Emphasis Area Requirement
- 3 - Elective
- 15-16

**Sophomore Year**

**First Semester**
- 4 - CH 1010 General Chemistry or
- 4 - CH 1050 Chemistry in Context I
- 3 - CHIN 2010 Intermediate Chinese or
- 3 - SPAN 2020 Intermediate Spanish
- 3 - COMM 1500 Intro. to Human Comm. or
- 3 - COMM 2500 Public Speaking
- 3 - HLTH 4700 International Health
- 3 - Social Science Requirement
- 16

**Second Semester**
- 4 - CH 1020 General Chemistry or
- 4 - CH 1060 Chemistry in Context II
- 3 - CHIN 2020 Intermediate Chinese or
- 3 - SPAN 3020 Inter. Span. Grammar and Comp. or
- 3 - SPAN 3050 Inter. Span. Conv. and Comp. I, or
- 3 - SPAN 3060 Span Comp. for Business
- 3 - HLTH 2400 Determinants of Health Behavior
- 3 - Arts and Humanities (Non-Lit.) Requirement
- 3 - Emphasis Area Requirement
- 16

**Junior Year**

**First Semester**
- 4 - BIOL 2220 Human Anatomy and Phys. I
- 3 - CHIN 3050 Chinese Conversation and Composition or
- 3 - SPAN 4150 Spanish for Health Professionals
- 3 - CHIN 4030 Premodern Chinese Literature or
- 3 - SPAN 3040 Int. to Hisp. Literary Forms or
- 3 - SPAN 3110 Survey of Spanish-Amer. Lit. or
- 3 - SPAN 3130 Survey of Spanish Lit. I
- 3 - HLTH 3800 Epidemiology
- 3 - HLTH 4800 Community Health Promotion or
- 3 - HEHD 4100 Leadership Behavior and Civic Engagement or
- 3 - RS (SOC) 4590 The Community or
- 3 - SOC 3310 Urban Sociology
- 16
Second Semester
3 - CHIN 3060 Chinese Conversation and Composition or
3 - SPAN 3070 The Hispanic World: Spain or
3 - SPAN 3080 The Hispanic World: Latin America or
3 - SPAN 3180 Spanish Through Culture or
3 - SPAN 4350 Contemporary Hispanic Culture
3 - CHIN (ANTH) 4180 Chinese Culture and Society or
3 - SPAN 4180 Technical Spanish for Health Management Professionals
3 - HLTH 4900 Research and Evaluation Strategies for Public Health
3 - LIH 4000 Internship Abroad
3 - Advanced Chinese Requirement or
3 - Advanced Spanish Requirement or
3 - Advanced Health Requirement
15

Senior Year
First Semester
4 - BIOL 2230 Human Anatomy and Physiology II
3 - CHIN 3170 Chinese for Health Professionals I or
3 - SPAN 4190 Health and the Hispanic Community
3 - HLTH 2030 Overview of Health Care
3 - Emphasis Area Requirement
3 - Elective
16

Second Semester
3 - CHIN 4170 Chinese for Health Professionals II or
3 - Advanced Spanish Requirement
3 - Advanced Health Requirement
3 - Emphasis Area Requirement
3 - Social Science Requirement
12

121-122 Total Semester Hours

Select one of the following emphasis areas:
Health Administration—select one course from four of the following groups:
Accounting—ACCT 2010
Economics—ECON 2110, 2120
Finance—FIN 3060
Health—AGRB (HLTH) 3610, HLTH 4730
International Trade—CHIN 3660, 4160, SPAN 3160, 4160, 4170
Law—LAW 3220
Management—MGT 2010, 2180, 3900, 4110, 4160, 4220, 4230, (IE) 4440, 4520
Marketing—MKT 3030
Community Development—select one course from four of the following groups:
Applied Economics—AGRB 2020, 3520
Community Development—AGRB 3570, 4110, 4120
Economics—ECON 2110, 2120
Health—AGRB (HLTH) 3610
International Trade—CHIN 3660, 4160, SPAN 3160, 4050, 4160, 4170
Rural Sociology—RS (SOC) 4010, (SOC) 4590, SOC 3710, (RS) 4710
Sociology—SOC 4330

Select two courses (six hours) from two different fields: ANTH 2020, GEOG 1030, HIST 1720, 1730, 1930, PSOC 1020, 1040, PSYC 2010, SOC 2010.

See General Education Requirements. For students not taking the CH 1030/1060 sequence, three of these credits must also satisfy the Science and Technology in Society Requirement.

Second Semester
3 - CHIN 1010 Elementary Chinese or
4 - FR 1010 Elementary French or
4 - GER 1010 Elementary German or
4 - JAPN 1010 Elementary Japanese or
4 - SPAN 1040 Basic Spanish
3 - ENGL 1030 Accelerated Composition
1 - LIT 1270 Introduction to LIT
3 - MATH 1020 Business Calculus I
4 - Natural Science Requirement
15

Junior Year
First Semester
3 - AGRB 3090 Agribusiness Management
3 - CHIN 3050 Chinese Convers. and Comp. I or
3 - FR 3050 Intermediate French Conversation and Composition I or
3 - GER 3050 German Convers. and Comp. or
3 - GER 3060 German Short Story or
3 - JAPN 3050 Japanese Convers. and Comp. or
3 - SPAN 3050 Intermediate Spanish Conversation and Composition I
3 - ENGL 3040 Business Writing
3 - MKT 3020 Consumer Behavior
3 - Advanced Social Science Requirement
15

Freshman Year
First Semester
4 - CHIN 1010 Elementary Chinese or
4 - FR 1010 Elementary French or
4 - GER 1010 Elementary German or
4 - JAPN 1010 Elementary Japanese or
4 - SPAN 1040 Basic Spanish

Second Semester
3 - ACCT 2010 Financial Accounting Concepts or
3 - ACCT 2020 Managerial Account. Concepts
4 - CHIN 1020 Elementary Chinese or
4 - FR 1020 Elementary French or
4 - GER 1020 Elementary German or
4 - JAPN 1020 Elementary Japanese or
3 - SPAN 2010 Intermediate Spanish
3 - MATH 2070 Business Calculus II
3 - Oral Communication Requirement
2-3 - Elective
15

Students with no previous study of Spanish may take SPAN 1010 and 1020.

See General Education Requirements.

APPLIED INTERNATIONAL ECONOMICS CONCENTRATION

Sophomore Year
First Semester
3 - AGRB 2020 Agricultural Economics
3 - CHIN 2030 Intermediate Chinese or
3 - FR 2010 Intermediate French or
3 - GER 2010 Intermediate German or
3 - JAPN 2010 Intermediate Japanese or
3 - SPAN 2020 Intermediate Spanish
3 - ECON 2110 Principles of Microeconomics
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Social Science Requirement
15

Second Semester
3 - AGRB 3090 Econ. of Agricultural Marketing
3 - CHIN 2020 Intermediate Chinese or
3 - FR 2020 Intermediate French or
3 - GER 2020 Intermediate German or
3 - JAPN 2020 Intermediate Japanese or
3 - SPAN 3020 Intermediate Spanish Grammar and Composition or
3 - SPAN 3060 Span. Composition for Bus.
3 - MKT 3010 Principles of Marketing
3 - Arts and Humanities (Literature) Requirement
3 - Social Science Requirement
15

Junior Year
First Semester
3 - AGRB 3190 Agribusiness Management
3 - CHIN 3050 Chinese Convers. and Comp. I or
3 - FR 3050 Intermediate French Conversation and Composition I or
3 - GER 3050 German Convers. and Comp. or
- GER 3060 German Short Story or
3 - JAPN 3050 Japanese Convers. and Comp. or
3 - SPAN 3050 Intermediate Spanish Conversation and Composition I
3 - ENGL 3040 Business Writing
3 - MKT 3020 Consumer Behavior
3 - Advanced Social Science Requirement
15

Second Semester
3 - AGRB 2020 Agricultural Economics
3 - CHIN 2030 Intermediate Chinese or
3 - FR 2010 Intermediate French or
3 - GER 2010 Intermediate German or
3 - JAPN 2010 Intermediate Japanese or
3 - SPAN 2020 Intermediate Spanish
3 - ECON 2110 Principles of Microeconomics
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Social Science Requirement
15

Internship must be taken in a country where the target language is spoken. The study abroad course and internship must be taken concurrently as listed during the second semester of the junior year or later during the summer.

Select from any 3000-4000 level courses in the target language except SPAN 3100.

Select from any 3000-4000 level courses in HLTH.

LANGUAGE AND INTERNATIONAL TRADE
Bachelor of Arts

Students in the Bachelor of Arts program in Language and International Trade acquire communicative competence in the target language; a familiarity with specific peoples, cultures, literatures, and business environments; and the knowledge and skills to pursue graduate studies or careers in business within their language of specialization.

The Language and International Trade program combines modern languages and international trade. Students choose one language concentration (Chinese, French, German, Japanese, or Spanish) and one professional concentration (Applied International Economics, International Trade, or Tourism).

The language component emphasizes speaking and writing skills, culture, civilization, and business/technical languages. The professional component introduces students to the core content of their preferred concentration, as well as to the international dimensions of that concentration.

Study abroad of at least one semester in the target language setting is mandatory. In addition, each student is required to complete an internship with an international company in the United States or a summer internship with a company abroad. Internships are subject to approval by the Language and International Trade Director. Students are strongly encouraged to participate in the Clemson Language Immersion Program (CLIP) prior to enrolling in study abroad programs.

In addition to the curriculum requirements below, students are required, as a condition of graduation, to pass a noncredit examination and submit a noncredit senior dossier to assess their language competence in various areas. Both assessments take place in the student’s last full semester at the University.
Second Semester
3 - CHIN 3160 Chinese for International Trade I or
3 - FR 3160 French for International Trade I or
3 - GER 3160 German for Int'l Trade I or
3 - JAPN 3160 Japanese for Int'l Trade I or
3 - SPAN 3160 Spanish for Int'l Trade I
3 - MGT 2010 Principles of Management
3 - Advanced Agricultural Econ. Requirement6
3 - Advanced Modern Language Requirement6
3 - Elective

Summer
3 - LIT 4000 LIT Internship

Senior Year
First Semester
3 - CHIN 4160 Chinese for Int'l Trade II or
3 - FR 4160 French for International Trade II or
3 - GER 4160 German for Int'l Trade II or
3 - JAPN 4160 Japanese for Int'l Trade II or
3 - SPAN 4160 Spanish for Int'l Trade II
3 - ECON 3100 International Economy or
3 - ECON 4120 International Microeconomics
3 - MKT 4270 International Marketing
3 - Advanced Agricultural Econ. Requirement6
3 - Modern Language Civilization Requirement6

Second Semester
2 - LANG 4990 Language ePortfolio
3 - MGT 4230 International Management
6 - Advanced Modern Language Requirement4
3 - Advanced Social Science Requirement1
14
122 Total Semester Hours

See General Education Requirements. Three of these credit hours must also satisfy the Science and Technology in Society Requirement.

Six credit hours selected from two different areas: ANTH 2010, GEOG 1030, HIST 1720, 1730, 1930, POSC 1020, 1040, PSYC 2010

Select from 3000–4000-level courses in AGRB, ANTH, ECON, GEOG, HIST, POSC, PSYC, SOC

AGRB 3510, 4020, 4080, 4090, 4520, 4560, or 4600

A minimum of nine credit hours of 3000–4000-level modern language courses is required. At least one course must be in literature. Advanced grammar is recommended for those exempting 1000–2000 levels. FR 4380 and 4390 and SPAN 4380 and 4390 may not be used to satisfy requirements for the French or Spanish Concentration. Students may not take more than one modern language course taught in English.

Any 3000- or 4000-level MKT course

CHIN (ANTH) 4180, 4990, FR 3070, 3170, GER 3400, 4050, 4550, JAPN 3070, 3080, (ANTH) 4170, 4990, SPAN 3070, 3080, or 4350

TOURISM CONCENTRATION

Sophomore Year
First Semester
3 - CHIN 2010 Intermediate Chinese or
3 - FR 2010 Intermediate French or
3 - GER 2010 Intermediate German or
3 - JAPN 2010 Intermediate Japanese or
3 - SPAN 2020 Intermediate Spanish
3 - ECON 2110 Principles of Microeconomics
3 - MGT 2010 Principles of Management
3 - Arts and Humanities (Non-Lit.) Requirement3
3 - Social Science Requirement1

Second Semester
3 - CHIN 2020 Intermediate Chinese or
3 - FR 2020 Intermediate French or
3 - GER 2020 Intermediate German or
3 - JAPN 2020 Intermediate Japanese or
3 - SPAN 3020 Intermediate Spanish Grammar and Composition or
3 - SPAN 3060 Span. Composition for Bus.
3 - ECON 2110 Principles of Macroeconomics
3 - MKT 3010 Principles of Marketing
3 - Arts and Humanities (Literature) Requirement1
3 - Social Science Requirement2

Junior Year
First Semester
3 - CHIN 3050 Chinese Conv. and Comp. I or
3 - FR 3050 Intermediate French Conversation and Composition I or
3 - GER 3050 German Conv. and Comp. or
3 - GER 3060 German Short Story or
3 - JAPN 3050 Japanese Conv. and Comp. or
3 - SPAN 3050 Intermediate Spanish Conversation and Composition I
3 - ECON 3140 Intermediate Microeconomics
3 - ENGL 3040 Business Writing
3 - MKT 3020 Consumer Behavior
3 - Advanced Social Science Requirement2

Second Semester
3 - CHIN 3160 Chinese for International Trade I or
3 - FR 3160 French for International Trade I or
3 - GER 3160 German for Int'l Trade I or
3 - JAPN 3160 Japanese for Int'l Trade I or
3 - SPAN 3160 Spanish for Int'l Trade I
3 - ECON 3150 Intermediate Microeconomics
3 - Advanced Modern Language Requirement4
3 - Advanced Marketing Requirement3
3 - Elective

Summer
3 - LIT 4000 LIT Internship

Senior Year
First Semester
3 - CHIN 4160 Chinese for Int'l Trade II or
3 - FR 4160 French for International Trade II or
3 - GER 4160 German for Int'l Trade II or
3 - JAPN 4160 Japanese for Int'l Trade II or
3 - SPAN 4160 Spanish for Int'l Trade II
3 - ECON 4120 International Microeconomics
3 - Advanced Modern Language Requirement4
3 - Advanced Business Requirement6
3 - Consumer Behavior

Second Semester
2 - LANG 4990 Language ePortfolio
3 - MGT 4230 International Management
6 - Advanced Modern Language Requirement4
3 - Advanced Social Science Requirement1
3 - Elective

122 Total Semester Hours

See General Education Requirements. Three of these credit hours must also satisfy the Science and Technology in Society Requirement.

Six credit hours selected from two different areas: ANTH 2010, GEOG 1030, HIST 1720, 1730, 1930, POSC 1020, 1040, PSYC 2010

Select from 3000–4000-level courses in AGRB, ANTH, ECON, GEOG, HIST, POSC, PSYC, SOC

AGRB 3510, 4020, 4080, 4090, 4520, 4560, or 4600

A minimum of nine credit hours of 3000–4000-level modern language courses is required. At least one course must be in literature. Advanced grammar is recommended for those exempting 1000–2000 levels. FR 4380 and 4390 and SPAN 4380 and 4390 may not be used to satisfy requirements for the French or Spanish Concentration. Students may not take more than one modern language course taught in English.

Any 3000- or 4000-level MKT course

CHIN (ANTH) 4180, 4990, FR 3070, 3170, GER 3400, 4050, 4550, JAPN 3070, 3080, (ANTH) 4170, 4990, SPAN 3070, 3080, or 4350

INTERNATIONAL TRADE CONCENTRATION

Sophomore Year
First Semester
3 - CHIN 2010 Intermediate Chinese or
3 - FR 2010 Intermediate French or
3 - GER 2010 Intermediate German or
3 - JAPN 2010 Intermediate Japanese or
3 - SPAN 2020 Intermediate Spanish
3 - ECON 2110 Principles of Microeconomics
3 - MGT 2010 Principles of Management
3 - Arts and Humanities (Non-Lit.) Requirement3
3 - Social Science Requirement1

Second Semester
3 - CHIN 3160 Chinese for Int'l Trade I or
3 - FR 3160 French for International Trade I or
3 - GER 3160 German for Int'l Trade I or
3 - JAPN 3160 Japanese for Int'l Trade I or
3 - SPAN 3160 Spanish for Int'l Trade I
3 - ECON 3150 Intermediate Microeconomics
3 - Advanced Modern Language Requirement4
3 - Advanced Business Requirement6
3 - Consumer Behavior

Summer
3 - LIT 4000 LIT Internship

Junior Year
First Semester
3 - CHIN 3050 Chinese Conv. and Comp. I or
3 - FR 3050 Intermediate French Conversation and Composition I or
3 - GER 3050 German Conv. and Comp. or
3 - GER 3060 German Short Story or
3 - JAPN 3050 Japanese Conv. and Comp. or
3 - SPAN 3050 Intermediate Spanish Conversation and Composition I
3 - ECON 3140 Intermediate Microeconomics
3 - Advanced Modern Language Requirement4
3 - Advanced Marketing Requirement3
3 - Elective

Second Semester
3 - CHIN 4160 Chinese for Int'l Trade II or
3 - FR 4160 French for International Trade II or
3 - GER 4160 German for Int'l Trade II or
3 - JAPN 4160 Japanese for Int'l Trade II or
3 - SPAN 4160 Spanish for Int'l Trade II
3 - MKT 4270 International Marketing
3 - Advanced Business Requirement6
3 - Modern Language Civilization Requirement1
3 - Elective

122 Total Semester Hours

See General Education Requirements. Three of these credit hours must also satisfy the Science and Technology in Society Requirement.
Second Semester
3 - CHIN 3160 Chinese for International Trade I or
3 - FR 3160 French for International Trade I or
3 - GER 3160 German for Int’l Trade I or
3 - JAPN 3160 Japanese for Int’l Trade I or
3 - SPAN 3160 Spanish for Int’l Trade I
3 - MGT 2010 Principles of Management
3 - Advanced Modern Language Requirement5
3 - Advanced PRTM Requirement1
3 - Elective

Summer
3 - L&IT 4000 L&IT Internship

Senior Year
First Semester
3 - CHIN 4160 Chinese for Int’l Trade II or
3 - FR 4160 French for International Trade II or
3 - GER 4160 German for Int’l Trade II or
3 - JAPN 4160 Japanese for Int’l Trade II or
3 - SPAN 4160 Spanish for Int’l Trade II
3 - ECON 3100 International Economy or
3 - ECON 4120 International Microeconomics
3 - MKT 4270 International Marketing
3 - Advanced PRTM Requirement1
3 - Modern Language Civilization Requirement6
15

Second Semester
2 - LANG 4990 Language ePortfolio
3 - MGT 4230 International Management
6 - Advanced Modern Language Requirement5
3 - Advanced Social Science Requirement6
14

122 Total Semester Hours

*See General Education Requirements. Three of these credit hours must also satisfy the Science and Technology in Society Requirement.

Second Semester
3 - Elective
3 - Minor Requirement
3 - Fine Arts Requirement2
3 - Arts and Humanities (Non-Lit.) Requirement1

MODERN LANGUAGES
Bachelor of Arts
The Bachelor of Arts degree in Modern Languages provides a broadly humanistic course of study in seven areas of concentration: American Sign Language, Chinese, French, German, Italian, Japanese, and Spanish. This course of study seeks to provide students with basic competence in both the relevant language and the literary and cultural heritage pertaining to that language. Moreover, students will be required to take at least two courses in cultural inquiry which are designed to sharpen their sense of cultural difference, to enhance their critical thinking skills, and to prepare them for citizenship in a global community of diverse cultural precepts and practices. In this respect, the Bachelor of Arts in Modern Languages is intended to prepare students for a wide range of careers in the international arena as well as for the kinds of graduate programs that are an appropriate starting point for such careers.

All Modern Languages students are required to study abroad with a Clemson-approved program for at least one semester in the case of Japanese and Spanish or for at least two semesters in the case of French and German.

As a condition of graduation, students in the Modern Languages program will be required to pass a noncredit examination and to submit an electronic portfolio in the relevant language to assess their competence in that language. Students should see their advisor for details. Both assessments take place in the student’s last full semester of study.

AMERICAN SIGN LANGUAGE EMPHASIS AREA
Freshman Year
First Semester
4 - ASL 1010 American Sign Language1
3 - ENGL 1030 Accelerated Composition1
3 - Mathematics Requirement1
3 - Oral Communication Requirement1
3 - Social Science Requirement1
16
Second Semester
2 - Elective
3 - Minor Requirement
3 - Fine Arts Requirement2
3 - Arts and Humanities (Non-Lit.) Requirement1

Sophomore Year
First Semester
3 - ASL 2010 American Sign Language II1
3 - Arts and Humanities (Non-Lit.) Requirement1
3 - Fine Arts Requirement1
3 - Oral Communication Requirement1
3 - Social Science Requirement1
2 - Elective
16
Second Semester
3 - ASL 2020 American Sign Language II1
3 - Mathematics or Natural Science Requirement1
3 - Natural Science Requirement1
3 - Social Science Requirement1
3 - Elective
16

Junior Year
First Semester
3 - ASL 3010 American Sign Language II1
3 - History Requirement1
3 - Minor Requirement
3 - Elective
15

CHINESE EMPHASIS AREA
Freshman Year
First Semester
4 - CHIN 1010 Elementary Chinese
3 - ENGL 1030 Accelerated Composition
3 - Mathematics Requirement1
3 - Oral Communication Requirement1
3 - Social Science Requirement1
16
Second Semester
4 - CHIN 2010 Intermediate Chinese
3 - Mathematics or Natural Science Requirement1
4 - Natural Science Requirement1
3 - Social Science Requirement1
2 - Elective
16

Sophomore Year
First Semester
3 - CHIN 2020 Intermediate Chinese
3 - History Requirement1
3 - Minor Requirement
3 - Elective
16
Second Semester
3 - CHIN 3020 Intermediate Chinese
3 - History Requirement1
3 - Minor Requirement
3 - Elective
15

Second Semester
3 - Advanced Arts and Humanities Requirement1
3 - Major Requirement1
3 - Methodology and Theory Requirement2
3 - Minor Requirement
3 - Elective
15

Senior Year
First Semester
2 - LANG 4990 Language Portfolio
3 - Major Requirement3
3 - Methodology and Theory Requirement2
3 - Minor Requirement
4 - Elective
15
Second Semester
3 - Advanced Arts and Humanities Requirement1
6 - Major Requirement5
3 - Methodology and Theory Requirement2
12
120 Total Semester Hours

*See General Education Requirements. Three of these credit hours must also satisfy the Science and Technology in Society Requirement.

**See advisor.

1Three credit hours from ASL 3020 and a minimum of 12 credit hours of ASL 3000–4000 level courses is required.
Junior Year
First Semester
3 - LANG 3030 Study Abroad Transfer
3 - Advanced Language Requirement
3 - Major Requirement
3 - Minor Requirement
3 - Elective
15

Second Semester
3 - Advanced Arts and Humanities Requirement
3 - Major Requirement
3 - Methodology and Theory Requirement
3 - Minor Requirement
3 - Elective
15

Senior Year
First Semester
2 - LANG 4990 Language Portfolio
3 - Major Requirement
3 - Methodology and Theory Requirement
12
120 Total Semester Hours
3See General Education Requirements. Three of these credit hours must also satisfy the Science and Technology in Society Requirement.
3See advisor.
3Select from CHIN 3000-4000 level courses. At least one course must be in literature. No more than two courses taught in English may be taken.

FRENCH EMPHASIS AREA
Freshman Year
First Semester
3 - ENGL 1030 Accelerated Composition
4 - FR 1010 Elementary French
3 - Mathematics Requirement
3 - Oral Communication Requirement
3 - Social Science Requirement
16

Second Semester
4 - FR 1020 Elementary French
3 - Mathematics or Natural Science Requirement
3 - History Requirement
3 - Minor Requirement
3 - Elective
15

Junior Year
First Semester
3 - FR 2020 Intermediate French
3 - Arts and Humanities (Literature) Requirement
3 - History Requirement
3 - Minor Requirement
3 - Elective
15

Second Semester
3 - Advanced Arts and Humanities Requirement
3 - Major Requirement
3 - Methodology and Theory Requirement
3 - Minor Requirement
3 - Elective
15

Senior Year
First Semester
2 - LANG 3030 Study Abroad Transfer
3 - Major Requirement
3 - Methodology and Theory Requirement
3 - Minor Requirement
4 - Elective
15

Second Semester
3 - Advanced Arts and Humanities Requirement
6 - Major Requirement
3 - Methodology and Theory Requirement
3 - Elective
3 - Social Science Requirement
12
120 Total Semester Hours
3See advisor.
3Select from CHIN 3000-4000 level courses. At least one course must be in literature. No more than two courses taught in English may be taken.

GERMAN EMPHASIS AREA
Freshman Year
First Semester
4 - GER 1010 Elementary German
3 - ENGL 1030 Accelerated Composition
3 - Mathematics Requirement
3 - Oral Communication Requirement
3 - Social Science Requirement
16

Second Semester
4 - GER 1020 Elementary German
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Fine Arts Requirement
3 - Minor Requirement
4 - Elective
16

Sophomore Year
First Semester
3 - GER 2010 Intermediate German
3 - Arts and Humanities (Literature) Requirement
3 - History Requirement
3 - Minor Requirement
4 - Elective
16

Second Semester
3 - GER 2020 Intermediate German
3 - Arts and Humanities (Literature) Requirement
3 - History Requirement
3 - Minor Requirement
3 - Elective
15

Junior Year
First Semester
2 - LANG 4990 Language Portfolio
3 - Major Requirement
3 - Methodology and Theory Requirement
3 - Minor Requirement
4 - Elective
15

Second Semester
3 - Advanced Arts and Humanities Requirement
6 - Major Requirement
4 - Methodology and Theory Requirement
3 - Elective
3 - Social Science Requirement
12
120 Total Semester Hours
3See advisor.
3See General Education Requirements. Three of these credit hours must also satisfy the Science and Technology in Society Requirement.
3A minimum of 15 credit hours of GER 3000-4000 level courses is required, of which at least two courses must be in literature. No more than one course taught in English may be taken.

Second Semester
3 - Advanced Arts and Humanities Requirement
6 - Major Requirement
4 - Methodology and Theory Requirement
3 - Minor Requirement
4 - Elective
16

Second Semester
3 - Advanced Arts and Humanities Requirement
6 - Major Requirement
3 - Methodology and Theory Requirement
3 - Elective
15

Senior Year
First Semester
2 - LANG 3030 Study Abroad Transfer
3 - Major Requirement
3 - Methodology and Theory Requirement
3 - Minor Requirement
4 - Elective
15

Second Semester
3 - Advanced Arts and Humanities Requirement
6 - Major Requirement
4 - Methodology and Theory Requirement
3 - Elective
3 - Social Science Requirement
12
120 Total Semester Hours
3Students who have had previous instruction in German may take an accelerated one-semester course that covers the material presented in the standard first-year sequence. They must then take four additional elective credit hours.
3See General Education Requirements. Three of these credit hours must also satisfy the Science and Technology in Society Requirement.
3Students who have had previous instruction in German may take an accelerated one-semester course that covers the material presented in the standard first-year sequence. They must then take four additional elective credit hours.
3See advisor.
3A minimum of 15 credit hours of GER 3000-4000 level courses is required, of which at least two courses must be in literature. No more than one course taught in English may be taken.
ITALIAN EMPHASIS AREA

Freshman Year
First Semester
3 - ENGL 1030 Accelerated Composition
4 - ITAL 1010 Elementary Italian
3 - Mathematics Requirement1
3 - Oral Communication Requirement1
3 - Social Science Requirement1
16

Second Semester
4 - ITAL 1020 Elementary Italian
3 - Mathematics or Natural Science Requirement1
4 - Natural Science Requirement1
3 - Social Science Requirement1
2 - Elective
16

Sophomore Year
First Semester
3 - ITAL 2010 Intermediate Italian
3 - Arts and Humanities (Non-Lit.) Requirement2
3 - Fine Arts Requirement2
3 - Minor Requirement
4 - Elective
16

Second Semester
3 - ITAL 2020 Intermediate Italian
3 - Arts and Humanities (Literature) Requirement1
3 - History Requirement2
3 - Minor Requirement
3 - Elective
15

Junior Year
First Semester
3 - LANG 3030 Study Abroad Transfer2
3 - Advanced Language Requirement1
3 - Major Requirement1
3 - Minor Requirement
3 - Elective
15

Second Semester
3 - Advanced Arts and Humanities Requirement2
3 - Major Requirement1
3 - Methodology and Theory Requirement2
3 - Minor Requirement
3 - Elective
15

Senior Year
First Semester
2 - LANG 4990 Language Portfolio
3 - Major Requirement1
3 - Methodology and Theory Requirement2
3 - Minor Requirement
4 - Elective
15

Second Semester
3 - Advanced Arts and Humanities Requirement2
6 - Major Requirement1
3 - Methodology and Theory Requirement2
3 - Minor Requirement
4 - Elective
12

120 Total Semester Hours

JAPANESE EMPHASIS AREA

Freshman Year
First Semester
3 - ENGL 1030 Accelerated Composition
4 - JAPN 1010 Elementary Japanese
3 - Mathematics Requirement1
3 - Oral Communication Requirement1
3 - Social Science Requirement1
16

Second Semester
4 - JAPN 1020 Elementary Japanese
3 - Mathematics or Natural Science Requirement1
4 - Natural Science Requirement1
3 - Social Science Requirement1
2 - Elective
16

Sophomore Year
First Semester
3 - JAPN 2010 Intermediate Japanese
3 - Arts and Humanities (Non-Lit.) Requirement1
3 - Social Science Requirement1
3 - Elective
4 - Elective
16

Second Semester
3 - JAPN 2020 Intermediate Japanese
3 - Arts and Humanities (Literature) Requirement2
3 - History Requirement2
3 - Minor Requirement
3 - Elective
15

Junior Year
First Semester
3 - JAPN 3050 Intermediate Japanese
3 - Arts and Humanities (Literature) Requirement1
3 - History Requirement2
3 - Minor Requirement
3 - Elective
15

Second Semester
3 - JAPN 3030 Study Abroad Transfer2
3 - Major Requirement1
3 - Methodology and Theory Requirement2
3 - Minor Requirement
3 - Elective
15

Senior Year
First Semester
2 - LANG 4990 Language Portfolio
3 - Major Requirement1
3 - Methodology and Theory Requirement2
3 - Minor Requirement
4 - Elective
15

Second Semester
3 - Advanced Arts and Humanities Requirement2
6 - Major Requirement1
3 - Methodology and Theory Requirement2
3 - Minor Requirement
4 - Elective
12

120 Total Semester Hours

SPANISH EMPHASIS AREA

Freshman Year
First Semester
3 - ENGL 1030 Accelerated Composition
4 - SPAN 1010 Elementary Spanish1
3 - Mathematics Requirement2
3 - Oral Communication Requirement1
3 - Social Science Requirement1
16

Second Semester
4 - SPAN 1020 Elementary Spanish1
3 - Mathematics or Natural Science Requirement2
4 - Natural Science Requirement2
3 - Social Science Requirement2
3 - Elective
16

Sophomore Year
First Semester
3 - SPAN 2010 Elementary Spanish1
3 - Mathematics Requirement1
3 - Fine Arts Requirement2
3 - Arts and Humanities (Non-Lit.) Requirement2
3 - Elective
16

Second Semester
3 - SPAN 2020 Intermediate Spanish
3 - Arts and Humanities (Non-Lit.) Requirement2
3 - History Requirement1
3 - Minor Requirement
3 - Elective
16

Junior Year
First Semester
3 - SPAN 3010 Intermediate Spanish
3 - Arts and Humanities (Non-Lit.) Requirement1
3 - Fine Arts Requirement2
3 - Social Science Requirement1
3 - Elective
15

Second Semester
3 - SPAN 3020 Intermediate Spanish
3 - Arts and Humanities (Literature) Requirement2
3 - History Requirement2
3 - Minor Requirement
3 - Elective
15

Senior Year
First Semester
3 - SPAN 4020 Intermediate Spanish
3 - Arts and Humanities (Literature) Requirement1
3 - History Requirement2
3 - Minor Requirement
3 - Elective
15

Second Semester
3 - Advanced Arts and Humanities Requirement2
3 - Major Requirement1
3 - Methodology and Theory Requirement2
3 - Minor Requirement
4 - Elective
12

120 Total Semester Hours

1See General Education Requirements. Three of these credit hours must also satisfy the Science and Technology in Society Requirement.
2See advisor.
3Select from 3000-4000-level courses in Japanese. At least one course must be in literature. No more than two courses taught in English may be taken.
PAN AFRICAN STUDIES

Bachelor of Arts

The Bachelor of Arts in Pan African Studies combines the interdisciplinary study of the African Diaspora, with an emphasis on the contributions African descendents have made to contemporary Western society. Majors learn to ask critical questions about the social, economic, political, and familial contributions Africans have made to Western society and to identify the connections between Africans in diverse cultures. An interdisciplinary curriculum that combines coursework in African and African American studies is supplemented by numerous practical work experiences and opportunities.

The major provides a strong foundation for students interested in advanced degrees in the humanities or social sciences and for students pursuing careers in law, business, government, non-profit organizations, social work, and work related to improving the lives of economically and socially disadvantaged people locally, nationally, and internationally. Students develop strong oral and written communication skills, gain exposure to different cultures, and learn the skills they need to navigate ethnically diverse environments. The program is designed to work well as a double major for students in the humanities, social sciences, education, engineering and business fields.

The program of study includes the courses stipulated in the curriculum below. The major consists of 33 credits. All students take an 18 credit core of required courses (Group I) that consists of an introductory class, Introduction to Pan African Studies (PAS 3010), and the Atlantic World (PAS 1010), African American History to 1877 (HIST 3110), African American History 1877–Present (HIST 3120); a theories and methods course (students choose from PAS 4000, 4100, or 4710), and a capstone senior seminar (PAS 4980/6980). In addition to this core, students take six credit hours from courses that focus entirely on race and ethnicity (Group II courses); six credit hours from courses that involve a substantial focus on racial issues (Group III courses); and three credit hours in approved race or ethnicity courses from the humanities or social sciences (Group IV).

Group I — PAS 1010; PAS 3010; HIST 3110; HIST 3120; PAS 4000, 4100 or 4710; and a capstone senior seminar (PAS 4980/6980)

Group II — courses focus entirely on cultural and racial issues. Select six credits from GEOG 3300, HIST 3370, 4380

Group III — courses have a substantial focus on racial issues. Select six credits from ENGL 4820, 4830, POSC 3810, SOC 4600

Group IV — Select three credits from any 3000-4000-level course in the humanities or the social sciences approved by the Director of the Pan African Studies Program.

Courses must be scheduled in consultation with the appropriate advisors. Pan African Studies advisors provide other affected advisors with a list of approved courses prior to registration.

Freshman Year

First Semester
1. ENGL 1010 Composition
2. Modern Language Requirement
3. Natural Science Requirement
4. Social Science Requirement
5. Elective
15

Second Semester
1. HIST 3120 African American History from 1877–Present
2. Arts and Humanities (Non-Lit.) Requirement
3. Modern Language Requirement
4. Mathematics and Natural Science Requirement
5. Oral Communication Requirement
16

Sophomore Year

First Semester
1. HIST 1720 African History to 1875
2. Arts and Humanities (Literature) Requirement
3. Modern Language Requirement
4. Social Science Requirement
15

Second Semester
1. HIST 3380 African History to 1875 or
2. HIST 3390 Modern Africa, 1875 to the Present
3. Major Requirement (Group II)
4. Minor Requirement
5. Elective
15

Junior Year

First Semester
1. THEA 3170 African American Theatre I
2. Major Requirement (Group III)
3. Major Requirement (Group IV)
4. Minor Requirement
5. Elective
15

Second Semester
1. HIST 3380 African History to 1875 or
2. HIST 3390 Modern Africa, 1875 to the Present
3. Major Requirement (Group II)
4. Minor Requirement
5. Elective
15

Senior Year

First Semester
1. HIST 3380 African History to 1875 or
2. HIST 3390 Modern Africa, 1875 to the Present
3. Major Requirement (Group III)
4. Minor Requirement
5. Elective
15

Second Semester
1. HIST 4980 Seminar on Pan African Studies
2. Minor Requirement
3. Elective
15

120 Total Semester Hours

1. Students who have previous instruction in Spanish may take an accelerated one-semester course that covers the material presented in the standard first-year sequence. They must then take four additional elective credit hours.
2. See General Education Requirements. Three of these credit hours must also satisfy the Science and Technology in Society Requirement.
3. See advisor.
4. Select from 3000- or 4000-level courses in Spanish.
5. Select from 4000-level courses in Spanish.
6. Students must complete through 2020 in a modern language.

PHILOSOPHY

Bachelor of Arts

The required course of study in Philosophy consists of the basic curriculum and either the standard Philosophy major or the Philosophy major with a Law, Liberty and Justice Emphasis Area. Philosophy majors must meet the requirements of the School of Humanities plus complete HIST 1720 and 1730 and 12 hours of 3000–4000-level coursework in one of the following areas: humanities (other than philosophy), math, science, or social science. Some courses may meet more than one requirement. All Philosophy majors must take PHIL 3990 in the junior year. Preparation of the portfolio should begin as soon as the major is declared. Specific requirements include the following:

Standard Philosophy Major—PHIL 3150, 3160, 4010 or 4020, and 24 additional credits in PHIL selected with the advice and consent of the advisor.

Law, Liberty and Justice Emphasis Area—PHIL 1020, 3150, 3160, 3040 or 3200 or 3210, 3430, 4010 or 4020, HIST 3280, 3290, and nine additional credits in philosophy selected with the advice and consent of the pre-law advisor. Three of these credits may be at the 1000 level. Students with this emphasis area are strongly advised to include POSC 4370 and/or 4380 as an elective, minor, or advanced area requirement.

Pre-law and Pre-medicine students majoring in Philosophy should consult the departmental advisor for help in tailoring the program to their needs.
## Freshman Year

### First Semester
- ENGL 1030 Accelerated Composition
- HIST 1720 The West and the World I
- Modern Language Requirement
- Mathematics Requirement
- Natural Science Requirement

### Second Semester
- HIST 1730 The West and the World II
- Modern Language Requirement
- Mathematics or Natural Science Requirement
- Oral Communication Requirement
- Social Science Requirement

## Sophomore Year

### First Semester
- Cross-Cultural Awareness Requirement
- Science and Tech. in Society Requirement
- Major Requirement
- Minor Requirement
- Elective

### Second Semester
- Arts and Humanities (Literature) Requirement
- Major Requirement
- Minor Requirement
- Elective

## Junior Year

### First Semester
- Advanced Area Requirement
- Major Requirement
- Minor Requirement

### Second Semester
- PHIL 3990 Philosophy Portfolio
- Major Requirement
- Minor Requirement
- Elective

## Senior Year

### First Semester
- Advanced Area Requirement
- Major Requirement
- Minor Requirement

### Second Semester
- Major Requirement
- Elective

### Total Semester Hours: 120

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### PRODUCTION STUDIES IN PERFORMING ARTS

#### Bachelor of Arts

The Production Studies in Performing Arts degree is a nationally distinctive Bachelor of Arts degree that prepares students for careers in many aspects of the arts, including but not limited to performance, design, arts administration, and arts technologies. The curriculum offers specialized study in music, theatre, and audio technology. In addition to discipline-specific concentrations, all performing arts students take classes in performance, production, history, theory, and arts technology. The Brooks Center for the Performing Arts is a living performing arts laboratory where visiting artists and industry professionals provide additional experiential educational opportunities for Clemson students. Students may choose from more than 70 minors and select elective courses to tailor their degrees to their individual interests.

The degree is rooted in the liberal arts tradition with specific training in the performing arts. It provides the background for a number of career options or advanced studies such as graduate school, professional internships, and specialized postgraduate training.

The curriculum features a senior capstone project in which students spend a semester of their final year working as a production team—writing, composing, designing, marketing, and performing a final project with a strong service component.

To be considered for admission to this program, students must undergo an interview/audition with the Department of Performing Arts. Please note that students will not be eligible for admission to Clemson University in Production Studies in Performing Arts until this interview/audition is completed. Contact the department for specific requirements.

As a requirement for graduation, all Music Concentration students will be required to demonstrate piano competence equivalent to the 1020 level, and all Audio Technology students will be required to demonstrate piano competence equivalent to the 1010 level.

### AUDIO TECHNOLOGY CONCENTRATION

#### Freshman Year

### First Semester
- AUD 1850 Introduction to Audio Technology
- MATH 1020 Business Calculus
- MUSC 1010 Beginning Class Piano
- PA 1010 Introduction to Performing Arts
- PA 1030 Portfolio I
- PHYS 2070 General Physics I
- PHYS 2090 General Physics I Laboratory
- PHYS 2120 Physics with Calculus I
- PHYS 2140 Physics Laboratory I

### Second Semester
- AUD 2850 Acoustics of Music
- ENGL 1030 Accelerated Composition
- PHYS 2080 General Physics II and
- PHYS 2100 General Physics II Laboratory
- PHYS 2210 Physics with Calculus II
- PHYS 2230 Physics Laboratory II
- Modern Language Requirement
- Elective

#### Sophomore Year

### First Semester
- AUD 2800 Sound Reinforcement
- AUD 3800 Audio Engineering I
- MUSC 1420 Music Theory I
- MUSC 1430 Aural Skills
- PA 2010 Career Planning and Professional Development
- Modern Language Requirement

### Second Semester
- AUD 3850 Adv. Live Sound Reinforcement or
- AUD 3860 Electr. Comp. and Sound Design
- MUSC 2100 Music Appreciation: Music in the Western World
- PA 2790 Performing Arts Practicum I
- Social Science Requirement
- Elective

#### Junior Year

### First Semester
- AUD 2790 Audio Practicum
- PA 3010 Principles of Arts Administration
- Minor Requirement
- Music History Requirement
- Social Science Requirement

### Second Semester
- AUD 4800 Audio Engineering II
- COMM 2500 Public Speaking
- MUSC 3180 History of Audio Technology
- Arts and Humanities (Literature) Requirement
- Minor Requirement

### Senior Year

### First Semester
- PA 3990 Internship
- Minor Requirement
- Music Requirement
- Elective

### Second Semester
- PA 4010 Capstone Project
- PA 4030 Capstone Project
- Minor Requirement
- Music History Requirement
- Elective

### Total Semester Hours: 121

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1. Students must complete through 2020 in any modern language except American Sign Language. See Modern Languages Requirement at Clemson University statement on page 27.
2. See General Education Requirements.
3. See major requirements in program description above.
4. See page 72 for approved minors.
5. Select from 3000–4000-level courses in the humanities (must be from an area other than philosophy), mathematical sciences, science, or the social sciences.
MATH 1060 or 1070 may be substituted.

Audio Technology students may demonstrate piano competence at the MUSC 1010 level with a competency test and not have to take the class. Students will be responsible for this hour of credit by substituting another class.

Students must complete through 2020 in a modern language. See Modern Languages Requirement at Clemson University statement on page 27.

Students minoring in music must also take MUSC 1440/1450.

See General Education Requirements.

Select from MUSC 3080, 3090, 3110, 3120, 3130, 3140, 3170, or 3180.

Students must complete through 2020 in a modern language.

Note: Audio Concentration majors must earn a C or better in all required AUD, MUSC and PHYS courses, including those satisfying the music requirement and music history requirement.

MUSIC CONCENTRATION

Freshman Year

First Semester
1. MUSC 1010 Beginning Class Piano
2. MUSC 1420 Music Theory I
3. MUSC 1430 Aural Skills I
4. MUSC 1530 Applied Music for Majors
5. PA 1010 Introduction to Performing Arts
6. PA 1030 Portfolio I
7. Modern Language Requirement
8. Large Ensemble Requirement
9. Mathematics Requirement

Second Semester
1. MUSC 1020 Intermediate Class Piano
2. MUSC 1440 Music Theory II
3. MUSC 1450 Aural Skills II
4. MUSC 1540 Applied Music for Majors
5. THEA 2100 Theatre Appreciation (Humanities Non-Lit Requirement)
6. Modern Language Requirement
7. Large Ensemble Requirement
8. Mathematics Requirement

Sophomore Year

First Semester
1. MUSC 2420 Music Theory III
2. MUSC 2430 Aural Skills III
3. MUSC 2530 Applied Music for Majors
4. PA 2010 Career Planning and Professional Dev.
5. PA 2790 Performing Arts Practicum I
6. Large Ensemble Requirement
7. Mathematics or Natural Science Requirement
8. Social Science Requirement

Second Semester
1. MUSC 2540 Applied Music for Majors
2. PA 2800 Performing Arts Practicum II
3. Arts and Humanities (Literature) Requirement
4. Large Ensemble Requirement
5. History Requirement
6. Natural Science Requirement
7. Social Science Requirement

Junior Year

First Semester
1. COMM 2500 Public Speaking
2. MUSC 3530 Applied Music for Majors
3. MUSC 4150 Music History to 1750
4. PA 3010 Principles of Arts Administration
5. Minor Requirement
6. Elective

Second Semester
1. MUSC 4180 Introduction to Music Technology
2. MUSC 4160 Music History Since 1750
3. MUSC 4300 Conducting
4. Minor Requirement
5. Elective

Senior Year

First Semester
1. PA 4010 Capstone Project
2. PA 4030 Portfolio II
3. Minor Requirement
4. History Requirement
5. Elective

Second Semester
1. Minor Requirement
2. Elective
12
121 Total Semester Hours

THEATRE CONCENTRATION

Freshman Year

First Semester
1. ENGL 1030 Accelerated Composition
2. MUSC 2100 Music Appreciation
3. PA 1010 Introduction to Performing Arts
4. PA 1030 Portfolio I
5. PA 2790 Performing Arts Practicum I
6. THEA 2780 Acting I
7. Modern Language Requirement

Second Semester
1. THEA 2790 Theatre Practicum
2. THEA 3160 Theatre History II
3. Natural Science Requirement
4. Social Science Requirement
5. Elective

Sophomore Year

First Semester
1. MUSC 2500 Public Speaking
2. PA 4010 Capstone Project
3. PA 4030 Portfolio II
4. THEA 2790 Theatre Practicum
5. Minor Requirement
6. Elective

Second Semester
1. THEA 3770 Stagecraft
2. Advanced Theatre Requirement
3. Dramatic Literature Requirement
4. Minor Requirement
5. Elective

Senior Year

First Semester
1. MUSC 3080, 3090, 3110, 3120, 3130, 3140, 3170, or 3180
2. THEA 3160 Theatre History II
3. THEA 3170 African American Theatre I
4. PA 3010 Principles of Arts Administration
5. THEA 3180 African American Theatre II
6. THEA 3190 African American Theatre III
7. THEA 3760 Stage Directing I
8. Minor Requirement
9. Social Science Requirement

Second Semester
1. THEA 3780 Stage Management
2. THEA 3790 Stage Design
3. Advanced Theatre Requirement
4. Dramatic Literature Requirement
5. Minor Requirement
6. Elective

See General Education Requirements. Three of these credit hours must also satisfy the Science and Technology in Society Requirements.

Students are expected to complete the first year of a modern language in high school or in a Clemson summer session before the first semester of the freshman year, except for Chinese or Japanese. See Modern Languages Requirement at Clemson University statement on page 27.
2016-2017 Undergraduate Announcements

RELIGIOUS STUDIES

Bachelor of Arts

The Religious Studies major is an interdisciplinary humanities program that focuses on the academic study of the world’s religious traditions and how they are related to various aspects of human existence (psychology, sociology, ethics, philosophy, language, economics, politics, science, etc.) The BA in Religious Studies provides grounding in the histories, scriptures, rituals, mythologies, ethics, and beliefs of religious communities as they have been situated in specific geopolitical contexts throughout the past three millennia. It should be emphasized that the program is not intended to indoctrinate students into one particular religion or to teach them to become religious, but is focused rather on studying how religion both historically and theoretically motivates, provides meaning for, and helps to organize human life. The program trains students to be global thinkers with a deeper understanding of the world’s cultural, political, and social differences. Historically, Religious Studies majors have gone on to pursue graduate work and employment in a number of fields, including law, medicine, ministry, non-profit and service related industries, in addition to numerous others.

In addition to completing the General Education curriculum, the Religious Studies major must meet the requirements of the School of Humanities; complete HIST 1720 and 1730; and complete six hours of 3000-4000 level coursework in Philosophy. Students are encouraged to substitute a double-major for their minor and should speak with their advisor early during their academic tenure at Clemson to ensure that both majors are completed within four years.

All majors must take REL 1020, 3000, 3990, and 4900. They may also take one course each in Judaism (REL 3010 or 3060), Christianity (REL 3020 or 3070), and Islam (REL 3030 or 3150), as well as 12 additional credits in Religious Studies at the 3000-4000 level. Students may also take ENGL 4140, HIST 3960, 4720, PHIL 3030, POSC 4070, and SOC 4320 for this last requirement. PHIL 3030 may only be used to satisfy one major requirement.

Freshman Year

First Semester
3 - ENGL 1030 Accelerated Composition
3 - HIST 1720 The West and the World I
3 - Modern Language Requirement
3 - Mathematics Requirement
4 - Natural Science Requirement
16

Second Semester
3 - HIST 1730 The West and the World II
3 - REL 1020 World Religions
3 - Modern Language Requirement
3 - Mathematics or Natural Science Requirement
3 - Oral Communication Requirement
15

Sophomore Year

First Semester
3 - Arts and Humanities (Literature) Requirement
6 - Major Requirement
3 - Science and Technology in Society Requirement
3 - Social Science Requirement
15

Second Semester
3 - REL 3000 Studying Religion
3 - Major Requirement
3 - Minor Requirement
3 - Philosophy Requirement
3 - Elective
15

Junior Year

First Semester
3 - Arts and Humanities (Non-Lit.) Requirement
6 - Major Requirement
3 - Minor Requirement
3 - Elective
15

Second Semester
3 - REL 3990 Junior Research Colloquium
3 - Cross-Cultural Awareness Requirement
3 - Major Requirement
3 - Minor Requirement
3 - Elective
15

Senior Year

First Semester
3 - REL 4900 Senior Seminar
3 - Major Requirement
3 - Minor Requirement
6 - Elective
15

Second Semester
3 - Minor Requirement
3 - Philosophy Requirement
9 - Elective
15

Visual Arts

Bachelor of Fine Arts

The Bachelor of Fine Arts degree is the recognized professional undergraduate degree in the visual arts. The program offers students a balanced curriculum of academic coursework, studio art and art history courses in preparation for careers in studio related areas of the visual arts. The department offers coursework in a number of studio disciplines, including ceramics, drawing, painting, printmaking, photography, sculpture and the new media arts.

First-year art students participate in a foundations program comprised of four studio classes. These classes expose first-year art students to 2-D, 3-D, and 4-D studio practices; utilize traditional and new media; and place special emphasis on drawing. Near the end of the freshmen year, students exhibit their work in a mandatory Foundations Review.

In the sophomore year, students take studio courses in six disciplines, which provides an overview of the studio arts and exposes students to a broad range of studio experiences. Upon completion of this core of courses, students identify one studio discipline as their emphasis area in the Bachelor of Fine Arts program.

In the junior year, students fulfill requirements in their emphasis area in preparation for the Senior Studio experience. Requirements include intermediate and advanced courses in their chosen studio discipline.

The Senior Studio experience is comprised of three courses and provides students an opportunity to focus on and refine their personal art concepts and skills, produce a cohesive body of artworks for their BFA exhibition, and develop their portfolio for graduate study or a career in studio-related art professions.

Visual Arts

Bachelor of Fine Arts

First Semester
3 - AAH 1010 Survey of Art and Arch. History I
3 - ART 1050 Foundation Drawing I
3 - ART 1510 Foundations in Visual Art I
3 - ENGL 1030 Accelerated Composition
3 - Mathematics Requirement
15

Second Semester
3 - AAH 1020 Survey of Art and Arch. History II
3 - ART 1060 Foundation Drawing II
3 - ART 1520 Foundations in Visual Art II
3 - ART 2210 Beginning New Media
4 - Natural Science Requirement
16

Sophomore Year

First Semester
3 - AAH 2050 History and Theory of Art I
9 - Art 2000 Requirement
3 - Mathematics or Natural Science Requirement
15

Second Semester
3 - AAH 2060 History and Theory of Art II
9 - Art 2000 Requirement
3 - Social Science Requirement
15

Junior Year

First Semester
3 - AAH 3050 Contemporary Art History
3 - Art 3000 Emphasis Area Requirement
3 - Art 3000/4000 Requirement
3 - Arts and Humanities (Literature) Requirement
3 - Oral Communication Requirement
15
Second Semester
3 - Art 4000 Emphasis Area Requirement
3 - Art 3000/4000 Requirement
3 - Studio Requirement
3 - Social Science Requirement
3 - Elective
15

Senior Year
First Semester
3 - ART 4710 BFA Senior Studio I
3 - ART 4730 Sr. Sem. in Professional Career Prep.
3 - Art 3000/4000 Requirement
3 - Studio Requirement
3 - Elective
15

Second Semester
4 - ART 4720 BFA Senior Studio II
1 - ART 4750 Senior Exhibition Internship
3 - Art 3000/4000 Requirement
6 - Elective
14

120 Total Semester Hours

WOMEN’S LEADERSHIP
Bachelor of Arts

The Bachelor of Arts in Women’s Leadership combines the interdisciplinary study of women’s experience and representation with an emphasis on the key principles and practice of leadership. Students learn to ask critical questions about women’s lives in social, economic, political, and familial contexts, and how connections in women’s lives across diverse cultures. This interdisciplinary curriculum combines coursework in women’s studies and leadership studies, and is supplemented by a semester-long internship that provides students with practical work experience and opportunities to test leadership skills and strategies.

The major provides a solid foundation for students interested in advanced degrees in the humanities or social sciences, and for students pursuing careers in law, business, government, nonprofit organizations, and work related to improving the lives of women locally, nationally, and internationally. Students develop strong oral and written communication skills, gain exposure to different leadership styles and paths to leadership, and learn the competitive skills they need to lead ethically in a rapidly changing global environment. The program is designed to work well as a double-major for students in the humanities, social sciences, and business fields.

The major consists of 33 credits and the program of study includes the courses stipulated in the curriculum map below. All students take a 12-credit core of required courses (Group I), which consists of an introductory women’s studies course (WS 1030 or 3010); a women and leadership course (WS 2300); a theory and methods course (WS 3490, 4230, 4360; or 4590); and a capstone senior seminar (WS 4010).

In addition to this core, students select six credit hours from courses that focus entirely on women or gender (Group II); six credit hours from courses that involve a substantial focus on women and gender issues (Group III); and six credit hours from approved leadership courses (Group IV). In addition, students complete a three-credit internship. While program faculty and staff help with internship placement, it is each student's responsibility to identify and secure an internship in line with her or his career goals.

Group I—Core Courses (12 hours)
• WS 1030 or 3010 (students may count only one of these toward the major)
• WS 2300 (required of all majors)
• One of WS 3490, 4230, 4360, or 4590 (students who take more than one of these may apply the others toward the Group II distribution requirement)
• WS 4010

Group II—Courses that focus entirely on women or gender issues (six hours)
Select from ANTH 4230 COMM 4550, ENGL 3800, ENGL 4360, FR 4990, HIST 3180, 3190, 3530, HLTTH 3100, PHIL 3490, POSC 4800, PRTM 3250, PSYC 4080, 4990, SOC 4610, SPAN 4030, THEA 3170, 3180, WS 3490, 4230, 4360, 4590, 4900, 4950. Special topics courses in various departments may qualify as Group II courses. Students should consult their advisor.

Group III—Courses with a substantial focus on women or gender issues (six hours)
Select from ANTH 4230 COMM 4550, ENGL 3800, ENGL 4360, FR 4990, HIST 3180, 3190, 3530, HLTTH 3100, PHIL 3490, POSC 4800, PRTM 3250, PSYC 4080, 4990, SOC 4610, SPAN 4030, THEA 3170, 3180, WS 3490, 4230, 4360, 4590, 4900, 4950. Special topics courses in various departments may qualify as Group III courses. Students should consult their advisor.

Group IV—Approved leadership courses (six hours)
Select from HEHD 4000, 4100, 4200, ED 1900, ELE 3010, ME 4100, NLP 3000, POSC 4580.

Freshman Year
First Semester
3 - ENGL 1030 Accelerated Composition
4 - Modern Language Requirement
4 - Natural Science Requirement
2 - Social Science Requirement
Second Semester
3 - WS 1030 Women’s Studies Internship
3 - Distribution Requirement (Group II)
3 - Minor Requirement
3 - Cross-Cultural Awareness Requirement
3 - Elective
15

Sophomore Year
First Semester
3 - Theory Requirement
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Modern Language Requirement
3 - Mathematics Requirement
3 - Social Science Requirement
15

Junior Year
First Semester
3 - WS 2300 Women and Leadership
3 - Distribution Requirement (Group II)
3 - Arts and Humanities (Literature) Requirement
3 - Modern Language Requirement
3 - Elective
15

Second Semester
3 - Leadership Requirement (Group IV)
3 - Distribution Requirement (Group II)
3 - Minor Requirement
3 - Cross-Cultural Awareness Requirement
3 - Elective
15

Senior Year
First Semester
3 - WS 3900 Women’s Studies Internship
3 - Distribution Requirement (Group II)
3 - Minor Requirement
3 - Science and Tech. in Society Requirement
3 - Elective
15

Second Semester
3 - WS 4010 Senior Seminar
3 - Minor Requirement
9 - Elective
15

120 Total Semester Hours

WORLD CINEMA
Bachelor of Arts

As an interdisciplinary program, the Bachelor of Arts in World Cinema allows students to study cinema, along with related media, within a broad approach, incorporating fields such as art, history, philosophy, theatre, languages, communications, literary and film studies. The major prepares students to analyze cinema as a venue of global exchange where art, communication and information move across borders. The curriculum offers students access to audiovisual literacy with an international perspective. Students engage in a summer study-abroad program or an internship to gain exposure to diverse cinematic traditions and specific film-related practices.

In the World Cinema major, students acquire skills in visual analysis, project planning and presentation, and creative video/digital practice, and gain awareness of the cultural, economic and historical forces that impact the course of cinematic production, distribution and exhibition. The major is designed to initiate theoretical and practical training for students who want to pursue advanced degrees in arts and
humanities or enter careers in teaching, journalism, filmmaking, digital media, audio-visual archives and libraries, tourism, advertising, film criticism, industrial video documentation, and community outreach.

The program of study consists of 39 credits. All students take a 15-credit core of required courses that consists of an introduction to world cinema (LANG 2540); an upper-division introductory course to film studies (ENGL 3570); a film theory and criticism course (ENGL 4510); a capstone seminar (WCIN 4960); and three credit hours of an internship or study abroad experience (WCIN 4990 or WCIN 4040). In addition, to students take nine credit hours of the Critical Approaches to Film and Media Requirement (Group I), nine credit hours of the Film in International Context Requirement (Group II); and six credit hours of the Creative Approaches Requirement (Group III).

**Group I – Critical Approaches to Film and Media Requirement** (nine hours): COMM 4000, COMM 4020, COMM 4040, ENGL 4500, ENGL 4520, ENGL 4530, ENGL 4420, ENGL 4430, HIST 4200, LANG 4620, PHIL 4750, THEA 3150. Special topics courses in various departments may be substituted for Group I courses. Students should check the program website for a complete list of Group I courses in a given semester.

**Group II – Film in International Context Requirement** (nine hours): ENGL (LANG) 4540, FR 4120, GER 4550, ITAL 4000, ITAL 4450, LANG 4600, SPAN 4070, WCIN 4550, WCIN 4570, WCIN 4580, WCIN 4620. Special topics courses in various departments may be substituted for Group II courses. Students should check the program website for a complete list of Group II courses in a given semester.

**Group III – Creative Approaches Requirement** (six hours): ART 1030, ART 2130, DPA 3070, DPA 4000, DPA 4020, ENGL 3480, ENGL 4480, THEA 2100, THEA 2790, WCIN 4760. Special topics courses in various departments may be substituted for Group III courses. Students should check the program website for a complete list of Group III courses in a given semester.

**Freshman Year**

**First Semester**
3 - ENGL 1030 Accelerated Composition
3 - LANG 2540 Introduction to World Cinemas
3 - Cross-Cultural Awareness Requirement
4 - Modern Language Requirement
3 - Mathematics Requirement
16

**Second Semester**
3 - Arts and Humanities (Literature) Requirement
4 - Modern Language Requirement
4 - Natural Science with Lab Requirement
3 - Social Science Requirement
14

**Sophomore Year**

**First Semester**
3 - COMM 1500 Intro. to Human Comm. or
3 - COMM 2500 Public Speaking or
3 - HON 2230 Studies in Communications
3 - ENGL 3570 Film
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Modern Language Requirement
3 - Mathematics or Natural Science Requirement
15

**Second Semester**
3 - ENGL (COMM) 4510 Film Theory and Criticism
3 - Modern Language Requirement
3 - Major Requirement
3 - Minor Requirement
3 - Science and Tech. in Society Requirement
15

**Junior Year**

**First Semester**
3 - WCIN 4990 World Cinema Practicum or
3 - WCIN 4040 Study Abroad Transfer
6 - Major Requirement
3 - Minor Requirement
3 - Elective
15

**Second Semester**
6 - Major Requirement
3 - Minor Requirement
3 - Social Science Requirement
3 - Elective
15

**Senior Year**

**First Semester**
6 - Major Requirement
3 - Minor Requirement
6 - Elective
15

**Second Semester**
3 - WCIN 4960 Capstone Seminar
3 - Major Requirement
3 - Minor Requirement
6 - Elective
15

120 Total Semester Hours

1Select from ANTH 2010, GEOG 1030, HIST 1730, 1930.
2Students must complete through 2020 in a modern language. See Modern Languages Requirement at Clemson University statement on page 27.
3See General Education Requirements.
4Select from ENGL 2020, 2120, 2130, 2140, 2150.
5Any General Education Arts and Humanities (Non-Lit.) course, except ENGL 3570, ENGL (LANG) 4540, THEA 2100, 2790.
6See course lists in Groups I, II and III.
MINORS
Following are minors acceptable for students in the College of Architecture, Arts and Humanities. Students cannot major and minor in the same field or acquire a minor that is not allowed by the degree program.

Accounting
Adult/Extension Education
Aerospace Studies
Agricultural Business Management
Agricultural Mechanization and Business
American Sign Language Studies
Animal and Veterinary Sciences
Anthropology
Architecture
Art
Athletic Leadership
Biochemistry
Biological Sciences
Brand Communications
British and Irish Studies
Business Administration
Chemistry
Chinese Studies
Cluster
Communication Studies
Computer Science
Creative Writing
Crop and Soil Environmental Science
Digital Production Arts
East Asian Studies
Economics
English
Entomology
Entrepreneurship
Environmental Science and Policy
Equine Industry
Film Studies
Financial Management
Food Science
Forest Products
Forest Resource Management
French Studies
Gender, Sexuality and Women’s Studies
Genetics
Geography
Geology
German Studies
Global Politics
Great Works
History
Horticulture
Human Resource Management
Italian Studies
Japanese Studies
Legal Studies
Management
Management Information Systems
Mathematical Sciences
Microbiology
Middle Eastern Studies
Military Leadership
Music
Natural Resource Economics
Nonprofit Leadership
Nuclear Engineering and Radiological Sciences
Packaging Science
Pan African Studies
Park and Protected Area Management
Philosophy
Physics
Plant Pathology
Political Science
Precision Agriculture
Psychology
Public Policy
Race, Ethnicity and Migration
Recreational Therapy
Religious Studies--not open to Religious Studies majors
Russian Area Studies
Science and Technology in Society
Screenwriting
Sociology
Spanish Studies
Spanish-American Area Studies
Sustainability
Theatre
Travel and Tourism
Turfgrass
Urban Forestry
Wildlife and Fisheries Biology
Women’s Leadership
Writing
Youth Development Studies

See pages 38-41 for details.
COLLEGE OF BEHAVIORAL, SOCIAL AND HEALTH SCIENCES

Students in the College of Behavioral, Social and Health Sciences seek to understand and organize human behavior in a business, economic, and social context. The College promotes scholarship with broad awareness of the individual, cultural, political, and global levels and develops distinctive leaders in industry, higher education, professional and public service. The College includes the Departments of Communication, Health Science, Nursing, Parks, Recreation and Tourism Management, Political Science, Psychology, Sociology and Anthropology, and Youth Development Studies.

All Anthropology, Justice Studies, Political Science, Psychology, and Sociology majors, and other non-majors taking 3000- and 4000-level courses offered by those departments, are required to pay a major and course fee that funds infrastructure and program enhancements associated with these majors. The fees are summarized at http://www.clemson.edu/finance/student/fees/index.html.

Modern Language Requirement
A number of Clemson University degree programs require the completion of a modern language through a specific course level. Modern languages taught at Clemson University or accepted for transfer credit include American Sign Language, Arabic, Chinese, French, German, Italian, Japanese, Latin, Portuguese, Russian and Spanish. While many degree programs accept any of these modern languages for the requirement, certain programs may have specific modern language requirements. Students should consult their program’s curriculum map for details.

BEHAVIORAL AND SOCIAL SCIENCE PROGRAMS
Bachelor of Arts degrees are offered in Anthropology, Justice Studies, Political Science, Psychology, and Sociology. Bachelor of Science degrees are also offered in Anthropology, Justice Studies, Political Science, Psychology, and Sociology. These programs are designed to meet the needs of students seeking a broad general education as preparation for citizenship, professional and public service, research, and teaching. These curricula also provide an excellent background for the study of law, journalism, and medicine.

To achieve depth as well as breadth in the educational experience, students select a major consisting of courses above the sophomore level. Students also choose a minor consisting of additional credit hours. Students should contact their advisor for additional information and approval before pursuing a minor. See page 88 for a list of acceptable minors.

Students in Bachelor of Arts programs who plan to teach in public schools may elect education courses required for certification by the South Carolina State Department of Education. Such courses are to be approved by their own department advisors.

ANTHROPOLOGY

Bachelor of Arts
The Anthropology BA major prepares students for a variety of professional careers related to human resources, international business, public relations, museum and park service interpretation, health services, and other people-oriented positions in the public and private sector. In addition, the degree provides excellent preparation for graduate training in anthropology, law, health care, and business. The degree requires a total of 124-125 semester hours, including 39 credit hours in anthropology as identified below. In addition, students take a modern language and nine additional hours of social science or humanities courses related to Anthropology (from a department-approved list). These additional courses provide students with a greater depth and broader diversity of interdisciplinary knowledge useful for the direct application of an anthropological perspective to potential career paths. Courses used to fulfill General Education Requirements and Departmental Social Science and Humanities courses may be used to fulfill minor requirements.

Students wishing to change majors into the Anthropology BA program must have a 2.0 or higher Clemson/Bridge cumulative grade point average.

Bachelor of Arts

Freshman Year
First Semester
3 - ANTH 2010 Introduction to Anthropology
3 - MATH 1020 Business Calculus
6

Second Semester
3 - MATH 1020 Business Calculus I or
3 - ENGL 1030 Accelerated Composition
3 - STAT 2300 Statistical Methods I
3 - Modern Language Requirement1
4 - Natural Science Requirement2
3 - Elective
16-17

Sophomore Year
First Semester
3 - Science and Technology in Society Requirement2
3 - Arts and Humanities (Literature) Requirement2
6-7 - Subfield Requirement1
15-16

Second Semester
2 - ANTH 2050 Professional Development
3 - Departmental Humanities/Social Science Requirement4
6 - Minor Requirement4
3 - Subfield Requirement1
34 - Subfield Requirement1
14-15

Junior Year
First Semester
6 - Anthropology Requirement
3 - Departmental Humanities/Social Science Requirement4
6 - Elective
15

Second Semester
6 - ANTH 4040 Anthropological Theories and/or Anthropology Requirement
3 - Departmental Humanities/Social Science Requirement4
6 - Minor Requirement1
15

Summer Semester
3 - Practicing Anthropology Requirement
3

Senior Year
First Semester
3 - Anthropology Requirement
3 - Minor Requirement1
6 - Elective
15

124-125 Total Semester Hours

ANTHROPOLOGY

Bachelor of Science
The Anthropology B.S. major prepares students for a variety of professional careers related to museum and park service interpretation, forensic science, health services, and other scientifically-oriented positions in the public and private sector. In addition, the Bachelor’s degree provides excellent preparation for graduate training in anthropology, medicine, and human factors engineering. The degree requires a total of 124-125 semester hours, including 39 credit hours in anthropology as identified below. In addition, students take 15 hours of math and/or science courses (from a department-approved list). These additional courses provide students with a greater depth and broader diversity of interdisciplinary knowledge useful for the direct application of anthropological perspective to potential career paths. Courses used to fulfill General Education Requirements and Departmental Science and Math courses may be used to fulfill minor requirements.
Students wishing to change majors into the Anthropology BS program must have a 2.0 or higher Clemson/Bridge cumulative grade-point average.

**Bachelor of Science**

**Freshman Year**

**First Semester**
3 - ANTH 2010 Introduction to Anthropology
3 - MATH 1010 Essential Mathematics for the Informed Society or
3 - MATH 1020 Business Calculus I or
4 - MATH 1060 Calculus of One Variable I
4 - Natural Science Requirement¹
3 - Social Science Requirement²
3 - Elective
16-17

**Second Semester**
3 - ANTH 4040 Anthropological Theories and/or
6 - Anthropology Requirement
3 - Minor Requirement¹
6 - Elective
15
124-125 Total Semester Hours

¹See General Education Requirements. (Note: Social Science Requirement must be in an area other than anthropology.)
²Departmental Science and Math courses must be from a department-approved list.
³See page 88 for approved minors.
⁴Practicing Anthropology courses could include ANTH 4950, 4980, or an approved Field School, Internship, or Study Abroad experience.

**Second Semester**
3 - COMM 1500 Intro. to Human Comm. or
3 - COMM 2500 Public Speaking
3 - ENGL 1030 Accelerated Composition
3 - STAT 2300 Statistical Methods I
3 - Departmental Math. or Science Requirement²
3 - Elective
15

**Sophomore Year**

**First Semester**
3 - Arts and Humanities (Literature) Requirement¹
3 - Departmental Math. or Science Requirement²
3 - Minor Requirement¹
6 - Subfield Requirement⁴
15-16

**Second Semester**
2 - ANTH 2050 Professional Development
3 - Arts and Humanities (Non-Lit.) Requirement¹
3 - Departmental Math. or Science Requirement²
3 - Science and Technology in Society Requirement¹
34 - Subfield Requirement⁴
14-15

**Junior Year**

**First Semester**
6 - Anthropology Requirement
3 - Departmental Math. or Science Requirement²
3 - Elective
15

**Second Semester**
6 - ANTH 4040 Anthropological Theories and/or
6 - Anthropology Requirement
3 - Minor Requirement¹
6 - Elective
15

**Senior Year**

**First Semester**
3 - Anthropology Requirement
3 - Minor Requirement¹
3 - Elective
15

**Second Semester**
3 - COMM 2500 Public Speaking
3 - Arts and Humanities (Non-Lit.) Requirement¹
3 - Mathematics or Natural Science Requirement³
4 - Modern Language Requirement²
3 - Elective
16

**Sophomore Year**

**First Semester**
4 - COMM 2010 Intro. to Communication Studies
3 - Arts and Humanities (Literature) Requirement¹
3 - Modern Language Requirement²
4 - Natural Science Requirement³
3 - Social Science Requirement³
17

**Second Semester**
3 - COMM 3010 Communication Theory or
3 - COMM 3020 Mass Comm. Theory or
3 - COMM 3150 Critical-Cultural Communication Theory
3 - Emphasis Area Requirement⁴
3 - Modern Language Requirement¹
6 - Elective
15

**Junior Year**

**First Semester**
3 - Communication Requirement³
3 - Emphasis Area Requirement⁴
3 - Minor Requirement
6 - Elective
17

**Second Semester**
3 - COMM 3060 Critical-Cultural Research Methods in Communication Studies or
3 - COMM 3100 Quantitative Research Methods in Communication Studies or
3 - COMM 3110 Qualitative Research Methods in Communication Studies
3 - Communication Requirement³
6 - Minor Requirement
3 - Elective
15

**Senior Year**

**First Semester**
6 - Emphasis Area Requirement⁴
3 - Minor Requirement
6 - Elective
15

**Second Semester**
3 - COMM 4950 Senior Capstone Seminar
1 - COMM 4980 Communication Academic and Professional Development II
3 - Minor Requirement
6 - Elective
13

120 Total Semester Hours

¹STAT 2220 or 2300
²Students must complete through 2020 in a modern language.
³See Modern Languages Requirement at Clemson University statement on page 27.
⁴See General Education Requirements. Six of these credit hours must also satisfy the Cross-Cultural Awareness Requirement and, if STAT 2220 is not selected, the Science and Technology in Society Requirement.
⁵See advisor. Emphasis area consists of 12 credit hours of COMM coursework at the 3000-4000 level.
⁶Select from 3000-4000 level COMM courses.

**COMMUNICATION**

**Bachelor of Arts**

The Bachelor of Arts in Communication provides a thoroughly integrated yet individual degree program that prepares students for careers in business, government, and public sectors. In addition, the program provides a foundation for graduates who wish to pursue advanced degrees in the humanities, social sciences, business, and law. Through their coursework and extracurricular experiences, Communication majors develop a set of skills in oral, written, and visual communication that enables them to research, design, present, and evaluate messages across diverse contexts and from a variety of platforms, including social media and digital communication technology.

Students may change majors into the Communication program based on approval of a committee of faculty from the Department of Communication. The deadline for applying for a change of major during the fall semester is September 15, with decisions made by October 1. For spring semester changes of major, the deadline is February 15, with decisions made by March 1. The Department of Communication accepts a maximum of 30 changes of major per year. To qualify for acceptance, applicants should have completed a grade-point average of 2.5 or higher. An application form and a writing sample are also required. Detailed information is available from the Communication Department, 408 Strode Tower or the department website: www.clemson.edu/caah/communication.

**Freshman Year**

**First Semester**
1 - COMM 1010 Communication Academic and Professional Development I
3 - ENGL 1030 Accelerated Composition
3 - Mathematics Requirement¹
4 - Modern Language Requirement²
3 - Social Science Requirement¹
14

**Second Semester**
3 - COMM 2010 Intro. to Communication Studies
3 - Arts and Humanities (Non-Lit.) Requirement¹
3 - Mathematics or Natural Science Requirement³
4 - Modern Language Requirement²
3 - Elective
16

¹See Modern Languages Requirement at Clemson University statement on page 27.
²See General Education Requirements. Six of these credit hours must also satisfy the Cross-Cultural Awareness Requirement and, if STAT 2220 is not selected, the Science and Technology in Society Requirement.
³See advisor. Emphasis area consists of 12 credit hours of COMM coursework at the 3000-4000 level.
⁴Select from 3000-4000 level COMM courses.
HEALTH SCIENCE

Bachelor of Science

The Department of Public Health Sciences prepares students for careers in the health field, one of the largest industries in the United States. It includes hospitals and other medical service providers, public health organizations, health insurance companies, health/medical related sales, health fitness organizations, and community and nonprofit health agencies.

Plans of study can be arranged in health promotion and education, health services administration, leadership for cardiovascular technology, and preprofessional health studies. Students in the Health Promotion and Education Concentration have the skills to assess, plan, communicate, implement, manage, and evaluate public health promotion programs. Students in the Preprofessional Health Studies Concentration obtain the coursework and experience necessary for acceptance into various graduate programs in clinical health professions. The Cardiovascular Imaging Leadership Concentration provides a core of health science classes, training in diagnostic cardiovascular sonography, and a leadership certificate. The Health Services Administration Concentration allows students to develop skills and competencies in health administration/management for entry-level careers or graduate study in this area. A minor in Business Administration is integral to the concentration. The department, in cooperation with the College of Architecture, Arts and Humanities, also offers a joint Bachelor of Science degree in Language and International Health (see pages 60-61).

Entrance Requirements

To facilitate admission of students who can achieve at an appropriate level in the program, admission is selective. Applicants are reviewed by the Office of Admissions and consideration is given to performance in secondary school and on the College Board Examination (SAT). Those seeking admission are advised to apply to the University early in the fall of their senior year of high school.

Transfer admission is competitive. Students are encouraged to apply early to the Office of Admissions. The University admits ten new transfer students to the Health Science major during the fall semester only. Potential students should have a minimum grade point average of 3.0 and completion of 30 semester hours of transferable courses. Placement in the Health Science curriculum is determined after credit evaluation is complete.

Students may apply to change majors into Health Science classes, training in diagnostic cardiovascular sonography, and a leadership certificate. The Health Services Administration Concentration allows students to develop skills and competencies in health administration/management for entry-level careers or graduate study in this area. A minor in Business Administration is integral to the concentration. The department, in cooperation with the College of Architecture, Arts and Humanities, also offers a joint Bachelor of Science degree in Language and International Health (see pages 60-61).

HEALTH SCIENCE

LEADERSHIP CONCENTRATION

Freshman Year
First Semester
3 - BIOL 1030 General Biology I and
1 - BIOL 1050 General Biology Lab. I or
5 - BIOL 1110 Principles of Biology I
4 - CH 1010 General Chemistry
3 - HLTH 2980 Human Health and Disease
3 - Social Science Requirement1
14-15
Second Semester
3 - BIOL 1040 General Biology II and
1 - BIOL 1060 General Biology Lab. II or
5 - BIOL 1110 Principles of Biology II
4 - CH 1020 General Chemistry
3 - ENGL 1030 Accelerated Composition
3 - HLTH 2030 Overview of Health Care Systems
3 - Mathematics Requirement1
17-19

Sophomore Year
First Semester
4 - BIOL 2220 Human Anatomy and Phys. I
3 - CVT 2260 Intro. to Cardiovascular Sonography
3 - HLTH 2980 Human Health and Disease
3 - PHYS 2070 General Physics I
1 - PHYS 2090 General Physics Laboratory
3 - Statistics Requirement1
17
Second Semester
4 - BIOL 2230 Human Anatomy and Physiology II
3 - COMM 1500 Introduction to Health Comm. or
3 - COMM 2500 Public Speaking
3 - CVT 2250 Ultrasound Physics
1 - HEHD 4000 Introduction to Leadership Theories and Concepts
3 - HLTH 2400 Determinants of Health Behavior
16

Junior Year
First Semester
4 - CVT 3250 Echocardiography Principles
4 - CVT 3350 Vascular Sonography Principles
3 - HLTH 3800 Epidemiology
3 - Arts and Humanities (Literature) Requirement1
14
Second Semester
4 - CVT 3260 Echocardiography Methods
4 - CVT 3360 Vascular Sonography Methods
4 - HEHD 4100 Leadership Behavior and Civil Engagement
3 - HLTH 4900 Research and Evaluation Strategies for Public Health
3 - Social Science Requirement1
17
Summer
3 - CVT 4240 Introduction to Field Experience

Senior Year
First Semester
6 - CVT 4250 CVS Field Experience II
3 - HLTH 4180 CVT Professional Development
3 - Arts and Humanities (Non-Lit.) Requirement1
12
Second Semester
6 - CVT 4260 CVS Field Experience III
3 - HEHD 4200 Leadership Appl. and Experience
3 - Health Requirement4
12
122-125 Total Semester Hours

*See General Education Requirements. Six of these credits must also satisfy the Cross-Cultural Awareness and Science and Technology in Society Requirements.
1MATH 1020 or 1060
2STAT 2300 or 1090
3Any HLTH course not otherwise required.

Note: A minimum grade-point average of 2.0 is required for registration in each HLTH course.

HEALTH PROMOTION AND BEHAVIOR CONCENTRATION

Freshman Year
First Semester
3 - BIOL 1030 General Biology I and
1 - BIOL 1050 General Biology Lab. I or
5 - BIOL 1110 Principles of Biology I
3 - HLTH 2980 Human Health and Disease
3 - Social Science Requirement1
14-15
Second Semester
3 - ENGL 1030 Accelerated Composition
3 - HLTH 2030 Overview of Health Care Systems
3 - Mathematics Requirement1
4 - Elective
16-17

Sophomore Year
First Semester
4 - CH 1010 General Chemistry or
4 - CH 1050 General Chemistry in Context I
3 - HLTH 2980 Human Health and Disease
3 - NUTR 2030 Introduction to Principles of Human Nutrition
3 - Guided Requirement1
3 - Statistics Requirement1
16

Second Semester
4 - CH 1020 General Chemistry or
4 - CH 1060 Chemistry in Context II
3 - COMM 1500 Intro., to Human Comm. or
3 - COMM 2500 Public Speaking
3 - HLTH 2400 Determinants of Health Behavior
1 - HLTH 3980 Health Appraisal Skills
3 - PSYC 3400 Lifespan Developmental Psych.
14

Junior Year
First Semester
4 - BIOL 2220 Human Anatomy and Phys. I
3 - HLTH 3030 Public Health Communication
3 - HLTH 3400 Hlth. Promotion Program Planning
3 - HLTH 3800 Epidemiology
3 - Guided Requirement1
16
### Sophomore Year

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**Notes:**
1. A minimum grade point average of 2.0 is required for registration in each HLTH course.
2. Students who wish to pursue preprofessional options should take CH 1010 and 1020.

### Junior Year

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**Notes:**
1. A minimum grade point average of 2.0 is required for registration in each HLTH course.

### Senior Year

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**Notes:**
1. A minimum grade point average of 2.0 is required for registration in each HLTH course.

### Preprofessional Health Studies Concentration

**Freshman Year**

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**Notes:**
1. A minimum grade point average of 2.0 is required for registration in each HLTH course.

### Sophomore Year

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**Notes:**
1. A minimum grade point average of 2.0 is required for registration in each HLTH course.

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**Notes:**
1. A minimum grade point average of 2.0 is required for registration in each HLTH course.

### Senior Year

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**Notes:**
1. A minimum grade point average of 2.0 is required for registration in each HLTH course.

### College of Behavioral, Social and Health Sciences

- Students who wish to pursue preprofessional options should take CH 1010 and 1020.
- A minimum grade-point average of 2.0 is required for registration in each HLTH course.
- Any HLTH course not otherwise required.
- Internship may be done fall, spring, or summer after completing HLTH 4190. A grade-point average of 2.0 is required for registration.
- Courses in Spanish are strongly recommended.
- See advisor. Courses in Spanish are strongly recommended.
- See advisor. Courses in Spanish are strongly recommended.
- See advisor. Courses in Spanish are strongly recommended.
- Any HLTH course not otherwise required.
- STAT 2300 or 3090
- MATH 1010, 1020, or 1060
- STAT 2300 or 3090
- MATH 1010, 1020, or 1060
- A minimum grade-point average of 2.0 is required for registration in each HLTH course.

**Notes:**
1. A minimum grade point average of 2.0 is required for registration in each HLTH course.
2. Students who wish to pursue preprofessional options should take CH 1010 and 1020.
3. A minimum grade point average of 2.0 is required for registration in each HLTH course.
4. Any HLTH course not otherwise required.
5. Internship may be done fall, spring, or summer after completing HLTH 4190. A grade-point average of 2.0 is required for registration.
6. Any HLTH course not otherwise required.
### JUSTICE STUDIES

#### Bachelor of Arts
The Bachelor of Arts degree in Justice Studies is an interdisciplinary degree that prepares students for a variety of professional careers related to law enforcement, social services, and criminal investigation. In addition, the degree provides excellent preparation for graduate education in criminology and public policy. The major offers two concentrations: the General Concentration and Leadership Concentration. The General Concentration allows students to pursue a science oriented education while still selecting from a wide variety of course options. The Leadership Concentration prepares students specifically for leadership or management roles in their field. The Justice Studies degree requires a total of 121 credits, including 39 in relevant courses. In addition, students take 18 hours of math and/or science courses selected from a department-approved list. These additional courses provide students greater scientific literacy on topics relevant to the technical elements of criminal investigations, and prepare students for graduate coursework. Courses that fulfill General Education requirements and departmental science and math courses may also fulfill minor requirements.

#### Sophomore Year

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<th>First Semester</th>
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<tbody>
<tr>
<td>3 - Elective²</td>
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<td>3 - SOCS 3880 The Criminal Justice System</td>
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<td>3 - Arts and Humanities (Literature) Requirement²</td>
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<td>3 - Science and Technology in Society Req.²</td>
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<tr>
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<tr>
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<tr>
<td>3 - Departmental Humanities/Social Science Req.³</td>
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<tbody>
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<tr>
<td>3 - Departmental Humanities/Social Science Req.³</td>
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<td>3 - Social Justice Requirement⁷</td>
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<td>3 - Core Requirement³</td>
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<th>Senior Year</th>
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<tr>
<td>2 - JUST 4910 Justice Studies Capstone</td>
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| 121-122 Total Semester Hours |

*Students must complete through 2020 in a modern language. See Modern Languages Requirement at Clemson University statement on page 27.

*See General Education Requirements. The Social Science Requirement may not be fulfilled by a SOC course.

*Any HLTH course not otherwise required

*Physician’s Assistant, premed, and premedicines students may also need BCHM 3010 and eight credit hours of organic chemistry. Some programs also require a course in microbiology.

*Internship must be completed in one or two semesters. Internship may be done fall, spring, or summer after completing HLTH 4940. Prior approval is required for summer internship. A grade-point average of 2.0 is required for registration. Note: A minimum grade-point average of 2.0 is required for registration in each HLTH course.

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#### Freshman Year

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<tbody>
<tr>
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<td>3 - MATH 1020 Business Calculus I or</td>
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<td>4 - MATH 1060 Calculus of One Variable</td>
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<tr>
<td>3 - SOC 2010 Intro to Sociology or</td>
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<tr>
<td>3 - SOC 2020 Social Problems</td>
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<tr>
<td>3 - Modern Language Requirement¹</td>
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<td>4 - Natural Science Requirement²</td>
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<td>3 - Cross-Cultural Awareness Requirement²</td>
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### JUSTICE STUDIES

#### Bachelor of Science
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*See Modern Languages Requirement at Clemson University statement on page 27.

*General Education Requirements. The Social Science Requirement may not be fulfilled by a SOC course.

*General concentration students select from POSC 4300, 4370, SOC 3910, 3920, 3970, 3980, 4280, 4860, 4940, and 4950. Leadership concentration students select from JUST 4290, 4920, POSC 4360, SOC 4500, and 4860.

*Select from a department approved list

*See page 88 for approved minors.

*Select from ANTH 4230, SOC 3510, 3640, 4140, 4330, 4600, and 4860.
Second Semester
3 - SOC 4910 Sociology of Policing
3 - Departmental Math or Science Requirement
3 - Minor Requirement
6 - Elective

Senior Year
First Semester
3 - SOC 4930 Sociology of Corrections
3 - Criminal Justice Requirement
6 - Minor Requirement
3 - Social Justice Requirement

Second Semester
2 - JUST 4970 Justice Studies Capstone
3 - Criminal Justice Requirement
3 - Minor Requirement
6 - Elective

121-122 Total Semester Hours

1MATH 1060 is recommended.
2See General Education Requirements. The Social Science Requirement may not be fulfilled by a SOC course.
3Select from a department-approved list.
4See page 88 for approved minors.
5General concentration students select from POSC 4360, 4370, SOC 3910, 3920, 3970, 3980, 4208, 4940, and 4950. Leadership concentration students select from JUST 4290, 4920, POSC 4360, SOC 4500, and 4860.
6SOC 4680, 4910 and 4930 may be taken in any order.
7Select from ANTH 4230, SOC 3510, 3600, 4140, 4330, 4600, and 4610.

LANGUAGE AND INTERNATIONAL HEALTH
Bachelor of Science
The Language and International Health program is administered by the College of Architecture, Arts and Humanities and the College of Behavioral, Social and Health Sciences. See pages 60-61 for the curriculum.

NURSING
Bachelor of Science
The Bachelor of Science degree program in Nursing prepares students for professional nursing practice in a variety of settings, such as hospitals, industry, clinics, and public health agencies. During the first two years, emphasis is on liberal arts and basic science courses arranged to provide a foundation for the nursing major. Junior and senior courses emphasize the study of nursing. Clinical nursing experiences, guided by the Nursing faculty, involve acute and community-based settings. Students are responsible for their own transportation to clinical laboratory experiences, which may extend throughout the Upstate.

Throughout the clinical laboratory period, Nursing majors are required to carry current, valid student nurses’ professional liability insurance with minimum limits of liability of $1,000,000 per occurrence and $6,000,000 in aggregate. Documentation of such coverage must be provided to the Director of the School of Nursing. No student may participate in clinical learning activities without this insurance coverage.

To comply with clinical agency contract requirements and South Carolina law, students enrolled in nursing courses with a clinical laboratory must meet specific requirements listed in the School of Nursing Student Handbook at www.clemson.edu/hehd/nursing.

The School of Nursing programs are accredited by the CCNE (Commission on Collegiate Nursing Education), One Dupont Circle NW, Suite 530, Washington, DC 20036-1120.

Entrance Requirements
To facilitate admission of students who can achieve at an appropriate level in the program, admission is selective. Consideration is given to performance in secondary school and on the College Board Examination (SAT). Those seeking admission are advised to apply to the University early in the fall of the senior year in high school.

Transfer admission is competitive. Students are encouraged to apply early to the Office of Admissions. The University admits ten new transfer students to the Nursing major during the fall semester only. Potential students should have a minimum grade-point average of 3.0 and completion of 30 semester hours of transferable courses. Placement in the Nursing curriculum will be determined after credit evaluation is completed.

Students may change majors into Nursing based on approval of an Admissions Committee in the School of Nursing. Applications are accepted each year during January with a deadline of January 31. Decisions are made by February 28. Change-of-major students will have a start date of the following January into upper division (junior-level) nursing courses. Applicants should meet the following requirements prior to the semester of application: a minimum cumulative grade-point average of 2.75; completion of a minimum of two required sciences in the Nursing curriculum with a C or better. Selection priority is based on grade-point average and number of completed nursing prerequisites. Students are allowed to apply only twice. Information regarding the admission process to the Accelerated Second Degree nursing program can be found on the School of Nursing website.

Detailed information is available from the Academic Advising Center in 309 Edwards Hall or at www.clemson.edu/hehd/nursing.

Freshman Year
First Semester
3 - BIOL 1030 General Biology I
1 - BIOL 1050 General Biology Lab. I
3 - COMM 1500 Intro. to Human Comm. or COMM 2500 Public Speaking
2 - NURS 1020 Nursing Success Skills
3 - SOC 2010 Introduction to Sociology
3 - Arts and Humanities (Non-Lit.) Requirement

Second Semester
4 - CH 1010 General Chemistry I
3 - ENGL 1030 Accelerated Composition
3 - NURS 1400 Computer Appl. in Health Care
3 - PSYC 2010 Introduction to Psychology
3 - STAT 2300 Statistical Methods I

Sophomore Year
First Semester
4 - BIOL 2220 Human Anatomy and Phys. I
4 - MICRO 2050 Introductory Microbiology or MICR 3050 General Microbiology
3 - NUTR 2050 Nutrition for Nursing Professionals
3 - Arts and Humanities (Literature) Requirement
2 - Elective

Second Semester
4 - BIOL 2230 Human Anatomy and Phys. II
3 - NURS 3010 Health Assessment
2 - NURS 3110 Health Promo. Across the Lifespan
3 - NURS 3200 Professionalism in Nursing
3 - Cross-Cultural Awareness Requirement
1 - Elective

Junior Year
First Semester
3 - ENGL 3040 Business Writing or ENGL 3140 Technical Writing or
3 - ENGL 3150 Scientific Writing and Comm.
3 - NURS 3040 Pathophysiology for Health Care Professionals
4 - NURS 3120 Medical-Surgical I: Foundations of Nursing
2 - NURS 3230 Gerontology Nursing
3 - NURS 3400 Pharmacotherapeutic Nursing Interventions

Second Semester
7 - NURS 3305 Medical-Surg. II: Nursing of Adults
3 - NURS 3305 Psychosocial Nursing
3 - NURS 3300 Research in Nursing
3 - NURS (HCG) 3330 Health Care Genetics

Senior Year
First Semester
5 - NURS 4010 Mental Health Nursing
5 - NURS 4110 Nursing Care of Children
5 - NURS 4120 Nursing Care of Women and Their Families

Second Semester
5 - NURS 4030 Medical-Surgical III: Complex Nursing of Adults
6 - NURS 4100 Leadership Management and Nursing Care Practicum
5 - NURS 4140 Community Health Nursing and Health Promotion or
4 - NURS 4150 Community Health Nursing

124 or 125 Total Semester Hours

1Students scoring below the designated score on the CMPT must make MATH 1010 as a prerequisite for CH 1010 during this semester.
2See General Education Requirements.
3Students enrolled at the University Center of Greenville may substitute CPSC 1200.
4Students enrolled at the University Center of Greenville will substitute NURS 4140 for NURS 3110 and 4150.
5If this requirement is satisfied by another course in the curriculum, elective hours must be taken to cover the credit hours.
Second Semester
4 - BIOL 2230 Human Anatomy and Phys. II
3 - COMM 1500 Intro. to Human Comm. or
3 - COMM 2500 Public Speaking
3 - NUTR 2030 Introduction to Principles of Human Nutrition or
3 - NUTR 2050 Nutrition for Nursing Prof.
5 - Elective
15

Junior Year
First Semester
3 - ENGL 3040 Business Writing or
3 - ENGL 3140 Technical Writing or
3 - ENGL 3150 Scientific Writing and Comm.
3 - NURS 3040 Pathophysiology for Health Care Professionals
3 - NURS 3190 Health Assessment for RNs
3 - NURS 4060 Issues in Professionalism
3 - Nursing Requirement
15

Second Semester
7 - NURS 3030 Medical-Surg. I: Nursing of Adults*
3 - NURS 3300 Research in Nursing
5 - NURS 4110 Nursing Care of Children*
15

Senior Year
First Semester
4 - NURS 3070 Family Nursing in the Community
3 - NURS (HCC) 3330 Health Care Genetics
5 - NURS 4030 Medical-Surgical III: Complex Nursing of Adults*
5 - NURS 4120 Nursing Care of Women and Families*
15

Second Semester
4 - NURS 3120 Medical-Surgical I: Therapeutic Nursing Interventions*
5 - NURS 4010 Mental Health Nursing*
3 - NURS 4050 Leadership and Mgt. in Nursing
4 - NURS 4250 Community Nursing
15
125 Total Semester Hours
STAT 3090 or 3300 may be substituted.

See General Education Requirements. Three of these credit hours must also satisfy the Cross-Cultural Awareness Requirement.
NURS 3340, 3510, 4600, or 4500.

*This course is exempt if the student achieves a B or better in NURS 4060.

Notes:
1. A minimum grade of C is required in the following courses to progress to junior year clinical courses: BIOL 1030/1050, 2220, 2230, CH 1010, MICR 2050, 3050, MATH 1010, NUTR 2050, STAT 2300.

2. A minimum grade of C is required in all nursing courses.

3. To progress to junior-level nursing courses, students must have a minimum grade-point average of 2.5 and may not have received more than two final course grades of less than a C in the last five years.

4. A minimum nursing grade-point average of 2.5 must be achieved in all required nursing (NURS) courses for progression to the next level. The nursing GPA will include only NURS courses.

5. Students may repeat only one nursing course. Further, students may repeat that nursing course one time only. Withdrawing with a W from the course or applying Academic Forgiveness counts as an attempt. Students who are unsuccessful on the second attempt in a nursing course will be counseled to select another major and will not be permitted to continue in the Nursing program.

6. Students must pass didactic and clinical components to pass all clinical courses.

Registered Nurse BS Completion Program
The RN/BS curriculum offers an individualized study option for the registered nurse to obtain a baccalaureate degree in Nursing. Credits may be earned through an accelerated program of study, combining transfer credits for selected courses from accredited institutions of higher learning, credit by examination for previously completed nursing courses, and enrollment in courses at Clemson University. Qualified students may take up to six hours of graduate courses towards the master’s degree in Nursing. Registered nurses interested in pursuing a baccalaureate degree should contact the School of Nursing for curriculum requirements. This program is offered at the University Center of Greenville.

Freshman Year
First Semester
3 - BIOL 1030 General Biology I and
1 - BIOL 1050 General Biology Laboratory I
4 - CH 1010 General Chemistry
3 - CPSC 1200 Introduction to Info. Tech. or
3 - NURS 1400 Computer App. in Nursing
3 - SOC 2010 Introduction to Sociology
3 - STAT 2300 Statistical Methods I
3 - Elective
16

Second Semester
3 - BIOL 1040 General Biology II and
1 - BIOL 1060 General Biology Laboratory II or
4 - CH 1020 General Chemistry
3 - ENGL 1030 Accelerated Composition
3 - PSYC 1010 Introduction to Psychology
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Elective
16

Sophomore Year
First Semester
4 - BIOL 2220 Human Anatomy and Phys. I
4 - MICR 2050 Introductory Microbiology or
4 - MICR 3050 General Microbiology
3 - Arts and Humanities (Literature) Requirement
4 - Elective
15

Second Semester
4 - BIOL 2230 Human Anatomy and Phys. II
3 - COMM 1500 Intro. to Human Comm. or
3 - COMM 2500 Public Speaking
3 - NUTR 2030 Introduction to Principles of Human Nutrition or
3 - NUTR 2050 Nutrition for Nursing Prof.
5 - Elective
15

Junior Year
First Semester
3 - ENGL 3040 Business Writing or
3 - ENGL 3140 Technical Writing or
3 - ENGL 3150 Scientific Writing and Comm.
3 - NURS 3040 Pathophysiology for Health Care Professionals
3 - NURS 3190 Health Assessment for RNs
3 - NURS 4060 Issues in Professionalism
3 - Nursing Requirement
15

Second Semester
7 - NURS 3030 Medical-Surg. I: Nursing of Adults*
3 - NURS 3300 Research in Nursing
5 - NURS 4110 Nursing Care of Children*
15

Senior Year
First Semester
4 - NURS 3070 Family Nursing in the Community
3 - NURS (HCC) 3330 Health Care Genetics
5 - NURS 4030 Medical-Surgical III: Complex Nursing of Adults*
5 - NURS 4120 Nursing Care of Women and Families*
15

Second Semester
4 - NURS 3120 Medical-Surgical I: Therapeutic Nursing Interventions*
5 - NURS 4010 Mental Health Nursing*
3 - NURS 4050 Leadership and Mgt. in Nursing
4 - NURS 4250 Community Nursing
15
125 Total Semester Hours
STAT 3090 or 3300 may be substituted.

See General Education Requirements. Three of these credit hours must also satisfy the Cross-Cultural Awareness Requirement.
NURS 3340, 3510, 4600, or 4500.

*This course is exempt if the student achieves a B or better in NURS 4060.

Notes:
1. A minimum grade of C is required in the following courses to progress in the program: CH 1010, 1020, BIOL 1030, 1040, 1050, 3060, 2220, 2230, NUTR 2030, 2050, STAT 2300, and all courses with a NURS subject code.

2. A minimum grade-point average of 2.5 must be achieved in all required nursing (NURS) courses for progression to the next level. The nursing GPA will include all courses with a NURS subject code.

PARKS, RECREATION AND TOURISM MANAGEMENT Bachelor of Science
The Department of Parks, Recreation and Tourism Management prepares students for a variety of careers in the public, private and non-profit sectors. The curriculum provides broad exposure to the knowledge, skills and abilities necessary to create, manage, and operate in organizations, agencies and businesses that provide leisure and leisure-related experiences, services, environments and therapeutic interventions. Students choose from one of five concentration areas: Community Recreation, Sport, and Camp Management (CRSCM); Parks and Conservation Area Management (PCAM); Professional Golf Management (PGM); Recreational Therapy (RT); and Travel and Tourism (T&T). These concentration areas offer the flexibility to accommodate each student’s career objectives in positions in community recreation, community and campus-based sport/athletics management, event and experience planning and management, commercial recreation and tourism, park and conservation area management, interpretation and management of natural, historic, and cultural sites, rehabilitation services, recreational therapy, programs for people with disabilities, senior citizens or other special populations, camp administration, golf industry, travel industry, resort management, convention and visitor bureaus, conference and meeting planning, and community tourism development to name a few.

The Parks, Recreation and Tourism Management program is accredited by the Council on Accreditation of Parks, Recreation, and Related Professions (COAPRT). Therefore, our graduates are immediately eligible to apply to become National Recreation and Park Association (NRPA) “Certified Park and Recreation Professional (CPRP),” a valuable credential for professional development. Students choosing the Recreational Therapy option will also be qualified to sit for the Certified Therapeutic Recreation Specialist (CTRS) certification; and Professional Golf Management students will be in a position to complete the requirements to become a Class A Professional with the PGA of America.

When space is available, a student may change majors to one of the degree concentrations in the Department of Parks, Recreation and Tourism Management with a 2.0 cumulative grade-point average and approval of the department chair or his/her designee. Students are encouraged to speak with a PRTM advisor about changing their major prior to the start of their sophomore year to avoid a delay in graduation due to course sequencing and course prerequisite requirements.

Graduate degrees offered are Master of Science (Thesis option or Online/non-thesis option) and Doctor of Philosophy.
COMMUNITY RECREATION, SPORT AND CAMP MANAGEMENT
CONCENTRATION
The Community Recreation, Sport and Camp Management (CRSCM) Concentration prepares students for careers in community recreation, community- and camp-based sport and athletic management, and camp management by developing theoretical, conceptual, and applied knowledge bases necessary for success in its diverse field. The focus of this program is on community, family, and individual development. Career opportunities include, but are not limited to, community- and campus-based recreation, athletic and amateur sport programming and administration, facility operation and management, special events, fitness/wellness programming, camp management, and non-profit recreation, sport and leisure service administration.

Freshman Year
First Semester
3 - Cross-Cultural Awareness, Science and Tech. in Society, or Other General Ed. Req.¹
3 - Mathematics Requirement¹
4 - Natural Science Requirement¹
6 - Social Science Requirement¹

Second Semester
3 - PRTM 2200 Conceptual Foundations of PRTM
3 - Arts and Humanities (Non-Lit.) Requirement²
3 - English Composition Requirement³
3 - Mathematics or Natural Science Requirement¹
3 - Oral Communication Requirement¹

Sophomore Year
First Semester
1 - PRTM 1980 Creative Inquiry--PRTM I
6 - PRTM 2260 Foundation of Management and Administration in PRTM
5 - PRTM 2270 Provision of Leisure Service Exper.
3 - PRTM 2290 Distributed Competency Integration in PRTM

Second Semester
3 - PRTM 2410 Introduction to Community Recreation, Sport and Camp Management
3 - Arts and Humanities (Literature) Requirement¹
6 - Concentration Requirement²
3 - Elective

Summer
1 - PRTM 2060 Practicum I
1 - PRTM 2070 Practicum II

Junior Year
First Semester
1 - PRTM 4040 Field Training I
12 - Concentration Requirement²

Second Semester
13 - Concentration Requirement²
1 - Elective

Second Semester
13 - Concentration Requirement²
6 - Concentration Requirement²
3 - Elective

Summer
1 - PRTM 4050 Field Training II

Senior Year
First Semester
12 - Concentration Requirement²

Second Semester
6 - Concentration Requirement²
6 - Elective
12
120 Total Semester Hours

³See General Education Requirements and advisor. Clemson University requires a total of 33 credit hours of General Education, including two credits of Academic and Professional Development (satisfied by PRTM 2060 and 2070). Students must take at least 31 additional credits of General Education as outlined in the Undergraduate Announcements General Education section.

PARK AND CONSERVATION AREA MANAGEMENT
CONCENTRATION
Students in Park and Conservation Area Management (PCAM) prepare for work as park rangers, planners, educators, law enforcement officers, and administrators of our nation’s federal, state, and county public lands that hold unique natural, cultural, and historic resources. PCAM focuses on helping visitors enjoy and appreciate parklands while protecting those resources for future generations. Besides taking coursework in PRTM, students study natural, cultural and historic resources by taking courses in related disciplines.

Freshman Year
First Semester
3 - Cross-Cultural Awareness, Science and Tech. in Society, or Other General Ed. Req.¹
3 - Mathematics Requirement¹
4 - Natural Science Requirement¹
6 - Social Science Requirement¹

Second Semester
3 - PRTM 2200 Conceptual Foundations of PRTM
3 - Arts and Humanities (Non-Lit.) Requirement²
3 - English Composition Requirement³
3 - Mathematics or Natural Science Requirement¹
3 - Oral Communication Requirement¹

Sophomore Year
First Semester
1 - PRTM 1980 Creative Inquiry--PRTM I
6 - PRTM 2260 Foundation of Management, Admin. and Programming in Leisure Skills
5 - PRTM 2270 Provision of Leisure Service Exp.
3 - PRTM 2290 Competency Integration in PRTM

Second Semester
3 - PRTM 2700 Introduction to Recreation Resources Management
3 - Arts and Humanities (Literature) Requirement¹
6 - Concentration Requirement²
3 - Elective

Summer
1 - PRTM 2060 Practicum I
1 - PRTM 2070 Practicum II

Junior Year
First Semester
1 - PRTM 4040 Field Training I
12 - Concentration Requirement²

Second Semester
13 - Concentration Requirement²
1 - Elective

Second Semester
13 - Concentration Requirement²
6 - Concentration Requirement²
3 - Elective

Summer
6 - PRTM 4050 Field Training II

Senior Year
First Semester
12 - Concentration Requirement²

Second Semester
6 - Concentration Requirement²
6 - Elective
12
120 Total Semester Hours

³See General Education Requirements and advisor. Clemson University requires a total of 33 credit hours of General Education, including two credits of Academic and Professional Development (satisfied by PRTM 2060 and 2070). Students must take at least 31 additional credits of General Education as outlined in the Undergraduate Announcements General Education section.

PROFESSIONAL GOLF MANAGEMENT
CONCENTRATION
The Professional Golf Management (PGM) Concentration provides a unique educational background for students who desire to become PGA professionals. Students obtain specialized knowledge and skills which prepare them to become leaders in the golf industry. The PGM Concentration combines academics, career training, and extensive internship experience to develop well-rounded, service-oriented professionals who can meet and respond to the personal as well as business management requirements of golf programs and facilities. See advisor for new/additional General Education Requirements.

Freshman Year
First Semester
1 - PRTM 1950 PGM Seminar I
3 - Mathematics Requirement¹
4 - Natural Science Requirement¹
6 - Social Science Requirement¹

Second Semester
3 - PRTM 1980 Creative Inquiry--PRTM I
6 - PRTM 2260 Foundation of Management, Admin. and Programming in Leisure Skills
5 - PRTM 2270 Provision of Leisure Service Exp.
3 - PRTM 2290 Competency Integration in PRTM

Summer
1 - PRTM 2060 Practicum I
1 - PRTM 2070 Practicum II

Second Semester
13 - Concentration Requirement²
1 - Elective

Second Semester
13 - Concentration Requirement²
6 - Concentration Requirement²
3 - Elective

Summer
6 - PRTM 4050 Field Training II

Senior Year
First Semester
12 - Concentration Requirement²

Second Semester
6 - Concentration Requirement²
6 - Elective
12
120 Total Semester Hours

³See advisor/Degree Works
Second Semester
1 - PRTM 2000 Professional and Practice in PRTM
2 - PRTM 2200 Conceptual Foundations of PRTM
3 - PRTM 2810 Introduction to Golf Management
4 - PRTM 2820 Principles of Golf Club Development
5 - Arts and Humanities (Non-Lit.) Requirement¹
6 - Mathematics or Natural Science Requirement¹
16

Summer
0 - COOP 2010 Cooperative Education
1 - PRTM 2060 Practicum I
1

Sophomore Year
First Semester
1 - PRTM 1980 Creative Inquiry—PRTM I
6 - PRTM 2260 Foundations of Management and Administration in PRTM
5 - PRTM 2270 Provision of Leisure Service Exp.
3 - PRTM 2290 Distributed Competency Integration in PRTM
1 - PRTM 2950 PGM Seminar II
16
Second Semester
3 - PRTM 2830 Advanced Methods of Teaching Golf²
3 - Arts and Humanities (Literature) Requirement¹
3 - Concentration Requirement²
3 - Cross-Cultural Awareness, Science and Tech. in Society, or Other General Education Req.¹
3 - Oral Communication Requirement¹
15

Summer
0 - COOP 2020 Cooperative Education

Junior Year
First Semester
0 - COOP 2030 Cooperative Education
1 - PRTM 2070 Practicum II
1
Second Semester
3 - PRTM 3830 Golf Shop Operations
9 - Concentration Requirement²
4 - Elective
16

Senior Year
First Semester
16 - Concentration Requirement²
16
Second Semester
0 - COOP 2040 Cooperative Education
0

Summer
0 - COOP 2050 Cooperative Education
6 - PRTM 4050 Field Training II
7

Fifth Year
First Semester
2 - PRTM 3950 PGM Seminar III
3 - PRTM 4830 Golf Club Management and Operations
12 - Concentration Requirement²
17

122 Total Semester Hours

¹See General Education Requirements and advisor. Clemson University requires a total of 33 credit hours of General Education, including two credits of Academic and Professional Development (satisfied by PRTM 2060 and 2070). Students must take at least 31 additional credits of General Education as outlined in the Undergraduate Announcements General Education section.
²See advisor/Degree Works

RECREATIONAL THERAPY CONCENTRATION
The Recreational Therapy (RT) Concentration prepares students for exciting careers working with people with disabilities in a variety of settings, including community-based recreation agencies, camps, children’s hospitals, psychiatric and physical rehabilitation hospitals, and assisted living facilities, to name a few. Recreational Therapy consists of the delivery of recreation services designed to enhance participants’ leisure experiences, quality of life, and functional capabilities. Students who complete these requirements will be eligible to sit for an examination to become a Certified Therapeutic Recreation Specialist (CTRS). Students take courses and preceptorships at the University Center and agencies in Greenville, SC and the surrounding area, during their junior year.

Freshman Year
First Semester
1 - PRTM 1980 Creative Inquiry—PRTM I
3 - BIOL 1010 General Biology I
3 - BIOL 1010 General Biology I Lab
2 - PSYC 2010 Intro to Psychology
3 - Arts and Humanities (Non-Lit.) Requirement¹
3 - Mathematics Requirement¹
3 - Social Science Requirement¹
16
Second Semester
4 - CH 1010 General Chemistry or
4 - CH 1050 Chemistry in Context I
3 - PRTM 2200 Conceptual Foundations of PRTM
3 - Arts and Humanities (Non-Lit.) Requirement¹
3 - English Composition Requirement¹
3 - Oral Communication Requirement¹
16

Second Semester
4 - CH 1010 General Chemistry or
4 - CH 1050 Chemistry in Context I
3 - PRTM 2200 Conceptual Foundations of PRTM
3 - Arts and Humanities (Non-Lit.) Requirement¹
3 - English Composition Requirement¹
3 - Oral Communication Requirement¹
16

Sophomore Year
First Semester
1 - PRTM 1980 Creative Inquiry—PRTM I
6 - PRTM 2260 Foundations of Management and Administration in PRTM
5 - PRTM 2270 Provision of Leisure Service Exp.
3 - PRTM 2290 Distributed Competency Integration in PRTM
15
Second Semester
3 - PRTM 2600 Foundations of Recreational Ther
1 - PRTM 2650 Terminology in Rec Ther Practice
3 - PSYC 3400 Lifespan Psychology
3 - PSYC 3830 Abnormal Psychology
3 - Arts and Humanities (Literature) Requirement²
1 - Concentration Requirement²
14

Summer
1 - PRTM 2060 Practicum I
1 - PRTM 2070 Practicum II
2

Junior Year
First Semester
4 - BIOL 2220 Anatomy and Physiology I
3 - PRTM 3220 Facilitation Techniques in Rec Ther
3 - PRTM 3230 Professional Prep of Rec Ther
4 - PRTM 3240 Assessment & Plan in Rec Ther
14
Second Semester
4 - BIOL 2230 Anatomy and Physiology II
3 - PRTM 3260 Rec Ther Implementation & Eval: Physical Health Conditions
3 - PRTM 3270 Rec Ther Implementation & Eval: Mental Health Conditions
2 - PRTM 3280 Preceptorship in Rec Therapy
12
Summer
6 - PRTM 4050 Field Training II

Senior Year
First Semester
1 - LS 2760 First Aid/CPR for Prof Rescuer
3 - PRTM 4220 Mgt of Recreational Therapy
3 - Concentration Requirement²
5 - Elective
12
Second Semester
3 - PRTM 4260 Trends & Issues in Rec Therapy
6 - Concentration Requirement²
6 - Elective
15

122 Total Semester Hours

¹See General Education Requirements and advisor. Clemson University requires a total of 33 credit hours of General Education, including two credits of Academic and Professional Development (satisfied by PRTM 2060 and 2070). Students must take at least 31 additional credits of General Education as outlined in the Undergraduate Announcements General Education section. See your advisor for choosing general education requirements that meet the prerequisites for the Recreational Therapy concentration specific classes.
²See advisor/Degree Works

TRAVEL AND TOURISM CONCENTRATION
The Travel and Tourism (T&T) Concentration prepares students for exciting careers working in one of the world’s most diverse and dynamic industries. Students in this concentration are introduced to issues pertaining to the management, planning, and promotion of destination attractions and events. The program is designed to provide an understanding of the linkages that exist
between local communities, their populations, and various public, private, and non-profit special interest groups. Students in Travel and Tourism can pursue careers in private sector enterprises, government agencies, convention and visitor bureaus, as well as other tourism-affiliated organizations.

Freshman Year
First Semester
3 - Cross-Cultural Awareness, Science and Tech. in Society, or other General Education Req.\(^1\)
3 - Mathematics Requirement\(^1\)
4 - Natural Science Requirement\(^1\)
6 - Social Science Requirement\(^1\)
16
Second Semester
3 - PRTM 2200 Conceptual Foundations of PRTM
3 - Arts and Humanities (Non-Lit.) Requirement\(^1\)
3 - English Composition Requirement\(^1\)
3 - Mathematics or Natural Science Requirement\(^1\)
3 - Oral Communication Requirement\(^1\)
15

Sophomore Year
First Semester
1 - PRTM 1980 Creative Inquiry—PRTM I
6 - PRTM 2260 Foundations of Management and Administration in PRTM
5 - PRTM 2270 Provision of Leisure Service Exp.
3 - PRTM 2290 Distributed Competency Integration in PRTM
15
Second Semester
3 - PRTM 3420 Introduction to Tourism
3 - Arts and Humanities (Literature) Requirement\(^1\)
6 - Concentration Requirement\(^2\)
3 - Elective
15
Summer
1 - PRTM 2060 Practicum I
1 - PRTM 2070 Practicum II
2

Junior Year
First Semester
1 - PRTM 4040 Field Training I
12 - Concentration Requirement\(^2\)
13
Second Semester
13 - Concentration Requirement\(^2\)
1 - Elective
14
Summer
6 - PRTM 4050 Field Training II

Senior Year
First Semester
12 - Concentration Requirement\(^2\)
12
Second Semester
6 - Concentration Requirement\(^2\)
6 - Elective
12
120 Total Semester Hours

\(^1\)See General Education Requirements and advisor. Clemson University requires a total of 33 credit hours of General Education, including two credits of Academic and Professional Development (satisfied by PRTM 2060 and 2070). Students must take at least 31 additional credits of General Education as outlined in the Undergraduate Announcements General Education section.

\(^2\)See advisor/Degree Works

POLITICAL SCIENCE

The Department of Political Science offers two degree programs: a Bachelor of Arts and a Bachelor of Science, requiring 120–121 credit hours. Both prepare students for a wide range of graduate programs and career opportunities. The Bachelor of Arts program provides broad coverage of the political science discipline and emphasizes communication skills and humanities. The Bachelor of Science program is recommended for those with an aptitude for mathematics and/or an interest in political economy, public administration, public policy, or other fields requiring advanced quantitative skills. Both programs are appropriate for pre-law students and for students interested in either American or global politics. Note that the Bachelor of Arts degree requires a minor, and the Bachelor of Science degree requires a field of concentration and, depending on the concentration, requires or allows a minor.

Bachelor of Arts

The requirements for a Bachelor of Arts degree in Political Science consist of POSC 1010, 1020 or 1040, 1030, 1990, 4990, and at least 24 additional credit hours in political science at the 3000-4000 level, including at least one course from each of the following fields:

- American Government—POSC 4030, 4050, 4160, 4360, 4420
- Comparative Politics—POSC 3710, 3720, 4660, 4710, 4760, 4770, 4780
- International Relations—POSC 3610, 3620, 3630, 3750, 4290, 4470, 4480
- Political Theory—POSC 4490, 4500, 4530, 4550
- Public Policy and Public Administration—POSC 3020, 3210, 4210, 4230, 4240, 4300

The student’s additional coursework in political science is chosen with the consent and advice of the departmental advisor to ensure an appropriate balance of breadth and specialization within the field of political science. In addition to the courses listed above, the department offers a wide range of specialized courses in each of the subfields of the political science discipline.

The Bachelor of Arts degree in Political Science also requires additional arts and humanities courses beyond the basic General Education Requirements.

Note: No more than three hours credit from POSC 3050, 3100, 3110, 3120, 3130, 4090, and 4100 may be applied toward a Political Science major.

Freshman Year
First Semester
3 - POSC 1030 American National Government
1 - POSC 1990 Introduction to Political Science
3 - Modern Language Requirement\(^1\)
3 - History Requirement\(^1\)
3 - Mathematics Requirement\(^3\)
1 - Elective
14
Second Semester
3 - POSC 1040 American National Government
1 - POSC 1990 Introduction to Political Science
3 - Modern Language Requirement\(^1\)
3 - History Requirement\(^1\)
3 - Mathematics Requirement\(^3\)
1 - Elective
14

Second Semester
3 - ENGL 1030 Accelerated Composition
3 - POSC 1020 Intro. to International Relations or
3 - POSC 1040 Intro. to Comparative Politics
3 - POSC 1030 Introduction to Political Theory
3 - Modern Language Requirement\(^1\)
4 - Natural Science Requirement\(^6\)
16

Sophomore Year
First Semester
3 - Arts and Humanities (Literature) Requirement\(^1\)
3 - Major Requirement\(^5\)
3 - Mathematics or Natural Science Requirement\(^3\)
3 - Oral Communication Requirement\(^1\)
3 - Elective
15
Second Semester
3 - Arts and Humanities (Literature) Requirement\(^1\)
3 - Arts and Humanities (Non-Lit.) Requirement\(^1\)
3 - History Requirement\(^7\)
3 - Major Requirement\(^5\)
3 - Minor Requirement\(^6\)
15

Junior Year
First Semester
3 - ECON 2110 Principles of Microeconomics
3 - Major Requirement\(^5\)
3 - Minor Requirement\(^6\)
3 - Science and Tech. in Society Requirement\(^1\)
3 - Elective
15
Second Semester
3 - ECON 2120 Principles of Macroeconomics
3 - Major Requirement\(^5\)
3 - Minor Requirement\(^6\)
6 - Elective
15

Senior Year
First Semester
1 - POSC 4990 Professional Dev. in Political Sci.
6 - Major Requirement\(^6\)
6 - Minor Requirement\(^6\)
2 - Elective
15
Second Semester
6 - Major Requirement\(^6\)
6 - Minor Requirement\(^6\)
6 - Elective
15
120 Total Semester Hours

\(^1\)Students must complete through 2020 in any modern language except American Sign Language. See Modern Languages Requirement at Clemson University statement on page 27.

\(^2\)HIST 1010, 1020, 1720, 1730, or 1930

\(^3\)Students should choose from American Sign Language, ASL 1010, 1020, 1030, and 1040.

\(^4\)Any University-approved General Education Natural Science course except BIOL 1090.

\(^5\)See major requirements in program description above.

\(^6\)See list of approved minors on page 88.

\(^7\)Any course in AAH, ART, DANCI, MUSC, or THEA not already used to satisfy a General Education Requirement.
POLITICAL SCIENCE

Bachelor of Science
The requirements for a Bachelor of Science degree in Political Science consist of POSC 1010, 1020 or 1040, 1030, 1990, 3410, 4990, and at least 21 additional credit hours in political science at the 3000–4000 level, including one upper-level American politics course and one upper-level global politics course.

In consultation with the departmental advisor, students choose one of the following concentrations: American Politics, Global Politics, Political Economy, Public Administration, or Public Policy.

Note: No more than three hours credit from POSC 3050, 3100, 3110, 3120, 3130, 4090, and 4100 may be applied toward a Political Science major.

Freshman Year
First Semester
3 - POSC 1010 American National Government
1 - POSC 1990 Introduction to Political Science
3 - Modern Language Requirement
3 - Mathematics Requirement
4 - Natural Science Requirement
14

Second Semester
3 - ENGL 1030 Accelerated Composition
3 - POSC 1020 Intro. to International Relations or POSC 1040 Intro. to Comparative Politics
3 - POSC 1030 Introduction to Political Theory
3 - Modern Language Requirement
4 - Natural Science Requirement
16

Sophomore Year
First Semester
3 - ECON 2110 Principles of Microeconomics
3 - American Politics Requirement
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Mathematics Requirement
3 - Philosophy of Science Requirement
15

Second Semester
3 - ECON 2120 Principles of Macroeconomics
3 - Advanced Political Science Requirement
3 - Arts and Humanities (Literature) Requirement
3 - Global Politics Requirement
3 - Mathematics Requirement
15

AMERICAN POLITICS CONCENTRATION
Junior Year
First Semester
3 - POSC 3410 Quantitative Methods in Pol. Sci.
3 - American Politics Requirement
3 - Oral Communication Requirement
6 - Elective
15

Second Semester
3 - American Politics Requirement
6 - Minor Requirement
6 - Elective
15
121 Total Semester Hours

POLITICAL ECONOMY CONCENTRATION
Junior Year
First Semester
3 - ECON 3140 Intermediate Microeconomics
3 - POSC 3410 Quantitative Methods in Pol. Sci.
3 - Oral Communication Requirement
6 - Elective
15

Second Semester
3 - ECON 3500 Moral and Ethical Aspects of a Market Economy
3 - POSC 4480 International Political Economy
3 - Science and Tech. in Society Requirement
7 - Elective
16

Senior Year
First Semester
3 - POSC 4990 Professional Dev. in Political Sci.
3 - Advanced Political Science Requirement
6 - Minor Requirement
5 - Elective
15

Second Semester
3 - American Politics Requirement
6 - Minor Requirement
6 - Elective
15
121 Total Semester Hours

Global Politics Concentration
Junior Year
First Semester
3 - POSC 3410 Quantitative Methods in Pol. Sci.
3 - Global Politics Requirement
3 - Oral Communication Requirement
6 - Elective
15

Second Semester
3 - Global Politics Requirement
3 - Minor Requirement
3 - Science and Tech. in Society Requirement
7 - Elective
16
121 Total Semester Hours

Senior Year
First Semester
3 - POSC 4990 Professional Dev. in Political Sci.
3 - American Politics Requirement
6 - Minor Requirement
5 - Elective
15

Second Semester
3 - American Politics Requirement
6 - Minor Requirement
6 - Elective
15
121 Total Semester Hours

Public Policy Concentration
Junior Year
First Semester
3 - POSC 3410 Quantitative Methods in Pol. Sci.
3 - Advanced Political Science Requirement
6 - Public Administration Requirement
6 - Elective
15

Second Semester
3 - Advanced Political Science Requirement
6 - Public Administration Requirement
4 - Elective
16

Senior Year
First Semester
3 - POSC 4210 Public Policy
1 - POSC 4990 Professional Dev. in Political Sci.
6 - Public Administration Requirement
5 - Elective
15

Second Semester
3 - Policy/Administration Requirement
6 - Public Administration Requirement
4 - Elective
15
121 Total Semester Hours

Public Administration Concentration
Junior Year
First Semester
3 - POSC 3210 Public Administration
3 - POSC 3410 Quantitative Methods in Pol. Sci.
3 - Oral Communication Requirement
6 - Elective
15

Second Semester
3 - Advanced Political Science Requirement
6 - Public Administration Requirement
3 - Science and Tech. in Society Requirement
4 - Elective
16

Senior Year
First Semester
3 - POSC 4210 Public Policy
1 - POSC 4990 Professional Dev. in Political Sci.
6 - Public Administration Requirement
5 - Elective
15

Second Semester
3 - Policy/Administration Requirement
6 - Public Administration Requirement
4 - Elective
15
121 Total Semester Hours

Note: Public Administration, or Public Policy.
American Politics, Global Politics, Political Economy, Public Administration, or Public Policy.

Junior Year
CONCENTRATION
American Politics
15
3 - Mathematics Requirement
3 - Global Politics Requirement
3 - Arts and Humanities (Literature) Requirement
3 - Advanced Political Science Requirement
3 - ECON 2120 Principles of Macroeconomics

Second Semester
3 - Philosophy of Science Requirement
3 - Mathematics Requirement
3 - Arts and Humanities (Non-Lit.) Requirement
3 - American Politics Requirement
3 - ECON 2110 Principles of Microeconomics

Senior Year
CONCENTRATION
Public Policy
15
3 - Economics Requirement
3 - Advanced Political Science Requirement

Second Semester
3 - Economics Requirement
3 - American Politics Requirement
3 - ECON 3600 Principles of Microeconomics

Senior Year
CONCENTRATION
Public Administration
15
4 - Elective
3 - Science and Tech. in Society Requirement
3 - Advanced Political Science Requirement

Second Semester
3 - Elective
3 - Science and Tech. in Society Requirement
3 - American Politics Requirement
3 - ECON 4610 Principles of Macroeconomics
### PSYCHOLOGY

Psychology is the study of human and animal behavior and the biological, psychological, and social processes related to that behavior. The Bachelor’s degree in Psychology prepares students for a variety of professional careers related to human resources, personnel, counseling, and other applied-oriented positions in human services, business, and industry. Additionally, the Bachelor’s degree provides excellent preparation for graduate study in such areas as clinical, counseling, industrial, experimental, cognitive, social, biological, health, developmental, and school psychology. The program also provides excellent preparation for students who intend to pursue professional training in medicine, physical or occupational therapy, dentistry, pharmacy, veterinary science, or law. Further information is available at www.clemson.edu/psych/.

### Change of Major into Psychology

Students who change majors into Psychology must have completed at least 12 credit hours at Clemson or in the Bridge Program and must have a 2.4 minimum Clemson/Bridge cumulative grade-point average.

### Bachelor of Arts

The Bachelor of Arts program requires PSYC 2010, 2020, 3090, 3100, 4920, and 19 additional credits selected from PSYC 2750 and/or 3000–4000-level psychology courses arranged as follows:

**Senior Year**

**First Semester**

- PSYC 3210 Public Administration
- PSYC 4990 Professional Dev. in Political Sci.
- 6 - Public Policy Requirement

**Second Semester**

- 3 - Policy/Administration Requirement
- 6 - Public Policy Requirement
- 15

**121 Total Semester Hours**

Students must complete through 2020 in any modern language except American Sign Language. See Modern Languages Requirement at Clemson University statement on page 27.

**PHIL 1020, 2250, 3230, 3250, or 3270**

Any 3000- or 4000-level PSOC course

**PSYC 3020, 3120, 3430, 3810, 4030, 4050, 4070, 4090, 4160, 4210, 4230, 4240, 4300, 4360, 4370, 4380, 4420, 4530, 4540, 4550, 4610, 4800, or 4820**

See General Education Requirements.

**15**

**Second Semester**

- 3 - Cross-Cultural Awareness Requirement
- 3 - Departmental Math. or Science Requirement
- 2 - Elective

**14**

**Bachelor of Science**

The Bachelor of Science program in Psychology requires PSYC 2010, 2020, 3090, 3100, 4920, and 19 additional credits selected from PSYC 2750 and/or 3000–4000-level psychology courses as follows:

**At least six credits from Biological and Cognitive courses: PSYC 3240, 3330, 4220**

At least three credits from each of the following:

**Applied—PSYC 2750, 3640, 3680, 3830, 4350, 4560, 4800, 4880**

**Individuals and Groups—PSYC 3400, 3520, 3700**

At least one credit from Laboratory/Research courses: PSYC 3250, 3340, 4230, 4560, 4710, 4900, 4930, 4950, 4970, 4980

At least six credits must be from 4000-level psychology courses, with at least three of those credits from psychology courses numbered between 4000 and 4890. BIOL 4700 may be taken in lieu of one elective psychology course. Students satisfying both the Applied and Laboratory requirements with PSYC 4560 must still satisfy the requirement for 19 additional credits in Psychology (see above). Students should consult their advisors for other degree requirements and course recommendations.

### Freshman Year

**First Semester**

- PSYC 2010 Introduction to Psychology
- PSYC 2020 Introductory Psychology Lab.
- 3 - Departmental Math. or Science Requirement
- 2 - Elective

**15**

**Second Semester**

- PSYC 2020 Advanced Introduction to Psychology
- 2 - Elective

**14**

**Sophomore Year**

**First Semester**

- PSYC 3000 Introductory Experimental Psych.
- 2 - Elective

**Second Semester**

- PSYC 3100 Advanced Experimental Psych.
- 2 - Elective

**Junior Year**

**First Semester**

- 4 - Major Requirement
- 3 - Minor Requirement
- 3 - Science and Tech. in Society Requirement

**Second Semester**

- 3 - Major Requirement
- 3 - Minor Requirement
- 6 - Elective

**Senior Year**

**First Semester**

- PSYC 4920 Senior Laboratory in Psychology
- 3 - Major Requirement
- 3 - Minor Requirement
- 8 - Elective

**Second Semester**

- 3 - Major Requirement
- 6 - Minor Requirement
- 6 - Elective

**15**

**120 Total Semester Hours**

Students must complete through 2020 in a modern language. See Modern Languages Requirement at Clemson University statement on page 27.

**See General Education Requirements.**

**See General Education Requirements. Social Science Requirement must be in an area other than psychology.**

**See major requirements in program description above.**

**Three credit hours, in addition to the Mathematics and Natural Science General Education Requirements, are required.**

Select any mathematics or natural science course that satisfies the General Education Requirement, any MATH or STAT course at the 3000-level or higher, any natural or physical science course on the departmental list of acceptable courses, or any relevant course with the approval of the Psychology Department Chair.

Select any minor listed on page 88.

**PSYCHOLOGY**

Bachelor of Science

The Bachelor of Science program in Psychology requires PSYC 2010, 2020, 3090, 3100, 4920, and 19 additional credits selected from PSYC 2750 and/or 3000–4000-level psychology courses as follows:

At least six credits from the Biological and Cognitive menu: PSYC 3240, 3330, 4220

At least three credits from each of the following menus:

**Applied—PSYC 2750, 3640, 3680, 3830, 4350, 4560, 4800, 4880**

**Foundations of Science—GW 4020, PHIL 3260, 3270, PSYC 4150**

**Individuals and Groups—PSYC 3400, 3520, 3700**

At least one credit from the Laboratory/Research menu—PSYC 3250, 3340, 4230, 4560, 4710, 4900, 4930, 4950, 4970, 4980

At least six credits must be from 4000-level psychology courses, with at least three of those credits from psychology courses numbered between 4000 and 4890. BIOL 4700 may be taken in lieu of one elective psychology course. Students satisfying both the Applied and Laboratory/Research requirements with PSYC 4560 must still satisfy the requirement for 19 additional credits in Psychology (see above). Students should consult their advisors for other degree requirements and course recommendations.
Freshman Year
First Semester
3 - PHIL 1020 Introduction to Logic
3 - PSYC 1020 Introduction to Psychology
1 - PSYC 2020 Introductory Psychology Lab.
3 - Mathematics Requirement1
4 - Natural Science Requirement1
12
Second Semester
3 - ENGL 1030 Accelerated Composition
4 - Departmental Math. or Science Requirement2
3 - Major Requirement1
3 - Mathematics or Natural Science Requirement1
3 - Elective
15
Sophomore Year
First Semester
4 - PSYC 3090 Introductory Experimental Psych.
3 - Arts and Humanities (Literature) Requirement1
4 - Departmental Math. or Science Requirement2
3 - Social Science Requirement2
15
Second Semester
2 - Departmental Math. or Science Requirement2
4 - Major Requirement1
3 - Minor Requirement2
3 - Oral Communication Requirement1
3 - Elective
15
Junior Year
First Semester
3 - Departmental Math. or Science Requirement2
4 - MATH 1020 Business Calculus I or MATH 1060 Calculus of One Variable I
3 - Major Requirement1
3 - Modern Language Requirement1
3 - Cross-Cultural Awareness Requirement2
3 - COMM 1500 Intro. to Human Comm. or COMM 2500 Public Speaking
3 - Arts and Humanities (Literature) Requirement2
3 - Cross-Cultural Awareness Requirement2
6
Second Semester
3 - Departmental Math. or Science Requirement2
4 - SOC 3600 Social Class and Poverty or SOC 3020 Social Research Methods I
4 - Advanced Humanities Requirement4
3 - Emphasis Area Requirement5
6
Senior Year
First Semester
1 - PSYC 4920 Senior Laboratory in Psychology
6 - Emphasis Area Requirement5
3 - Major Requirement1
3 - Minor Requirement2
5 - Elective
15
Second Semester
3 - Major Requirement1
6 - Minor Requirement2
6 - Elective
15
120 Total Semester Hours

See General Education Requirements.
Sixteen credit hours, in addition to the Mathematics and Natural Science General Education Requirements, are required. Select any mathematics or natural science course that satisfies the General Education Requirement, any MATH or STAT course at the 3000-level or higher, any natural or physical science course on the departmental list of acceptable courses, or any relevant course with the approval of the Psychology Department Chair.

SOCIOLoGY
The Sociology major offers two degree programs: a Bachelor of Arts and a Bachelor of Science. Both degrees prepare students for a variety of professional careers related to human resources, management, public relations, social services, criminal justice, health services, social research, and other people-oriented positions in the public and private sector. In addition, the Bachelor’s degree provides excellent preparation for graduate training in sociology, anthropology, social services, law, and business. Both degrees require a total of 121 semester hours, including 36 credit hours in sociology and/or anthropology, as identified below. Courses used to fulfill General Education Requirements may be used to fulfill minor requirements.

Change of Major into Sociology
Students who change majors into Sociology must have completed at least 12 credit hours at Clemson and must have a 2.0 minimum Clemson Bridge cumulative grade-point average.

Emphasis Areas in Sociology
Community Studies—RS (SOC) 4590, SOC 3310, (RS) 4950; and six credits from all courses offered in anthropology or sociology not already taken to fulfill requirements.
Criminal Justice—SOC 3880, 3890, and nine credits selected from SOC 3910, 3920, 3970, 3980, 4680, 4860, 4910, 4930, 4940; and ANTH 3530. No more than three hours of SOC 4860 may be taken to satisfy concentration electives.
General Sociology—Three credit hours selected from SOC 3110, 3300, 4320, and 4440; three credit hours selected from SOC 3500, 3510, 3910, 4030, and 4330; and nine credit hours selected from any courses offered in anthropology or sociology not already taken to fulfill requirements.
Social Services—SOC 3800, 4140, (RS) 4950; and six credits from all courses offered in anthropology or sociology not already taken to fulfill requirements.

At least 12 of the total credits must be from 4000-level sociology, rural sociology, and/or anthropology courses; no more than nine credit hours may be taken in courses at the 1000 or 2000 level, except with approval of the department chair. Additional electives are added to meet the minimum of 121 hours required for graduation.

Bachelor of Arts
Freshman Year
First Semester
3 - MATH 1010 Essential Math. for Informed Soc. or MATH 1020 Business Calculus I or MATH 1060 Calculus of One Variable I
3 - SOC 2010 Introduction to Sociology or SOC 2020 Social Problems
4 - Modern Language Requirement2
3 - Natural Science Requirement2
3 - Elective
16-17
Second Semester
3 - ENGL 1030 Accelerated Composition
3 - STAT 2300 Statistical Methods I
3 - Modern Language Requirement1
3 - Social Science Requirement2
3 - Elective
15
Sophomore Year
First Semester
3 - COMM 1500 Intro. to Human Comm. or COMM 2500 Public Speaking
3 - Arts and Humanities (Literature) Requirement2
3 - Cross-Cultural Awareness Requirement2
6
Second Semester
1 - SOC 2050 Sociology Lab.
3 - Arts and Humanities (Non-Lit.) Requirement2
3 - Minor Requirement1
3 - Social and Tech. in Society Requirement2
3 - Elective
15
Junior Year
First Semester
3 - ENGL 3040 Business Writing or ENGL 3120 Advanced Composition or ENGL 3140 Technical Writing
3 - SOC 3020 Social Research Methods I
3 - SOC 3600 Social Class and Poverty or SOC 4600 Race and Ethnicity or SOC 4610 Sociology of Sex and Gender
3 - Advanced Humanities Requirement4
3 - Emphasis Area Requirement5
15
Second Semester
4 - SOC 3040 Social Research Methods II
3 - Advanced Humanities Requirement4
3 - Emphasis Area Requirement5
6 - Minor Requirement2
16
Senior Year
First Semester
3 - SOC 3600 Social Class and Poverty or SOC 4600 Race and Ethnicity or SOC 4610 Sociology of Sex and Gender
3 - Advanced Humanities Requirement4
6 - Emphasis Area Requirement5
3 - Elective
15
Second Semester
3 - SOC 4640 Sociological Theory
1 - SOC 4970 Sociology Senior Lab.
3 - Advanced Humanities Requirement4
3 - Emphasis Area Requirement5
3 - Minor Requirement1
13
121-122 Total Semester Hours

Students must complete through 2020 in a modern language. See Modern Languages Requirement at Clemson University statement on page 27.

See General Education Requirements. (Note: Social Science Requirement must be in an area other than sociology.)

See page 88 for approved minors.
Senior Year
First Semester
3 - SOC 3600 Social Class and Poverty or
3 - SOC 4600 Race and Ethnicity or
3 - SOC 4610 Sociology of Sex and Gender
6 - Departmental Math. or Science Requirement
3 - Emphasis Area Requirement
3 - Elective
15
Second Semester
3 - SOC 4040 Sociological Theory
1 - SOC 4970 Sociology Senior Lab.
6 - Emphasis Area Requirement
3 - Minor Requirement
13
121-122 Total Semester Hours

See General Education Requirements. (Note: Social Science Requirement must be in an area other than sociology.)

Select from department-approved list. At least nine of the 18 hours must be at the 3000 level or above.

See page 88 for approved minors.

Humanities courses numbered 3000 or higher (ART 2100, MUSC 2100, THEA 2100 are accepted). The humanities for this purpose include art and architectural history, communication studies (except 3640 and 3680), English (except ENGL 3040, 3120, 3140, 3330, 4850, 4900, 4950), languages, music, philosophy, religion, theatre (except 3770, 4870, 4970), and women’s studies, as well as courses entitled Humanities.

See emphasis area requirements in program description above.

SPORTS COMMUNICATION
Bachelor of Arts
The Bachelor of Arts in Sports Communication provides a thoroughly integrated yet individualized degree program that prepares students for communication careers in the sports industry. In addition, the program provides a foundation for graduates who wish to pursue advanced degrees in sports communication. Through their coursework and extracurricular experiences, Sports Communication majors develop a set of skills in oral, written, and visual communication that enables them to research, design, present, and evaluate messages across diverse contexts and from a variety of platforms, including social media and digital communication technology.

Students may change majors into the Sports Communication program based on approval of a committee from the Department of Communication. The deadline for applying for a change of major during the fall semester is September 15, with decisions made by October 1. For spring semester changes of major, the deadline is February 15, with decisions made by March 1. Acceptance to the major is competitive and applicants should have completed 15 credit hours, including ENGL 1030 and COMM 2010 (with a B or better). All students requesting a transfer into the Sports Communication major must have a grade-point average of 3.0 or higher. An application form and a writing sample are also required. Detailed information is available from the Communication Department, 408 Strode Tower, or on the departmental website: www.clemson.edu/cauh/communication.

Freshman Year
First Semester
1 - COMM 1010 Communication Academic and Professional Development I
3 - ENGL 1030 Accelerated Composition
4 - Modern Language Requirement
3 - Mathematics Requirement
3 - Social Science Requirement
14
Second Semester
3 - COMM 2500 Public Speaking
3 - Arts and Humanities (Non-Lit.) Requirement
4 - Modern Language Requirement
3 - Mathematics or Natural Science Requirement
3 - Elective
16
Sophomore Year
First Semester
4 - COMM 2010 Intro. to Communication Studies
3 - Arts and Humanities (Literature) Requirement
3 - Modern Language Requirement
3 - Social Science Requirement
17
Second Semester
3 - COMM 3010 Communication Theory or
3 - COMM 3020 Mass Comm. Theory or
3 - COMM 3150 Critical-Cultural Communication Theory
3 - Emphasis Area Requirement
3 - Modern Language Requirement
3 - Elective
15
Junior Year
First Semester
3 - COMM 3240 Sport, Communication and Society
3 - Emphasis Area Requirement
3 - Minor Requirement
6 - Elective
15
Second Semester
3 - COMM 3060 Critical-Cultural Methods in Communication Studies. or
3 - COMM 3100 Quantitative Research Methods in Communication Studies or
3 - COMM 3110 Qualitative Research Methods in Communication Studies
3 - COMM 3250 Survey of Sports Communication
3 - Emphasis Area Requirement
3 - Minor Requirement
3 - Elective
15
Senior Year
First Semester
3 - COMM 4250 Advanced Sports Communication
3 - Minor Requirement
3 - Elective
15
Second Semester
3 - COMM 4950 Senior Capstone Seminar
1 - COMM 4980 Communication Academic and Professional Development II
3 - Minor Requirement
6 - Elective
13
2016-2017 Undergraduate Announcements

College of Behavioral, Social and Health Sciences

120 Total Semester Hours

Students must complete through 2020 in a modern language. See Modern Languages Requirement at Clemson University statement on page 27.

STAT 2220 or 2300

See General Education Requirements. Six of these credit hours must also satisfy the Cross-Cultural Awareness Requirement and, if STAT 2220 is not selected, the Science and Technology in Society Requirement.

See advisor. Emphasis area consists of nine credit hours at the 3000-4000 level. Six credit hours must be sports communication courses.

YOUTH DEVELOPMENT STUDIES
Bachelor of Science Degree Completion Program

The B.S. degree in Youth Development Studies is specifically designed as an upper-level degree completion program for professional youth workers who wish to complete a bachelor’s degree in youth development. As such, all classes are offered in the evenings and are delivered online using web-enhanced technologies. Classes are designed to be taken part-time and students are admitted in the fall and spring of each year.

The Youth Development Studies program equips students with the competencies, knowledge and skills necessary to help young people develop into healthy, competent, coping and contributing citizens. Through academic coursework and practical field-based experiences, the program integrates positive youth development theory with practical skills needed to design, deliver and assess intentional and effective youth-serving programs. Studies also prepare students for graduate work in a variety of youth-oriented fields, including programs such as Clemson University’s M.S. in Youth Development Leadership.

The term “youth development” encompasses a specific set of principles and practices that help to mold and shape the successful developmental processes of school-aged youth. These principles include a focus on building and strengthening the assets of young people, and emphasizing the strengths, abilities and potential of youth. Effective youth development programs are exemplified by supportive adult relationships, healthy and stimulating environments conducive to learning and skill attainment, availability of challenging programs and activities, and ample opportunity to engage young people in the process of their own development. Youth-serving organizations include those whose primary mission focuses on youth development, principally for young people and their families, during out-of-school time hours. Examples include afterschool programs, 4-H, YMCA/YWCA, Boys and Girls Clubs; health, fitness and sports programs; organized camping; mentoring programs; programs for children with disabilities; and faith-based ministries.

Program Objectives

The B.S. in Youth Development Studies (1) prepares entry- and mid-career level professional youth development leaders for careers in agencies, institutions, schools, and community organizations that serve youth; (2) enhances youth-serving agencies and organizations by supplying professionals who are competent in child and adolescent growth and development, and who understand the connections between problem-focused and positive youth development approaches to working with youth; (3) educates and empowers students to focus on strengths and assets within the context of culturally diverse family and community structures that promote positive youth development; (4) identifies and examines physical, emotional, cognitive, environmental and social issues related to being a young person in today’s society, and teaches students to provide programmatic and policy solutions to help solve pressing youth issues; (5) provides ethical leaders with skills necessary to effect change in complex and changing environments in their communities, in the State of South Carolina, and across the nation; (6) prepares students to design, deliver and evaluate intentional, outcomes-focused youth programs and services based on national best-practices; (7) creates a community of scholars and practitioners that enhances professional connections in the youth development field, and provides a forum for the development and maintenance of meaningful collaborations and partnerships with diverse individuals, families and community groups; (8) educates students in organizational behavior and how governance and youth development systems work; (9) prepares students to demonstrate flexibility, resilience, adaptability, caring, ethical decision-making and ethical conduct; and (10) connects students to professional development opportunities in youth development for continual growth and lifelong learning.

Admission

Students who have completed a minimum of 60 credit hours, including all Clemson University General Education credits (33 hours) and approved electives (27 hours), are eligible for admission to the B.S. degree in Youth Development Studies. Students must initiate an application to Clemson University as a transfer student, and must have a cumulative grade point average of 2.5 on all prior college coursework to be eligible for admission. All students accepted into the program are required to attend an on-campus orientation program prior to starting the program. The orientation is designed to build camaraderie among students and faculty, as well as to familiarize students with the online learning technologies that are used to deliver the program.

Curriculum

As an upper-level degree completion program, the Youth Development Studies curriculum encompasses only core academic coursework and field experience in youth development and the approved concentration area. All required coursework, including prerequisite courses, youth development core courses, and approved concentration area courses, is designed to build a set of core competencies for effective youth work. Required coursework is designed to facilitate the Ten Core Knowledge and Competencies for Afterschool and Youth Development Professionals as outlined by the National Afterschool Association (NAA) and National Institute on Out-of-School Time (NIOST).

First Year

First Semester

3 - YDP 3000 Youth Development in Society
3 - YDP 3050 Theory & Phil. of Youth Dev. Work

Second Semester

3 - YDP 3100 Youth Development and the Family
3 - YDP 3150 Community Youth Dev. Systems

Summer

3 - YDP 3200 Youth Development in Sport & Physical Activities
3 - YDP 3250 Working with Diverse Youth

Second Year

First Semester

3 - YDP 3300 Designing Effective Youth Programs
3 - YDP 3450 Creative Activities for Youth

Second Semester

3 - YDP 3350 Youth Activity Facilitation & Lead.
3 - YDP 3400 Delivering Effective Youth Programs

Summer

3 - YDP 4400 Youth Program Assessment & Eval.
3 - YDP 4990 Youth Development Fieldwork or Concentration Requirement

Third Year

First Semester

3 - YDP 4450 Admin. of Youth Dev. Organizations
3 - YDP 4990 Youth Development Fieldwork or Concentration Requirement

Second Semester

3 - YDP 4500 Prof. Issues & Ethics in Youth Dev.
3 - YDP 4990 Youth Development Fieldwork or Concentration Requirement

Summer

6 - YDP 4990 Youth Development Fieldwork or Concentration Requirement

Fourth Year

First Semester

3 - YDP 4990 Youth Development Fieldwork or Concentration Requirement

Second Semester

3 - YDP 4550 Youth and Technology

1YDP 3000 is also offered spring semester for students who transfer into the program at that time.

2Completion of three to six credits of supervised hands-on fieldwork in a youth serving organization is required.

3A concentration comprised of 12 to 15 credits of online Clemson University courses is required. The concentration area must be approved in advance, and courses are selected by the student in consultation with an advisor or program representative. Possible concentrations include Athletic Leadership, Camp Management, Event Management, and Nonprofit Leadership.
MINORS

Following are minors acceptable for students in the College of Behavioral, Social and Health Sciences. Students cannot major and minor in the same field or acquire a minor that is not allowed by the degree program.

Accounting
Adult/Extension Education
Aerospace Studies
Agricultural Business Management
Agricultural Mechanization and Business
American Sign Language Studies
Animal and Veterinary Sciences
Anthropology
Architecture
Art
Athletic Leadership
Biochemistry
Biological Sciences
Brand Communications
British and Irish Studies
Business Administration
Chemistry
Chinese Studies
Cluster
Communication Studies
Computer Science
Creative Writing
Crop and Soil Environmental Science
Digital Production Arts
East Asian Studies
Economics
English
Entomology
Entrepreneurship
Environmental Science and Policy
Equine Industry
Film Studies
Financial Management
Food Science
Forest Products
Forest Resource Management
French Studies
Gender, Sexuality, and Women’s Studies
Genetics
Geography
Geology
German Studies
Global Politics—not open to Political Science majors
Great Works
History
Horticulture
Human Resources Management
Italian Studies
Japanese Studies
Legal Studies
Management
Management Information Systems
Mathematical Sciences
Microbiology
Middle Eastern Studies
Military Leadership
Music
Natural Resources Economics
Nonprofit Leadership
Nuclear Engineering and Radiological Sciences
Packaging Science
Pan African Studies
Park and Protected Area Management
Philosophy
Physics
Plant Pathology
Political Science
Precision Agriculture
Psychology
Public Policy—not open to Political Science majors
Race, Ethnicity and Migration
Recreational Therapy
Religious Studies
Russian Area Studies
Science and Technology in Society
Screenwriting
Sociology
Spanish Studies
Spanish-American Area Studies
Sustainability
Theatre
Travel and Tourism
Turfgrass
Urban Forestry
Wildlife and Fisheries Biology
Women’s Leadership
Writing
Youth Development Studies

See pages 38-41 for details.
COLLEGE OF BUSINESS

Students in the College of Business are exposed to the principles of human behavior in business, economic, social and organizational contexts. The College promotes scholarship and a deep appreciation for lifelong learning, with thoughtful awareness of the roles individuals play in business affairs and the global economy. The role capitalism has played in the human condition is explored, as students are developed into distinctive leaders in industry and higher education and in roles of professional and public service. Faculty members pride themselves on their commitment to, and engagement with, the College’s undergraduate students.

The College includes the School of Accountancy, the John Walker Department of Economics, and the departments of Aerospace Studies, Graphic Communications, Finance, Management, Marketing, and Military Leadership.

All College of Business majors, and other non-majors taking 3000- and 4000-level courses offered by the College, are required to pay a major and course fee to fund significant infrastructure and program enhancements. Additional information about this fee and the benefits derived from it is available at www.clemson.edu/col/academics/fee.

Modern Language Requirement
A number of Clemson University degree programs require the completion of a modern language through a specific course level. Modern languages taught at Clemson University or accepted for transfer credit include American Sign Language, Arabic, Chinese, French, German, Italian, Japanese, Latin, Portuguese, Russian and Spanish. While many degree programs accept any of these modern languages for the requirement, certain programs may have specific modern language requirements. Students should consult their program’s curriculum map for details.

BUSINESS AND PROFESSIONAL PROGRAMS
Bachelor of Science degrees are offered in Accounting, Economics, Financial Management, Graphic Communications, Management, and Marketing. With the exception of Graphic Communications, these programs share a common curriculum during the first year, allowing the student maximum flexibility in choosing an appropriate major. The Business programs in Accounting, Financial Management, Management, and Marketing are accredited by AACSB International (Association to Advance Collegiate Schools of Business). The Accounting program has earned additional accounting accreditation by AACSB International. All business and professional curricula prepare students for a variety of careers and furnish an education that recognizes the need for an understanding of the basic principles of science, appreciation for the nature of human interaction, and the comprehension of the economic, political, and social environment.

Pre-Business Program
The Pre-Business program provides students planning to earn Bachelor of Science degrees in Accounting, Economics, Financial Management, Management, and Marketing with a sound academic preparation for these degrees. All Pre-Business students complete a common curriculum during the freshman year. All new Business students (including transfer students) are admitted into the Pre-Business program until the following core classes are satisfactorily completed and the grade-point average requirement is met: BUS 1010, ECON 2110, 2120, MATH 1020, 2070 or acceptable sequence, ENGL 1030, and a natural science with laboratory requirement.

Change of Major into Pre-Business
Students who change majors into Pre-Business must have completed at least 12 credit hours at Clemson and must have a 2.0 minimum cumulative grade-point average.

Freshman Curriculum
First Semester
1 - BUS 1010 Business Foundations1
2 - ECON 2110 Principles of Microeconomics1
3 - MATH 1020 Business Calculus I1,2
4 - MATH 1060 Calculus of One Variable II1,2
5 - PSYC 2030 Introduction to Psychology or SOC 2010 Introduction to Sociology
6 - Natural Science Requirement1,3
7 - Elective
15
Second Semester
3 - COMM 1500 Intro to Human Comm. or
3 - COMM 2500 Public Speaking
3 - ECON 2120 Principles of Macroeconomics1
3 - ENGL 1030 Accelerated Composition1
3 - MATH 2070 Business Calculus II1,2
4 - MATH 1080 Calculus of One Variable II1,2
3 - Science and Tech. in Society Requirement1,3
15
1 Freshman year curriculum class. Students must complete core classes before submitting a change-of-major request from Pre-Business to a business major.
2 The following sequences are acceptable: MATH 1020/2070, 1060/1080, 1060/2070. For each of the four-credit-hour courses taken, one credit will be applied toward the elective credit-hour requirement. Students considering a graduate degree in Economics or related fields should take MATH 1060/1080.
3 See General Education Requirements.

Admission to Business Degree Programs
To be eligible for admission into the Bachelor of Science degree programs in Accounting, Economics, Financial Management, or Management, students must have completed the courses outlined in the freshman core curriculum and have a cumulative grade-point average of 2.0 or higher. Students wishing to enter the Marketing Program must have completed the freshman core curriculum and have a Clemson/Bridge cumulative grade-point average of 3.0 or higher. Students should initiate a Request to Change Academic Program form with the College of Business Academic Advising Center in G-02 Sirrine Hall after completing the freshman core curriculum. Students who fail to meet the requirements for admission to a degree-granting business program may remain in Pre-Business until those requirements are met, but only until 64 semester hours of coursework have been completed. Students who exceed 64 credit hours and still do not meet the requirements for admission into a degree program must declare another major.

Transfer Credit Policy
For upper level undergraduates business courses (3000- and 4000-level courses with the rubrics of ACCT, BUS, ELE, FIN, LAW, MGT and MKT) transfer credits will only be accepted from AACSB International and/or EQUIS accredited institutions. Transfer credits from non-US institutions that do not hold either accreditation may be evaluated on a case-by-case basis.

ROTC PROGRAMS
Aerospace Studies (AFROTC)
Air Force Reserve Officer Training Corps (AFROTC) is designed to “develop quality leaders for the Air Force.” Students can earn a minor in Aerospace Studies and a commission as Second Lieutenants while pursuing a bachelor’s degree. Clemson’s program has won numerous local and national awards for excellence. The program includes courses in foundations of the Air Force, air power history, leadership and management, and national security affairs. In addition to courses, students participate in a weekly leadership laboratory. “Lead Lab” provides students a training environment to practice leadership principles in a cadet-led Air Force wing. Throughout the program, cadets hone their communication skills through various leadership positions, briefings, and papers. The first year of the program, Foundations of the United States Air Force, introduces students to the Air Force and AFROTC. It provides an overview of the basic characteristics, missions, and organization of the Air Force. The second year, The Evolution of USAF Air and Space Power, features topics on Air Force heritage and leaders; and introduces air and space power through examination of distinct capabilities and functions. The third year, Air Force Leadership Studies, teaches cadets advanced skills and knowledge in management and leadership. Special emphasis is placed on enhancing leadership skills. Cadets have an opportunity to try out these leadership and management techniques in a supervised environment as juniors and seniors. The fourth year, National Security Affairs and Preparation for Active Duty, is designed for college seniors and gives them the foundation to understand their role as military officers in American society. It is an overview of complex social and political issues facing the military profession and requires a measure of sophistication commensurate with the senior college level. Seniors are also prepared to enter active duty as they transition from student to Air Force Officer. For additional information, contact the Department of Aerospace Studies.

Military Leadership (Army ROTC)
Army Reserve Officer Training Corps (Army ROTC) is all about leadership. Students that complete the entire program may earn a commission as a Lieutenant in the Army Reserve, National Guard, or Active Army. The first two years of the program are open to all students. During the freshman year, the focus is on learning individual leadership skills such as time management, character, values, setting goals, and con-
ducting meetings. The sophomore year emphasizes teamwork, team leading, communication/briefings, decision making, team values, and organizational culture and vision. Juniors primarily learn how to plan and conduct training for large groups and are evaluated in leadership positions. Seniors focus on organizational leadership as they plan and run the organization, conduct individual counseling, and evaluate the juniors’ performance in leadership positions. This prepares them for their career as an Army Officer once they graduate. A minor in Military Leadership can be earned by completing the program. Enrollment requires no military obligation until the sophomore year for those on an Army scholarship or the junior year for those without a scholarship. Additional information is available from the Military Leadership Department.

ACCOUNTING
Bachelor of Science
The program leading to the Bachelor of Science degree in Accounting prepares students for careers as professional accountants. Students completing this program are well prepared to begin professional careers in corporate accounting or internal auditing or to continue study at the graduate level.

Students planning to become Certified Public Accountants should note that the requirements for certification in South Carolina include 150 hours of collegiate education and completion of a bachelor’s degree. Other states have similar requirements. The faculty of the School of Accountancy believes these requirements are best met with a bachelor’s degree in Accounting and completion of the Master of Professional Accountancy (MPAcc) degree program. The MPAcc program also enhances the preparation of students pursuing accounting careers in areas of specialization such as assurance services and taxation.

Admission to the MPAcc program is separate from admission to the undergraduate program. It is based on the student’s undergraduate record and score on the Graduate Management Admissions Test (GMAT). For information, contact the School of Accountancy, 300 Sirrine Hall.

In addition to accounting and business courses, the Bachelor of Science curriculum is devoted to English, public speaking, mathematics, natural and social sciences, and the humanities. Thus, students in the accounting program obtain a broad-based education that not only gives them accounting expertise but also contributes to their proficiency in analytical, communication, and interpersonal skills. Along with the general business accreditation held by the College, the Accounting degree programs offered by the School of Accountancy are separately accredited by AACSB International, the only accrediting agency for accounting programs. Students wishing to change majors into the accounting program must have a 2.0 or higher Clemson/Bridge cumulative grade-point average.

Sophomore Year
First Semester
3 - ACCT 2010 Financial Accounting Concepts
3 - MGT 2010 Principles of Management
3 - STAT 3090 Introductory Business Statistics
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Elective
15
Second Semester
3 - ACCT 2180 Management Personal Computer Applications
3 - MKT 3010 Principles of Marketing
3 - Arts and Humanities (Literature) Requirement
3 - Cross-Cultural Awareness Requirement
4 - Elective
16
Junior Year
First Semester
3 - ACCT 3110 Intermediate Financial Acct. I
3 - ACCT 3220 Accounting Information Systems
3 - ENGL 3040 Business Writing
3 - FIN 3110 Financial Management I
3 - Fine Arts Requirement
15
Second Semester
3 - ACCT 3120 Intermediate Financial Acct. II
3 - ACCT 4150 Auditing
3 - FIN 3120 Financial Management II
3 - LAW 3220 Legal Environment of Business
3 - PHIL 3440 Business Ethics
1 - Elective
16
Senior Year
First Semester
3 - ACCT 3120 Cost Accounting
3 - ACCT 3130 Intermediate Financial Acct. III
3 - ACCT 4040 Individual Taxation or
3 - ACCT 4060 Business Taxation
3 - MGT 3100 Intermediate Business Statistics
3 - International Business Requirement
15
Second Semester
3 - ACCT 3990 Internship in Accounting or
3 - Business Requirement
3 - ACCT 4100 Contemporary Reporting and Management Control Systems
3 - MGT 4150 Business Strategy
6 - Business Requirement
15
122 Total Semester Hours

Sophomores in the MPAcc program must complete ECON 3140 and 3150 in addition to ECON 3340. Students planning to change majors into the Bachelor of Science program in Economics must have a 2.0 or higher Clemson/Bridge cumulative grade-point average.

Minors
A minor field is required of students in both the Bachelor of Arts and the Bachelor of Science degree programs. Economics majors may choose, in consultation with their advisors, any College-approved minor (see page 95).

Students who wish to combine the curriculum in Economics with secondary-school teaching should take the degree in Education with a teaching area in Economics. The courses taken will be those required for teaching certification as specified by the South Carolina Department of Education, as well as those required for an Economics major.

Combined Bachelor’s/Master’s Plan
The Department of Economics allows students to count up to 12 hours of graduate credit (8000-level courses) toward both the bachelor’s and master’s degrees. Students participating in this program must have a minimum grade-point average of 3.4 and be admitted to the Graduate School prior to registering for graduate courses. Details of the suggested curriculum and program information are available from the Department of Economics.

ECONOMICS
A bachelor’s degree in Economics provides a thorough understanding of business, society, and public policy and prepares students for a wide range of careers. By combining general education courses and a strong course of study in economics, students can prepare for graduate studies in business, law, or any of the social sciences, as well as for careers in business and government.

The Department of Economics offers two undergraduate degree paths. The Bachelor of Arts degree emphasizes modern language skills and offers students maximum freedom to tailor their course of study to their specific interests and career goals. A broad choice of minors is available for this program. The Bachelor of Arts program requires 30 credit hours in economics, which should be satisfied by completing ECON 2110, 2120, and 24 credits of coursework above the sophomore level. Bachelor of Arts majors must complete ECON 3140 and 3150. ECON 4050 is strongly recommended but not required.

The Bachelor of Science program emphasizes business applications. It requires 31 credit hours in economics, which should be satisfied by completing ECON 2110, 2120, and 25 credits of coursework above the sophomore level. Bachelor of Science majors must complete ECON 4050 in addition to 3140 and 3150. Students wishing to change majors into the Bachelor of Science program in Economics must have a 2.0 or higher Clemson/Bridge cumulative grade-point average.

1See General Education Requirements. Note: Cross-Cultural Awareness Requirement may also be satisfied by some of these courses.
2ART 2100, MUSC 2100, or THEA 2100
3Students planning to pursue the Master of Professional Accountancy degree program shall take ACCT 4040.
4ECON 3100, FIN 4100, LAW 4200, MGT 4230, or MKT 4270
5Internship may be completed in the summer between junior and senior years with ACCT 4100, MGT 4150, and six hours of Business Requirement completed in the second semester of the senior year; or internship may be completed in the second semester of the senior year with ACCT 4100, MGT 4150, and six hours of Business Requirement completed during the summer sessions.
6Any three-credit 3000-, 4000- or 8000-level course in ACCT or any three credit 3000- or 4000-level course in ECON, FIN, LAW, MGT, or MKT.
7MGT 4150 must be taken at Clemson University.
Note: At least 50 percent of the total credits taken in ACCT, ECON, FIN, LAW, MGT, and MKT must be taken at Clemson University.
Dual Degree Program with Université Catholique de Louvain in Belgium

The Economics Department has a dual degree program with the Université Catholique de Louvain in Belgium. Students spend one semester taking courses at the University of Maastricht in The Netherlands and two semesters at UCL in Louvain la Neuve, Belgium. The instruction at Maastricht is in English, and the instruction at UCL is in French. After returning to Clemson to complete their studies, students will earn bachelor degrees from both Clemson and UCL. Students must be proficient in French to participate in the program. Interested students should contact the Department of Economics for information.

Change of Major into Bachelor of Arts in Economics

Students who change majors into Bachelor of Arts in Economics must have a 2.0 minimum Clemson/Bridge cumulative grade-point average.

Bachelor of Arts

Freshman Year
First Semester
- ECON 2110 Principles of Microeconomics
- MATH 1020 Business Calculus 1
- Modern Language Requirement 2
- Natural Science Requirement 3
- Elective 2
15
Second Semester
- ECON 2120 Principles of Macroeconomics
- ENGL 1030 Accelerated Composition
- MATH 2070 Business Calculus II 1
- Modern Language Requirement 2
- Science and Tech. in Society Requirement 4
15

Sophomore Year
First Semester
- ECON 3140 Intermediate Microeconomics
- MATH 3020 Stats. for Science and Engineering 2 or 3
- STAT 3090 Introductory Business Statistics
- Arts and Humanities (Literature) Requirement 1
- Arts and Humanities (Non-Lit.) Requirement 1
- Elective 3
15
Second Semester
- ECON 3150 Intermediate Macroeconomics
- HIST 1730 The West and the World II 4
- Major Requirement 7
- Minor Requirement 2
- Elective 3
15
Junior Year
First Semester
- COMM 1500 Intro. to Human Comm. or
- COMM 2500 Public Speaking
- Major Requirement 7
- Minor Requirement 2
- Elective 6
15
Second Semester
- Major Requirement 7
- Minor Requirement 6
- Elective 6
15

Senior Year
First Semester
- Major Requirement 7
- Minor Requirement 2
- Elective 9
15
Second Semester
- Major Requirement 7
- Minor Requirement 6
- Elective 6
120 Total Semester Hours

FIN 310 is recommended for Students minoring in Financial Management. Three credit hours must be selected from ECON 3440, 3500, 4020, 4040, 4100, 4240, 4260, 4350, 4550. Note: Only ECON courses numbered 3060 and above may be used to satisfy the Major Requirement.

Note:
The following sequences are also acceptable: MATH 1060/1080, and MATH 3060/3070. Students considering a graduate degree in Economics should begin with MATH 1060.

Students must complete through 2020 in a modern language. See Modern Languages Requirement at Clemson University statement on page 27.

ECON courses numbered 3160 and above may be used to satisfy the Major Requirement.

ECONOMICS Bachelor of Science

Sophomore Year
First Semester
- ACCT 2010 Financial Accounting Concepts 1
- ECON 3140 Intermediate Microeconomics
- MATH 3020 Stats. for Science and Engineering 2 or 3
- STAT 3090 Introductory Business Statistics
- MGT 2010 Principles of Management
- Elective 3
15
Second Semester
- ACCT 2020 Managerial Accounting Concepts
- ECON 3150 Intermediate Macroeconomics
- Arts and Humanities (Literature) Requirement 1
- Arts and Humanities (Non-Lit.) Requirement 1
- Cross-Cultural Awareness Requirement 1
15
Junior Year
First Semester
- ECON 4050 Introduction to Econometrics
- FIN 3060 Corporation Finance 1, 4
- Major Requirement 7
- Minor Requirement 5
- Elective 16
Second Semester
- Major Requirement 7
- Minor Requirement 6
- Elective 6
15
Senior Year
First Semester
- Major Requirement 7
- Minor Requirement 2
- Elective 9
15
Second Semester
- Major Requirement 7
- Minor Requirement 6
- Elective 6
120 Total Semester Hours

FIN 310 is recommended for Students minoring in Financial Management. Three credit hours must be selected from ECON 3440, 3500, 4020, 4040, 4100, 4240, 4260, 4350, 4550. Note: Only ECON courses numbered 3060 and above may be used to satisfy the Major Requirement.

Note: At least 50 percent of the total credits taken in ACCT, ECON, FIN, LAW, MGT, and MKT must be taken at Clemson University.

FINANCIAL MANAGEMENT Bachelor of Science

The Bachelor of Science in Financial Management covers how to plan for and manage monetary resources based on expectations about the future. Finance deals with how to price assets, how to make investment and project decisions, and how financial markets work. The curriculum prepares students for careers in such areas as corporate finance, banking, investments, financial planning, insurance, and real estate. The curriculum also provides excellent preparation for students interested in graduate study, including law school, accounting or business administration.

The core of the curriculum provides a broad overview of the major fields of finance, including corporate finance, investments, real estate, and financial markets and institutions. Students then have the ability to tailor courses by choosing an emphasis area that focuses on a specific area of finance. Students who complete the Financial Planning emphasis area are eligible to sit for the Certified Financial Planner (CFP®) examination.

Students wishing to change majors into the Financial Management program must have a 2.0 or higher Clemson/Bridge cumulative grade-point average.

Sophomore Year
First Semester
- ACCT 2010 Financial Accounting Concepts 3
- CPAicum 2200 Microcomputer Applications or
- MGT 2180 Mgt. Personal Computer Appl.
- MGT 2010 Principles of Management
- STAT 3090 Introductory Business Statistics
- Arts and Humanities (Non-Lit.) Requirement 1
15

3See General Education Requirements.
4FIN 3110 is recommended for Students minoring in Financial Management.
5Students considering a graduate degree in Economics or related fields should take MATH 3020.
6The following sequences are also acceptable: MATH 1060/1080, and MATH 3060/3070. Students considering a graduate degree in Economics should begin with MATH 1060.
7Students must complete through 2020 in a modern language. See Modern Languages Requirement at Clemson University statement on page 27.
8ECON courses numbered 3160 and above may be used to satisfy the Major Requirement.
9This course satisfies the cross-cultural requirement.
10Three credit hours must be selected from ECON 3440, 3500, 4020, 4040, 4100, 4240, 4260, 4350, 4550. Note: Only ECON courses numbered 3060 and above may be used to satisfy the Major Requirement.
11At least 50 percent of the total credits taken in ACCT, ECON, FIN, LAW, MGT, and MKT must be taken at Clemson University.
Second Semester
3 - MGT 3100 Intermediate Business Statistics
2 - Elective
1 - Elective
15

Junior Year
First Semester
3 - ACCT 3110 Intermediate Financial Acct. I
3 - ENGL 3040 Business Writing
3 - FIN 3110 Financial Management I
3 - LAW 3220 Legal Environment of Business
3 - Elective
15

Second Semester
3 - ACCT 3120 Intermediate Financial Acct. II
3 - FIN 3050 Investment Analysis
3 - FIN 3070 Principles of Real Estate
3 - FIN 3120 Financial Management II
3 - Emphasis Area Requirement
15

Senior Year
First Semester
3 - ACCT 3030 Cost Accounting
3 - ACCT 3130 Intermediate Financial Acct. III
3 - FIN 3080 Financial Institutions and Markets
6 - Emphasis Area Requirement
15

Second Semester
3 - MGT 4150 Business Strategy
6 - Emphasis Area Requirement
3 - Elective
15

121 Total Semester Hours

See General Education Requirements. Note: Cross-Cultural Awareness Requirement may also be satisfied by some of these courses.

If this requirement is met through the completion of another General Education requirement, students will have three additional elective hours. Students must complete 121 hours total.

Fifteen credit hours from one of the following emphasis areas are required. Emphasis area should be selected before the end of the junior year in consultation with the advisor (not all courses are offered every semester):

Corporate Finance—FIN 4110, and two courses selected from FIN 4010, 4020, 4030, 4040, and any 4000-level FIN course, or any 3000–4000-level ACCT course. Credit will only be given for only one of FIN 4030 or 4040. Only one 3000–4000-level ACCT course may count toward the emphasis area.

Financial Planning—ACCT 4040 (should be taken spring of junior year), 4050; FIN 3040, 4070, 4090. Due to CFP Board requirements, no substitutions are allowed.

Financial Services—FIN 4050, 4060, 4080, 4110, and one course selected from FIN 3040, 3390, or any 4000-level FIN course, or any 3000–4000-level ACCT course.

Real Estate—FIN 4150, 4160, 4170, LAW 3330, and one course from selects CRP 4010, ECON 3060, 3400, or FIN 3990, or any 4000-level FIN course, or any 3000–4000-level ACCT course.

MGT 4150 must be taken at Clemson University.

Notes:
1. Financial Management majors are required to have a minimum grade-point average of 2.0 in all FIN-designated courses to graduate. Only the last grade for courses that are repeated is used in computing this grade-point average.

2. At least 50 percent of the total credits taken in ACCT, ECON, FIN, LAW, MGT, and MKT must be taken at Clemson University.

3. Three credits of the same variable credit course, such as FIN 4980, are required to be used to satisfy emphasis area requirements.

4. No ACCT course already required by the major (ACCT 3030, 3110, 3120, 3130) may be used to fulfill an emphasis area requirement.

GRAPHIC COMMUNICATIONS

Bachelor of Science

The Bachelor of Science degree in Graphic Communications prepares students for professional careers in printing, publishing, packaging, and related industries. The core curriculum assures graduates of having the skills and knowledge required by most entry-level jobs. The major requirements allow each student to select courses that enhance career preparation in specific segments of graphic communications. Coursework is heavily oriented around individual laboratory performance, which stresses the development of problem-solving skills in a broad cross-section of manufacturing areas. Applications include all major processes and a variety of industry segments, including commercial printing, publishing, package production, specialty printing, and industrial applications of printing technology beyond communications. The most common career opportunities are in printing management, production planning and supervision, and commercial and technical sales.

The Graphic Communications program is designed to be completed in four years (eight semesters and one or two summers). While students may take one internship during a fall or spring semester, one or two summers are typically used to make up for that semester. The department schedules courses in summers for that purpose. Taking a reduced load per term or other circumstances could extend the time needed to meet graduation requirements.

Policy on Advancement in Graphic Communications

Graphic Communications majors must earn a C or better in prerequisite GC courses before enrolling in the next level GC course. Registration priority is given to those students for whom the course is a requirement.

Change of Major into Graphic Communications

Students who change majors into Graphic Communications must have completed at least 12 credit hours at Clemson, must have a 2.0 minimum cumulative grade-point average, and must have earned a B or better in GC 1020.

Freshman Year
First Semester
1 - GC 1010 Orientation to Graphic Comm.
4 - GC 1020 Foundations in Graphic Comm.
3 - PSYC 2010 Introduction to Psychology
4 - Approved Laboratory Science Requirement
3 - Major Requirement
15

Second Semester
3 - ENGL 1030 Accelerated Composition
4 - GC 1040 Graphic Communications I
3 - STAT 2300 Statistical Methods I or 3 - STAT 3090 Intro. Business Statistics or 3 - STAT 3300 Statistical Methods II
4 - Approved Laboratory Science Requirement
1 - Elective
15

Sophomore Year
First Semester
3 - ACCT 2010 Financial Accounting Concepts
4 - GC 2070 Graphic Communications II
3 - MGT 2010 Principles of Management
2 - PKGS 1020 Intro. to Packaging Science
3 - Arts and Humanities (Literature) Requirement
15

Second Semester
3 - ACCT 2020 Managerial Accounting Concepts
3 - ECON 2000 Economic Concepts or 3 - ECON 2110 Principles of Microeconomics
3 - ENSP 2000 Intro. to Environmental Science
4 - GC 3400 Digital Imaging and eMedia
3 - GC 3460 Ink and Substrates
16

Summer
0 - COOP 2010 Cooperative Education
1 - GC 3500 Graphic Comm. Internship I
1

Junior Year
First Semester
3 - COMM 1500 Intro. to Human Comm. or 3 - COMM 2500 Public Speaking
4 - GC 4060 Package and Specialty Printing
3 - MGT 3010 Principles of Marketing
6 - Major Requirement
15

Second Semester
3 - ENGL 3140 Technical Writing
4 - GC 4400 Commercial Printing
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Major Requirement
3 - Elective
15

Senior Year
First Semester
3 - COMM 1500 Intro. to Human Comm. or 3 - COMM 2500 Public Speaking
4 - GC 4060 Package and Specialty Printing
3 - MGT 3010 Principles of Marketing
6 - Major Requirement
15

Second Semester
3 - ENGL 3140 Technical Writing
4 - GC 4400 Commercial Printing
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Major Requirement
3 - Elective
15

Summer
0 - COOP 2020 Cooperative Education
1 - GC 4500 Graphic Comm. Internship II
1

Senior Year
First Semester
4 - GC 4440 Current Dev. and Trends in GC
3 - MGT 3070 Human Resource Management or 3 - PSYC 3640 Industrial Psychology or 3 - PSYC 3680 Organizational Psychology
3 - Graphic Communication Technical Req.
3 - Major Requirement
2 - Elective
15

Notes:
Second Semester
3 - GC 4480 Planning and Controlling Printing Functions
2 - GC 4800 Senior Seminar in Graphic Comm.
3 - Major Requirement2
4 - Elective
12
122 Total Semester Hours

Sophomore Year
First Semester
3 - ACCT 2010 Financial Accounting Concepts
3 - MGT 2010 Principles of Management1
3 - CPSC 2200 Microcomputer Applications1 or MGT 2180 Mgt. Personal Computer Appl.1
3 - STAT 3090 Introductory Business Statistics
3 - Arts and Humanities (Non-Lit.) Requirement2
15
Second Semester
3 - ACCT 2020 Managerial Accounting Concepts
3 - MGT 3010 Intermediate Business Statistics1
3 - Arts and Humanities (Literature) Requirement2
3 - Cross Cultural Awareness Requirement2
3 - Elective
15
Junior Year
First Semester
3 - MGT 3070 Human Resource Management1 or MGT 4000 Mgt. of Organizational Behavior1
3 - MGT 3180 Management of Info. Systems1
3 - MGT 3900 Operations Management1
3 - MKT 3010 Principles of Marketing
3 - Support Area Requirement1
15
Second Semester
3 - LAW 3220 Legal Environment of Business1
3 - MGT 3120 Decision Models for Management1
6 - Emphasis Area Requirement1,4
3 - Support Area Requirement1
15
Senior Year
First Semester
3 - FIN 3100 Financial Management I
3 - Emphasis Area Requirement1,4
6 - Support Area Requirement1,4
3 - Elective
15
Second Semester
3 - MGT 4150 Business Strategy1,5
3 - MGT 4230 International Business Management1
3 - Emphasis Area Requirement1,4
3 - Support Area Requirement1,4
3 - Elective
15
120 Total Semester Hours

MARKETING
Bachelor of Science
The Bachelor of Science degree program in Marketing develops an understanding of various aspects of marketing. The curriculum prepares students for professional marketing careers in industry, government, or the nonprofit sector. Graduates are also well prepared for entrance into the Master of Business Administration, law, or other graduate programs. For students who want a general perspective of marketing, the curriculum provides a broad range of subjects with the flexibility to tailor courses by choosing areas that enhance career preparation in various areas of marketing. Subjects include promotional strategy, professional selling, sales management, public and nonprofit marketing. Subjects include promotional strategy, professional selling, sales management, public and nonprofit marketing. Students who want a general perspective of marketing, the curriculum provides a broad range of subjects with the flexibility to tailor courses by choosing areas that enhance career preparation in various areas of marketing. Subjects include promotional strategy, professional selling, sales management, public and nonprofit marketing. The Marketing degree is accredited by AACSB International.

Combining Bachelor of Science/Master of Science Degree Program
Under this plan, students may reduce the time necessary to earn both degrees by applying graduate credits to both undergraduate and graduate program requirements. Students may apply up to 12 hours of graduate credits to both the BS and MS degrees. To be eligible for this program, students must have a 3.4 or higher grade point average, have completed at least 90 credits of coursework and have been admitted to the Graduate School prior to registering for graduate courses. Students in this program are conditionally accepted to the graduate program until they have completed all BS degree requirements.

Sophomore Year
First Semester
3 - ACCT 2010 Financial Accounting Concepts
3 - MGT 2010 Principles of Management1
3 - CPSC 2200 Microcomputer Applications1 or MGT 2180 Mgt. Personal Computer Appl.1
3 - STAT 3090 Introductory Business Statistics
3 - Arts and Humanities (Non-Lit.) Requirement2
15
Second Semester
3 - ACCT 2020 Managerial Accounting Concepts
3 - MGT 3010 Intermediate Business Statistics1
3 - Arts and Humanities (Literature) Requirement2
3 - Cross Cultural Awareness Requirement2
3 - Elective
15
Junior Year
First Semester
3 - MGT 3070 Human Resource Management1 or MGT 4000 Mgt. of Organizational Behavior1
3 - MGT 3180 Management of Info. Systems1
3 - MGT 3900 Operations Management1
3 - MKT 3010 Principles of Marketing
3 - Support Area Requirement1
15
Second Semester
3 - LAW 3220 Legal Environment of Business1
3 - MGT 3120 Decision Models for Management1
6 - Emphasis Area Requirement1,4
3 - Support Area Requirement1
15
Senior Year
First Semester
3 - FIN 3100 Financial Management I
3 - Emphasis Area Requirement1,4
6 - Support Area Requirement1,4
3 - Elective
15
Second Semester
3 - MGT 4150 Business Strategy1,5
3 - MGT 4230 International Business Management1
3 - Emphasis Area Requirement1,4
3 - Support Area Requirement1,4
3 - Elective
15
120 Total Semester Hours

Business Analytics—MGT 3500, 3510, 4500, and 4540
Entrepreneurship—ELE 3100, MGT (ELE) 3150 plus two courses from ECON (ELE) 3210, ELE 4700, 4790, MGT 4420, 4970, MKT (ELE) 346, MGT 4200, 4250, 4260, 4270, 4280, 4290, 4300, SCC (ELE, POSC, PSYC) 3560.

Human Resource Management—Any four of the following courses, including at least two management courses not already taken in the basic curriculum: MGT 3070, 4080, 4250, 4310, 4350, 4360, 4400, PSYC 3640, 4600, 4570.

International Marketing—Any four of the following courses: ECON 3120, FIN 4110, LAW 4200, MGT 4240, 4440, MKT 4270, POSC 3630, 3620, 3670, 4290, and any international business courses approved in advance and taken as part of a study abroad experience.

Management Information Systems—MGT 4110, 4120, and two courses from CPSC 4620, MGT 4300 (topic must be approved in advance by advisor), 4540, 4550, 4560.

Operations Management—MGT 4200, and two courses from MGT 4080, 4100, 4270, and one course from MGT 4040, 4140, 4440.

Supply Chain Management—MGT 4120, 4240, and two courses from MGT 3050, 3170, 4200, 4270, 4440, 4440, MGT 4260, General Management—Any four 3000- or 4000-level management courses.

MGT 4150 must be taken at Clemson University.

Note: At least 50 percent of the total credits taken in ACCT, ECON, ELE, FIN, LAW, MGT, and MKT must be taken at Clemson University.
Second Semester
3 - ACCT 2020 Managerial Accounting Concepts
3 - MKT 3310 Marketing Metrics and Analytics
3 - Arts and Humanities (Literature) Requirement¹
3 - Cross-Cultural Awareness Requirement¹
3 - Professional Development Requirement²
15

Junior Year
First Semester
3 - ENGL 3040 Business Writing
3 - LAW 3220 Legal Environment of Business
3 - MKT 3020 Consumer Behavior
3 - MKT 4310 Marketing Research³
3 - Support Course Requirement⁴
15

Second Semester
3 - FIN 3060 Corporation Finance
3 - MKT 4200 Professional Selling
3 - Marketing Requirement¹
3 - Support Course Requirement⁴
4 - Elective
16

Senior Year
First Semester
3 - MGT 4150 Business Strategy³
3 - MKT 4270 International Marketing
3 - Marketing Requirement¹
3 - Support Course Requirement⁴
3 - Elective
15

Second Semester
3 - MKT 4500 Strategic Marketing Management³
3 - Marketing Requirement¹
6 - Support Course Requirement⁴
3 - Elective
15

121 Total Semester Hours

¹See General Education Requirements. Note: Cross-Cultural Awareness Requirement may also be satisfied by other General Education courses.
²See Advisor. May include GC 1990, INT 1010 or 2010, MKT 3980, 3990, 4980, or 4990, or other professional development courses approved by a department advisor. Courses cannot count toward both Support Course Requirement and Professional Development Requirement.
³Must be taken at Clemson University.
⁴Chosen jointly by the student and the advisor. Certain minors may be used to satisfy the Support Courses Requirement. A maximum of six hours can be from MKT 2980, 3980, 3990, 4980, and 4990. See advisor.
⁵Select from any MKT 3000- and 4000-level content courses except for MKT 3980, 3990, 4980, or 4990.

Note: At least 30 percent of the total credits taken in ACCT, ECON, FIN, LAW, MGT, and MKT must be taken at Clemson University.
MINORS
Following are minors acceptable for students in the College of Business. Students cannot major and minor in the same field or acquire a minor that is not allowed by the degree program.

Accounting
Adult/Extension Education
Aerospace Studies
Agricultural Business Management
Agricultural Mechanization and Business
American Sign Language Studies
Animal and Veterinary Sciences
Anthropology
Architecture
Art
Athletic Leadership—not open to Marketing majors
Biochemistry
Biological Sciences
Brand Communications
British and Irish Studies
Business Administration—not open to Accounting, BS Economics (except students pursuing a second degree in a business related field), Financial Management, Management, or Marketing majors
Chemistry
Chinese Studies
Cluster
Communication Studies
Computer Science
Creative Writing
Crop and Soil Environmental Science
Digital Production Arts
East Asian Studies
Economics
English
Entomology
Entrepreneurship—not open to Accounting, BS Economics, Financial Management, Management, or Marketing majors
Environmental Science and Policy
Equine Industry
Film Studies
Financial Management
Food Science
Forest Products
Forest Resource Management
French Studies
Gender, Sexuality, and Women’s Studies
Genetics
Geography
Geology
German Studies
Global Politics
Great Works
History
Horticulture
Human Resources Management—not open to Management majors
Italian Studies
Japanese Studies
Legal Studies
Management
Management Information Systems—not open to Management Majors
Mathematical Sciences
Microbiology
Middle Eastern Studies
Military Leadership
Music
Natural Resource Economics
Nonprofit Leadership
Nuclear Engineering and Radiological Sciences
Packaging Science
Pan African Studies
Park and Protected Area Management
Philosophy
Physics
Plant Pathology
Political Science
Precision Agriculture
Psychology
Public Policy
Race, Ethnicity and Migration
Recreational Therapy
Religious Studies
Russian Area Studies
Science and Technology in Society
Screenwriting
Sociology
Spanish Studies
Spanish-American Area Studies
Sustainability
Theatre
Travel and Tourism
Turfgrass
Urban Forestry
Wildlife and Fisheries Biology
Women’s Leadership
Writing
Youth Development Studies

See pages 38-41 for details.
All engineering programs have the common goal of producing engineering graduates who are able to:

- apply knowledge of math, science, and engineering
- identify, formulate, and solve engineering problems
- design and conduct experiments and analyze data
- design systems or components to meet needs within realistic constraints
- function on multidisciplinary teams
- communicate effectively
- conduct themselves professionally and ethically
- understand engineering’s global, economic, environmental, and societal context
- understand contemporary engineering issues
- apply modern engineering methods and tools
- appreciate the need for lifelong learning

Each engineering program has objectives specific to the discipline. All prepare students for a wide range of career opportunities and provide sound preparation for graduate study. Each curriculum provides opportunities for students to pursue individual areas of interest.

**Admission Requirements**

The University admission requirements are given under the section entitled Admission. Engineering applicants are strongly advised to include the following in their high school programs:

- **Mathematics**—Four units, including geometry, trigonometry, and introductory calculus
- **Laboratory Science**—At least three units, including both chemistry and physics
- **Computing**—At least one unit, including introduction to a programming language. Applicants should have good keyboarding skills.

**General Engineering Program**

All new engineering students (including transfer students who have not completed all courses in the freshman engineering curriculum) are admitted into General Engineering. The General Engineering Program provides students an opportunity to explore various engineering fields while getting a sound academic preparation for engineering study.

**Freshman Curriculum**

**First Semester**

1. **ENGR 1090 Programming and Problem Solving**
2. **ENGR 1050 Engineering Disciplines and Skills I**
3. **ENGR 1080 Programming and Problem Solving II**
4. **ENGL 1030 Accelerated Composition**
5. **CH 1010 General Chemistry**
6. **MATH 1080 Calculus of One Variable I**

**Second Semester**

1. **ENGR 1070 Programming and Problem Solving II**
2. **ENGR 1060 Engineering Disciplines and Skills II**
3. **MATH 1060 Calculus of One Variable I**
4. **PHYS 1200 Physics with Calculus I**
5. **ENGR 1050 Programming and Problem Solving Applications**
6. **ENGR 1080 Programming and Problem Solving II**
7. **ENGR 1090 Programming and Problem Solving Applications**
8. **MATH 1060 Calculus of One Variable II**
9. **PHYS 1200 Physics with Calculus I**
10. **MATH 1080 Calculus of One Variable I**

**General Education Requirements for Engineering Curricula**

Engineers have an obligation to practice their profession in a socially responsible manner. The education of engineers must prepare them for this responsibility and make them aware of the constraints imposed by societal and cultural factors. Thus, the humanities and social sciences are an important component of the engineering curricula. Further, the program of study must include educational experiences addressing the intersection of science and technology with society and cross-cultural awareness.

In addition to the University General Education Requirements, some engineering majors are required to complete additional credit hours from a college approved list. Individual engineering curricula may have more specific requirements. For a complete list of acceptable courses, please speak with an advisor.

**Electives for Engineering Curricula**

Advisors must approve any course taken for elective credit in the Engineering curriculum. Courses excluded for elective credit include PHYS 2000, 2070/2090, 2080/2100.
Registration Requirements
A cumulative grade-point average of 2.0 or higher is required for registration in engineering courses numbered 3000 or higher. Priority for registration in engineering courses is given to those majors for whom the course is a degree requirement. Exceptions to this requirement may be granted by the department offering the course.

Graduation Requirements
In addition to other institutional requirements, candidates for a baccalaureate degree in Engineering are required to have a 2.0 or higher cumulative grade-point average in all engineering courses taken at Clemson. All courses with “Engineering” in the course designator (e.g., ENGR 1300, ME 4530, etc.) are used in this calculation.

The baccalaureate programs in Engineering are designed to be completed in four years (eight regular semesters). Taking a reduced load or participating in cooperative education will extend this time. On average, Clemson engineering students take about four and one-half years to complete the requirements for graduation.

BIOENGINEERING
Bachelor of Science
The undergraduate program in Bioengineering is built upon a rigorous engineering science foundation that is, in turn, based upon a broad curriculum of applied and life sciences, mathematics, electives in humanities, social science, and design. Students select a formal focus that concentrates in a subfield of interest in bioengineering: Bioelectrical Concentration or Biomaterials Concentration.

The curriculum provides undergraduates with a solid background in engineering and life sciences in preparation for advanced studies. Through the Bioengineering program, graduates acquire an understanding of biology, biochemistry, and physiology and the capability to apply advanced mathematics, including differential equations and statistics, science, and engineering, to solve problems at the interface of engineering and biology. Graduates also have an ability to make measurements on and interpret data from living systems, addressing the problems associated with the interaction between living and nonliving materials and systems.

Combined Bachelor's/Master's Plan
Bioengineering undergraduates may begin a Master of Science degree program or a Master of Engineering degree program while completing the Bachelor of Science degree and use a limited number of courses to satisfy the requirements of both the undergraduate and graduate degrees. Details are available from the Department of Bioengineering.

BIOELECTRICAL CONCENTRATION

Freshman Year
First Semester
4 - CH 1010 General Chemistry
3 - ENGL 1030 Accelerated Composition
1 - ENGR 1050 Engineering Disciplines and Skills I
1 - ENGR 1060 Engineering Disciplines and Skills II
4 - MATH 1060 Calculus of One Variable I
3 - Arts and Humanities Requirement 1 or
3 - Social Science Requirement 1
16

Second Semester
4 - CH 1020 General Chemistry
1 - ENGR 1070 Programming and Problem Solving I
1 - ENGR 1080 Programming and Problem Solving II
1 - ENGR 1090 Programming and Problem Solving Applications
4 - MATH 1080 Calculus of One Variable II
3 - PHYS 1220 Physics with Calculus I 2
3 - Arts and Humanities Requirement 1 or
3 - Social Science Requirement 1
1 - Biology Requirement 1
18

Sophomore Year
First Semester
3 - BIOE 2010 Intro. to Biomedical Engineering
2 - ECE 210 Logic and Computing Devices
3 - ECE 2200 Electric Circuits I
1 - ECE 2090 Logic and Computing Devices Lab.
1 - ECE 2110 Electrical Engineering Lab. I
1 - MATH 2060 Calculus of Several Variables
3 - PHYS 2210 Physics with Calculus II 2
17

Second Semester
3 - BIOE 2020 Bioengineering Professional Development
3 - CE 2010 Statics
1 - ECE 2120 Electrical Engineering Lab. II
3 - ECE 2220 Electric Circuits II
2 - ENGR 2080 Engineering Graphics and Machine Design
4 - MATH 2080 Intro. to Ordinary Diff. Equations
3 - MSE 2100 Introduction to Materials Science
16

Junior Year
First Semester
4 - BIOE 3150 Functional Human Anatomy
3 - CH 2010 Survey of Organic Chemistry 1 and
1 - CH 2020 Survey of Organic Chemistry Lab. 1
3 - ECE 3110 Electrical Engineering Lab. III
3 - ECE 3200 Electronics I
3 - ECE 3300 Signals, Systems, and Transforms
15

Second Semester
3 - BCHM 3050 Essential Elements of Biochem.
0 - BIOE 3000 Bioengineering Ethics and Entrepreneurship
3 - BIOE 3020 Biomaterials
3 - BIOE 3700 Bioinstrumentation and Bioimaging
3 - ECE 3800 Electromagnetics
3 - BIOE or ECE Technical Requirement 4
15

Senior Year
First Semester
3 - BIOE 3200 Biomechanics
3 - BIOE 4010 Bioengineering Design Theory
3 - BIOL 4610 Cell Biology
3 - Arts and Humanities Requirement 1 or
3 - Social Science Requirement 1
3 - BIOE or ECE Technical Requirement 4
15

Second Semester
1 - BIOE 4000 Bioengineering Leadership and MedTech Commercialization
3 - BIOE 4030 Applied Biomedical Design
3 - BIOE 4480 Tissue Engineering
3 - Arts and Humanities Requirement 1 or
3 - Social Science Requirement 1
6 - BIOE or ECE Technical Requirement 4
16

128 Total Semester Hours

See Policy on Humanities and Social Sciences for Engineering Curricula. Six of these credit hours must also satisfy General Education Cross-Cultural Awareness and Science and Technology in Society Requirements.

Students planning to enter medical school should take CH 2230/2270 instead of CH 2010/2020 and take CH 2240/2280 as an additional course sequence. Students planning to enter medical school should also take physics laboratories as additional courses (PHYS 1220 course with PHYS 1240 lab and PHYS 2210 course with PHYS 2230 lab).

Select from department-approved list.

Notes:
1. To transfer from General Engineering into the Bioengineering degree program, students must have a minimum cumulative grade-point average of 3.0 in courses taken at Clemson and must have earned a C or better in each course in the General Engineering freshman curriculum, including the Arts and Humanities/Social Science Requirements.
2. A student is allowed to enroll in ECE courses (excluding ECE 2010, 2080, 3080) only when all prerequisites have been passed with a grade of C or better.
3. All Bioelectrical Concentration students must have a cumulative engineering grade-point average of 2.0 to enroll in any 3000- or 4000-level ECE courses.
4. No student may exceed a maximum of two attempts, excluding a W, to complete successfully any ECE course.

BIOMATERIALS CONCENTRATION

Freshman Year
First Semester
4 - CH 1010 General Chemistry
3 - ENGL 1030 Accelerated Composition
1 - ENGR 1050 Engineering Disciplines and Skills I
1 - ENGR 1060 Engineering Disciplines and Skills II
4 - MATH 1060 Calculus of One Variable I
3 - Arts and Humanities Requirement 1 or
3 - Social Science Requirement 1
16

Second Semester
4 - CH 1020 General Chemistry
1 - ENGR 1070 Programming and Problem Solving I
1 - ENGR 1080 Programming and Problem Solving II
1 - ENGR 1090 Programming and Problem Solving Applications
4 - MATH 1080 Calculus of One Variable II
3 - PHYS 1220 Physics with Calculus I 2
3 - Arts and Humanities Requirement 1 or
3 - Social Science Requirement 1
1 - Biology Requirement 1
18
Sophomore Year

First Semester
3 - BIOE 2010 Intro. to Biomedical Engineering
1 - CH 2100 Survey of Organic Chemistry
3 - CH 2102 Survey of Organic Chemistry Lab.
4 - MATH 2060 Calculus of Several Variables
3 - MSE 2100 Introduction to Materials Science
3 - PHYS 2210 Physics with Calculus II

Second Semester
0 - BIOE 2000 Bioengineering Professional Development
3 - BIOE 3020 Biomaterials
3 - CE 2010 Statics
2 - ECE 2070 Basic Electrical Engineering
1 - ECE 2080 Basic Electrical Engineering Lab.
2 - ENGR 2080 Engineering Graphics and Machine Design
4 - MATH 2080 Intro. to Ordinary Diff. Equations

Junior Year

First Semester
3 - BIOE 3200 Biomechanics
4 - BIOL 3150 Functional Human Anatomy
3 - MSE 3190 Materials Processing I
3 - MSE 3260 Thermodynamics of Materials
3 - MSE 3270 Transport Phenomena

Second Semester
3 - BCHM 3050 Essential Elements of Biochem.
0 - BIOE 3000 Bioengineering Ethics and Entrepreneurship
3 - BIOE 3210 Biofluid Mechanics
3 - BIOE 3700 Bioinstrumentation and Bioimaging
3 - MATH 3020 Statistics for Science and Engr.
3 - Bioengineering Technical Requirement 1

Senior Year

First Semester
3 - BIOE 4010 Bioengineering Design Theory
3 - BIOL 4610 Cell Biology
3 - MSE 4150 Intro. to Polymer Science and Engr.
3 - Arts and Humanities Requirement or Social Science Requirement
3 - Bioengineering Technical Requirement 1

Second Semester
1 - ENGR 2100 Computer-Aided Design and Solving Applications
2 - PHYS 2210 Computer-Aided Design and Engineering Applications
4 - MATH 1080 Calculus of One Variable II
3 - PHYS 2220 Physics with Calculus II
4 - Biology Requirement

Sophomore Year

First Semester
2 - ENGR 2100 Computer-Aided Design and Solving Applications
2 - PHYS 2210 Computer-Aided Design and Engineering Applications
4 - MATH 2080 Intro. to Ordinary Diff. Equations
3 - ME 3100 Thermodynamics and Heat Transfer
4 - MICRO 3050 General Microbiology

Junior Year

First Semester
3 - BE 2110 Fundamentals of Biosystems Engr.
3 - CE 2010 Statics
4 - MATH 2060 Calculus of Several Variables
3 - PHYS 2210 Physics with Calculus II
4 - Biology Requirement

Second Semester
2 - ENGR 2100 Computer-Aided Design and Solving Applications
2 - CE 2080 Dynamics
4 - MATH 2080 Intro. to Ordinary Diff. Equations
3 - ME 3100 Thermodynamics and Heat Transfer
4 - MICRO 3050 General Microbiology

Junior Year

First Semester
3 - BE 3200 Principles and Practices of Geomatics
3 - BE 4100 Biol. Kinetics and Reactor Modeling
3 - BIOL 4410 Ecology
4 - CE 3410 Introduction to Fluid Mechanics
2 - ECE 2070 Basic Electrical Engineering
1 - ECE 2080 Basic Electrical Engineering Lab.

Second Semester
3 - BE 3220 Small Watershed Hydrology and Sedimentology
3 - BE 4120 Heat and Mass Transport in Biosystems Engineering
3 - BE 4130 Instrumentation and Process Control for Biosystems Engineering
3 - BE 4380 Bioprocess Engineering Design
3 - CH 2230 Organic Chemistry
1 - CH 2270 Organic Chemistry Laboratory

BIOSYSTEMS ENGINEERING

Bachelor of Science

Biosystems engineering is the field of engineering most closely allied with advances in biology. Biosystems engineers apply engineering design and analysis to biological systems and incorporate fundamental biological principles to engineer design solutions to achieve ecological balance.

The Biosystems engineering program emphasizes two main areas – sustainable bioprocess engineering, with its basis in microbiology, and ecological engineering, with its basis in ecology. Bioprocess engineering focuses on the sustainable production of biorenewable compounds - biofuels, nutraceuticals, bioactive molecules, and biomaterials - using metabolic pathways found in nature and green processing technologies. Ecological engineering focuses on the design of sustainable communities utilizing low-impact development strategies such as bioretention basins, rainwater harvesting, and bioswales for stormwater retention, treatment, and management. Both emphasis areas interface with ecologically sound food and energy systems to both undergraduate and graduate program requirements.

Biosystems engineers lead teams to:
- Design bioprocesses and systems for biofuels (biodiesel, hydrogen, ethanol), biopharmaceutical, bioplastics, and food processing industries
- Develop ecological designs (permeable pavement, bioswales, green infrastructure) to integrate stormwater management into the landscape
- Integrate biological sustainability into energy, water, and food systems
- Provide engineering expertise for agriculture, food processing, and manufacturing industries.

Biosystems engineering graduates are highly qualified to pursue graduate studies in biosystems engineering, biomedical engineering or ecological engineering fields, or medical or veterinary school.

Students are urged to complete a minor and participate in the Cooperative Education, Biosystems Engineering Intern, and/or Study Abroad Programs. Those interested in medical school can fulfill requirements with the Biosystems Engineering BS degree.

Additional information is available from the departmental offices or at: http://www.clemson.edu/majors/biosystems.engineering

Combined Bachelor's/Master's Program

Under this plan, students may reduce the time necessary to earn both degrees by applying graduate credits to both undergraduate and graduate program requirements.

Undergraduate students in Biosystems Engineering may begin a Master of Science or a Master of Engineering Degree in Environmental Engineering and Science or Master of Science Degree in Bioengineering while completing the BS degree.

Students are encouraged to obtain the specific requirements for the dual degree from the academic departments involved as early as possible in their undergraduate program. See Academic Regulations in this catalog for enrollment guidelines and procedures.

Freshman Year

First Semester
4 - CH 1010 General Chemistry
3 - ENGL 1030 Accelerated Composition
1 - ENGR 1050 Engineering Disciplines and Skills I
1 - ENGR 1060 Engineering Disciplines and Skills II
4 - MATH 1060 Calculus of One Variable I
3 - Arts and Humanities Requirement
3 - Social Science Requirement

Second Semester
4 - CH 1020 General Chemistry
1 - ENGR 1070 Programming and Problem Solving I
1 - ENGR 1080 Programming and Problem Solving II
1 - ENGR 1090 Programming and Problem Solving Applications
2 - ENGR 2100 Computer-Aided Design and Engineering Applications
4 - MATH 1080 Calculus of One Variable II
3 - PHYS 2220 Physics with Calculus II

Sophomore Year

First Semester
2 - BE 2110 Fundamentals of Biosystems Engr.
3 - CE 2010 Statics
4 - MATH 2060 Calculus of Several Variables
3 - PHYS 2210 Physics with Calculus II
4 - Biology Requirement

Second Semester
2 - BE 2100 Intro. to Biosystems Engineering
2 - CE 2080 Dynamics
4 - MATH 2080 Intro. to Ordinary Diff. Equations
3 - ME 3100 Thermodynamics and Heat Transfer
4 - MICRO 3050 General Microbiology

Junior Year

First Semester
3 - BE 3200 Principles and Practices of Geomatics
3 - BE 4100 Biol. Kinetics and Reactor Modeling
3 - BIOL 4410 Ecology
4 - CE 3410 Introduction to Fluid Mechanics
2 - ECE 2070 Basic Electrical Engineering
1 - ECE 2080 Basic Electrical Engineering Lab.

Second Semester
3 - BE 3220 Small Watershed Hydrology and Sedimentology
3 - BE 4120 Heat and Mass Transport in Biosystems Engineering
3 - BE 4130 Instrumentation and Process Control for Biosystems Engineering
3 - BE 4380 Bioprocess Engineering Design
3 - CH 2230 Organic Chemistry
1 - CH 2270 Organic Chemistry Laboratory

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2016-2017 Undergraduate Announcements

CHEMICAL ENGINEERING
Bachelor of Science
The Department of Chemical and Biomolecular Engineering offers the Bachelor of Science degree in Chemical Engineering. Chemical Engineering students select one of several emphasis areas (such as energy studies or environmental engineering), a concentration in Biomolecular Engineering (to prepare them for medical school or a career in biotechnology), or any approved minor.

Chemical engineering is based on chemistry, biology, physics, and mathematics. The curriculum at Clemson includes classroom and laboratory instruction and emphasizes broadly applicable fundamental principles and current technology to prepare graduates for professional practice and professional growth. The Educational Objective of the BS degree program is for graduates to have careers characterized by:
• success in chemical engineering practice, post-graduate education, or other areas making use of engineering skills, as defined by accomplishments and/or job satisfaction;
• demonstrated success in the design of chemical processes and/or identification, formulation, and solution of chemical engineering problems;
• ethical behavior in all endeavors;
• demonstrated effectiveness in teamwork, communication, and service to society through professional contributions;
• demonstrated technical and/or managerial leadership; and
• demonstrated commitment to lifelong learning.

Chemical engineers are involved in the research, manufacture, sales, and use of commodity and specialty chemicals, fuels, pharmaceuticals, electronic components, synthetic fibers and textiles, food and consumer goods, and many other products. They work on environmental pollution prevention and remediation and apply engineering science to solve medical and health-related problems.

Combined Bachelor of Science/Master of Science
Qualified students can reduce the time to earn a Master’s Degree by applying graduate credits to both the Bachelor’s and Master’s program requirements. Undergraduate Chemical and Biomolecular Engineering students who have earned a grade-point average of 3.4 or above and completed 90 credit hours can begin work toward a Master of Science in Chemical Engineering or a Master of Science in Environmental Engineering and Science by selecting approved graduate courses for their emphasis area. Details are available in the ChBE Undergraduate Handbook, which can be found at www.clemson.edu/ces/chbe.

Freshman Year
First Semester
4 - CH 1010 General Chemistry
3 - ENGL 1030 Accelerated Composition
1 - ENGR 1050 Engineering Disciplines and Skills I
1 - ENGR 1060 Engineering Disciplines and Skills II
4 - MATH 1060 Calculus of One Variable I
3 - Arts and Humanities Requirement or Social Science Requirement

Second Semester
4 - CH 1020 General Chemistry
3 - CHE 1300 Intro to Chemical Engineering
4 - MATH 1080 Calculus of One Variable II
3 - PHYS 1220 Physics with Calculus I
3 - Arts and Humanities Requirement or Social Science Requirement

Sophomore Year
First Semester
3 - CH 2230 Organic Chemistry
4 - CHE 2110 Mass and Energy Balances
4 - MATH 2060 Calculus of Several Variables
3 - PHYS 2210 Physics with Calculus II
3 - Arts and Humanities Requirement or Social Science Requirement

Second Semester
3 - CH 2240 Organic Chemistry
1 - CH 2290 Organic Chemistry Lab.
3 - CHE 2220 Chemical Engr. Thermodynamics I
4 - CHE 2300 Fluids/Heat Transfer
4 - MATH 2080 Intro. to Ordinary Diff. Equations

Junior Year
First Semester
1 - CH 3390 Physical Chemistry Lab.
3 - CHE 3210 Chemical Engr. Thermodynamics II
4 - CHE 3300 Mass Transfer and Separation Proc.
2 - ECE 2070 Basic Electrical Engineering
1 - ECE 2080 Basic Electrical Engineering Lab.
3 - STAT 4110 Statistical Methods for Process Development and Control
3 - Emphasis Area Requirement

Second Semester
3 - BMOL 4250 Biomolecular Engineering
3 - CH 3320 Physical Chemistry
1 - CH 3400 Physical Chemistry Lab.
3 - CHE 3070 Unit Operations Lab. I
3 - CHE 3190 Engineering Materials
3 - Arts and Humanities Requirement or Social Science Requirement

Senior Year
First Semester
3 - CHE 4070 Unit Operations Lab. II
3 - CHE 4310 Chemical Process Design I
2 - CHE 4430 Safety, Environ & Prof Practice I
3 - CHE 4500 Chemical Reaction Engineering
3 - Arts and Humanities Requirement or Social Science Requirement
3 - Emphasis Area Requirement

Second Semester
3 - BMOL 4290 Bioprocess Engineering
3 - CHE 3530 Process Dynamics and Control
3 - CHE 4330 Process Design II
1 - CHE 4440 Safety, Environ. and Prof. Practice II
3 - Arts and Humanities Requirement or Social Science Requirement
3 - Emphasis Area Requirement

126 Total Semester Hours

ECOLOGICAL ENGINEERING
EMPHASIS AREA
Senior Year
First Semester
3 - BChM 3050 Biochemistry
3 - BE 4280 Biochemical Engineering
2 - BE 4740 Biosystems Engr. Design/Project Mgt.
2 - BE 4750 Biosystems Engr. Capstone Design
2 - BIOL 4340 Biol. Chemical Lab. Techniques
4 - CE 2060 Structural Mechanics
3 - Arts and Humanities Requirement
1 - Management
3 - Social Science Requirement

Second Semester
9 - Arts and Humanities Requirement or Social Science Requirement
9 - Social Science Requirement
3 - BE 4210 Engineering Systems for Soil Water
2 - BE 4750 Biosystems Engr. Capstone Design
2 - BE 4740 Biosystems Engr. Design/Project Mgt.
2 - BIOL 4340 Biol. Chemical Lab. Techniques
4 - CE 2060 Structural Mechanics
15

126 Total Semester Hours

BIOPROCESS ENGINEERING
EMPHASIS AREA
Senior Year
First Semester
3 - BCHM 3050 Biochemistry
3 - BE 4280 Biochemical Engineering
2 - BE 4740 Biosystems Engr. Design/Project Mgt.
2 - BE 4750 Biosystems Engr. Capstone Design
2 - BIOL 4340 Biol. Chemical Lab. Techniques
4 - CE 2060 Structural Mechanics
15

Second Semester
9 - Arts and Humanities Requirement or Social Science Requirement
9 - Social Science Requirement
3 - BE 4210 Engineering Systems for Soil Water
2 - BE 4750 Biosystems Engr. Capstone Design
2 - BE 4740 Biosystems Engr. Design/Project Mgt.
2 - BIOL 4340 Biol. Chemical Lab. Techniques
4 - CE 2060 Structural Mechanics
15

126 Total Semester Hours

*Any 3000-level or higher ENGR or other approved course.
*Select from Sustainability Minor course list or other approved course.

Notes for Bioprocess and Ecological Engineering emphasis areas:
1. The following must be completed with C or better: CE 2010, 2080, 3410; MATH 2060, 2080; ME 3100; PHYS 2210.
2. Biosystems Engineering students are encouraged to complete a Minor, Coop Ed program, internship (BE 3700) and/or a Study Abroad Program.
3. Departmental Honors Thesis (BE 3000/3010/4000) is available for qualifying Junior/Senior students.
BIOLOGICAL SCIENCE CURRICULUM

Freshman Year
First Semester
4 - CH 1010 General Chemistry
3 - ENGL 1030 Accelerated Composition
1 - ENGR 1050 Engineering Disciplines and Skills I
1 - ENGR 1060 Engineering Disciplines and Skills II
4 - MATH 1060 Calculus of One Variable I
3 - Arts and Humanities Requirement or Social Science Requirement
16

Second Semester
4 - CH 1020 General Chemistry
3 - CHE 1300 Intro to Chemical Engineering
4 - MATH 1080 Calculus of One Variable II
3 - Arts and Humanities Requirement or Social Science Requirement
17

Sophomore Year
First Semester
5 - BIOL 1100 Principles of Biology I
3 - CH 2230 Organic Chemistry
4 - CHE 2110 Mass and Energy Balances
4 - MATH 2060 Calculus of Several Variables
3 - Arts and Humanities Requirement or Social Science Requirement
19

Second Semester
3 - CH 2240 Organic Chemistry
1 - CH 2290 Organic Chemistry Lab.
3 - CHE 2200 Chemical Engr. Thermodynamics I
4 - CHE 2300 Fluids/Heat Transfer
4 - MATH 2080 Intro. to Ordinary Diff. Equations
15

Junior Year
First Semester
3 - CHE 3210 Chemical Engr. Thermodynamics II
4 - CHE 3300 Mass Transfer and Separation Proc.
3 - PHYS 2210 Physics with Calculus II
3 - STAT 4110 Stat Methods for Process Dev & Con
3 - Biochemistry Requirement
16

Second Semester
3 - BIOE 3020 Biomaterials
2 - BIOL 4340 Biological Chemical Lab Techniques
3 - BMOL 4250 Biomolecular Engineering
3 - CHE 3070 Unit Operations Lab. I
3 - CHE 3190 Engineering Materials
3 - Arts and Humanities Requirement or Social Science Requirement
17

Senior Year
First Semester
3 - BCHM 4310 Physical Approach to Biochem
3 - CHE 4070 Unit Operations Lab. II
3 - CHE 4310 Chemical Process Design I
2 - CHE 4430 Safety, Environ & Prof Pract I
3 - CHE 4500 Chemical Reaction Engineering I
3 - Arts and Humanities Requirement or Social Science Requirement

Second Semester
3 - BMOL 4290 Bioprocess Engineering
3 - CHE 3350 Process Dynamics and Control
3 - CHE 4330 Process Design II
1 - CHE 4440 Safety, Environ & Prof Pract II
3 - Arts and Humanities Requirement or Social Science Requirement

16

133 Total Semester Hours

CIVIL ENGINEERING

Bachelor of Science

Civil Engineering involves the planning, design, construction management, operation, and maintenance of facilities and systems in the built environment, including bridges, buildings, airports, water supply systems, ports, dams, and highways.

The Bachelor of Science degree program in Civil Engineering includes the common educational goals listed on page 96 for the College of Engineering, Computing and Applied Sciences. The complete objectives of the program can be found at www.clemson.edu/ce.

The first two years provide students with building blocks necessary to be successful civil engineers, including proficiency in calculus, engineering mechanics, physics, and chemistry. During the junior year, students receive a broad introduction to the fundamental areas of civil engineering (structures, hydraulics, geotechnical, transportation, environmental, construction materials, and construction engineering and management). Design experiences are integrated throughout the curriculum, culminating in the senior year with a major capstone design project. In addition, during the senior year, students can select from available emphasis areas that serve to strengthen their undergraduate background.

The Civil Engineering program prepares students to work immediately upon graduation in most areas of civil engineering or to pursue graduate degrees. Students are also exposed to issues related to professional practice, including professional registration, lifelong learning, and communication and team skills. Because a concerned society demands a realistic consideration of the impacts of engineering projects, civil engineering students are also educated in the broad areas of the humanities and social sciences.

To be eligible for admission into the Bachelor of Science degree program in Civil Engineering, students must have completed the courses outlined in the freshman core curriculum and have a cumulative grade-point average of 2.6 or higher.

The Department of Civil Engineering allows eligible students to count up to six hours of graduate credit (6000- and 8000-level courses) toward both the bachelor’s and master’s degrees. Students participating in this program must have completed the junior year, must have earned a minimum 3.4 grade-point average, and must be approved by the department. Details of the suggested curriculum and program information are available from the department.

Freshman Year
First Semester
4 - CH 1010 General Chemistry
3 - ENGL 1030 Accelerated Composition
1 - ENGR 1050 Engineering Disciplines and Skills I
1 - ENGR 1060 Engineering Disciplines and Skills II
4 - MATH 1060 Calculus of One Variable I
3 - Social Science Requirement

Second Semester
1 - CHE 1010 Intro. to Ordinary Diff. Equations
2 - CE 2060 Statics
2 - CE 2080 Dynamics
4 - CE 2010 Statics
2 - ENGR 2100 Computer-Aided Design and Engineering Applications
4 - MATH 2060 Calculus of Several Variables
3 - PHYS 2220 Physics with Calculus II
1 - PHYS 2240 Physics Lab. I

15

Sophomore Year
First Semester
3 - CE 2010 Statics
3 - CE 2550 Geometrics
4 - MATH 2060 Calculus of Several Variables
3 - PHYS 2210 Physics with Calculus II
1 - PHYS 2230 Physics Lab. II
3 - Arts and Humanities Requirement or Social Science Requirement

Second Semester
4 - CE 2060 Structural Mechanics
2 - CE 2080 Dynamics
2 - CE 3520 Economic Evaluation of Projects
3 - COMM 2500 Public Speaking
4 - MATH 2080 Intro. to Ordinary Diff. Equations

15

Junior Year
First Semester
3 - CE 3010 Structural Analysis
3 - CE 3310 Construction Engineering and Mgt.
4 - CE 3410 Introduction to Fluid Mechanics
4 - CE 3510 Civil Engineering Materials
3 - MATH 3020 Statistics for Engineering and Science

17
Second Semester
3 - CE 3110 Transportation Engineering Planning and Design
4 - CE 3210 Geotechnical Engineering
3 - CE 3420 Applied Hydraulics and Hydrology
1 - CE 3530 Professional Seminar
3 - EES 4010 Environmental Engineering
3 - Design Technical Requirement
17

Senior Year
First Semester
3 - ENGL 3140 Technical Writing
3 - Design Technical Requirement
6 - Technical Requirement
3 - Technical Requirement Restricted
15

Second Semester
3 - CE 4590 Capstone Design Project
3 - Arts and Humanities Requirement or Social Science Requirement
3 - Social Science Requirement
3 - Arts and Humanities (Literature) Requirement
3 - Technical Requirement
3 - Elective
15

129 Total Semester Hours
3See Policy on Humanities and Social Sciences for Engineering Curricula. Six of these three credit hours must also satisfy General Education Cross-Cultural Awareness and Science and Technology in Society Requirements.
3See advisor for approved list.
3See advisor for approved list. Technical Requirements and electives may be used to complete an emphasis area in one or more of the following fields: Applied Fluid Mechanics, Construction, Environmental Engineering, Geotechnical/Geoenvironmental Engineering, Structural Engineering, or Transportation Engineering.

Notes:
1. Civil Engineering students may neither enroll in nor receive credit for any CE or EM course unless they have a 2.0 Engineering grade-point average.
2. Civil Engineering students enrolling in any CE course (except CE 4590) must have a grade of C or better in the prerequisites for that course.

COMPUTER ENGINEERING
Bachelor of Science

Computer engineers have excellent career opportunities in the design and application of hardware and software components for a variety of computer applications. These include mainframe, desktop, and embedded microprocessor platforms, as well as the networking of various types of computers and peripherals.

Based on a strong foundation in mathematics, computer science, and the physical sciences, the Computer Engineering program includes engineering science and design in circuits, electronics, computer organizations and design, peripheral interfacing, and software engineering. Emphasis is placed on hands-on experience with networked computer systems, micro-, mini-, and mainframe computers, and the solution of a wide range of practical problems using engineering principles. In addition to these technical skills, students learn to communicate effectively and to develop interpersonal, teamwork, and management skills, all of which contribute to success in a professional engineering career. The program is also an excellent preparation for graduate study.

Information on the program and its objectives is available at www.clemson.edu/ces/departments/ece/.

Freshman Year
First Semester
4 - CH 1010 General Chemistry
3 - ENGL 1030 Accelerated Composition
1 - ENGR 1050 Engineering Disciplines and Skills I
1 - ENGR 1060 Engineering Disciplines and Skills II
4 - MATH 1060 Calculus of One Variable I
3 - Arts and Humanities Requirement or Social Science Requirement
3 - Arts and Humanities Requirement
1 - Social Science Requirement
16

Second Semester
1 - ECE 3720 Microcontroller Interfacing Lab.
3 - ECE 3200 Electronics I
3 - ECE 3300 Signals, Systems, and Transforms
3 - ECE 3710 Microcontroller Interfacing
1 - ECE 3720 Microcontroller Interfacing Lab.
3 - MATH 3110 Linear Algebra
17

Sophomore Year
First Semester
3 - CPSC 1110 Introduction to Programming in C
2 - ECE 2020 Electric Circuits I
1 - ECE 2090 Logic and Computing Devices Lab.
1 - ECE 2110 Electrical Engineering Lab. I
1 - MATH 2060 Calculus of Several Variables
3 - PHYS 2210 Physics with Calculus II
16

Second Semester
1 - ECE 2120 Electrical Engineering Lab. II
3 - ECE 2220 System Programming Concepts for Computer Engineering
3 - ECE 2620 Electric Circuits II
3 - ECE 2710 Computer Organization Laboratory
4 - MATH 2080 Intro. to Ordinary Diff. Equations
15

Junior Year
First Semester
3 - ECE 2230 Computer Systems Engineering
1 - ECE 3110 Electrical Engineering Lab. III
3 - ECE 3200 Electronics I
3 - ECE 3300 Signals, Systems, and Transforms
3 - ECE 3710 Microcontroller Interfacing
1 - ECE 3720 Microcontroller Interfacing Lab.
3 - MATH 3110 Linear Algebra
17

Second Semester
3 - ECE 3710 Random Signal Analysis
3 - ECE (CPSO) 3220 Intro. to Operating Systems
3 - ECE 3270 Digital Computer Design
3 - ECE 3520 Programming Systems
3 - MATH 4190 Discrete Math. Structures I
15

Senior Year
First Semester
3 - COMM 1500 Intro. to Human Comm. or 3 - COMM 2500 Public Speaking
3 - ECE 4950 Integrated System Design I
3 - ENGL 3140 Technical Writing
6 - Computer Engineering Technical Requirement
17

Second Semester
2 - ECE 4960 Integrated System Design II
3 - Arts and Humanities Requirement or Social Science Requirement
3 - Computer Engineering Technical Requirement
3 - Special Requirement
14

127 Total Semester Hours
3See General Education section of the Undergraduate Announcements. Six of these three credit hours must also satisfy General Education Cross-Cultural Awareness and Science and Technology in Society Requirements.
3Select from department-approved list.
3Three additional credits of university or college approved Arts and Humanities or Social Science courses; or ELE 3010 or 4010, or any additional three-credit, 4000-level course from the departmental Computer Engineering Technical Requirement list or Electrical Engineering Technical Requirement list; or any additional three-credit course from the departmental Electrical Engineering Technical Requirement list. Note: The student is allowed to enroll in three courses (excluding ENGR 2070, 2080, 3080) only when all prerequisites have been passed with a grade of C or better.
3All Computer Engineering students must have a cumulative engineering grade-point average of 2.0 to enroll in any 3000 or 4000-level ECE courses. 3No student may exceed a maximum of two attempts, excluding a W, to complete successfully any ECE course.

COMPUTER INFORMATION SYSTEMS
Bachelor of Science

The Computer Information Systems degree program is oriented toward computer applications in management-related areas. The program emphasizes functional areas of management, including accounting, production, marketing, and finance and the applications of computers in these areas. The curriculum is designed to prepare students for careers in areas such as systems design and analysis, applications programming, database administration, and information retrieval, as well as for continued study toward an advanced degree.

Students who change majors into Computer Information Systems must have a cumulative grade-point average of 2.0 or higher.

Additional information can be found at cs.clemson.edu.

Freshman Year
First Semester
3 - ENGL 1030 Accelerated Composition
3 - MATH 1020 Business Calculus I or 4 - MATH 1060 Calculus of One Variable I
4 - Introduction to Computing Requirement
4 - Natural Science Requirement
1 - Elective
15
Second Semester
3 - MATH 2070 Business Calculus II1 or
4 - MATH 1080 Business Calculus II1
3 - Arts and Humanities (Non-Lit.) Requirement1
4 - Introduction to Computing Requirement6
3 - Natural Science Requirement1
3 - Social Science Requirement1
1 - Elective1

Sophomore Year
First Semester
3 - CPSC 2070 Discrete Structures for Computing1
4 - CPSC 2120 Algorithms and Data Structures
3 - Arts and Humanities (Literature) Requirement1
3 - Computer Science Requirement9
3 - Business Requirement11
3 - MKT 3010 Principles of Marketing
3 - MGT 3120 Decision Models for Management
15
3 - Computer Science Requirement9
3 - Business Requirement11
3 - CPSC 4910 Seminar in Professional Issues II
3 - CPSC 4620 Database Management Systems
15
3 - Economics Requirement10
3 - Arts and Humanities (Non-Lit.) Requirement4
3 - CPSC 4720 Intro. to Software Engineering
3 - CPSC 3220 Introduction to Operating Systems
14
1 - CPSC 2910 Seminar in Professional Issues I
4 - CPSC 2310 Intro. to Computer Organization
3 - CPSC 2150 Software Development Foundations
3 - ACCT 2010 Financial Accounting Concepts
3 - CPSC 2070 Discrete Structures for Computing1
4 - CPSC 2120 Algorithms and Data Structures
3 - Arts and Humanities (Literature) Requirement1
3 - Computer Science Requirement9
3 - Business Requirement11
3 - CPSC 3600 Networks and Network Program.
3 - CPSC 3710 Systems Analysis or
3 - MGT 4520 Systems Analysis and Design
3 - Computer Science Requirement9
3 - Economics Requirement10
15
Second Semester
3 - CPSC 2150 Software Development Foundations
4 - CPSC 2310 Intro. to Computer Organization
1 - CPSC 2910 Seminar in Professional Issues I
3 - MGT 2010 Principles of Management
3 - STAT 3090 Introductory Business Statistics7
14
Junior Year
First Semester
3 - ACCT 2010 Financial Accounting Concepts
3 - CPSC 2200 Microcomputer Applications
3 - CPSC 3220 Introduction to Operating Systems
3 - CPSC 3720 Intro. to Software Engineering
3 - Writing Requirement8
15
Second Semester
3 - ACCT 2020 Managerial Accounting Concepts
3 - CPSC 3600 Networks and Network Program.
3 - CPSC 3710 Systems Analysis or
3 - MGT 4520 Systems Analysis and Design
3 - Computer Science Requirement9
3 - Economics Requirement10
15
Senior Year
First Semester
3 - CPSC 4200 Computer Security Principles or
3 - CPSC 4240 System Admin. and Security
3 - CPSC 4620 Database Management Systems
3 - CPSC 4910 Seminar in Professional Issues II
3 - Business Requirement11
3 - Computer Science Requirement9
15
Second Semester
3 - MGT 3120 Decision Models for Management
3 - MKT 3010 Principles of Marketing
3 - Business Requirement11
3 - Computer Science Requirement9
3 - Information Systems Requirement12
15
122 Total Semester Hours

1Select either the MATH 1020/2070, 1060/2070 or 1060/1080 sequence. Students who select the 1060/1080 sequence will have satisfied the two elective credits in the freshman year.
2Select either the CPSC 1010 and 1020 sequence; or the CPSC 1060 and 1070 sequence. The sequence of CPSC 1110 and 1020 is also acceptable with one elective credit taken in the first semester.

Sophomore Year
First Semester
3 - CPSC 2070 Discrete Structures for Computing1
4 - CPSC 2120 Algorithms and Data Structures
3 - Arts and Humanities (Literature) Requirement1
3 - Modern Language Requirement11
3 - Oral Communication Requirement6

Second Semester
3 - CPSC 2150 Software Development Foundations
4 - CPSC 2310 Intro. to Computer Organization
1 - CPSC 2910 Seminar in Professional Issues I
3 - Modern Language Requirement11
4 - Natural Science Requirement7
15
Junior Year
First Semester
3 - STAT 3090 Introductory Business Statistics8
6 - Computer Science Requirement6
3 - Minor Requirement
3 - Natural Science Requirement7
15
Second Semester
3 - Computer Science Requirement6
6 - Minor Requirement
3 - Social Science Requirement4
3 - Writing Requirement8
15
Senior Year
First Semester
6 - Computer Science Requirement6
6 - Departmental Humanities Requirement11
3 - Minor Requirement
3 - Social Science Requirement4
15
Second Semester
3 - CPSC 4910 Seminar in Professional Issues II
3 - Computer Science Requirement6
3 - Fine Arts Requirement12
3 - Minor Requirement
3 - Elective
15
121 Total Semester Hours

1Select either the MATH 1020/2070, 1060/2070, or 1060/1080 sequence. Students who select the MATH 1060/1080 sequence will have satisfied the elective credits in the freshman year. Students interested in computer graphics should select the MATH 1060/1080 sequence.
2Students must complete through 2020 in a modern language. See Modern Languages Requirement at Clemson University statement on page 27.
3Select either the CPSC 1010 and 1020 sequence; or the CPSC 1060 and 1070 sequence. The sequence of CPSC 1110 and 1020 is also acceptable with one elective credit taken in the first semester.
4See General Education Requirements.
5MATH 1190 may be substituted.
6Select from: COMM 1500, 2500, HONS 2230; or the cluster of courses AS 3090, 3100, 4090, 4100, or ML 1010, 1020.
7Select from courses in BIOL, BCHM, CH, GEOL, MICR, PHYS; or ENSP 2000. At least one course must include a laboratory and satisfy the Natural Science General Education Requirement.
8MATH 3020 or MATH 3110 or STAT 3300 may be substituted.
9Select from courses in BIOL, BCHM, CH, GEOL, MICR, PHYS; or ENSP 2000. At least one course must include a laboratory and satisfy the Natural Science General Education Requirement.
10Select from: ENGL 3040, 3120, 3140, 3150, 3160, 3330; AS 3090, 3100, 4090, 4100; ML 3010, 3020, 4010, 4020.
11Select from 3000-level or higher CPSC courses or DPA 3070. No more than three credits of CPSC 3990 or 4810 may be applied to this requirement, and no more than six credits of CPSC 4520 may be applied. Up to three credits of ECE 3500-level or higher courses; or MATH 3565; or MATH 4060-level courses may be substituted.
12Select from ECN 2000, 2110, or 2120.
13Select from courses in BIOL, BCHM, CH, GEOL, MICR, PHYS; or ENSP 2000. At least one course must include a laboratory and satisfy the Natural Science General Education Requirement.
14MATH 1190 may be substituted.
15Select from: COMM 1500, 2500, HONS 2230; or the cluster of courses AS 3090, 3100, 4090, 4100, or ML 1010, 1020.
2016-2017 Undergraduate Announcements

College of Engineering, Computing and Applied Sciences

COMPUTER SCIENCE

Bachelor of Science

The Computer Science program is oriented toward design, implementation, and application of software systems to solve information processing problems. This program is more technically oriented than the Computer Information Systems curriculum. It prepares students for employment in the computer software field or for continued study toward an advanced degree in computer science. This program is accredited by the Computing Accreditation Commission (CAC) of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4102; telephone: (410) 347-7700. Additional information can be found at www.cs.clemson.edu.

Students who change majors into Computer Science must have a cumulative grade-point average of 2.0 or higher.

Combined Bachelor’s/Master’s Plan

The School of Computing allows students to apply up to nine hours of graduate credit (6000- and 8000-level courses) toward both the bachelor’s and master’s degrees. Students participating in this program must have a minimum grade-point average of 3.4 and be admitted to the Graduate School prior to registering for graduate courses. Details of the suggested curriculum and program information are available from the School.

Sophomore Year

First Semester
3 - CPSC 2070 Discrete Structures for Computing
4 - CPSC 2120 Algorithms and Data Structures
4 - MATH 1060 Calculus of One Variable I

Second Semester
3 - CPSC 2150 Software Development Foundations
4 - CPSC 2310 Intro. to Computer Organization
1 - CPSC 2910 Seminar in Professional Issues I
3 - STAT 3090 Introductory Business Statistics

Junior Year

First Semester
3 - CPSC 3300 Computer Systems Organization
3 - CPSC 3600 Networks and Network Program.
3 - CPSC 3720 Intro. to Software Engineering
3 - MATH 3110 Linear Algebra
3 - Social Science Requirement

Second Semester
3 - CPSC 3220 Introduction to Operating Systems
3 - CPSC 3500 Foundations of Computer Science
3 - CPSC 3620 Distributed and Cluster Computing
3 - Arts and Humanities Requirement 2 or
3 - Social Science Requirement

Senior Year

First Semester
3 - CPSC 3520 Programming Languages
3 - Writing Requirement
3 - Elective

Second Semester
3 - CPSC 4910 Seminar in Professional Issues II
3 - Arts and Humanities Requirement or
3 - Social Science Requirement
3 - Computer Science Requirement
3 - Elective

122 Total Semester Hours

Notes:
1. For graduation, a candidate for the BS degree in Computer Science must have a grade of C or better in every CPSC course. The candidate must have a minimum grade-point average of 2.0 or higher.
2. A grade of C or better must be earned in all prerequisite courses (including CPSC and MATH courses) before enrolling in the next CPSC course.
3. General Education Cross-Cultural Awareness and Science and Technology in Society requirements must be satisfied.

ELECTRICAL ENGINEERING

Bachelor of Science

Electrical engineers are in high demand for a wide range of influential positions. Professional duties range from analytical problem solving to the design of components and systems. The scope of employment requires a unique breadth and depth of knowledge and technical skills, which are reflected in the Electrical Engineering program. This program also offers an excellent preparation for graduate education. Detailed information can be found at www.ece.clemson.edu.

Building on a foundation of mathematical and physical sciences, students progress into the application of these in the engineering science areas of circuits, electronics, communications, controls, power, and electromagnetics. In these subjects, students also begin to apply the concepts and techniques learned to the design of circuits and systems. Senior technical design courses offer the opportunity to further develop expertise in a selected area.

In addition to these technical skills, students learn to communicate effectively, both orally and with the written word. Because engineers work for the benefit of society, the curriculum includes a strong component of humanities and social science courses. Also, many project design assignments enable the development of interpersonal, teamwork, and management skills, which are necessary for success in a professional engineering career.

Freshman Year

First Semester
3 - ENGR 1090 Programming and Problem Solving
3 - ENGL 1030 Accelerated Composition
4 - MATH 1060 Calculus of One Variable I
4 - Introduction to Computing Requirement
4 - Natural Science Requirement

Second Semester
4 - MATH 1060 Calculus of One Variable II
3 - Arts and Humanities (Non-Lit.) Requirement
4 - Introduction to Computing Requirement
4 - Natural Science Requirement

1 Select from 3000-level or higher CPSC courses or DPA 3070.
No more than three credits of CPSC 3990 or 4810 may be applied to this requirement, and no more than six credits of CPSC 4820 may be applied. Up to three credits of ECE 3000-level or higher courses; or MATH 3650, or MATH 4000-level courses may be substituted.
2 Select from ENGL 3090, 3100, 3140, 3330, AS 3090, 3100, 4090, 4100, ML 3100, 3200, 4030, 4020.
3 Select from courses in AAH, ANTH, ART, CHIN, DANC, ENGL, FR, GER, HUM, ITAL, JAPN, MUSC, PA, PHIL, REL, RUSS, SPAN, THEA.
4 MUSC 2100 or any course in AAH, ART, or THEA.

Sophomore Year

First Semester
3 - CPSC 2070 Discrete Structures for Computing
4 - CPSC 2120 Algorithms and Data Structures
4 - MATH 1060 Calculus of One Variable I

Second Semester
3 - CPSC 2150 Software Development Foundations
4 - CPSC 2310 Intro. to Computer Organization
1 - CPSC 2910 Seminar in Professional Issues I
3 - STAT 3090 Introductory Business Statistics
3 - Natural Science Requirement
3 - Oral Communication Requirement

Junior Year

First Semester
3 - CPSC 3300 Computer Systems Organization
3 - CPSC 3600 Networks and Network Program.
3 - CPSC 3720 Intro. to Software Engineering
3 - MATH 3110 Linear Algebra
3 - Social Science Requirement

Second Semester
3 - CPSC 3220 Introduction to Operating Systems
3 - CPSC 3500 Foundations of Computer Science
3 - CPSC 3620 Distributed and Cluster Computing
3 - Arts and Humanities Requirement or
3 - Social Science Requirement
3 - Social Science Requirement

Senior Year

First Semester
3 - CPSC 3520 Programming Languages
3 - Writing Requirement
3 - Elective

Second Semester
3 - CPSC 4910 Seminar in Professional Issues II
3 - Arts and Humanities Requirement or
3 - Social Science Requirement
3 - Computer Science Requirement
3 - Elective

122 Total Semester Hours

Notes:
1. For graduation, a candidate for the BS degree in Computer Science must have earned a grade of C or better in each CPSC course applied to the non-elective requirements of the degree.
2. A grade of C or better must be earned in all prerequisite courses (including CPSC and MATH courses) before enrolling in the next CPSC course.
3. General Education Cross-Cultural Awareness and Science and Technology in Society requirements must be satisfied.
Sophomore Year
First Semester
3 - CPSC 1110 Introduction to Programming in C
2 - ECE 2010 Logic and Computing Devices
3 - ECE 2020 Electric Circuits I
1 - ECE 2090 Logic and Computing Devices Lab.
1 - ECE 2110 Electrical Engineering Lab. I
4 - MATH 2060 Calculus of Several Variables
3 - PHYS 2210 Physics with Calculus II

Second Semester
1 - ECE 2120 Electrical Engineering Lab. II
3 - ECE 2620 Electric Circuits II
3 - ECE 2720 Computer Organization
1 - ECE 2730 Computer Organization Laboratory
4 - MATH 2080 Intro. to Ordinary Diff. Equations
3 - Arts and Humanities Requirement
2 - ECE 4950 Integrated Systems Design I
3 - ECE 4270 Communications Systems
3 - ECE 4090 Intro. to Linear Control Systems
3 - COMM 1500 Intro. to Human Comm.
Senior Year
First Semester
3 - ENGL 3140 Technical Writing
3 - ECE 3120 Electrical Engineering Lab. III
3 - ECE 3200 Electronics I
3 - ECE 3300 Signals, Systems, and Transforms
3 - ECE 3600 Electric Power Engineering
3 - ECE 3800 Electromagnetics
3 - Advanced Mathematics Requirement
Second Semester
1 - ECE 3120 Electrical Engineering Lab. IV
3 - ECE 3710 Random Signal Analysis
3 - ECE 3210 Electronics II
3 - ECE 3710 Microcontroller Interfacing
1 - ECE 3720 Microcontroller Interfacing Lab.
3 - ECE 3810 Fields, Waves, and Circuits
3 - ENGL 3140 Technical Writing

Junior Year
First Semester
1 - ECE 3110 Electrical Engineering Lab. III
3 - ECE 3200 Electronics I
3 - ECE 3300 Signals, Systems, and Transforms
3 - ECE 3600 Electric Power Engineering
3 - ECE 3800 Electromagnetics
Advanced Mathematics Requirement
Second Semester
1 - ECE 3120 Electrical Engineering Lab. IV
3 - ECE 3710 Random Signal Analysis
3 - ECE 3210 Electronics II
3 - ECE 3710 Microcontroller Interfacing
1 - ECE 3720 Microcontroller Interfacing Lab.
3 - ECE 3810 Fields, Waves, and Circuits
ENGL 3140 Technical Writing

Senior Year
First Semester
3 - COMM 1500 Intro. to Human Comm. or
3 - COMM 2500 Public Speaking
1 - ECE 4900 Intro. to Control Systems
3 - ECE 4270 Communications Systems
2 - ECE 4950 Integrated Systems Design I
3 - Electrical Engineering Technical Requirement
Second Semester
2 - ECE 4960 Integrated Systems Design II
3 - Arts and Humanities Requirement
1 - ECE 4960 Integrated Systems Design II
3 - Social Science Requirement
1 - Electrical Engineering Technical Requirement
Special Requirement
126 Total Semester Hours

Sophomore Year
First Semester
3 - BIOL 1030 General Biology
1 - BIOL 1050 General Biology Lab
3 - CE 1010 Statics
3 - EES 1020 Environmental Engineering Fund. I
4 - MATH 2060 Calculus of Several Variables
3 - PHYS 2210 Physics with Calculus II

Second Semester
2 - CE 2080 Dynamics
3 - CH 2010 Survey of Organic Chemistry
4 - EES 2020 Environmental Engineering Fund. II
2 - ENGR 2100 Computer-Aided Design and Engineering Applications
4 - MATH 2080 Intro. to Ordinary Diff. Equations

Junior Year
First Semester
2 - EES 3030 Water Treatment
2 - EES 3040 Wastewater Treatment
3 - EES 3050 Water and Wastewater Treatment Lab
3 - MATH 3020 Statistics for Science and Engineering
4 - MICR 3050 General Microbiology
3 - Arts and Humanities Requirement
3 - Social Science Requirement

Second Semester
4 - EES 4510 Introduction to Fluid Mechanics
3 - EES 4540 Municipal Solid Waste Mgt.
3 - EES 4850 Hazardous Waste Management
3 - GEOL 1010 Physical Geology
1 - GEOL 1030 Physical Geology Lab
3 - ME 3100 Thermodynamics and Heat Transfer

Senior Year
First Semester
3 - EES 4300 Air Pollution Engineering
1 - EES 4500 Environ. Eng. Senior Seminar
3 - EES 4800 Environmental Risk Assessment
3 - EES 4860 Environmental Sustainability
2 - Engineering Economics Requirement
3 - Engineering or Science Requirement

Second Semester
3 - EES 4750 Capstone Design Project
6 - Engineering or Science Requirement
6 - Arts and Humanities Requirement
6 - Social Science Requirement
127 Total Semester Hours

Environmental Engineering
Bachelor of Science
Our complex world faces many challenges, including contaminated water supplies, hazardous wastes, an increasing population and limited resources. Environmental engineers help to solve many of the environmental problems faced by society using the principles of biology, chemistry, physics, mathematics and earth sciences. An undergraduate degree in Environmental Engineering opens the door to a variety of rewarding career options. Environmental engineers protect water quality by designing water and wastewater treatment systems; ensure public safety by managing solid, hazardous and radioactive wastes; improve air quality by controlling emissions from mobile and stationary sources; reduce human health risks by tracking contaminants as they move through the environment; clean up toxic waste spills and restore historically contaminated sites; and design a more sustainable future by understanding our use of resources.

The curriculum for the Bachelor of Science degree in Environmental Engineering consists of 127 credit hours. All students participate in one professional seminar course and complete a capstone design project.

Freshman Year
First Semester
4 - CH 1010 General Chemistry
3 - ENGL 1030 Accelerated Composition
1 - ENGR 1060 Engineering Disciplines and Skills II
3 - ENGR 1070 Programming and Problem Solving I
1 - ENGR 1080 Programming and Problem Solving II
3 - ENGR 1090 Programming and Problem Solving Applications
1 - ENGR 1050 Engineering Disciplines and Skills I
2 - EES 1010 Water and Wastewater Treatment Lab
3 - MATH 1060 Calculus of One Variable I
3 - Arts and Humanities Requirement
3 - Social Science Requirement

Second Semester
3 - EES 1010 Water and Wastewater Treatment Lab
4 - MATH 1080 Calculus of One Variable II
3 - PHYS 1220 Physics with Calculus I

Sophomore Year
First Semester
3 - BIOL 1030 General Biology
1 - BIOL 1050 General Biology Lab
3 - CE 1010 Statics
3 - EES 1020 Environmental Engineering Fund. I
4 - MATH 2060 Calculus of Several Variables
3 - PHYS 2210 Physics with Calculus II

Second Semester
2 - CE 2080 Dynamics
3 - CH 2010 Survey of Organic Chemistry
4 - EES 2020 Environmental Engineering Fund. II
2 - ENGR 2100 Computer-Aided Design and Engineering Applications
4 - MATH 2080 Intro. to Ordinary Diff. Equations

Junior Year
First Semester
2 - EES 3030 Water Treatment
2 - EES 3040 Wastewater Treatment
3 - EES 3050 Water and Wastewater Treatment Lab
3 - MATH 3020 Statistics for Science and Engineering
4 - MICR 3050 General Microbiology
3 - Arts and Humanities Requirement
3 - Social Science Requirement

Second Semester
4 - EES 4510 Introduction to Fluid Mechanics
3 - EES 4540 Municipal Solid Waste Mgt.
3 - EES 4850 Hazardous Waste Management
3 - GEOL 1010 Physical Geology
1 - GEOL 1030 Physical Geology Lab
3 - ME 3100 Thermodynamics and Heat Transfer

Senior Year
First Semester
3 - EES 4300 Air Pollution Engineering
1 - EES 4500 Environ. Eng. Senior Seminar
3 - EES 4800 Environmental Risk Assessment
3 - EES 4860 Environmental Sustainability
2 - Engineering Economics Requirement
3 - Engineering or Science Requirement

Second Semester
3 - EES 4750 Capstone Design Project
6 - Engineering or Science Requirement
6 - Arts and Humanities Requirement
6 - Social Science Requirement
127 Total Semester Hours

See General Education section of the Undergraduate Announcements. Six of these credit hours must also satisfy General Education Cross-Cultural Awareness and Science and Technology in Society Requirements.

MATH 490, 4340, 4350, 4530, or 4540

Select from department-approved list.

See Policy on Humanities and Social Sciences for Engineering Curricula. Three of these credit hours must also satisfy the Cross-Cultural Awareness General Education requirement. Students are encouraged (but not required) to take PHIL 3450 (Environmental Ethics) to fulfill the non-literature humanities requirements.

HIST 1240 satisfies three credit hours of the social science requirement and the Science and Technology in Society General Education requirement. If a student is unable to enroll in the second semester of the freshman year, this course may be taken at another time.

May substitute BIOL 1100 for BIOL 1030 and BIOL 1050; BIOL 1100 is five hours.
With the Geology curriculum, students who are particularly interested in environmental or water resources issues may choose to specialize in the Environmental Science Concentration or the Hydrogeology Concentration. These two concentrations provide more structured course pathways through the curriculum and help prepare students for careers in these specific areas. The Environmental Science Concentration in Geology focuses on environmental aspects of geoscience and is well suited for students interested in topics such as environmental policy, natural hazard assessment and remediation, evaluation of land use impacts, understanding geochemical cycles, and environmental systems analysis. This concentration provides a rigorous background in the sciences so that students can scientifically address environmental issues and integrate material from several fields to solve complex environmental problems. The Hydrogeology Concentration in Geology is designed for students who want to specialize in areas such as surface- and ground-water systems, treatment of water and cleanup of contaminated sites, contaminant flow and fluid transport, and water resource sustainability.

Freshman Year
First Semester
1 - GEOL 2910 Introduction to Research I
3 - GEOL 1030 General Biology
4 - MATH 1010 Calculus of One Variable I
3 - Arts and Humanities (Non-Lit.) Requirement1
3 - Social Science Requirement1
7
Second Semester
1 - GEOL 2920 Introduction to Research II
3 - GEOL 1020 Introduction to Physical Geology
4 - MATH 1020 Calculus of One Variable II
3 - Arts and Humanities (Non-Lit.) Requirement1
3 - Social Science Requirement1
3 - STEM Requirement2
13
Sophomore Year
First Semester
3 - GEOL 2050 Mineralogy and Petrology
1 - GEOL 2070 Mineralogy and Petrology Lab.
4 - GEOL 2910 Introduction to Research I
3 - PHYS 1220 Physics with Calculus I
3 - STEM Requirement2
13
Second Semester
4 - GEOL 2020 Structural Geology
2 - GEOL 3910 Research Methods I
3 - Quantitative Science Requirement1
3 - STEM Requirement2
12
Junior Year
First Semester
3 - BIOL 1030 General Biology Lab.
1 - BIOL 1050 General Biology Lab.
3 - ENSP 2000 Intro. to Environmental Science
3 - GEOL 2050 Mineralogy and Petrology Lab.
1 - GEOL 2070 Mineral. and Intro. Petrology Lab.
4 - GEOL 2910 Introduction to Research I
3 - Arts and Humanities (Literature) Requirement1
13
Second Semester
2 - GEOL 3920 Research Methods II
7 - Geology Requirement4
3 - STEM Requirement2
12
Summer
6 - Field Experience5
12
Senior Year
First Semester
3 - GEOL 4910 Research Synthesis I
4 - Geology Requirement4
6 - STEM Requirement2
13
Second Semester
3 - GEOL 4920 Research Synthesis II
4 - Geology Requirement4
6 - STEM Requirement2
13

120 Total Semester Hours

Get General Education Requirements. Three of these credit hours must also satisfy the Cross-Cultural Awareness Requirement.

Ten-eight credit hours selected from department approved list. No more than 14 hours below the 300 level and no more than eight hours below the 200 level. Courses may not be used to satisfy any other requirement.

Select from department-approved list. Courses may not be used to satisfy any other requirement.

Fifteen credit hours. Select from GEOL 3130, 3180, 4050, 4090, 4150, 4210, or (CE) 4820. Only excess hours may be used to satisfy STEM requirement hours.

A combination of GEOL 2750 plus a three-credit field course in geology or other approved discipline. Students desiring to become registered professional geologists should take a six-credit summer field camp in geology/hydrogeology.

ENVIRONMENTAL SCIENCE CONCENTRATION

Freshman Year
First Semester
4 - CH 1010 General Chemistry
3 - ENGL 1030 Accelerated Composition
3 - GEOL 1030 General Geography
1 - GEOL 1030 Physical Geology Lab.
1 - MATH 1060 Calculus of One Variable I
15
Second Semester
4 - GEOL 2920 Introduction to Research I
3 - GEOL 1010 Physical Geology Lab.
4 - MATH 1080 Calculus of One Variable I
3 - Arts and Humanities (Non-Lit.) Requirement1
3 - Social Science Requirement1
17
Sophomore Year
First Semester
3 - GEOL 2050 Mineralogy and Intro. Petrology
1 - GEOL 2070 Mineralogy and Intro. Petrology Lab.
4 - GEOL 2910 Introduction to Research I
3 - PHYS 1220 Physics with Calculus I
3 - STEM Requirement2
13
Second Semester
4 - GEOL 2020 Introduction to Research II
3 - Quantitative Science Requirement1
7 - STEM Requirement2
15
Junior Year
First Semester
4 - GEOL 3020 Structural Geology
2 - GEOL 3910 Research Methods I
3 - Quantitative Science Requirement1
3 - STEM Requirement2
12
Second Semester
2 - GEOL 3920 Research Methods II
7 - Geology Requirement4
3 - STEM Requirement2
12
Summer
6 - Field Experience5
12
Senior Year
First Semester
3 - GEOL 4910 Research Synthesis I
4 - Geology Requirement4
6 - STEM Requirement2
13
Second Semester
3 - GEOL 4920 Research Synthesis II
4 - Geology Requirement4
6 - STEM Requirement2
13

120 Total Semester Hours

Get General Education Requirements. Three of these credit hours must also satisfy the Cross-Cultural Awareness Requirement.

Ten-eight credit hours selected from department approved list. No more than 14 hours below the 300 level and no more than eight hours below the 200 level. Courses may not be used to satisfy any other requirement.

Select from department-approved list. Courses may not be used to satisfy any other requirement.

Fifteen credit hours. Select from GEOL 3130, 3180, 4050, 4090, 4150, 4210, or (CE) 4820. Only excess hours may be used to satisfy STEM requirement hours.

A combination of GEOL 2750 plus a three-credit field course in geology or other approved discipline. Students desiring to become registered professional geologists should take a six-credit summer field camp in geology/hydrogeology.
Second Semester
3 - BIOL 1040 General Biology II
1 - BIOL 1060 General Biology Lab. II
3 - CH 2010 Survey of Organic Chemistry or
3 - CH 2230 Organic Chemistry
4 - GEOL 2020 Earth History
1 - GEOL 2920 Introduction to Research II
2 - PHYS 1220 Physics with Calculus I
15

Junior Year
First Semester
3 - GEOL 3000 Environmental Geology
4 - GEOL 3020 Structural Geology
2 - GEOL 3910 Research Methods I
4 - GEOL 4150 Analysis of Geologic Processes
13

Second Semester
3 - GEOL 3180 Introduction to Geochemistry
2 - GEOL 3920 Research Methods II
4 - GEOL 4090 Environmental and Exploration Geology
17

Summer
6 - Field Experience

Senior Year
First Semester
3 - ENSP 4000 Studies in Environmental Science
3 - GEOL (CE) 4820 Groundwater and Contaminant Transport
3 - GEOL 4910 Research Synthesis I
3 - Social Science Requirement
13

Second Semester
3 - GEOL 4920 Research Synthesis II
10 - Environmental Science Requirement
13

121 Total Semester Hours

HYDROGEOLOGY CONCENTRATION
Freshman Year
First Semester
4 - CH 1010 General Chemistry
3 - ENGL 1030 Accelerated Composition
3 - GEOL 1010 Physical Geology
1 - GEOL 1030 Physical Geology Lab.
4 - MATH 1060 Calculus of One Variable I
15

Second Semester
4 - CH 1020 General Chemistry
3 - GEOL 1120 Earth Resources
4 - MATH 1080 Calculus of One Variable II
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Social Science Requirement
17

Sophomore Year
First Semester
3 - GEOL 2050 Mineralogy and Intro. Petrology
1 - GEOL 2070 Mineral. and Intro. Petrology Lab.
1 - GEOL 2910 Introduction to Research I
3 - PHYS 1220 Physics with Calculus I
1 - PHYS 1240 Physics Lab I
3 - Arts and Humanities (Literature) Requirement
3 - Hydrogeology Requirement
15

Second Semester
4 - GEOL 2020 Earth History
1 - GEOL 2920 Introduction to Research II
3 - MATH 3020 Statistics for Science and Engr. or
3 - STAT 2300 Statistical Methods I
4 - PHYS 2210 Physics with Calculus II
3 - Social Science Requirement
3 - Hydrogeology Requirement
17

Junior Year
First Semester
3 - GEOL 3000 Environmental Geology
4 - GEOL 3020 Structural Geology
2 - GEOL 3910 Research Methods I
4 - GEOL 4150 Analysis of Geologic Processes
13

Second Semester
4 - GEOL 3180 Introduction to Geochemistry
3 - GEOL (CE) 4820 Groundwater and Contaminant Transport
3 - GEOL 4910 Research Synthesis I
3 - Social Science Requirement
13

Summer
6 - GEOL 4750 Summer Geology Field Camp

Senior Year
First Semester
3 - GEOL (CE) 4820 Groundwater and Contaminant Transport
3 - GEOL 4910 Research Synthesis I
6 - Hydrogeology Requirement
12

Second Semester
3 - EES 4010 Environmental Engineering
4 - GEOL 4050 Surficial Geology
4 - GEOL 4090 Environmental and Exploration Geophysics
3 - GEOL 4920 Research Synthesis II
14

121 Total Semester Hours

INDUSTRIAL ENGINEERING
Bachelor of Science

Industrial engineers design, install, and improve the complex systems that provide goods and services vital to our society and economy. These systems place unique demands for breadth of preparation on industrial engineers. The Industrial Engineering baccalaureate program prepares graduates to: (1) design, develop, implement, and improve integrated systems that include people, materials, information, equipment, and energy using appropriate analytical, computational and experimental practices; (2) apply information technologies to the practice of industrial engineering; (3) conduct themselves in a professional and ethical manner; and (4) work and communicate effectively with colleagues at every level in the organization.

The traditional arenas for the practice of industrial engineering are the manufacturing facilities of industry; however, many practicing industrial engineers are employed in non-Manufacturing institutions such as hospitals, financial institutions, consulting firms and government agencies. In addition to numerous employment opportunities in professional practice, industrial engineering graduates may further their formal education. The Department of Industrial Engineering offers programs leading to the Master of Science and Doctor of Philosophy degrees.

The Department of Industrial Engineering also offers a combined Bachelor's/Master's plan in which accepted students may count up to 12 hours of graduate credit (approved 6000- and 8000-level courses) toward both a bachelor's and a master's degree, with the stipulation that a minimum of 150 credit hours must be earned. To be eligible, the student must have senior standing and a minimum overall grade-point average of 3.4. Most students completing the joint BS/MS program in IE can only double count nine units. Details of the suggested curriculum and program information are available from the Industrial Engineering Department.

Detailed curriculum and department information is available at http://www.clemson.edu/ce/departments/ie/

Freshman Year
First Semester
4 - CH 1010 General Chemistry
3 - ENGL 1030 Accelerated Composition
3 - GEOL 1010 Physical Geology
1 - GEOL 1030 Physical Geology Lab.
4 - MATH 1060 Calculus of One Variable I
15

Second Semester
4 - CH 1020 General Chemistry
3 - GEOL 1120 Earth Resources
4 - MATH 1080 Calculus of One Variable II
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Social Science Requirement
17
Sophomore Year
First Semester
3 - CE 2010 Statics
2 - ENGR 2080 Engineering Graphics and Machine Design or
2 - ENGR 2090 Intro to Engineering/Computer Graphics or
2 - ENGR 2100 Computer-Aided Design and Engineering Graphics
4 - MATH 2060 Calculus of Several Variables
3 - MATH 3110 Linear Algebra
3 - PHYS 2210 Physics with Calculus II
1 - PHYS 2230 Physics Lab. I
Second Semester
3 - IE 2100 Design and Analysis of Work Systems
4 - IE 3010 Systems Design I
1 - IE 3140 Seminar in Industrial Engineering
3 - IE 3600 Industrial Apps of Prob/Stat I
3 - IE 3800 Deterministic Operations Research
3 - MSE 2100 Introduction to Materials Science
Junior Year
First Semester
3 - IE 3610 Industrial Apps of Prob/Stat II
3 - IE 3810 Probabilistic Operations Research
3 - IE 3840 Engineering Economic Analysis
3 - IE 4400 Decision Support Systems in IE
3 - Arts and Humanities Requirement or
3 - Social Science Requirement
Second Semester
3 - IE 3860 Production Planning and Control
3 - IE 4610 Quality Engineering
3 - IE 4650 Facilities Planning and Design
4 - IE 4820 Systems Modeling
3 - Oral Communication Requirement
Senior Year
First Semester
3 - IE 4880 Human Factors Engineering
3 - Electrical Engineering Requirement
3 - Ethics & Professional Practice Requirement
6 - Technical Requirement
Second Semester
4 - IE 4670 Systems Design II
3 - Management Requirement or
3 - Arts and Humanities Requirement or
3 - Social Science Requirement
3 - Technical Requirement
125 Total Semester Hours
Notes:
1. This course must be passed with a C or better or either to transfer into IE from General Engineering or to satisfy later course prerequisites.
2. See General Education Requirements. Six of these credit hours must also satisfy the Cross-Cultural Awareness and Science and Technology in Society Requirements.
3. Select from department-approved list. See advisor.
4. ME 2010 may be substituted.
5. PHYS 1240 may be substituted.
6. See General Education Requirements. COMM 1500 is recommended.

INORGANIC MATERIALS CONCENTRATION
Freshman Year
First Semester
4 - CH 1010 General Chemistry
3 - ENGL 1030 Accelerated Composition
1 - ENGR 1050 Engineering Disciplines and Skills I
1 - ENGR 1060 Engineering Disciplines and Skills II
4 - MATH 1060 Calculus of One Variable I
3 - Arts and Humanities Requirement or
3 - Social Science Requirement
Second Semester
4 - CH 1020 General Chemistry
1 - ENGR 1070 Programming and Problem Solving I
1 - ENGR 1080 Programming and Problem Solving II
1 - ENGR 1090 Programming and Problem Solving Applications
4 - MATH 1080 Calculus of One Variable II
3 - PHYS 1220 Physics with Calculus I
3 - Arts and Humanities Requirement or
3 - Social Science Requirement
Sophomore Year
First Semester
3 - CH 2230 Organic Chemistry
1 - CH 2270 Organic Chemistry Lab.
3 - MSE 2100 Introduction to Materials Science
4 - MATH 2060 Calculus of Several Variables
3 - PHYS 2210 Physics with Calculus II
3 - Arts and Humanities Requirement or
3 - Social Science Requirement
Second Semester
3 - CE 2010 Statics
3 - CH 2240 Organic Chemistry
1 - CH 2280 Organic Chemistry Lab.
2 - ENGR 2080 Engineering Graphics and Machine Design
4 - MATH 2080 Intro. to Ordinary Diff. Equations
3 - MSE 3610 Process of Metals & Their Composites
Junior Year
First Semester
3 - COMM 2500 Public Speaking
3 - MSE 3190 Materials Processing I
3 - MSE 3260 Thermodynamics of Materials
3 - MSE 3270 Transport Phenomena
3 - MSE 4150 Intro. to Polymer Sci. and Engr.
Second Semester
3 - IE 3840 Engineering Economic Analysis
3 - MATH 3020 Statistics for Science and Engr.
3 - STAT 2300 Statistical Methods I
3 - MSE 3280 Phase Diagrams for Materials Processing and Applications
2 - MSE 3420 Structure/Property Laboratory
3 - MSE 4220 Mechanical Behavior of Materials
3 - Arts and Humanities Requirement

MATERIALS SCIENCE AND ENGINEERING
Bachelor of Science
Materials scientists and engineers design, develop, and produce traditional and new advanced materials with diverse applications intended for use in a wide variety of industries. These include traditional materials-intensive industries such as structural clay, foundry, whiteheat, polymers, plastics, fibers, textiles, composite materials, and automotive industries. Also included are high performance technology industries such as semiconductor, defense, biomaterials, aerospace, and communication industries. The broad career responsibilities of this discipline require competence in science, engineering, mathematics, and social sciences. The curriculum develops skills in problem solving, engineering analysis, and design, as well as oral and written communication.

The Department of Materials Science and Engineering offers two areas of concentration within the Bachelor of Science degree in Materials Science and Engineering. The Inorganic Materials Concentration provides for more in-depth study of the engineering and science of materials such as ceramics, glasses, metals, optical and electronic materials; while the Polymeric Materials Concentration provides more emphasis on plastics, elastomers, fibers and fibrous materials, films, coatings and adhesives. Students select either the Inorganic Materials Concentration or the Polymeric Materials Concentration at the beginning of their sophomore year. Both concentrations in Materials Science and Engineering integrate laboratory with classroom experiences to prepare students for life-long learning and exciting career opportunities. Courses covering thermodynamics, kinetics, mechanical behavior, processing, fabrication and characterization of materials prepare students for careers in industry and for graduate school.
### Senior Year

**First Semester**
- MSE 4020 Solid State Materials
- MSE 4130 Noncrystalline Materials
- MSE 4320 Manufacturing Processes and Systems
- MSE 4410 Manufacturing Laboratory
- MSE 4910 Undergraduate Research
- Arts and Humanities Requirement or Social Science Requirement

**Second Semester**
- MSE 4070 Senior Capstone Design
- MSE 4160 Electrical Properties of Materials
- MSE 4240 Optical Materials and Applications
- MSE 4330 Combustion System and Environmental Emissions
- MSE 4430 Practice of Materials Engineering

127 Total Semester Hours

*See Policy on Humanities and Social Sciences for Engineering Curricula. Six of these credits must also satisfy the Cross-Cultural Awareness and the Science and Technology in Society General Education requirements.

### Junior Year

**First Semester**
- MSE 3180 Physical Chemistry
- COMM 2500 Public Speaking
- MSE 3270 Transport Phenomena
- MSE 4150 Intro. to Polymer Sci. and Engineering
- MSE 4550 Polymer and Fiber Lab.
- Arts and Humanities Requirement or Social Science Requirement

**Second Semester**
- CH 3320 Physical Chemistry
- IE 3840 Engineering Economic Analysis
- MATH 3020 Stat. for Science and Engr.
- STAT 2300 Statistical Methods I
- MSE 4220 Mechanical Behavior of Materials
- MSE 4560 Polymer and Fiber Science II

### Second Semester

**Senior Year**

**First Semester**
- MSE 4580 Surface Phenomena in Materials Science and Engineering
- MSE 4600 Surface Phenomena in Materials Science and Engineering Laboratory
- MSE 4610 Polymer and Fiber Science III
- MSE 4910 Undergraduate Research
- Technical Requirement

**Second Semester**
- MSE 4450 Practice of Materials Engineering
- MSE 4570 Color Science
- MSE 4590 Color Science Laboratory
- Arts and Humanities Requirement or Social Science Requirement

### Additional Information

Preparation for a 40-45 year professional career requires development of the whole person through a balanced program encompassing the humanities, social sciences, communication and computer skills, physical and engineering sciences, design, and laboratory experience. Students start with the physical sciences and communication skills and progress through the engineering sciences, ultimately applying the principles learned in such areas as energy conversion and transfer, mechanical design, and systems analysis. Throughout the curriculum, the fundamental nature of engineering as a problem-solving discipline is emphasized.

Most graduates take positions in industry, government, or business. Many, however, continue their formal education in a graduate program. The Department of Mechanical Engineering offers study leading to the Master of Science and Doctor of Philosophy degrees.

Mechanical Engineering students who have a cumulative grade-point average or cumulative engineering grade-point average (EGPA) below 2.0 are on probation and will have restricted enrollment in classes. Students whose cumulative grade-point average is below 2.0 are subject to the regulations stipulated under Academic Eligibility Policy. Students on probation for EGPA below 2.0 who fail to recover in the first regular semester (fall or spring) will not be allowed to register for mechanical engineering classes. After one year, such students may petition the Mechanical Engineering Department for continued enrollment. An advising policy for students on probation is available from the Mechanical Engineering Department.

Additional information can be found at [www.clemson.edu/me](http://www.clemson.edu/me).

### Freshman Year

**First Semester**
- CH 1010 General Chemistry
- ENGL 1030 Accelerated Composition
- ENGR 1050 Engineering Disciplines and Skills I
- ENGR 1060 Engineering Disciplines and Skills II
- MATH 1060 Calculus of One Variable I
- Arts and Humanities Requirement or Social Science Requirement

**Second Semester**
- CH 1020 General Chemistry
- ENGR 1070 Programming and Problem Solving I
- ENGR 1080 Programming and Problem Solving II
- ENGR 1090 Programming and Problem Solving Applications
- MATH 1080 Calculus of One Variable II
- PHYS 1223 Physics with Calculus I
- Arts and Humanities Requirement or Social Science Requirement

**Sophomore Year**

**First Semester**
- CH 2230 Organic Chemistry
- CH 2270 Organic Chemistry Laboratory
- MSE 2100 Introduction to Materials Science
- MATH 2060 Calculus of Several Variables
- PHYS 2210 Physics with Calculus II
- Arts and Humanities Requirement or Social Science Requirement

**Second Semester**
- CE 2010 Statics
- CH 2240 Organic Chemistry
- CH 2280 Organic Chemistry Laboratory
- ENGR 2080 Engineering Graphics and Machine Design
- MATH 2080 Intro. to Ordinary Diff. Equations
- MSE 3610 Proc. of Metals & Their Composites

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## Sophomore Year

### First Semester
1. ME 2000 Sophomore Seminar
3. MSE 2100 Intro. to Materials Science
4. MATH 2060 Calculus of Several Variables
5. PHYS 2210 Physics with Calculus II

### Second Semester
1. ECE 2070 Basic Electrical Engineering
2. ME 2030 Found. of Thermal and Fluid Systems
3. ME 2040 Mechanics of Materials
4. ME 2220 Mechanical Engineering Lab. I
5. MATH 2080 Intro. to Ordinary Diff. Equations

## Junior Year

### First Semester
1. ENGL 3140 Technical Writing
2. ME 3030 Thermodynamics
3. ME 3070 Foundations of Mechanical Systems
4. ME 3080 Fluid Mechanics
5. ME 3330 Mechanical Engineering Lab. II
6. MATH 3650 Numerical Methods for Engineers

### Second Semester
1. ME 3040 Heat Transfer
2. ME 3050 Model. and Analysis of Dynamic Syst.
3. ME 3060 Fundamentals of Machine Design
4. ME 3120 Manufacturing Processes and Their Application
5. ME 3330 Mechanical Engineering Lab. II
6. Statistics Requirement

## Senior Year

### First Semester
1. ME 4010 Mechanical Engineering Design
2. ME 4030 Control and Integration of Multi-Domain Dynamic Systems
3. ME 4440 Mechanical Engineering Lab. III
4. Mechanical Engineering Technical Requirement
5. Arts and Humanities Requirement
6. Social Science Requirement

### Second Semester
1. ME 4000 Senior Seminar
2. ME 4020 Internship in Engineering Design
3. ME 4440 Mechanical Engineering Lab. III
4. Mechanical Engineering Technical Requirement
5. Arts and Humanities Requirement
6. Social Science Requirement

## Notes:
1. Enrollment Policy: A student is allowed to enroll in any ME course only when all prerequisites, as defined by current official listings for that course, have been passed with a grade of C or higher.
2. No student may exceed three attempts to complete successfully ME 2010, 2030, or 2040. Registration for a third attempt to complete one of these ME courses requires the approval of the undergraduate coordinator in the Department of Mechanical Engineering. A grade of W counts as an unsuccessful attempt at completing the course.
3. For students repeating an ME course, registration preference will be given to students in a degree-granting engineering major whose curriculum requires the course in question.
4. To change majors into the Mechanical Engineering degree program, students must have a minimum cumulative grade-point average of 2.60 or higher at Clemson and earned a C or better in each course in the General Engineering freshman curriculum, EXCLUDING the Arts and Humanities/Social Science requirements.

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1 Select from MATH 3020 or STAT 4110
2 See advisor. Select from department-approved list.

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3 See Policy on Humanities and Social Sciences for Engineering Curricula. Six of these credit hours must also satisfy General Education Cross-Cultural Awareness and Science and Technology in Society Requirements. These requirements may be fulfilled in any order.

4 Both are required but may be taken in either semester.
MINORS
Following are minors acceptable for students in the College of Engineering, Computing and Applied Sciences. Students cannot major and minor in the same field or acquire a minor that is not allowed by the degree program.

Accounting
Adult/Extension Education
Aerospace Studies
Agricultural Business Management
Agricultural Mechanization and Business
American Sign Language Studies
Animal and Veterinary Sciences
Anthropology
Architecture
Art
Athletic Leadership
Biochemistry
Biological Sciences
Brand Communications
British and Irish Studies
Business Administration
Chemistry
Chinese Studies
Cluster
Communication Studies
Computer Science—not open to Computer Information Systems majors
Creative Writing
Crop and Soil Environmental Science
Digital Production Arts
East Asian Studies
Economics
English
Entomology
Entrepreneurship
Environmental Science and Policy
Equine Industry
Film Studies
Financial Management
Food Science
Forest Products
Forest Resource Management
French Studies
Gender, Sexuality and Women’s Studies
Genetics
Geography
Geology
German Studies
Global Politics
Great Works
History
Horticulture
Human Resource Management
International Engineering and Science
Italian Studies
Japanese Studies
Legal Studies
Management
Management Information Systems
Mathematical Sciences
Microbiology
Middle Eastern Studies
Military Leadership
Music
Natural Resource Economics
Nonprofit Leadership
Nuclear Engineering and Radiological Sciences
Packaging Science
Pan African Studies
Park and Protected Area Management
Philosophy
Physics
Plant Pathology
Political Science
Precision Agriculture
Psychology
Public Policy
Race, Ethnicity and Migration
Recreational Therapy
Religious Studies
Russian Area Studies
Science and Technology in Society
Screenwriting
Sociology
Spanish Studies
Spanish-American Area Studies
Sustainability
Theatre
Travel and Tourism
Turfgrass
Urban Forestry
Wildlife and Fisheries Biology
Women’s Leadership
Writing
Youth Development Studies

See pages 38–41 for details.
COLLEGE OF EDUCATION

EUGENE T. MOORE SCHOOL OF EDUCATION

A driving force in the genesis of the new College of Education is the Eugene T. Moore School of Education, a transformative leader in systematically improving education, beginning at birth. The mission is to engage students in high quality applied research, professional learning, and immersive experiences. We prepare culturally competent scholar practitioners who promote the growth, education, and development of all individuals, with emphasis on underperforming schools and underserved communities across the state and nation.

Modern Language Requirement

A number of Clemson University degree programs require the completion of a modern language through a specific course level. Modern languages taught at Clemson University or accepted for transfer credit include American Sign Language, Arabic, Chinese, French, German, Italian, Japanese, Latin, Portuguese, Russian and Spanish. While many degree programs accept any of these modern languages for the requirement, certain programs may have specific modern language requirements. Students should consult their program’s curriculum map for details.

TEACHER EDUCATION PROGRAMS

The College of Education offers NCATE accredited teacher education undergraduate programs leading to teaching licensure in early childhood; elementary; secondary English, mathematics, science and social studies; agricultural education (in cooperation with the College of Agriculture, Forestry and Life Sciences); agricultural education (in cooperation with the College of Agriculture, Forestry and Life Sciences), and special education.

Our excellent preparation in both content and methodology includes many collaborative experiences in local schools. It prepares our graduates to shape the economic future of South Carolina, the United States, and the world by preparing leaders, workers, and citizens for their future roles in society.

The mission of the teacher preparation programs in the College of Education is to prepare critically reflective practitioners who:

- advocate for all learners,
- understand the importance of students’ developmental and sociocultural contexts to learning,
- implement research-based instructional practices,
- utilize current disciplinary knowledge to integrate educational theory, research and practice,
- understand the influence of educational policies on their instruction and educational system, and
- stand firm in their conviction that all students can learn.

Field and clinical practice are integral to teacher preparation. The College of Education is committed to providing candidates with purposeful, challenging, and diverse experiences. It is through a range of diverse, carefully constructed, and challenging field-based experiences, in conjunction with classroom instruction, that candidates recognize the inherent dignity and value of all individuals, value social justice, and advocate on behalf of children and families.

The Teacher Education Programs in Early Childhood, Elementary, Special Education, and secondary school programs in Agriculture, English, Mathematics, Science, and Social Studies are accredited by NCATE (now known as CAEP), the State of South Carolina, and discipline specialized national professional associations.

Criminal Records Check

A criminal record could prevent a person enrolled in a teacher education program in South Carolina from being licensed as a teacher in this state in accordance with State Board of Education guidelines.

Section 59-25-115 of the South Carolina Code of Laws specifies that before beginning the full-time clinical teaching experience in South Carolina, a teacher education candidate shall undergo a state criminal records check by the South Carolina Law Enforcement Division (SLED) and a national criminal records check supported by fingerprints by the Federal Bureau of Investigation (FBI). The applicant is responsible for the cost associated with the FBI background checks. Information reported relative to prior arrests or convictions will be reviewed by the State Department of Education, and the State Board of Education when warranted, according to board guidelines. A teacher education candidate with prior arrests or convictions of a serious nature that could affect his/her fitness to teach in the public schools of South Carolina may be denied the opportunity to complete the clinical teaching experience, and thus affect eligibility for initial teacher licensure. An individual who is denied this opportunity as a result of prior arrests or convictions, after one year, may request reconsideration under guidelines established by the State Board of Education.

The criminal records check will be handled through the Office of Educator Services at the South Carolina State Department of Education and will be considered phase one of a person’s application for a teaching credential. Provided the criminal records check is conducted within 18 months of the time the teacher candidate formally applies for a teaching license, the fingerprinting will not have to be repeated at the time of application. A graduate of a teacher education program applying for initial teacher licensure must have completed the FBI fingerprint process within 18 months of formally applying for initial teacher licensure or the fingerprint process must be repeated. The background check normally requires six (6) to eight (8) weeks to process. If the electronic fingerprints cannot be processed, the South Carolina State Department will inform the individual that it will be necessary to complete another electronic fingerprinting appointment.

Additionally, College of Education teacher candidates must complete a SLED check, a National Sex Offender check and a Tuberculosis (TB) test prior to beginning field and practicum experiences in public schools. Candidates complete field and practicum experiences prior to the full time clinical teaching experience. Therefore, the teacher education candidate will complete a SLED check for field and practicum experiences and a SLED and FBI background check for the full time clinical teaching experience.

Admission

Professional—Application to the professional level of a program will be reviewed in the second semester of the sophomore year, the second year of enrollment in the education program. Admission to the professional level requirements include 60 semester hours of education program work, passing scores on all areas of the Praxis CORE and have a minimum cumulative grade-point average of 2.75. A candidate may exempt the CORE by meeting minimum ACT or SAT requirements as determined by the South Carolina Department of Education.

Enrollment in Professional Courses

Once admitted to the professional level, candidates must maintain a 2.75 GPA in order to continue through the coursework sequence. Please see the following pages for additional program-specific academic requirements. On occasion appeals may be reviewed by department chairs.

Directed Teaching/Teaching Internship—A candidate shall apply for student teaching with the Office of Field Experiences prior to the semester in which the senior level teaching methods courses are to be scheduled. Admission and maintenance at the professional level and completion of at least 95 semester hours is required for registration to student teaching.

Change of Major

Changing majors into Education is highly competitive. Change of major decisions are made on an annual basis at the end of the fall semester. Applications are due December 1 and can only be obtained after meeting with a College of Education academic advisor. To apply, candidates must have a minimum grade-point average of 2.75.

Graduation and Licensure

To graduate, a candidate must have scores for all state-mandated licensure exams on file with the College of Education’s Office of Field Experience. Candidates must pass all required Praxis II tests, including the PLT (Principles of Learning and Teaching) test, before receiving recommendation for South Carolina teaching licensure.

ATHLETIC LEADERSHIP AND EDUCATION MINORS

Two minors are offered in the College of Education—Education and Athletic Leadership. For more information on these minors and the requirements, please see Minors, Programs and Degrees section of this catalog.

ATHLETIC LEADERSHIP CERTIFICATE

Students completing a nationally recognized coaching certification through the Athletic Leadership Program at Clemson may be eligible to meet the requirements for Athletic Leadership Certification. For more information, contact the Coordinator of Athletic Leadership at 864-656-0434.

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### Graduate Study
The College of Education offers a comprehensive set of programs at the masters, specialist and doctoral levels in pre-k through grade 12 education, educational leadership, counselor education (clinical mental health counseling and school counseling), student affairs and higher education, and human resource development. Browse the Clemson University Office of Graduate Programs or College of Education websites for more information.

### AGRICULTURAL EDUCATION

#### Bachelor of Science
The College of Education and the College of Agriculture, Forestry and Life Sciences conduct a cooperative program to produce agricultural teachers (grades 9–12) for South Carolina. See page 42 for the curriculum.

### EARLY CHILDHOOD EDUCATION

#### Bachelor of Arts
The Early Childhood Education curriculum prepares students for teaching positions on the pre-kindergarten and primary levels (Pre-K–3).

#### Freshman Year
**First Semester**
- ENGL 1050 Orientation to Education
- HIST 1000 The West and the World II
- MATH 1150 Contemporary Mathematics for Elementary School Teachers I
- Modern Language Requirement¹
- Natural Science Requirement²

**Second Semester**
- COMM 1500 Intro. to Human Comm. or COMM 2500 Public Speaking
- ENGL 1030 Accelerated Composition
- MATH 1160 Contemporary Mathematics for Elementary School Teachers II
- PSYC 2010 Introduction to Psychology
- Modern Language Requirement¹
- Elective

#### Sophomore Year
**First Semester**
- EDEC 3000 Foundations of Early Childhood Education³
- EDEC 3010 Practicum in Early Childhood Settings I
- GEOG 1030 World Regional Geography
- MATH 2160 Geometry for Elementary School Teachers
- Arts and Humanities (Literature) Requirement²
- Natural Science Requirement²

**Second Semester**
- EDEC 2200 Family, School, and Community Relationships³
- EDEC 3020 Practicum in Early Childhood Settings I
- EDLT 3360 Concepts of Play and Social Development of Infants and Young Children³
- EDEL 3100 Arts in the Elementary School³
- EDSP 3700 Introduction to Special Education³
- EDSP 3750 Early Intervention for Infants and Children with Special Needs³
- Elective

#### Junior Year
**First Semester**
- EDEC 3030 Practicum in Early Childhood Settings III³
- EDEC 3360 Concepts of Play and Social Development of Infants and Young Children³
- EDEL 3100 Arts in the Elementary School³
- EDSP 3700 Introduction to Special Education³
- EDSP 3750 Early Intervention for Infants and Children with Special Needs³
- Elective

**Second Semester**
- EDEC 3040 Practicum in Early Childhood Grades K–3⁴
- EDEC 4200 Early Childhood Science⁵
- EDEC 4500 Early Childhood Curriculum and Social Studies Methods⁶
- EDEL 3210 Physical Education Methods and Content for Classroom Teachers³
- EDF 3010 Principles of American Education³
- EDLT 4590 Early Literacy: Birth–Kindergarten⁶

#### Senior Year
**First Semester**
- EDEC 4600 Observation and Assessment in Clinical Settings⁷
- EDEC 4400 Early Childhood Mathematics⁷
- EDEC 4400 Early Childhood Language Arts⁷
- EDEC 4600 Critical Issues and Cultural Diversity in Early Childhood Education⁸
- EDLT 4590 Teaching Reading in the Early Grades: K–3⁹

**Second Semester**
- EDEC 4840 Directed Teaching in Early Childhood Education¹⁰
- EDEC 4850 Early Childhood Capstone¹⁰
- 125 Total Semester Hours

¹Students must complete through 2020 in a modern language. See Modern Languages Requirement at Clemson University statement on page 27. Spanish is recommended.
²One biological science and one physical science course, each with laboratory, must be selected from General Education Requirements. See advisor.
³Must be taken the fall semester of the sophomore year.
⁴ENGL 2120, 2130, 2140, or 2150
⁵Must be taken the spring semester of the sophomore year.
⁶Must be taken the fall semester of the junior year.
⁷Must be taken the spring semester of the junior year.
⁸Must be taken the fall semester of the senior year.
⁹Must be taken the spring semester of the senior year.

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### ELEMENTARY EDUCATION

#### Bachelor of Arts
The Elementary Education curriculum prepares students for teaching on the elementary school level (grades 2–6). Students select one of two Emphasis Areas: Literacy, Culture and Diversity; or Mathematics and Science.

#### LITERARY, CULTURE AND DIVERSITY EMPHASIS AREA

**Freshman Year**
**First Semester**
- BIOL 1090 Introduction to Life Science
- ED 1050 Orientation to Education
- GEOG 1030 World Regional Geography
- MATH 1150 Contemporary Mathematics for Elementary School Teachers I

**Second Semester**
- ENGL 1030 Accelerated Composition
- HIST 1000 History of the United States or HIST 1020 History of the United States
- MATH 1160 Contemporary Mathematics for Elementary School Teachers II
- PHSC 1170 Intro. to Chemistry and Earth Science for Elementary Education Majors

**Sophomore Year**
**First Semester**
- COMM 1500 Intro. to Human Comm. or COMM 2500 Public Speaking
- EDF 3340 Child Growth and Development
- MATH 2160 Geometry for Elementary School Teachers

**Second Semester**
- EDEL 3100 Arts in the Elementary School
- EDF 3010 Principles of American Education
- EDF 3020 Educational Psychology
- EDSP 3700 Introduction to Special Education
- Arts and Humanities (Literature) Requirement²

**Junior Year**
**First Semester**
- EDEL 3210 Physical Education Methods and Content for Classroom Teachers
- EDLT 4590 Teaching Reading in the Elementary Grades 2–6
- MATH 3160 Problem Solving for Math. Teachers

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2016-2017 Undergraduate Announcements
Second Semester
3 - EDEL 4050 Social Justice and 21st Cen. Learners
3 - EDEL 4520 Elem. Methods in Math. Teaching
3 - EDLT 4670 Prin. and Strat. for Teaching Engl.
   Speakers of Other Lang. in Elem. Schools
3 - EDLT 4620 Reading and Responding to
   Literature in the Elementary School
3 - EDLT 4630 Teaching Reading and Writing to
   English Language Learners
15
Senior Year
(Courses must be taken as listed in both semesters.)
First Semester
3 - EDEL 4010 Elementary Field Experience
3 - EDEL 4510 Elem. Methods in Science Teaching
3 - EDEL 4870 Elementary Methods in Social
   Studies Teaching
3 - EDEL 4880 Elementary Methods in Language
   Arts Teaching
3 - EDLT 4610 Content Area Reading: Grades 2–6
15
Second Semester
3 - EDEL 4820 Capstone Sem. in Elem. Teaching
9 - EDEL 4830 Directed Teaching in the
   Elementary School
12
122 Total Semester Hours
1Students must complete through 2020 in a modern language. See Modern Languages Requirement at Clemson University statement on page 27.
2Select from ENGL 2120, 2130, 2140 or 2150.
3See General Education Requirements.

MATHMATICS AND SCIENCE
EMPHASIS AREA
Freshman Year
First Semester
4 - BIOL 1090 Introduction to Life Science
2 - ED 1050 Orientation to Education
3 - GEOG 1030 World Regional Geographies
3 - MATH 1150 Contemporary Mathematics for
   Elementary School Teachers I
3 - Modern Language Requirement1
15
Second Semester
3 - ENGL 1030 Accelerated Composition
3 - HIST 1010 History of the United States or
3 - HIST 1020 History of the United States
3 - MATH 1160 Contemporary Mathematics for
   Elementary School Teachers II
4 - PHSC 1170 Intro. to Chemistry and Earth
   Science for Elementary Education Majors
3 - Modern Language Requirement1
16
Sophomore Year
First Semester
3 - COMM 1500 Intro. to Human Comm. or
3 - COMM 2500 Public Speaking
3 - EDF 3340 Child Growth and Development
3 - MATH 2160 Geometry for Elementary School
   Teachers
4 - PHSC 1180 Intro. to Physics, Astronomy, and
   Earth Science for Elementary Education Majors
3 - Arts and Humanities (Literature) Requirement2
16
Second Semester
3 - EDEL 3100 Arts in the Elementary School
3 - EDF 3010 Principles of American Education
3 - EDF 3020 Educational Psychology
3 - EDSP 3700 Introduction to Special Education
3 - Arts and Humanities (Non-Lit) Requirement3
3 - Elective
18
Junior Year
First Semester
3 - EDEL 3210 Physical Education Methods and
   Content for Classroom Teachers
3 - EDF 3080 Classroom Assessment
3 - EDF 4800 Foundations of Digital Media and
   Learning
3 - EDLT 4600 Teaching Reading in the
   Elementary Grades: 2–6
3 - MATH 3160 Problem Solving for Math. Teachers
15
Second Semester
3 - EDEL 4520 Elem. Methods in Math. Teaching
3 - EDLT 4670 Prin. and Strat. for Teaching Engl.
   Speakers of Other Lang. in Elem. Schools
3 - ENSP 2010 Introduction to Environmental
   Science for Education Majors
3 - MATH 3150 Advanced Topics in Mathematics
   for Elementary Teachers
3 - Science Content Requirement4
15
Senior Year
(Courses must be taken as listed in both semesters.)
First Semester
3 - EDEL 4510 Elementary Field Experience
3 - EDEL 4870 Elementary Methods in Science
   Teaching
3 - EDEL 4880 Elementary Methods in Social
   Studies Teaching
3 - EDLT 4610 Content Area Reading: Grades 2–6
15
Second Semester
3 - EDEL 4520 Elem. Methods in Math. Teaching
3 - EDLT 4670 Prin. and Strat. for Teaching Engl.
   Speakers of Other Lang. in Elem. Schools
3 - ENSP 2010 Introduction to Environmental
   Science for Education Majors
3 - MATH 3150 Advanced Topics in Mathematics
   for Elementary Teachers
3 - Science Content Requirement4
15
Bachelor of Science
The program leading to a Bachelor of Science degree in Mathematics Teaching is designed for students
planning to teach mathematics on the secondary school level (grades 9–12). (Note: The program
leading to a Bachelor of Arts degree in Secondary Education with a Teaching Area of Mathematics
is also designed for students planning to teach mathematics on the secondary school level.) To be
recommended for licensure, students must earn a grade of C or higher in all required mathematics
content and education courses.

Freshman Year
First Semester
4 - CH 1050 Chemistry in Context I or
4 - CH 1060 Chemistry in Context II
2 - ED 1050 Orientation to Education
4 - MATH 1060 Calculus of One Variable I
2 - PHIL 1020 Introduction to Logic
3 - Cross-Cultural Awareness Requirement1
16
Second Semester
3 - ENGL 1030 Accelerated Composition
4 - MATH 1080 Calculus of One Variable II
3 - PHYS 1220 Physics with Calculus I
1 - PHYS 2230 Physics Lab I
3 - Science Requirement2
14
Sophomore Year
First Semester
3 - COMM 1500 Intro. to Human Comm. or
3 - COMM 2500 Public Speaking
3 - EDSC 2260 A Prof. Approach to Sec. Algebra
3 - MATH 2060 Calculus of Several Variables
4 - MATH 2210 Physics with Calculus II
1 - PHYS 2230 Physics Lab II
3 - Arts and Humanities (Literature) Requirement3
17
Second Semester
3 - EDF 3020 Educational Psychology
4 - MATH 2080 Intro. to Ordinary Diff. Equations
3 - MATH 3110 Linear Algebra
3 - MATH 3190 Introduction to Proofs
3 - Economics Requirement4
16
Junior Year
First Semester
3 - EDF 3010 Principles of American Education
3 - EDLT 4800 Foundations of Adolescent Literacy
3 - EDSC 3260 Practicum in Secondary Math.
3 - MATH 3020 Statistics for Science and Engr.
3 - History Requirement5
3 - Science Requirement2
18
Second Semester
3 - EDF 3350 Adolescent Growth and Development
3 - EDSC 4370 Technology in Secondary Math.
3 - EDSP 3700 Introduction to Special Education
3 - MATH 3080 College Geometry
3 - MATH 4120 Algebra I
15

College of Education
Senior Year
First Semester
3 - EDSC 4260 Teaching Secondary Mathematics6
3 - EDLT 4980 Secondary Content Area Reading6
3 - MATH 4000 Theory of Probability or
3 - MATH 4020 Statics for Science and Eng. II
3 - MATH 4080 Topics in Geometry
3 - MATH 4530 Advanced Calculus I
12
Second Semester
9 - EDSC 4460 Teaching Internship in Sec. Math.7
3 - EDSC 4560 Secondary Math. Capstone Sem.7
12
123 Total Semester Hours

See General Education Requirements. Cross-Cultural Awareness Requirement must be in an area other than history.
Select from courses in ASTR, BIOL, CH, GEOL, PHYS
"ENGL 2120, 2130, 2140, 2150
Select from ECON 2000, 2110, or 2120
Select from HIST 1010, 1020, 1720, 1730, or 1930
EDSC 4260 and EDLT 4980 must be taken concurrently prior to the teaching internship. Offered fall semester only.
EDSC 4460 and 4560 must be taken concurrently. Offered spring semester only.

SCIENCE TEACHING
The programs leading to a Bachelor of Arts or Bachelor of Science degree in Science Teaching are designed for students planning to teach biological sciences, chemistry, or physical sciences on the secondary school level (grades 9–12). To be recommended for licensure, students must earn a grade of C or higher in all required science content and education courses.

Double Majors in Science Teaching and Content Area
The Bachelor of Arts Degree in Science Teaching could result in a double major in Science Teaching and the select content area (Biological Sciences, Chemistry, or Physics). To receive a double major in Science Teaching and the selected content area, a Change of Academic Program form must be completed to declare both majors. To achieve a double major, the appropriate plan of study listed under Science Teaching must be followed and all major requirements from both programs must be satisfied. The double major prepares students for teaching science on the secondary level and graduate work in the respective content field.

TEACHING AREA: BIOLOGICAL SCIENCES
Bachelor of Arts
Freshman Year
First Semester
3 - BIOL 1030 General Biology I and
1 - BIOL 1050 General Biology Lab. I or
5 - BIOL 1100 Principles of Biology
4 - CH 1010 General Chemistry
2 - ED 1050 Orientation to Education
4 - MATH 1060 Calculus of One Variable I
3 - Modern Language Requirement1
17-18

Second Semester
3 - BIOL 1040 General Biology I and
1 - BIOL 1060 General Biology Lab. II or
5 - BIOL 1110 Principles of Biology II
4 - CH 1020 General Chemistry
3 - EDSC 4270 Teaching Secondary Science
3 - ENGL 3150 Scientific Writing and Comm.
3 - EDF 3350 Adolescent Growth and Development
3 - EDSP 3700 Introduction to Special Education
3 - EDSC 4270 Teaching Secondary Science6
3 - EDLT 4980 Secondary Content Area Reading6
3 - Arts and Humanities (Non-Lit.) Requirement5
15

Senior Year
First Semester
3 - COMM 1500 Intro. to Human Comm. or
3 - COMM 2500 Public Speaking
3 - EDSP 3700 Introduction to Special Education
3 - EDSC 4270 Teaching Secondary Science5
3 - EDLT 4980 Secondary Content Area Reading6
3 - EDSC 4570 Sec. Science Capstone Seminar6
12
127–129 Total Semester Hours

3 Students must complete through 2020 in a modern language. See Modern Languages Requirement at Clemson University statement on page 27.

4 STAT 2300 or 3090

Second Semester
9 - EDSC 4470 Teaching Internship in Sec. Sci.7
3 - EDSC 4570 Sec. Science Capstone Seminar6
12

Junior Year
First Semester
3 - BIOL 4610 Cell Biology
2 - BIOL 4620 Cell Biology Laboratory
3 - EDLT 4800 Foundations of Adolescent Literacy
3 - EDSC 3270 Practicum in Secondary Science
3 - Functional Biology Requirement5
16-17

Sophomore Year
First Semester
3 - CH 2100 Survey of Organic Chemistry
1 - CH 2100 Survey of Organic Chemistry Lab. or
3 - HIST 1220 History, Technology and Society or
3 - HIST 1240 Environmental History Survey
3 - PHYS 2070 General Physics I
1 - PHYS 2090 General Physics I Lab.
3 - Arts and Humanities (Literature) Requirement1
3 - Biochemistry or Genetics Requirement4
3 - Statistics Requirement2
17

Second Semester
3 - EDF 3010 Principles of American Education
3 - EDF 3250/3260 Educational Psychology
3 - PHYS 2080 General Physics II
1 - PHYS 2100 General Physics II Lab.
3 - Biochemistry or Genetics Requirement5
4 - Organismal Diversity Requirement7
17

Junior Year
First Semester
3 - ANTH 2010 Introduction to Anthropology or
3 - GEOG 1030 World Regional Geography
3 - BIOL 4810 Cell Biology
2 - BIOL 4500 Cell Biology Laboratory
3 - EDLT 4800 Foundations of Adolescent Literacy
3 - EDSC 3270 Practicum in Secondary Science
3 - Ecology Requirement5
17

Second Semester
3 - BIOL 3550 Evolutionary Biology
3 - BIOL (EDSC) 4820 Laboratory Techniques for Teaching Science
3 - EDF 3350 Adolescent Growth and Development
3 - ENGL 3150 Scientific Writing and Comm.
3 - Functional Biology Requirement5
15

Senior Year
First Semester
3 - COMM 1500 Intro. to Human Comm. or
3 - COMM 2500 Public Speaking
3 - EDSP 3700 Introduction to Special Education
3 - EDSC 4270 Teaching Secondary Science
3 - EDLT 4980 Secondary Content Area Reading6
3 - Arts and Humanities (Non-Lit.) Requirement5
15

Second Semester
9 - EDSC 4470 Teaching Internship in Sec. Sci.7
3 - EDSC 4570 Sec. Science Capstone Seminar6
12

Junior Year
First Semester
3 - BIOL 4610 Cell Biology
2 - BIOL 4620 Cell Biology Laboratory
3 - EDLT 4800 Foundations of Adolescent Literacy
3 - EDSC 3270 Practicum in Secondary Science
3 - Organismal Diversity Requirement7
15

Sophomore Year
First Semester
3 - CH 2100 Survey of Organic Chemistry
1 - CH 2100 Survey of Organic Chemistry Lab. or
3 - HIST 1220 History, Technology and Society or
3 - HIST 1240 Environmental History Survey
3 - PHYS 2070 General Physics I
1 - PHYS 2090 General Physics I Lab.
3 - Arts and Humanities (Non-Lit.) Requirement5
3 - Biochemistry Requirement4
3 - Statistics Requirement2
17

Second Semester
3 - BIOL 3550 Evolutionary Biology
3 - EDF 3010 Principles of American Education
3 - PHYS 2080 General Physics II
1 - PHYS 2100 General Physics II Lab.
3 - Biochemistry Requirement3
3 - Ecology Requirement4
15
**Sophomore Year**

**First Semester**
- BIOL 1030 General Biology I
- CH 2230 Organic Chemistry
- PHYS 2210 Physics with Calculus II

**Second Semester**
- BIOL 1040 General Biology II
- CH 2280 Organic Chemistry Laboratory
- CH 3130 Quantitative Analysis
- EDLT 4980 Secondary Content Area Reading

**Junior Year**

**First Semester**
- BIOL 1050 General Biology Lab. I
- CH 2220 Organic Chemistry Laboratory
- CH 3170 Quantitative Analysis Laboratory
- EDSC 3270 Practicum in Secondary Science

**Second Semester**
- BIOL 1060 General Biology Lab. II
- CH 2230 Organic Chemistry
- CH 3310 Physical Chemistry
- EDSC 4270 Practicum in Secondary Science

**Senior Year**

**First Semester**
- BIOL 1070 General Biology Lab. III
- CH 3320 Physical Chemistry
- EDF 3020 Educational Psychology
- EDSP 3700 Introduction to Special Education

**Second Semester**
- BIOL 1100 Principles of Biology I
- CH 3330 Principles of Biology I
- CH 3340 Principles of Biology II
- EDSC 3270 Practicum in Secondary Science

**Sophomore Year**

**First Semester**
- BIOL 1030 General Biology I
- CH 2230 Organic Chemistry
- MATH 2060 Calculus of Several Variables

**Second Semester**
- BIOL 1040 General Biology II
- CH 2280 Organic Chemistry Laboratory
- MATH 2070 Calculus of Several Variables

**Junior Year**

**First Semester**
- BIOL 1050 General Biology Lab. I
- CH 2220 Organic Chemistry Laboratory
- EDLT 4980 Secondary Content Area Reading

**Second Semester**
- BIOL 1060 General Biology Lab. II
- CH 2230 Organic Chemistry
- CH 3310 Physical Chemistry
- EDSC 3270 Practicum in Secondary Science

**Senior Year**

**First Semester**
- BIOL 1070 General Biology Lab. III
- CH 3320 Physical Chemistry
- EDF 3020 Educational Psychology
- EDSP 3700 Introduction to Special Education

**Second Semester**
- BIOL 1100 Principles of Biology I
- CH 3330 Principles of Biology I
- CH 3340 Principles of Biology II
- EDSC 3270 Practicum in Secondary Science

**Sophomore Year**

**First Semester**
- BIOL 1030 General Biology I and
- MATH 2060 Calculus of Several Variables
- PHYS 2210 Physics with Calculus II

**Second Semester**
- BIOL 1040 General Biology II and
- MATH 2070 Calculus of Several Variables
- PHYS 2220 Physics with Calculus III

**Junior Year**

**First Semester**
- BIOL 1050 General Biology Lab. I
- CH 2220 Organic Chemistry Laboratory
- EDLT 4980 Secondary Content Area Reading

**Second Semester**
- BIOL 1060 General Biology Lab. II
- CH 2230 Organic Chemistry
- CH 3310 Physical Chemistry
- EDSC 3270 Practicum in Secondary Science

**Senior Year**

**First Semester**
- BIOL 1070 General Biology Lab. III
- CH 3320 Physical Chemistry
- EDF 3020 Educational Psychology
- EDSP 3700 Introduction to Special Education

**Second Semester**
- BIOL 1100 Principles of Biology I
- CH 3330 Principles of Biology I
- CH 3340 Principles of Biology II
- EDSC 3270 Practicum in Secondary Science
TEACHING AREA: PHYSICS

Bachelor of Arts
Freshman Year
First Semester
4 - CH 1010 General Chemistry
2 - ED 1050 Orientation to Education
3 - ENGL 1030 Accelerated Composition
4 - MATH 1080 Calculus of One Variable I
3 - PHYS 1240 Physics Lab I
1 - PHYS 1240 Physics Lab I

Second Semester
4 - CH 1020 General Chemistry
4 - MATH 1080 Calculus of One Variable II
3 - PHYS 2210 Physics with Calculus II
1 - PHYS 2230 Physics Laboratory I
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Oral Communication Requirement

Sophomore Year
First Semester
5 - BIOL 1100 Principles of Biology I or
3 - BIOL 1030 General Biology I and
1 - BIOL 1050 General Biology I Lab.
4 - MATH 2060 Calculus of Several Variables
3 - PHYS 2220 Physics with Calculus III
3 - PHYS 3250 Experimental Physics I
14-15

Second Semester
3 - ASTR 1010 Solar System Astronomy
5 - BIOL 1110 Principles of Biology II or
3 - BIOL 1040 General Biology II and
1 - BIOL 1060 General Biology II Lab.
4 - MATH 2080 Intro to Ordinary Diff. Equations
3 - Social Science Requirement
17-18

Senior Year
First Semester
3 - EDSC 4270 Teaching Secondary Science
3 - EDLT 4980 Foundations of Adolescent Literacy
3 - PHYS 4410 Electromagnetics I
3 - PHYS 4550 Quantum Physics I
3 - Arts and Humanities (Literature) Requirement
15

Second Semester
3 - EDSP 3700 Introduction to Special Education
9 - EDSC 4470 Teaching Internship in Secondary Science
3 - EDSC 4570 Sec. Science Capstone Seminar
15

122-125 Total Semester Hours

SECONDARY EDUCATION

The Bachelor of Arts degree in Secondary Education is available to students preparing to teach English, mathematics, or social studies on the secondary school level (grades 9–12). The teaching field should be selected as early as possible so appropriate freshman and sophomore courses may be taken.

Each curriculum may lead to a double major composed of the major concentration in the teaching field and the corresponding content major. To receive a double major in Secondary Education and the selected content area, a Change of Academic Program form must be completed to declare both majors. To achieve a double major, the appropriate plan of study under Secondary Education must be followed and all major requirements from both programs must be satisfied.

Specific courses and sequences have been designated to meet requirements for those planning to teach. The professional education courses should be completed in sequence.

TEACHING AREA: ENGLISH

The Bachelor of Arts Degree in Secondary Education—English offers a double major in Secondary Education—English and English. To be recommended for licensure, students must earn a C or higher in all required English content and education courses.

Freshman Year
First Semester
3 - COMM 1500 Intro. to Human Comm. or
3 - COMM 2500 Public Speaking
2 - ED 1050 Orientation to Education
3 - ENGL 1030 Accelerated Composition
3 - Modern Language Requirement
3 - Mathematics Requirement

Second Semester
3 - BIOL 2000 Biology in the News
3 - ENGL 2120 World Literature
3 - HIST 1730 The West and the World II
3 - Modern Language Requirement
4 - Natural Science Requirement

Sophomore Year
First Semester
3 - EDF 3350 Adolescent Growth and Development
3 - ENGL 3100 Critical Writing About Literature
3 - HIST 1760 American Social History
3 - HIST 3160 American Social History or
3 - HIST 3600 American Social History and
3 - HIST 3630 History of England to 1688
3 - HIST 3630 History of England to 1688 or
3 - HIST 3630 Britain Since 1688 or
3 - HIST 3630 British Cultural History
3 - Arts and Humanities (Non-Lit) Req.
3 - English Literature Survey Requirement

Second Semester
3 - EDF 3350 Adolescent Growth and Development
3 - ENGL 3860 Adolescent Literature
3 - ENGL 4110 Shakespeare
3 - HIST 1720 The West and the World I
3 - English Literature Survey Requirement
3 - Fine Arts Requirement

Junior Year
First Semester
3 - EDSC 4270 Teaching Secondary Science
3 - EDLT 4980 Foundations of Adolescent Literacy
3 - EDSC 3240 Pract. in Teaching Secondary Eng.
3 - EDSP 3700 Introduction to Special Education
3 - Literature Emphasis Area Requirement
15

Second Semester
3 - EDLT 4850 Found. in Adolescent Literacy
3 - EDSC 3240 Pract. in Teaching Secondary Engl.
3 - EDSP 4550 Intro to Computational Physics
3 - Literature Emphasis Area Requirement
3 - Social Science Requirement

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### Senior Year

#### First Semester
- EDLT 4980 Secondary Content Area Reading
- EDSC 4260 Teaching Secondary English
- ENGL 4850 Composition for Teachers
- ED 4960 English Senior Seminar
- Literature Emphasis Area Diversity Req.

#### Second Semester
- EDSC 4440 Teaching Internship in Secondary English
- EDSC 4540 Secondary English Capstone Sem.

123 Total Semester Hours

*Students must complete through 2020 in a modern language. See Modern Languages Requirement at Clemson University statement on page 27.*

*See General Education Requirements.*

*Any other Mathematics or Natural Sciences General Education course that satisfies the General Education Science and Technology in Society requirement may be substituted.*

*Select from PHIL 1010, 1020, or 1030.*

*Select from ENGL 3960, 3970, 3980, or 3990. One course each of British and American Survey are required. The additional course satisfies the upper level ENGL requirement.*

*This course qualifies as a Literature Emphasis Area Requirement for a BA in English.*

*Select from AAH 1010 or ART 2100; ENGL 3570; HUM 3020, 3022, or 3060; MUSC 2100, 3110, 4150, or 4560; or THEA 2100.*

*Students must complete 45 hours of field experience in a public school.*

*Select from ENGL 4030, 4070, 4080, 4100, 4140, 4200, (THEA) 4290, 4440, or 4630.*

*Select any 4000 level ENGL course.*

*Select from ENGL 4350, 4360, 4400, or 4420, or other course approved by the department.*

*Select from ENGL 4150, 4160, 4170, 4180, 4210, 4250, 4260, or 4640.*

*Select from ENGL 4280, (THEA) 4300, 4310, 4320, 4330, 4340, 4350, or 4650.*

*EDSC 4480, and ENGL (EDSC) 4850 must be taken concurrently during fall semester of senior year.*

*Students must also enroll in the laboratory sections of EDSC 4240 and EDLT 4980.*

*Select from ENGL 3530, 3800, 4190, (HUM) 4500, 4820, or 4830.*

*EDSC 4440 and EDSC 4540 must be taken concurrently during spring semester of senior year.*

### Second Semester
- MATH 1080 Calculus of One Variable II
- PHIL 1020 Introduction to Logic
- PHYS 1220 Physics with Calculus I
- PHYS 1240 Physics Laboratory I
- History Requirement
- Modern Language Requirement

#### Sophomore Year

##### First Semester
- EDSC 2260 A Prof. Approach to Sec. Algebra
- MATH 2060 Calculus of Several Variables
- MATH 2500 Intro. to Mathematical Sciences
- Arts and Humanities (Literature) Requirement
- Computer Science Requirement
- Economics Requirement

##### Second Semester
- MATH 2080 Intro. to Ordinary Diff. Equations
- MATH 3110 Linear Algebra
- MATH 3190 Introduction to Proof
- Cross-Cultural Awareness Requirement

#### Junior Year

##### First Semester
- EDF 1020 Educational Psychology
- MATH 2060 Calculus of Several Variables
- MATH 2500 Intro. to Mathematical Sciences
- Arts and Humanities (Non-Lit.) Requirement

##### Second Semester
- MATH 3020 Statistics for Science and Engr.
- MATH 4000 Theory of Probability

#### Senior Year

##### First Semester
- MATH 3190 Introduction to Proof
- MATH 3110 Linear Algebra
- MATH 3020 Statistics for Science and Engr.
- EDF 3010 Principles of American Education

##### Second Semester
- MATH 3190 Introduction to Proof
- MATH 4000 Theory of Probability
- MATH 3020 Statistics for Science and Engr.
- EDF 3010 Principles of American Education

### TEACHING AREA: MATHEMATICS

The Bachelor of Arts degree in Secondary Education—Mathematics offers a double major in Secondary Education—Mathematics and Mathematical Sciences. To be recommended for licensure, students must earn a C or higher in all required mathematics content and education courses.

### Bachelor of Arts

#### Freshman Year

##### First Semester
- ED 1050 Orientation to Education
- ENGL 1030 Accelerated Composition
- MATH 1060 Calculus of One Variable I
- Modern Language Requirement
- Natural Science Requirement

##### Second Semester
- MATH 1080 Calculus of One Variable II
- PHIL 1020 Introduction to Logic
- PHYS 1220 Physics with Calculus I
- PHYS 1240 Physics Laboratory I
- History Requirement
- Modern Language Requirement

#### Sophomore Year

##### First Semester
- EDSC 2260 A Prof. Approach to Sec. Algebra
- MATH 2060 Calculus of Several Variables
- MATH 2500 Intro. to Mathematical Sciences
- Arts and Humanities (Literature) Requirement
- Computer Science Requirement
- Economics Requirement

##### Second Semester
- MATH 2080 Intro. to Ordinary Diff. Equations
- MATH 3110 Linear Algebra
- MATH 3190 Introduction to Proof
- Cross-Cultural Awareness Requirement

#### Junior Year

##### First Semester
- EDF 1020 Educational Psychology
- MATH 2060 Calculus of Several Variables
- MATH 2500 Intro. to Mathematical Sciences
- Arts and Humanities (Non-Lit.) Requirement

##### Second Semester
- MATH 3020 Statistics for Science and Engr.
- MATH 4000 Theory of Probability
- MATH 3020 Statistics for Science and Engr.
- EDF 3010 Principles of American Education

### TEACHING AREA: SOCIAL STUDIES (HISTORY)

The Bachelor of Arts degree in Secondary Education—Social Studies (History) offers a double major in Secondary Education—Social Studies (History) and History. To be recommended for licensure, students must earn a C or higher in all required history content and education courses.

#### Freshman Year

##### First Semester
- ED 1050 Orientation to Education
- ENGL 1030 Accelerated Composition
- Mathematics Requirement
- Modern Language Requirement
- Natural Science Requirement

##### Second Semester
- ANTH 2010 Introduction to Anthropology
- BIOL 2140 American Literature
- GEOG 1030 World Regional Geography
- PSYC 2100 Introduction to Psychology
- Modern Language Requirement

#### Sophomore Year

##### First Semester
- ECON 2000 Economic Concepts
- EDF 3020 Educational Psychology
- HIST 1010 History of the United States
- HIST 1720 The West and the World I
- POSC 1010 American National Government

##### Second Semester
- HIST 1020 History of the United States
- HIST 1730 The West and the World II
- HIST 2900 Seminar; The Historian’s Craft
- Advanced Humanities Requirement
- Arts and Humanities (Non-Lit.) Requirement

#### Junior Year

##### First Semester
- EDF (HIST) 3200 History of U.S. Public Educ.
- EDLT 4800 Found of Adolescent Literacy
- EDSC 3280 Practicum in Secondary Social Studies
- Teaching Major

##### Second Semester
- SOC 2010 Introduction to Sociology
- Advanced Humanities Requirement
- Arts and Humanities (Literature) Requirement
- Teaching Major

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*Select from ECON 2000, 2110, or 2120
*EDSC 4260 and EDLT 4980 must be taken concurrently prior to the teaching internship. Offered fall semester only.
*EDSC 4460 and 4560 must be taken concurrently. Offered spring semester only.

1. Students must complete through 2020 in a modern language. See Modern Languages Requirement at Clemson University statement on page 27.
2. Any other Mathematics or Natural Sciences General Education course that satisfies the General Education Science and Technology in Society requirement may be substituted.
3. Select from PHIL 1010, 1020, or 1030.
4. Select from ENGL 3960, 3970, 3980, or 3990. One course each of British and American Survey are required. The additional course satisfies the upper level ENGL requirement.
5. This course qualifies as a Literature Emphasis Area Requirement for a BA in English.
6. Select from AAH 1010 or ART 2100; ENGL 3570; HUM 3020, 3022, or 3060; MUSC 2100, 3110, 4150, or 4560; or THEA 2100.
7. Students must complete 45 hours of field experience in a public school.
8. Select from ENGL 4030, 4070, 4080, 4100, 4140, 4200, (THEA) 4290, 4440, or 4630.
9. Select any 4000 level ENGL course.
10. Select from ENGL 4350, 4360, 4400, or 4420, or other course approved by the department.
11. Select from ENGL 4150, 4160, 4170, 4180, 4210, 4250, 4260, or 4640.
12. Select from ENGL 4280, (THEA) 4300, 4310, 4320, 4330, 4340, 4350, or 4650.
13. EDLT 4980, EDSC 4260, and ENGL (EDSC) 4850 must be taken concurrently during fall semester of senior year.
14. Students must also enroll in the laboratory sections of EDSC 4240 and EDLT 4980.
15. Select from ENGL 3530, 3800, 4190, (HUM) 4500, 4820, or 4830.
16. EDSC 4440 and EDSC 4540 must be taken concurrently during spring semester of senior year.
17. Students must complete through 2020 in a modern language. See Modern Languages Requirement at Clemson University statement on page 27.
18. See General Education Requirements. Natural Science with Lab requirement selection must also meet the Science and Technology in Society requirement. Cross-Cultural Awareness requirement must be selected from non-history courses.
19. Select from HIST 1010, 1020, 1720, 1730, or 1930.
20. ENGL 2120, 2130, 2140, or 2150
21. CPSC 1010, 1110, 1150, 1610, or 2200

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College of Education

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Senior Year
First Semester
3 - EDF 3350 Adolescent Growth & Devel
3 - EDLT 4980 Secondary Content Area Reading
3 - EDSP 3700 Introduction to Special Education
3 - EDSC 4280 Teaching Secondary Social Studies
3 - HIST 4900 Senior Seminar
3 - Advanced Humanities Requirement
3 - Natural Science Requirement
129 Total Semester Hours

Second Semester
9 - EDSC 4480 Teaching Internship in Secondary Social Studies
9 - EDSC 4580 Secondary Social Studies
Capstone Seminar

Sophomore Year
First Semester
3 - EDF 3010 Principles of American Education
3 - EDSP 3700 Introduction to Special Education
3 - MATH 2160 Geometry for Elementary School Teachers
3 - Arts and Humanities (Literature) Requirement
4 - Natural Science Requirement
16
Second Semester
3 - COMM 1500 Intro. to Human Comm. or
3 - ELECTIVE 1
3 - EDF 3020 Educational Psychology
3 - EDF 3340 Child Growth and Development
3 - Arts and Humanities (Non-Lit.) Requirement
3 - History Requirement
15
Junior Year
First Semester
3 - EDEL 3100 Arts in the Elementary School
3 - EDF 4800 Foundations of Digital Media and Learning
3 - EDLT 4600 Teaching Reading in the Elementary Grades: 2–6
3 - EDSP 3720 Char. and Instruction of Individuals with Learning Disabilities
3 - EDSP 3740 Char. and Strat. for Individuals with Emotional/Behavioral Disorders
15
Second Semester
3 - EDEL 4510 Elem. Meth. in Science Teaching
3 - EDEL 4870 Elementary Methods in Social Studies Teaching
3 - EDSP 3730 Characteristics and Instruction of Individuals with Intellectual Disabilities and Autism
3 - EDSP 3750 Early Intervention Strategies for Young Children with Special Needs
3 - EDSP 4910 Educational Assessment of Individuals with Disabilities
15

Freshman Year
First Semester
2 - ED 1050 Orientation to Education
2 - HIST 1240 Environmental History Survey or
2 - HIST 1220 History, Technology, and Society
2 - MATH 1150 Contemporary Mathematics for Elementary School Teachers I
2 - Modern Language Requirement
2 - Natural Science Requirement
15
Second Semester
2 - ENGL 1030 Accelerated Composition
2 - GEOG 1030 World Regional Geography
2 - MATH 1160 Contemporary Mathematics for Elementary School Teachers II
2 - Modern Language Requirement
2 - Natural Science Requirement
15

SPECIAL EDUCATION
Bachelor of Arts
The Bachelor of Arts degree in Special Education prepares students to teach individuals with disabilities in grades P-12. The curriculum is designed to meet the competencies outlined by the Council for Exceptional Children for beginning special education teachers. Students completing the program receive instruction and practical experiences that lead to Multi-Categorical Special Education Licensure in South Carolina. Once admitted to the professional level, candidates must maintain a 2.75 GPA in order to advance through the professional level coursework sequence. To be recommended for certification, candidates must earn a C or higher in all education courses at the professional level and a B or higher in EDSP 4960 and EDSP 4980.

First Semester
1 - EDSP 4900 Teaching Writing to Students with Disabilities
1 - EDSP 4920 Mathematics Instruction for Individuals with Mild Disabilities
1 - EDSP 4930 Classroom and Behavior Management for Special Educators
1 - EDSP 4940 Teaching Reading to Students with Mild Disabilities
1 - EDSP 4960 Special Education Field Experience
1 - EDSP 4970 Secondary Methods for Individuals with Disabilities

Second Semester
1 - EDSP 4950 Communication and Collaboration in Special Education
1 - EDSP 4980 Directed Teaching in Special Ed.

123 Total Semester Hours

Freshman Year
First Semester
2 - ED 1050 Orientation to Education
2 - HIST 1240 Environmental History Survey or
2 - HIST 1220 History, Technology, and Society
2 - MATH 1150 Contemporary Mathematics for Elementary School Teachers I
2 - Modern Language Requirement
2 - Natural Science Requirement
15
Second Semester
2 - ENGL 1030 Accelerated Composition
2 - GEOG 1030 World Regional Geography
2 - MATH 1160 Contemporary Mathematics for Elementary School Teachers II
2 - Modern Language Requirement
2 - Natural Science Requirement
15

Sophomore Year
First Semester
3 - EDF 3010 Principles of American Education
3 - EDSP 3700 Introduction to Special Education
3 - MATH 2160 Geometry for Elementary School Teachers
3 - Arts and Humanities (Literature) Requirement
4 - Natural Science Requirement
16
Second Semester
3 - COMM 1500 Intro. to Human Comm. or
3 - COMM 2500 Public Speaking
3 - EDF 3020 Educational Psychology
3 - EDF 3340 Child Growth and Development
3 - Arts and Humanities (Non-Lit.) Requirement
3 - History Requirement
15
Junior Year
First Semester
3 - EDEL 3100 Arts in the Elementary School
3 - EDF 4800 Foundations of Digital Media and Learning
3 - EDLT 4600 Teaching Reading in the Elementary Grades: 2–6
3 - EDSP 3720 Char. and Instruction of Individuals with Learning Disabilities
3 - EDSP 3740 Char. and Strat. for Individuals with Emotional/Behavioral Disorders
15
Second Semester
3 - EDEL 4510 Elem. Meth. in Science Teaching
3 - EDEL 4870 Elementary Methods in Social Studies Teaching
3 - EDSP 3730 Characteristics and Instruction of Individuals with Intellectual Disabilities and Autism
3 - EDSP 3750 Early Intervention Strategies for Young Children with Special Needs
3 - EDSP 4910 Educational Assessment of Individuals with Disabilities
15
MINORS

Following are minors acceptable for students in the College of Education. Students cannot major and minor in the same field or acquire a minor that is not allowed by the degree program.

Accounting
Adult/Extension Education
Aerospace Studies
Agricultural Business Management
Agricultural Mechanization and Business
American Sign Language Studies
Animal and Veterinary Sciences
Anthropology
Architecture
Art
Athletic Leadership
Biochemistry
Biological Sciences—not open to Science Teaching—Biological Sciences majors
Brand Communications
British and Irish Studies
Business Administration
Chemistry—not open to Science Teaching—Chemistry majors
Chinese Studies
Cluster
Communication Studies
Computer Science
Creative Writing
Crop and Soil Environmental Science
Digital Production Arts
East Asian Studies
Economics
English—not open to Secondary Education—English majors
Entomology
Entrepreneurship
Environmental Science and Policy
Equine Industry
Film Studies
Financial Management
Food Science
Forest Products
Forest Resource Management
French Studies
Gender, Sexuality and Women’s Studies
Genetics
Geography
Geology
German Studies
Global Politics
Great Works
History—not open to Secondary Education: Social Studies (History) majors
Horticulture
Human Resource Management
Italian Studies
Japanese Studies
Legal Studies
Management
Management Information Systems
Mathematical Sciences—not open to Mathematics Teaching or Secondary Education—Mathematics majors
Microbiology
Middle Eastern Studies
Military Leadership
Music
Natural Resource Economics
Nonprofit Leadership
Nuclear Engineering and Radiological Sciences
Packaging Science
Pan African Studies
Park and Protected Area Management
Philosophy
Physics—not open to Science Teaching—Physical Sciences or Science Teaching—Physics majors
Plant Pathology
Political Science
Precision Agriculture
Psychology
Public Policy
Race, Ethnicity and Migration
Recreational Therapy
Religious Studies
Russian Area Studies
Science and Technology in Society
Screenwriting
Sociology
Spanish Studies
Spanish-American Area Studies
Sustainability
Theatre
Travel and Tourism
Turfgrass
Urban Forestry
Wildlife and Fisheries Biology
Women’s Leadership
Writing
Youth Development Studies

See pages 38-41 for details.
COLLEGE OF SCIENCE

The College of Science offers baccalaureate programs in subjects ranging from mathematics to the physical sciences to the life sciences. World class faculty provide outstanding experiences in classrooms, research labs, and in the field. These degree programs prepare students for graduate study in many disciplines, professional schools, teaching careers, and a variety of industry and government science, technology and mathematics positions. Numerous options and emphasis areas allow students to tailor their curricula to their specific interests. Additional information is available at www.clemson.edu/science.

Modern Language Requirement
A number of Clemson University degree programs require the completion of a modern language through a specific course level. Modern languages taught at Clemson University or accepted for transfer credit include American Sign Language, Arabic, Chinese, French, German, Italian, Japanese, Latin, Portuguese, Russian and Spanish. While many degree programs accept any of these modern languages for the requirement, certain programs may have specific modern language requirements. Students should consult their program’s curriculum map for details.

BIOCHEMISTRY

Bachelor of Science
Biochemistry is the study of the molecular basis of life. To comprehend current biochemical information and make future contributions to our molecular understanding of life processes, students must obtain a broad background in biology and a firm foundation in chemistry, mathematics, and physics. This is the basis of the biochemistry curriculum.

The program provides an excellent educational background for professional school (medicine, dentistry, veterinary medicine) and graduate school in biochemistry, molecular biology, or another biological science discipline. Graduates will find employment opportunities in the research and service programs of universities, medical schools, hospitals, research institutes, and industrial and government laboratories.

Freshman Year
First Semester
1 - BCHM 1030 Careers in Biochem. and Genetics
2 - MATH 1060 Calculus of One Variable I
3 - CH 1010 General Chemistry
4 - ENGL 1030 Accelerated Composition
5 - MATH 1080 Calculus of One Variable II
14
Second Semester
1 - BCHM 1050 Principles of Biochemistry
2 - MATH 2060 or STAT 2300
3 - CH 2240 Organic Chemistry
4 - ENGL 1050 Intro. to Human Comm. or COMM 2500 Public Speaking
5 - PHYS 2210 Physics with Calculus II
14

Sophomore Year
First Semester
2 - BCHM 3040 Molecular Biology Lab.
3 - CH 2230 Organic Chemistry
1 - CH 2270 Organic Chemistry Lab.
3 - GEN 3020 Molecular and General Genetics
3 - PHYS 1220 Physics with Calculus I
1 - PHYS 1240 Physics Lab. I
16-17
Second Semester
3 - BCHM 3010 Molecular Biochemistry
1 - CH 2280 Organic Chemistry Lab.
3 - COMM 1500 Intro. to Human Comm. or COMM 2500 Public Speaking
3 - PHYS 2210 Physics with Calculus II
1 - PHYS 2230 Physics Lab. II
3 - Arts and Humanities (Literature) Requirement

Junior Year
First Semester
3 - BCHM 4310 Physical Approach to Biochem.
2 - BCHM 4330 Physical Approach to Biochem. Lab
3 - CH 3300 Introduction to Physical Chemistry
3 - Science Requirement
2 - Elective
16
Second Semester
3 - BCHM 4320 Biochemistry of Metabolism Lab
2 - BCHM 4340 Biochemistry of Metabolism
3 - BCHM 4360 Molecular Biology I: Genes to Proteins
3 - PHIL 3200 Science and Values
3 - Social Science Requirement
14
Senior Year
First Semester
3 - BIOL 4610 Cell Biology
3 - GEN (BCHM) 4400 Bioinformatics
3 - Science Requirement
2 - Elective
16
Second Semester
2 - BCHM 4930 Senior Seminar
3 - Science Requirement
9 - Elective
16
120–121 Total Semester Hours
1MATH 2060 or STAT 2300
2See General Education Requirements.
3CH 3310 may be substituted.
4BCHM 2220, 2230, or any courses at 3000 level or above in BCHM, BIOE, BIOL, CH, GEN, MATH, MICR, PHYS, PLPA, and STAT. Other courses must be approved by advisor.
5See General Education Requirements. Three of these credit hours must also satisfy the Cross-Cultural Awareness Requirement.
6Two semesters of a modern language are strongly recommended. See Modern Languages Requirement at Clemson University statement on page 27.

Note:
1. A student is allowed to enroll in science and mathematics courses only when all prerequisites have been passed with a grade of C or higher.
2. A minimum grade of C is required in all science and mathematics courses. No student may exceed a maximum of two attempts, excluding a W, to complete successfully any science or mathematics course.

BIOLOGICAL SCIENCES

Biology encompasses the broad spectrum of the modern life sciences, including the study of all aspects of life from the structure and function of the whole organism down to the subcellular levels and up through the interactions of organisms to the integrated existence of life on the entire planet. Descriptive, structural, functional, and evolutionary questions are explored through the hierarchy of the organization of life. Applications of current advances to the health and well-being of man and society, to nature and the continuation of earth as a balanced ecosystem, and to an appreciation of the place of natural science in our cultural heritage receive emphasis. Majors in Biological Sciences receive classroom, laboratory, and field training in biology with an emphasis on chemistry, mathematics, and physics as necessary tools.

Bachelor of Arts
The Bachelor of Arts in Biological Sciences provides a strong foundation in biology and is ideal for students desiring a liberal education emphasizing an interdisciplinary approach to a thorough understanding of the life sciences.

Freshman Year
First Semester
1 - BIOL 1010 Frontiers in Biology I
5 - BIOL 1100 Principles of Biology I
4 - CH 1010 General Chemistry
3 - MATH 1060 Calculus of One Variable I
3 - Oral Communications Requirement
17
Second Semester
5 - BIOL 1110 Principles of Biology II
4 - CH 1020 General Chemistry
3 - ENGL 1030 Accelerated Composition
3 - Mathematical Sciences Requirement
15
Sophomore Year
First Semester
3 - CH 2230 Organic Chemistry
1 - CH 2270 Organic Chemistry Lab
3 - GEN 3000 Fundamental Genetics
3 - Arts and Humanities (Literature) Requirement
4 - Modern Language Requirement
3 - Social Science Requirement
17
Second Semester
3 - BCHM 3050 Essential Elements of Bioch.
1 - CH 2270 Organic Chemistry
3 - GEN 3020 Molecular and General Genetics
3 - PHYS 1220 Physics with Calculus I
3 - Modern Language Requirement
4 - Organismal Diversity Requirement
15
Junior Year
First Semester
3 - BIOL 3350 Evolutionary Biology
3 - BIOL 4610 Cell Biology
2 - BCHM 4200 Cell Biology Laboratory
3 - ENGL 3150 Scientific Writing and Comm
3 - Modern Language Requirement
3 - Minor Requirement
17

10
Second Semester
3 - Arts and Humanities (Non-Lit.) Requirement
10
3 - Modern Language Requirement
10
3 - Ecology Requirement
10
6 - Minor Requirement
10
15
Senior Year
First Semester
2 - BIOL 4930 Senior Seminar or
2 - MICR 4930 Senior Seminar
3 - PHYS 2070 General Physics I
3 - PHYS 2090 General Physics I Lab.
3 - Functional Biology Requirement
3 - Social Science Requirement
12
Second Semester
3 - PHYS 2080 General Physics II
1 - PHYS 2100 General Physics II Lab.
6 - Minor Requirement
3 - Elective
13
121 Total Semester Hours
*Students seeking a double major in Science Teaching and Biological Sciences should substitute ED 1050 for BIOL 1010.
*BIOL 1100 and 1110 are strongly recommended; however, BIOL 1100/1150 may substitute for BIOL 1100, and BIOL 1040/1060 may substitute for BIOL 1110. The remaining 1-2 credits required must be completed by earning 1-2 extra credits.
*See General Education Requirements.
*MATH 1080, STAT 2300, or other approved coursework. See advisor. Medical and dental schools have different mathematics requirements. The Medical Colleges Admissions Test (MCAT) includes questions on statistics.
*Most professional health sciences schools require a second semester of organic chemistry with laboratory, CH 2240/2280.
*CH 2100 and CH 2020 may substitute.
*GEN 3020 may substitute.
*See General Education Requirements. Six of these credit hours must also satisfy the Cross-Cultural Awareness and the Science and Technology in Society Requirements. The Medical Colleges Admissions Test (MCAT) includes questions on psychology and sociology.
*Students must complete through 2020 in a modern language. See Modern Languages Requirement at Clemson University statement on page 27.
*BCHM 3010 may substitute.
*Four credit hours must be selected from BIOL or MICR courses at the 3000 level or above or CH 2240/2280. Students seeking a double major in Science Teaching/Biological Sciences should substitute EDSC 4470 for Major Requirement.
*At least one lecture and associated laboratory selected from BIOL 3010, 3020/3060, 3030/3070, 3040/3080, 3200, 4060/4070, 4250/4260.
*ENGL 3140 may substitute.
*See page 32 for approved minors.
*At least one course selected from BIOL 4100, 4410, 4420, 4430, 4460, 4700, MICR 4010, or 4030.
*Students seeking a double major in Science Teaching/Biological Sciences should substitute EDSC 4570 for BIOL 4930 or MICR 4930.
*PHYS 1220/1240 may substitute.
*At least one course selected from BIOL 3160, 4070, 4080, 4200, 4400, 4590, 4750, 4800, 4830, 4840, or MICR 4410.
*PHYS 2210/2230 may substitute.

Double Major in Biological Sciences/Science Teaching—Biological Sciences
The Bachelor of Arts Degree in Biological Sciences and Science Teaching—Biological Sciences prepares students for teaching biology on the secondary school level and for graduate studies in any of the life science areas. See page 114 for the curriculum.

Note: To receive a double major in Biological Sciences and Science Teaching—Biological Sciences, the student must complete a change-of-program form to declare both majors.

PREREHABILITATION SCIENCES EMPHASIS AREA
Freshman Year
First Semester
1 - BIOL 1010 Frontiers in Biology I
3 - BIOL 1030 General Biology I
1 - BIOL 1050 General Biology Lab. I
4 - CH 1010 General Chemistry
4 - MATH 1060 Calculus of One Variable I
3 - Oral Communication Requirement
16
Second Semester
3 - BIOL 1040 General Biology II
1 - BIOL 1060 General Biology Lab. II
4 - CH 1020 General Chemistry
3 - ENGL 1030 Accelerated Composition
3 - Statistics Requirement
14
Sophomore Year
First Semester
3 - CH 2230 Survey of Organic Chemistry
1 - CH 2270 Survey of Organic Chemistry Lab.
3 - GEN 3000 Fundamental Genetics
4 - Modern Language Requirement
3 - Organismal Diversity Requirement
15
Second Semester
3 - BCHM 3050 Essential Elements of Bioch.
3 - PSYC 2100 Introduction to Psychology
4 - Arts and Humanities (Literature) Requirement
4 - Modern Language Requirement
3 - Social Science Requirement
16
Junior Year
First Semester
4 - BIOL 3150 Functional Human Anatomy
3 - BIOL 3350 Evolutionary Biology
3 - BIOL 4610 Cell Biology
2 - BIOL 4620 Cell Biology Laboratory
3 - Modern Language Requirement
15
Second Semester
4 - BIOL 3160 Human Physiology
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Modern Language Requirement
6 - Minor Requirement
16
Senior Year
First Semester
2 - BIOL 4930 Senior Seminar or
2 - MICR 4930 Senior Seminar
3 - ENGL 3150 Scientific Writing and Comm.
3 - PHYS 2070 General Physics I
1 - PHYS 2090 General Physics I Lab.
3 - Ecology Requirement
3 - Minor Requirement
15
Second Semester
3 - PHYS 2080 General Physics II
1 - PHYS 2100 General Physics II Lab.
6 - Minor Requirement
3 - Prerehabilitation Requirement
2 - Elective
15
122 Total Semester Hours
Rehabilitation programs require BIOL 1030/1050 and 1040/1060 or equivalent, however, BIOL 1100 and 1110 may substitute.
*See General Education Requirements.
*STAT 3200 or other approved coursework. See advisor. Professional schools have different mathematics requirements.
*CH 2100 and 2200 may substitute.
*Most professional health sciences schools require two semesters of organic chemistry with laboratory, CH 2230/2270 and 2240/2280.
*GEN 3020 may substitute.
*Students must complete through 2020 in a modern language. See Modern Languages Requirement at Clemson University statement on page 27.
*At least one lecture and associated laboratory selected from BIOL 3010, 3020/3060, 3030/3070, 3040/3080, 3200, 4060/4070, 4250/4260.
*BCHM 3010 may substitute.
*See General Education Requirements. Six of these credit hours must also satisfy the Cross-Cultural Awareness and the Science and Technology in Society Requirements.
*See page 132 for approved minors. Psychology is recommended. The Medical University of South Carolina and other Rehabilitation Sciences programs require PSYC 2100 and 3830.
*ENGL 3140 may substitute.
*PHYS 1220/1240 may substitute.
*At least one course selected from BIOL 4100, 4410, 4420, 4430, 4460, 4700, MICR 4010, or 4030.
*PHYS 2210/2230 may substitute.
*BIOL 4780 or 4790 or MICR 3050. BIOL 4780 or 4790 is recommended for physical and occupational therapy programs. MICR 3050 is recommended for physician assistant programs.

BIOLICAL SCIENCES
Bachelor of Science
The Bachelor of Science in Biological Sciences curriculum prepares students for graduate study in any of the life science areas (such as agricultural sciences, biochemistry, botany, cell and molecular biology, conservation, ecology and environmental science, entomology, forestry, genetics, industrial and regulatory biology, microbiology, morphology, physiology, wildlife biology, and zoology; for the health professions (medicine, dentistry, etc.), veterinary medicine; and for science teaching.

Freshman Year
First Semester
1 - BIOL 1010 Frontiers in Biology I
5 - BIOL 1100 Principles of Biology I
4 - CH 1010 General Chemistry
4 - MATH 1060 Calculus of One Variable I
3 - Oral Communications Requirement
17
Second Semester
5 - BIOL 1110 Principles of Biology II
4 - CH 1020 General Chemistry
3 - ENGL 1030 Accelerated Composition
3 - Mathematical Sciences Requirement
15
Sophomore Year
First Semester
3 - CH 2230 Organic Chemistry
4 - BIOL 4610 Cell Biology
5 - GEN 3000 Fundamental Genetics
6 - Arts and Humanities (Literature) Requirement
7 - Social Science Requirement
8 - Elective

Second Semester
3 - BCHM 3050 Essential Elements of Bioch.
4 - Elective
5 - Elective

Junior Year
First Semester
3 - BIOL 3350 Evolutionary Biology
3 - BCHM 4020 Cell Biology Lab.
3 - PHYS 2070 General Physics I
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Functional Biology Requirement
2 - Major Requirement

Second Semester
3 - ENGL 3150 Scientific Writing and Comm.
3 - PHYS 2080 General Physics II
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Functional Biology Requirement
2 - Major Requirement

Senior Year
First Semester
2 - BIOL 4930 Senior Seminar or MICR 4930 Senior Seminar
6 - Major Requirement
3 - Social Science Requirement
4 - Elective

Second Semester
9 - Major Requirement
3 - Elective

121 Total Semester Hours

Sophomore Year
First Semester
3 - CH 2230 Organic Chemistry
1 - CH 2270 Organic Chemistry Lab.
4 - ENT (BIOL) 3010 Insect Biology and Diversity
3 - GEN 3000 Fundamental Genetics
3 - Arts and Humanities (Literature) Requirement
2 - Elective

Second Semester
3 - BCHM 3050 Essential Elements of Bioch.
3 - BIOL 3350 Evolutionary Biology
4 - Major Requirement
3 - Social Science Requirement
3 - Elective

Junior Year
First Semester
3 - BIOL 4610 Cell Biology
2 - BIOL 4620 Cell Biology Laboratory
3 - PHYS 2070 General Physics I
1 - PHYS 2090 General Physics I Lab.
3 - Ecology Requirement
3 - Entomology Requirement

Second Semester
3 - ENGL 3150 Scientific Writing and Comm.
3 - PHYS 2080 General Physics II
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Functional Biology Requirement
2 - Major Requirement

Senior Year
First Semester
2 - BIOL 4930 Senior Seminar or MICR 4930 Senior Seminar
6 - Major Requirement
3 - Social Science Requirement
4 - Elective

Second Semester
3 - Elective

121 Total Semester Hours

Freshman Year
First Semester
1 - BIOL 1010 Frontiers in Biology
1 - BIOL 1030 General Biology
1 - BIOL 1050 General Biology Lab.
4 - CH 1010 General Chemistry
3 - ENGL 1030 Accelerated Composition
3 - Mathematical Sciences Requirement

Second Semester
3 - Elective

Sophomore Year
First Semester
3 - CH 2230 Organic Chemistry
1 - CH 2270 Organic Chemistry Lab.
4 - ENT (BIOL) 3010 Insect Biology and Diversity
3 - GEN 3000 Fundamental Genetics
3 - Arts and Humanities (Literature) Requirement
2 - Elective

Second Semester
3 - ENGL 3150 Scientific Writing and Comm.
3 - PHYS 2080 General Physics II
1 - PHYS 2090 General Physics II Lab.
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Entomology Requirement
3 - Functional Biology Requirement

Senior Year
First Semester
2 - BIOL 4930 Senior Seminar or MICR 4930 Senior Seminar
6 - Major Requirement
3 - Social Science Requirement
4 - Elective

Second Semester
3 - Elective

121 Total Semester Hours

PREPHARMACY EMPHASIS AREA

Freshman Year
First Semester
1 - BIOL 1010 Frontiers in Biology
1 - BIOL 1030 General Biology
1 - BIOL 1050 General Biology Lab.
4 - CH 1010 General Chemistry
3 - ENGL 1030 Accelerated Composition
3 - Mathematical Sciences Requirement

Second Semester
3 - Elective

Sophomore Year
First Semester
3 - CH 2230 Organic Chemistry
1 - CH 2270 Organic Chemistry Lab.
4 - GEN 3000 Fundamental Genetics
3 - Arts and Humanities (Literature) Requirement
4 - Organismal Diversity Requirement
2 - Elective

Second Semester
3 - Elective

Junior Year
First Semester
4 - BIOL 3150 Functional Human Anatomy
3 - BIOL 4610 Cell Biology
2 - BIOL 4620 Cell Biology Laboratory
3 - PHYS 2070 General Physics I
1 - PHYS 2090 General Physics I Lab.
3 - PSYC 2010 Introduction to Psychology

121 Total Semester Hours
Second Semester
4 - BIOL 3160 Human Physiology
3 - ENGL 3150 Scientific Writing and Comm.9
3 - PHYS 2080 General Physics II 10
1 - PHYS 2100 General Physics II Lab.10
3 - Arts and Humanities (Non-Lit.) Requirement 5
3 - Economics Requirement 10
17

Senior Year
First Semester
2 - BIOL 4930 Senior Seminar or
2 - MICR 4930 Senior Seminar
3 - Ecology Requirement 12
3 - Major Requirement 13
5 - Elective
13

Second Semester
4 - MICR 3050 General Microbiology
3 - Major Requirement 13
6 - Elective
13

121 Total Semester Hours

*Pharmacy programs require BIOL 1030/1050 and 1040/1060 or equivalent; however, BIOL 1100 and 1110 may substitute. The additional 1–2 credit hours will be subtracted from Major Requirement credits.

See General Education Requirements. Six of these credit hours must also satisfy the Cross-Cultural Awareness and the Science and Technology in Society Requirements.

*CH 2010 and CH 2020 may be substituted.
*GEN 3020 may be substituted.
*At least one lecture and associated laboratory selected from CH 3010, 3020/3060, 3030/3070, 3040/3080, 3200, 4060/4070, 4250/4260.
*BCHM 3010 may be substituted.
*PHYS 1220/1240 may be substituted.
*ENGL 3140 may be substituted.
*PHYS 2210/2230 may be substituted.
*ECON 2000, 2110, or 2120
*At least one course selected from BIOL 4100, 4410, 4420, 4430, 4460, 4700, MICR 4010, or 4030.
*Six credit hours must be selected from BIOL or MICR courses at the 3000 level or above.

TOXICOLOGY EMPHASIS AREA
See Bachelor of Science curriculum for freshman year requirements.

Sophomore Year
First Semester
3 - CH 2230 Organic Chemistry 1,2
1 - CH 2270 Organic Chemistry Lab. 1,2
3 - GEN 3000 Fundamental Genetics 1
4 - Organismal Diversity Requirement 6
3 - Social Science Requirement 1
2 - Elective
16

Second Semester
3 - BCHM 3050 Essential Elements of Bioch. 6
3 - BIOL 2110 Introduction to Toxicology
3 - BIOL 3350 Evolutionary Biology
4 - Major Requirement 1,2
3 - Elective
16

Junior Year
First Semester
3 - BIOL 4610 Cell Biology
3 - BIOL 4620 Cell Biology Laboratory
3 - ETOX 4300 Toxicology
3 - PHYS 2070 General Physics I 8
1 - PHYS 2090 General Physics I Lab. 8
3 - Ecology Requirement 10
15

Second Semester
3 - ENGL 3150 Scientific Writing and Comm. 10
3 - PHYS 2080 General Physics II 10
1 - PHYS 2100 General Physics II Lab. 10
3 - Arts and Humanities (Literature) Requirement 5
2 - Functional Biology Requirement 12
2 - Elective
15

Senior Year
First Semester
2 - BIOL 4930 Senior Seminar or
2 - MICR 4930 Senior Seminar
3 - CH 3130 Quantitative Analysis
2 - CH 3170 Quantitative Analysis Lab.
3 - Social Science Requirement 1
5 - Elective
15

Second Semester
3 - CH 4130 Chemistry of Aqueous Systems or
3 - ETOX 4210 Chemical Sources and Fate in Environmental Systems
3 - Arts and Humanities (Non-Lit.) Requirement 5
3 - Toxicology Requirement 13
3 - Elective
12

121 Total Semester Hours

Most professional health sciences schools require the second semester of organic chemistry with laboratory, CH 2240/2280, CH 2010 and CH 2020 may be substituted.

GEN 3020 may be substituted.

At least one lecture and associated laboratory selected from BIOL 3010, 3020/3060, 3030/3070, 3040/3080, 3200, 4060/4070, 4250/4260.

See General Education Requirements. Six of these credit hours must also satisfy the Cross-Cultural Awareness and the Science and Technology in Society Requirements.

*BCHM 3010 may be substituted.

Four credit hours must be selected from BIOL or MICR courses at the 3000 level or above or CH 2240/2280.

*PHYS 1220/1240 may be substituted.

*At least one course selected from BIOL 4100, 4410, 4420, 4430, 4460, 4700, MICR 4010, or 4030.
*ENGL 3140 may be substituted.
*PHYS 2210/2230 may be substituted.
*At least one course selected from BIOL 3610, 4010, 4080, 4200, 4400, 4930, 4950, 4970, 4980, 4980, 4980, or MICR 4140.

Combined Bachelor of Science in Biological Sciences/Master of Science in Bioengineering
Under this plan, students may reduce the time necessary to earn both degrees by applying graduate credits to both undergraduate and graduate program requirements. See Academic Regulations in this catalog for enrollment guidelines and procedures. Students are encouraged to obtain the specific requirements for the dual degree from the Department of Biological Sciences or Bioengineering as early as possible in their undergraduate program as a number of required courses have prerequisites not normally taken by Biological Sciences majors.

CHEMISTRY
Bachelor of Arts
Freshman Year
First Semester
4 - CH 1010 General Chemistry
3 - ENGL 1030 Accelerated Composition
4 - MATH 1060 Calculus of One Variable I
3 - Arts and Humanities Requirement 1 or
3 - Social Science Requirement 1
1 - Elective
15

Second Semester
4 - CH 1020 General Chemistry
4 - MATH 1080 Calculus of One Variable II
3 - PHYS 1220 Physics with Calculus I
3 - Arts and Humanities Requirement 1 or
3 - Social Science Requirement 1
- Elective
15

Sophomore Year
First Semester
3 - CH 2230 Organic Chemistry
1 - CH 2270 Organic Chemistry Lab.
4 - MATH 2060 Calculus of Several Variables
3 - PHYS 2210 Physics with Calculus II
4 - Modern Language Requirement 2
15

Second Semester
3 - CH 1520 Chemistry Communication
3 - CH 2050 Introduction to Inorganic Chemistry
3 - CH 2240 Organic Chemistry
1 - CH 2280 Organic Chemistry Lab.
3 - Arts and Humanities Requirement 1 or
3 - Social Science Requirement 1
- Elective
15

Junior Year
First Semester
3 - CH 3130 Quantitative Analysis
1 - CH 3170 Quantitative Analysis Lab.
3 - CH 3310 Physical Chemistry
3 - ETOX 4210 Chemical Sources and Fate in Environmental Systems
3 - Arts and Humanities (Non-Lit.) Requirement 5
3 - Minor Requirement 2
3 - Modern Language Requirement 2
16

Second Semester
3 - CH 3320 Physical Chemistry
3 - ENGL 3140 Technical Writing
3 - Arts and Humanities (Literature) Requirement 1
3 - Minor Requirement 2
3 - Modern Language Requirement 2
15
Senior Year
First Semester
3 - Arts and Humanities Requirement1 or
3 - Social Science Requirement1
3 - Chemistry Requirement1
3 - Minor Requirement
6 - Elective
15

Second Semester
3 - CH 4500 Chemistry Capstone
3 - Arts and Humanities Requirement1 or
3 - Social Science Requirement1
3 - Chemistry Requirement1
6 - Minor Requirement
15

123 Total Semester Hours

CHEMISTRY

Bachelor of Science
Chemistry, an experimental discipline based on
observation guided by molecular theory, is of funda-
mental importance in much of modern science and
technology. Its molecular concepts form the basis
for ideas about complex material behavior. Due to
the fundamental nature and extensive application of
chemistry, an unusually large variety of challenging
opportunities to contribute in the science-oriented
community are open to students whose education is
built around the principles of this discipline.

The Chemistry curriculum, through the career
requirement options and the large number of elec-
tives, provides students the opportunity to select a
coherent program of study beyond the basic courses.
Career requirement options are provided for students
anticipating graduate study in chemistry or related
fields; employment following the BS degree in labo-
ratory, production, technical sales, or management
positions; professional studies (e.g., medicine);
chemical physics; geochemistry; and employment in
fields requiring extensive preparation in courses
other than sciences (e.g., patent law and technical
writing). Significant features of the curriculum are
the student’s extensive participation in experimental
work and the opportunity to take part in a research
investigation during the junior and senior years.

Freshman Year
First Semester
4 - CH 1010 General Chemistry
3 - ENGL 1030 Accelerated Composition
4 - MATH 1060 Calculus of One Variable I
4 - Technical Requirement1
15

Second Semester
4 - CH 1020 General Chemistry
4 - MATH 1080 Calculus of One Variable II
3 - PHYS 1220 Physics with Calculus I
1 - PHYS 1240 Physics Laboratory I
3 - Arts and Humanities Requirement1 or
3 - Social Science Requirement1
15

Sophomore Year
First Semester
3 - CH 2230 Organic Chemistry
1 - CH 2270 Organic Chemistry Lab.
4 - MATH 2060 Calculus of Several Variables
3 - PHYS 2210 Physics with Calculus II
1 - PHYS 2230 Physics Lab. II
3 - Arts and Humanities Requirement1 or
3 - Social Science Requirement1
15

Second Semester
3 - CH 1520 Chemistry Communication
3 - CH 2050 Introduction to Inorganic Chemistry
3 - CH 2240 Organic Chemistry
1 - CH 2280 Organic Chemistry Lab.
3 - Advanced MATH/STAT Requirement1
3 - Arts and Humanities (Literature) Requirement2
16

Junior Year
First Semester
3 - CH 3130 Quantitative Analysis
2 - CH 3150 Quantitative Analysis Lab.
3 - CH 3310 Physical Chemistry
1 - CH 3390 Physical Chemistry Lab.
1 - CH 3410 Introduction to Research
3 - Inorganic Chemistry Requirement4
3 - Elective
16

Second Semester
3 - CH 3320 Physical Chemistry
2 - CH 3430 Physical Chemistry Lab.
3 - CH 3650 Chemical Biology 5
3 - CH 4110 Instrumental Analysis
2 - CH 4120 Instrumental Analysis Lab.
3 - Elective
15

Senior Year
First Semester
3 - CH 4430 Research Problems
3 - Arts and Humanities Requirement2 or
3 - Social Science Requirement2
3 - Chemistry Requirement1
6 - Elective
15

Second Semester
2 - CH 4030 Advanced Synthetic Techniques
3 - CH 4440 Research Problems
3 - CH 4500 Chemistry Capstone
3 - Chemistry Requirement1
3 - Elective
14

121 Total Semester Hours

GEETICS
Bachelor of Science
Genetics is the study of heredity. Genetics research
takes many forms, from the study of heredity at the
level of individual molecules to study at the level of
cells and chromosomes, individuals, or populations.
To comprehend current genetic information and to
make future contributions to our molecular under-
standing of life processes, students must obtain a
broad background in biology and a firm foundation
in chemistry and mathematics. This is the basis of
the genetics curriculum.

A degree in Genetics is a strong preparation for many
careers. The degree provides an excellent foundation
for medical, veterinary, or pharmacy school, as well as
graduate research in any discipline related to biology,
including bioinformatics, forensic technology, and
genetic counseling. Because of the increasing emphasis
on genetics in everyday life, a Bachelor of Science in
Genetics can also be a direct path to a career in the
emerging biotechnology industries (pharmaceuticals,
agricultural technologies, biomimetic minerals) in
research, sales, or business operations. Combined
with a law degree, a genetics bachelor of science is a
good background for a career as a patent attorney.

Freshman Year
First Semester
5 - BIOL 1100 Principles of Biology I
4 - CH 1010 General Chemistry
1 - GEN 1030 Careers in Biochem. and Genetics
4 - MATH 1060 Calculus of One Variable I
14

Second Semester
5 - BIOL 1110 Principles of Biology II
4 - CH 1020 General Chemistry
3 - ENGL 1030 Accelerated Composition
4 - MATH 1080 Calculus of One Variable II
16

Sophomore Year
First Semester
3 - CH 2230 Organic Chemistry
1 - CH 2270 Organic Chemistry Lab.
3 - COMM 1500 Intro. to Human Comm. or
3 - COMM 2500 Public Speaking
3 - GEN 3020 Molecular and General Genetics
3 - PHYS 1220 Physics with Calculus I
1 - PHYS 1240 Physics Lab. I
14

Second Semester
3 - BCHM 3010 Molecular Biochemistry
3 - CH 2240 Organic Chemistry
1 - CH 2280 Organic Chemistry Lab.
2 - GEN 3040 Molecular Biology Lab.
3 - STAT 2300 Statistical Methods I
3 - Arts and Humanities (Literature) Requirement2
3 - Social Science Requirement2
18

1See General Education Requirements. Six of these credit hours
must also satisfy the Cross-Cultural Awareness and Science
and Technology in Society Requirements.

2See advisor.

3MATH 2080, 3110, or STAT 2300
4CH 4010 or 4020
5BCHM 3050 may be substituted for CH 3600.
Junior Year
First Semester
3 - GEN 4200 Molecular Genetics and Gene Reg.
2 - GEN 4210 Molecular Genetics and Gene Regulation Lab.
3 - GEN (BCHM) 4400 Bioinformatics
3 - Science Requirement4
3 - Social Science Requirement2
14

Second Semester
3 - BIOL 4610 Cell Biology
3 - GEN 4100 Population and Quantitative Gen.
2 - GEN 4110 Population and Quantitative Gen. Lab.
3 - PHIL 3260 Science and Values
5 - Elective5
5 - Science Requirement3
5 - Genetics Requirement4
3 - Elective3
17

Senior Year
First Semester
3 - GEN 4500 Comparative Genetics
3 - Genetics Requirement4
3 - Science Requirement3
6 - Elective6
15

Second Semester
2 - GEN 4930 Senior Seminar
3 - Genetics Requirement6
3 - Science Requirement6
6 - Elective6
14

122 Total Semester Hours

Mathematical Sciences
The Mathematical Sciences curriculum is designed to be versatile. Students gain a broad knowledge of mathematical concepts and methods that are applicable in sciences, engineering, business, industry, and other professions requiring a strong mathematical background. In addition to the basic courses that provide necessary mathematical skills, the curriculum allows students to select an emphasis area or concentration, providing an introduction to a specific area where mathematics is used. These are Abstract Mathematics, Actuarial Science/Financial Mathematics, Applied and Computational Mathematics, Biology, Computer Science, Operations Research/Management Science, and Statistics.

In addition to the overall goal of preparing students to cope with a variety of mathematical problems, the curriculum seeks to provide an adequate background for students who plan to pursue graduate study or positions in business, industry, or government. Students electing the Biology Concentration will have the necessary preparation for entering medical school. More information about the degree program can be found at www.clemson.edu/ces/departments/math.

All mathematical sciences majors are required to complete a capstone experience that provides an opportunity to pursue research, independent study, or an approved internship under the direction of a faculty member, or the opportunity to study mathematical models in some area of the mathematical sciences. The capstone experience requires a written report (thesis, computer code, project description, intern experience, etc.) and an oral or poster presentation by each student.

Combined Bachelor’s/Master’s Plan
Under this plan, students may reduce the time necessary to earn both degrees by applying up to 12 graduate credits to both undergraduate and graduate program requirements. Students are encouraged to obtain the specific requirements for pursuing the combined degree from the Department of Mathematical Sciences www.clemson.edu/ces/departments/math as early as possible in their undergraduate program. Enrollment guidelines and procedures can be found under Academic Regulations in this catalog.

Bachelor of Arts
Freshman Year
First Semester
3 - ENGL 1030 Accelerated Composition
4 - MATH 1060 Calculus of One Variable I
3 - Modern Language Requirement1
3 - Social Science Requirement2
1 - Elective1
14

Second Semester
4 - MATH 1080 Calculus of One Variable II
3 - Computer Science Requirement3
3 - Modern Language Requirement1
3 - Science and Technology in Society Req.4
3 - Social Science Requirement2
16

Sophomore Year
First Semester
4 - MATH 2060 Calculus of Several Variables
1 - MATH 2500 Intro. to Mathematical Sciences
3 - MATH 3600 Interned, Math. Computing or
3 - EDSC 4370 Technology in Sec. Math.
3 - Arts and Humanities (Literature) Requirement4
3 - Cross-Cultural Awareness Requirement4
14

Second Semester
4 - MATH 2080 Intro. to Ordinary Diff. Equations
3 - MATH 3020 Statistics for Science and Engr.
3 - MATH 3110 Linear Algebra
3 - Arts and Humanities (Non-Lit.) Requirement4
3 - Minor Requirement6 or
3 - Second Major Requirement
16

Junior Year
First Semester
3 - MATH 3190 Introduction to Proof
3 - Math Science Requirement7
4 - Natural Science Requirement4
3 - Elective
16

Second Semester
3 - COMM 2500 Public Speaking
3 - MATH 4120 Introduction to Modern Algebra
3 - Minor Requirement6 or
3 - Second Major Requirement
4 - Natural Science Requirement4
3 - Elective
16

Senior Year
First Semester
3 - MATH 4530 Advanced Calculus I
3 - Arts and Humanities Requirement4 or
3 - Education Requirement8
3 - Capstone Experience6
3 - Minor Requirement6 or
3 - Second Major Requirement
3 - Math Science Requirement4
15

Second Semester
1 - MATH 4920 Professional Development or
1 - EDF 4250 Instructional Tech. Strategies
3 - Capstone Experience6
3 - Math Science Requirement6 or
3 - Minor Requirement6 or
3 - Second Major Requirement
2 - Elective
15

122 Total Semester Hours

Students must complete through 2020 in a modern language. See Modern Languages Requirement at Clemson University statement on page 27.

Notes:
1. A student is allowed to enroll in science and mathematics courses only when all prerequisites have been passed with a grade of C or better.
2. A minimum grade of C is required in all science and mathematics courses. No student may exceed a maximum of two attempts, excluding a W, to complete successfully any science or mathematics course.
3. See General Education Requirements.
4. ECON 2000 or 2110 is recommended.
5. CPSC 1010, 1110, or 2200
6. CPSC 1010, 1110, or 2200
7. See General Education Requirements.
8. See page 132 for approved minors.
9. Select from EDSC 2260, ENGL 3040, 3120, 3140, 3150; the cluster of AS 3090, 3100, 4090, and 4100; or the cluster of ML 3010, 3020, 4010, and 4020.
See advisor.

MATHEMATICAL SCIENCES

Bachelor of Science

Freshman Year
First Semester
- ENGL 1030 Accelerated Composition
- MATH 1060 Calculus of One Variable I
- Arts and Humanities (Non-Lit.) Requirement
- Modern Language Requirement
- Social Science Requirement
- 16

Second Semester
- MATH 1080 Calculus of One Variable II
- PHYS 1220 Physics with Calculus I
- Computer Science Requirement
- Cross-Cultural Awareness Requirement
- Social Science Requirement
- 16

Sophomore Year
First Semester
- MATH 2060 Calculus of Several Variables
- MATH 2500 Intro. to Mathematical Sciences
- MATH 3190 Introduction to Proof
- MATH 3020 Statistics for Science and Engr.
- Natural Science Requirement
- 15

Second Semester
- MATH 2080 Intro. to Ordinary Diff. Equations
- MATH 3020 Statistics for Science and Engr.
- Computer Science Requirement
- Cross-Cultural Awareness Requirement
- Social Science Requirement
- 16

Junior Year
First Semester
- MATH 4000 Theory of Probability
- MATH 4400 Linear Programming
- MATH 4530 Advanced Calculus I
- Advanced Writing Requirement
- Technical Requirement
- 15

Second Semester
- MATH 4120 Introduction to Modern Algebra
- MATH 4540 Advanced Calculus II
- Emphasis Area Requirement
- Technical Requirement
- Elective
- 15

Senior Year
First Semester
- Capstone Experience
- Emphasis Area Requirement
- Oral Communication Requirement
- Science and Tech. in Society Requirement
- 15

Second Semester
- MATH 4920 Professional Development
- Capstone Experience
- Emphasis Area Requirement
- Mathematical Sciences Requirement
- Elective
- 13

122 Total Semester Hours

See General Education Requirements.

Sophomore Year
First Semester
- ENGL 1030 Accelerated Composition
- MATH 1060 Calculus of One Variable I
- Modern Language Requirement
- Social Science Requirement
- 16

Second Semester
- MATH 2080 Intro. to Ordinary Diff. Equations
- MATH 3110 Linear Algebra
- MATH 4000 Theory of Probability
- Social Science Requirement
- 15

Junior Year
First Semester
- MATH 4030 Intro. to Statistical Theory
- FIN 3060 Corporation Finance
- Actuarial Science/Financial Mathematics
- 6 - Mathematical Sciences Requirement
- 12

Second Semester
- MATH 4070 and 4410
- MATH 4020 Statistical Theory and Meth. II
- MATH 4030 Intro. to Stochastic Models
- Computer Science Requirement
- Social Science Requirement
- 15

BIOLOGY CONCENTRATION

Freshman Year
First Semester
- BIOL 1100 Principles of Biology I
- ENGL 1030 Accelerated Composition
- MATH 1060 Calculus of One Variable I
- Modern Language Requirement
- 15

Second Semester
- BIOL 1110 Principles of Biology II
- MATH 1080 Calculus of One Variable II
- Computer Science Requirement
- Social Science Requirement
- 15

Sophomore Year
First Semester
- CH 1010 General Chemistry
- MATH 2060 Calculus of Several Variables
- MATH 2500 Intro. to Mathematical Sciences
- PHYS 2070 General Physics I
- PHYS 2090 General Physics I Lab.
- Arts and Humanities (Non-Lit.) Requirement
- 16

Second Semester
- CH 1020 General Chemistry
- MATH 2080 Intro. to Ordinary Diff. Equations
- MATH 3110 Linear Algebra
- PHYS 2080 General Physics II
- PHYS 2100 General Physics II Lab.
- 15
Junior Year
First Semester
3 - CH 2230 Organic Chemistry
1 - CH 2270 Organic Chemistry Lab.
3 - MATH 3190 Introduction to Proof
3 - MATH 3600 Intermediate Math. Computing
3 - Advanced Writing Requirement
3 - Elective
3 - Elective
16
Second Semester
3 - CH 2240 Organic Chemistry
1 - CH 2280 Organic Chemistry Lab.
3 - MATH 3020 Statistics for Science and Engr.
3 - MATH 4400 Linear Programming
3 - Mathematical Sciences Requirement
3 - Oral Communication Requirement
16
Senior Year
First Semester
3 - MATH 4000 Theory of Probability
3 - MATH 4530 Advanced Calculus I
3 - Animal or Plant Diversity Requirement
3 - Capstone Experience
3 - Social Science Requirement
15
Second Semester
3 - MATH 4120 Introduction to Modern Algebra
3 - MATH 4540 Advanced Calculus II
1 - MATH 4920 Professional Development
3 - Biological Sciences Requirement
3 - Capstone Experience
13
121 Total Semester Hours

*Three credits in any modern language numbered 1020 or above. See Modern Languages Requirement at Clemson University statement on page 27.

**CPSC 1010, 1110, or 2200

See General Education Requirements. ECON 2000 or 2110 is recommended.

See General Education Requirements. Six of these credit hours must also satisfy the Cross-Cultural Awareness and Science and Technology in Society Requirements.

Select from ENGL 3040, 3120, 3140 or 3150; or the cluster of courses AS 3090, 3100, 4090 and 4100; or the cluster of courses ML 3010, 3020, 4010, and 4020.

Any 4000-level MATH or STAT course approved by advisor.

See General Education Requirements.

BIOL 3020, 3030, 3040, or 3050

May be satisfied by (1) completion of six credits of MATH 4820, (2) completion of six credits of MATH 4910 or an approved substitution; or (3) completion of three credits of MATH 4500 and three credits of an additional course approved by advisor.

**BCHM 3010, GEN 3020/3030, MICR 3050, or any 3000–4000-level BIOL course

Notes:
1. For graduation, a candidate for the BS degree in Mathematical Sciences will be required to have a 2.0 or higher cumulative grade-point average in all required MATH courses.
2. Students who change majors to Mathematical Sciences must have achieved the Minimum Cumulative Grade-Point Average (MC GPA) by Total Credit Hour Level as defined in the Academic Regulations section of the Undergraduate Announcements and must have received a grade of C or better in all MATH courses taken.

MICROBIOLOGY
Bachelor of Science
Microbiology deals with the study of bacteria, viruses, yeasts, filamentous fungi, protozoa, and unicellular algae. Microbiologists seek to describe these organisms in terms of their structures, functions, and processes of reproduction, growth, and death at both the cellular and molecular levels. They are also concerned with their ecology, particularly in regard to their pathological effects on man, and with their economic importance.

The Microbiology major provides a thorough training in the basic microbiological skills. Further, students receive instruction in mathematics, physics, chemistry, and biochemistry, all essential to the training of a modern microbiologist. Students can prepare for a variety of careers through a wide choice of electives. Microbiology graduates may enter graduate school in microbiology, biochemistry, bioengineering, or related disciplines; they may enter medical or dental schools or pursue careers in one of the many industries or public service departments dependent upon microbiology. Some of these are the fermentation and drug industries, medical and public health microbiology, various food industries, and agriculture.

Microbiology majors planning to apply for admission to a medical or dental school should inform their advisors immediately upon entering the program.

Freshman Year
First Semester
1 - BIOL 1010 Frontriers in Biology I
5 - BIOL 1100 Principles of Biology I
4 - CH 1010 General Chemistry
4 - MATH 1060 Calculus of One Variable I
3 - Oral Communication Requirement
17
Second Semester
5 - BIOL 1100 Principles of Biology II
4 - CH 1020 General Chemistry
3 - ENGL 1030 Accelerated Composition
3 - Mathematical Sciences Requirement
15
Sophomore Year
First Semester
3 - CH 2230 Organic Chemistry
1 - CH 2270 Organic Chemistry Lab.
3 - ENGL 3150 Scientific Writing and Comm.
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Elective
16
Second Semester
3 - mikro 3050 Essential Elements of Biochem
2 - BIOL 4340 Biol. Chemistry Lab. Techniques
3 - CH 2240 Organic Chemistry
1 - CH 2280 Organic Chemistry Lab.
4 - MICR 3050 General Microbiology
3 - Arts and Humanities (Non-Lit.) Requirement
16
Junior Year
First Semester
3 - MICR 4010 Microbial Diversity and Ecology
3 - PHYS 2070 General Physics I
1 - PHYS 2090 General Physics II
6 - Microbiology Requirement
3 - Elective
16
Second Semester
3 - MICR 4120 Bacterial Physiology
2 - MICR 4500 Advanced Micro Lab I
3 - Microbiology Requirement
3 - Social Science Requirement
3 - Elective
14
Senior Year
First Semester
3 - BIOL 4610 Cell Biology
3 - MICR 4150 Microbial Genetics
2 - MICR 4510 Advanced Micro Lab II
3 - Virology Requirement
3 - Elective
17
Second Semester
2 - BIOL 4930 Senior Seminar or
2 - MICR 4930 Senior Seminar
2 - MICR 4520 Advanced Micro Lab III
3 - Microbiology Requirement
3 - Elective
16
124 Total Semester Hours

1BIOL 1100 and 1110 are strongly recommended; however, BIOL 1030/1050 may substitute for BIOL 1100, and BIOL 1040/1060 may substitute for BIOL 1110. The remaining 1-2 credits required must be satisfied by completing 1-2 extra credits.

2See General Education Requirements.

3MATH 1030 or STAT 2300 or other approved coursework. See advisor. Medical and dental schools have different mathematics requirements. The Medical Colleges Admissions Test (MCAT) includes questions on statistics.

See General Education Requirements. Six of these credit hours must also satisfy the Cross-Cultural Awareness and Science and Technology in Society Requirements. The Medical Colleges Admissions Test (MCAT) includes questions on psychology and sociology.

3Elective hours may be used toward satisfying the requirements of a minor.

3BCHM 3010 may be substituted.

3PHYS 1220/1240 may be substituted.

6See advisor. Minimum of 12 credits is required. At least one course must be selected from each of the following fields: Biomedicine—BIOL 4200, 4560/4570, 4670, 4840, 4890; GEN 3020, 3070; HTH 3800, MICR 4000, 4050, 4100; AVS, BIOL 4140, 4170 Environmental—BIOL (PLPA) 4530, MICR 4020, 4030, 4100 Food Safety, Industrial, and Technology—BIOL 4870, MICR 4070, 4130

Remaining credits can be satisfied by any 3000- or 4000-level MICR course, any of the above listed courses, or any of the following:

BCHM 4000, BIOL 3150, 3160, 3940, 4910, 4940

Students planning to apply to medical/dental schools should take PHYS 2080 and 2100 during the second semester of the junior year.

3BIOL 4540 or MICR 4160
BIOMEDICINE CONCENTRATION

The Microbiology curriculum with a Biomedicine Concentration is recommended for students planning postgraduate programs. It is especially suited for students interested in the study of infectious disease.

Freshman Year
First Semester
1 - BIOL 1010 Frontiers in Biology I
5 - BIOL 1100 Principles of Biology I1
4 - CH 1010 General Chemistry
4 - MATH 1060 Calculus of One Variable I
3 - Oral Communication Requirement2

Second Semester
1 - MICR 4520 Advanced Micro Lab III
3 - Elective1

125 Total Semester Hours

Sophomore Year
First Semester
3 - Elective
3 - Biomedicine Requirement9
2 - MICR 4510 Advanced Micro Lab II
3 - MICR 4160 Introductory Virology
3 - MICR 4140 Basic Immunology

Second Semester
3 - MICR 4930 Senior Seminar or
2 - MICR 4930 Senior Seminar
3 - MICR 4110 Pathogenic Bacteriology
3 - MICR 4170 Cancer and Aging
2 - MICR 4520 Advanced Micro Lab III
3 - Biomedicine Requirement9
3 - Elective1

16

Junior Year
First Semester
3 - HIST 1720 The West and the World I
14
Second Semester
3 - HIST 1730 The West and the World II
3 - Arts and Humanities (Literature) Requirement1
3 - Oral Communication Requirement1

PHYSICS

PHYSICS

Physics, the most fundamental of the natural sciences, forms the basis of study upon which the other branches of science are founded. Physics is concerned with the fundamental behavior of matter and energy. Classical physics encompasses the fields of mechanics, heat and thermodynamics, electricity and magnetism, acoustics and optics. Modern physics is concerned with the study of atoms and molecules, atomic nuclei, elementary particles and the properties of liquids, crystalline solids, and other materials, as well as the areas of relativity, cosmology, and the large-scale structure of the universe. The undergraduate Physics curricula provide students with a strong background in the classical areas of physics, as well as an introduction to the more important aspects of modern physics.

PHYSICS

Bachelor of Arts

The Bachelor of Arts in Physics program is ideal for students interested in acquiring a broad-based liberal education that includes a strong and solid understanding of either science or a broad exposure to engineering with a strong physics foundation.

Double Major in Physics/Science Teaching—Physics

The Bachelor of Arts Degree in Physics and Science Teaching—Physics prepares students for teaching physics on the secondary school level and for graduate studies in physics. See page 116 for the curriculum.

Note: To receive a double major in Physics and Science Teaching—Physics, the student must complete a change-of-program form to declare both majors.
120 Total Semester Hours

Bachelor of Science
The BS curriculum is directed toward preparing students for graduate study ultimately leading to the PhD degree or toward research and development work in industrial or governmental laboratories. It also provides a good background for graduate study or industrial work in many areas or engineering physics and applied science.

Freshman Year
First Semester
4 - CH 1010 General Chemistry
3 - ENGL 1030 Accelerated Composition
4 - MATH 1060 Calculus of One Variable I
3 - PHYS 1220 Physics with Calculus I
1 - PHYS 1240 Physics Lab I
15
Second Semester
4 - CH 1020 General Chemistry
4 - MATH 1080 Calculus of One Variable II
3 - PHYS 2210 Physics with Calculus II
1 - PHYS 2230 Physics Lab. II
3 - Arts and Humanities (Non-Lit.) Requirement
15

Sophomore Year
First Semester
4 - MATH 2060 Calculus of Several Variables
3 - PHYS 2220 Physics with Calculus III
2 - PHYS 3000 Introduction to Research
3 - PHYS 3250 Experimental Physics I
4 - Modern Language Requirement
16
Second Semester
4 - MATH 2080 Intro. to Ordinary Diff. Equations
3 - PHYS 3110 Intro. to Meth. of Theoretical Phys.
3 - PHYS 3260 Experimental Physics II
4 - Modern Language Requirement
14

Junior Year
First Semester
3 - PHYS 3120 Methods to Theoretical Physics II
3 - PHYS 3150 Intro. to Computational Physics
3 - PHYS 3210 Mechanics I
3 - Emphasis Area Requirement
3 - Oral Communication Requirement
15
Second Semester
3 - PHYS 3220 Mechanics II
3 - PHYS 4650 Thermodynamics and Statistical Mechanics
3 - Emphasis Area Requirement
3 - Physics Writing Requirement
3 - Science Requirement
15

Senior Year
First Semester
3 - PHYS 4010 Senior Thesis
3 - PHYS 4410 Electromagnetics I
3 - PHYS 4550 Quantum Physics I
3 - Arts and Humanities (Literature) Requirement
3 - Emphasis Area Requirement
3 - Science Requirement
15
Second Semester
3 - HIST 1720 The West and the World I or
3 - HIST 1730 The West and the World II
3 - PHYS 4420 Electromagnetics II
3 - PHYS 4560 Quantum Physics II
3 - Emphasis Area Requirement
3 - Social Science Requirement
15
120 Total Semester Hours

Second Semester
3 - Arts and Humanities (Non-Lit.) Requirement
3 - Emphasis Area Requirement
3 - Oral Communication Requirement
15

Sophomore Year
First Semester
4 - CH 1010 General Chemistry
3 - ENGL 1030 Accelerated Composition
4 - MATH 1060 Calculus of One Variable I
3 - PHYS 1220 Physics with Calculus I
1 - PHYS 1240 Physics Lab I
15
Second Semester
4 - CH 1020 General Chemistry
4 - MATH 1080 Calculus of One Variable II
3 - PHYS 2210 Physics with Calculus II
1 - PHYS 2230 Physics Lab. II
3 - Arts and Humanities (Non-Lit.) Requirement
15

Junior Year
First Semester
3 - PHYS 3120 Methods to Theoretical Physics II
3 - PHYS 3150 Intro. to Computational Physics
3 - PHYS 3210 Mechanics I
3 - Emphasis Area Requirement
3 - Oral Communication Requirement
15
Second Semester
3 - PHYS 3220 Mechanics II
3 - PHYS 4650 Thermodynamics and Statistical Mechanics
3 - Emphasis Area Requirement
3 - Physics Writing Requirement
3 - Science Requirement
15

Senior Year
First Semester
3 - PHYS 4010 Senior Thesis
3 - PHYS 4410 Electromagnetics I
3 - PHYS 4550 Quantum Physics I
3 - Arts and Humanities (Literature) Requirement
3 - Emphasis Area Requirement
3 - Science Requirement
15
Second Semester
3 - HIST 1720 The West and the World I or
3 - HIST 1730 The West and the World II
3 - PHYS 4420 Electromagnetics II
3 - PHYS 4560 Quantum Physics II
3 - Emphasis Area Requirement
3 - Social Science Requirement
15
123 Total Semester Hours

BIOPHYSICS CONCENTRATION
The Biophysics Concentration offers an excellent preparation for medical school or graduate work in biological sciences. It includes the flexibility of selecting courses in chemistry, biological sciences, physics, and mathematics. This concentration also provides the necessary background for employment in industry, manufacturing, and instrumentation for clinical or molecular biology applications.

Freshman Year
First Semester
4 - CH 1010 General Chemistry
3 - ENGL 1030 Accelerated Composition
4 - MATH 1060 Calculus of One Variable I
3 - PHYS 1220 Physics with Calculus I
1 - PHYS 1240 Physics Lab I
15
Second Semester
4 - CH 1020 General Chemistry
4 - MATH 1080 Calculus of One Variable II
3 - PHYS 2210 Physics with Calculus II
1 - PHYS 2230 Physics Lab. II
3 - Arts and Humanities (Non-Lit.) Requirement
15

Sophomore Year
First Semester
5 - BIOL 1100 Principles of Biology
4 - MATH 2060 Calculus of Several Variables
3 - PHYS 2220 Physics with Calculus III
2 - PHYS 3000 Introduction to Research
3 - PHYS 3250 Experimental Physics I
17
Second Semester
4 - MATH 2080 Intro. to Ordinary Diff. Equations
3 - PHYS 3110 Intro. to Meth. of Theoretical Phys.
3 - PHYS 3260 Experimental Physics II or
3 - Science Requirement
4 - Biophysics Requirement
14

Junior Year
First Semester
3 - PHYS 3120 Methods of Theoretical Physics II
3 - PHYS 4550 Quantum Physics I
3 - Arts and Humanities (Literature) Requirement
4 - Biophysics Requirement
4 - Modern Language Requirement
16
Second Semester
3 - PHYS 4650 Thermodynamics and Statistical Mechanics
3 - Biophysics Requirement
3 - Oral Communication Requirement
15

Senior Year
First Semester
3 - PHYS 4410 Electromagnetics I
3 - PHYS 4550 Quantum Physics I
3 - Arts and Humanities (Literature) Requirement
3 - Biophysics Requirement
3 - Social Science Requirement
15
123 Total Semester Hours

INTERDISCIPLINARY EMPHASIS AREA
Students who select the Bachelor of Science degree in Physics with an interdisciplinary emphasis supplement their study of physics with core courses in complementary fields of study. This emphasis area is an excellent option for students preparing for direct entry into the job market or for medical, law or business school. Depending on a student’s academic goals, it may also be a good option for students preparing for graduate school or for those pursuing both a major and minor or a double major.
Because students choosing the interdisciplinary emphasis have a wide variety of academic and career goals, and because the interdisciplinary emphasis requirements cannot be tracked via Clemson's degree audit system, detailed departmental advising is vital. Students, in consultation with their advisor, must select a technical or professional emphasis area subject to departmental approval no later than the end of the second semester of their sophomore year. Additionally, all potential prerequisite courses for a minor should be completed in the student’s first or second year. For additional information, please visit http://physics.clemson.edu.

Note: Student transcripts record a Bachelor of Science in Physics; the interdisciplinary emphasis area is not included on transcripts.

Freshman Year

First Semester
4 - CH 1010 General Chemistry
3 - ENGL 1030 Accelerated Composition
4 - MATH 1060 Calculus of One Variable I
3 - PHYS 1220 Physics with Calculus I
1 - PHYS 1240 Physics Lab I
15
Second Semester
4 - CH 1020 General Chemistry
4 - MATH 1080 Calculus of One Variable II
3 - PHYS 2210 Physics with Calculus II
1 - PHYS 2230 Physics Lab. II
3 - Arts and Humanities (Non-Lit.) Requirement
15

Sophomore Year

First Semester
4 - MATH 2060 Calculus of Several Variables
3 - PHYS 2220 Physics with Calculus III
2 - PHYS 3000 Introduction to Research
3 - PHYS 3250 Experimental Physics I
3 - Emphasis Area Requirement
15
Second Semester
4 - MATH 2080 Intro. to Ordinary Diff. Equations
3 - PHYS 3110 Intro. to Meth. of Theoretical Phys.
3 - PHYS 3260 Experimental Physics II
3 - Emphasis Area Requirement
3 - Physics Writing Requirement
16

Junior Year

First Semester
3 - PHYS 3150 Intro. to Computational Physics
3 - PHYS 3210 Mechanics I
3 - Emphasis Area Requirement
3 - Modern Language Requirement
3 - Oral Communication Requirement
16
Second Semester
3 - PHYS 3220 Mechanics II
3 - PHYS 4650 Thermodynamics and Statistical Mechanics
3 - Emphasis Area Requirement
3 - Modern Language Requirement
3 - Science Requirement
16

Senior Year

First Semester
3 - PHYS 4010 Senior Thesis
3 - PHYS 4410 Electromagnetics I
3 - PHYS 4550 Quantum Physics I
3 - Arts and Humanities (Literature) Requirement
3 - Emphasis Area Requirement
15
Second Semester
4 - HIST 1720 The West and the World I or
3 - HIST 1730 The West and the World II
6 - Emphasis Area Requirement
3 - Social Science Requirement
12
120 Total Semester Hours

Other introductory courses, such as CPSC 1010 or 1020, may be chosen with departmental approval.

See General Education Requirements. Three of these credit hours must also satisfy the Science and Technology in Society Requirement.

See advisor. Twenty-one credit hours, with at least nine at the 3000-4000 level, are required. Courses and emphasis area must be approved by the department. Note: Requirements for a minor may be satisfied with these courses. Emphasis area and courses of study must be approved by the end of sophomore year.

ENG 3040, 3120, 3140, 3510, 3560, 3450, 3960, 3490, ML 4020, or THEA (ENGL) 3470

Students must complete through 2020 in a modern language. See Modern Languages Requirement at Clemson University statement on page 27.

Any 2000-4000 level science course in ASTR, BIOL, CH, ENSP, GEOL, PHYS, or STS. Other science courses require departmental approval.

Students may select an approved synthesis or capstone course or directed research in their emphasis area. Students in the honors program must complete a senior thesis in physics.

Combined Bachelor's/Master's Plan
Under this plan, students may reduce the time necessary to earn both degrees by applying graduate credits to both undergraduate and graduate program requirements. Both BS/MS (Master of Science) and BS/MAT (Master of Arts in Teaching) plans are available. Students are encouraged to obtain the specific requirements for pursuing the combined degree from the Department of Physics and Astronomy (www.physics.clemson.edu) as early as possible in their undergraduate program. Enrollment guidelines and procedures can be found under Academic Regulations in this catalog.

PREPROFESSIONAL HEALTH STUDIES

Non-degree
The health professions need individuals with a diversity of educational backgrounds and a wide variety of talents and interests. The philosophies of education, the specific preprofessional course requirements, the noncognitive qualifications for enrollment, and the systems of training vary among the professional health schools; but all recognize the desirability of a broad education—a good foundation in the natural sciences, highly developed communication skills, and a solid background in the humanities and social sciences. The absolute requirements for admission to professional health schools are limited to allowing latitude for developing individualized undergraduate programs of study; however, most schools of medicine and dentistry require 16 semester hours of chemistry, including organic chemistry, eight hours of biological sciences, eight hours of physics, and six hours of mathematics. These requirements should be balanced with courses in vocabulary building, the humanities, and social sciences. The basic requirements in the natural sciences and as many of the courses in the humanities and social sciences as possible should be completed by the third year so students are prepared to take the Dental Admission Test or the Medical College Admission Test prior to applying to a professional school.

Undergraduates may also prepare to study optometry, podiatry, and other health professions. While the basic requirements for these professional schools are essentially the same as those for schools of medicine and dentistry, specific requirements for individual schools in these professions vary somewhat; consequently, interested students are advised to consult with the chief health professionals advisor.

At Clemson, rather than having a separate, organized preprofessional health studies program, students are allowed to major in any curriculum, as long as the basic entrance requirements of the professional health school are fulfilled. These schools are not as concerned about a student’s major as they are about academic performance in whichever curriculum the student chooses. Professional health schools have neither preferences nor prejudices concerning any curriculum, which is evidenced by the fact that their entering students represent a broad spectrum of curricula. The emphasis is placed on the student’s doing well in the curriculum chosen, and this becomes critical as competition increases for the limited number of places available in professional health schools.

PREPHARMACY
The two-year Prepharmacy program requires 66–72 credit hours, depending on the pharmacy school of interest. Upon completion of the program, students will be eligible to apply to a college of pharmacy, usually the South Carolina College of Pharmacy (MSC and USC campuses), and may be eligible to apply for the Bachelor of Science in Preprofessional Studies. The degree in Pharmacy is awarded by the institution attended. It is important for students to work closely with their advisor as there are variations in courses required by the pharmacy schools.

For financial aid purposes, students in the Prepharmacy program are considered to be enrolled in a degree-seeking program.

First Year

First Semester
3 - BIOL 1030 General Biology I
1 - BIOL 1050 General Biology Lab. I
4 - CH 1010 General Chemistry
3 - MATH 1060 Calculus of One Variable I
3 - PHYS 2210 Physics with Calculus II
3 - Arts and Humanities (Non-Lit.) Requirement
18
Second Semester
3 - BIOL 1040 General Biology II
1 - BIOL 1060 General Biology Lab. II
4 - CH 1020 General Chemistry
3 - ECON 2000 Economic Concepts
3 - ENGL 1030 Accelerated Composition
3 - STAT 2300 Statistical Methods I
1 - Elective
18
Second Year
First Semester
4 - BIOL 2220 Human Anatomy and Phys. I
3 - CH 2230 Organic Chemistry
1 - CH 2270 Organic Chemistry Lab.
3 - PHYS 2070 General Physics I
1 - PHYS 2090 General Physics I Lab.
3 - Arts and Humanities (Literature) Requirement¹
3 - History or Philosophy Requirement¹
18

Second Semester
4 - BIOL 2230 Human Anatomy and Phys. II
3 - CH 2240 Organic Chemistry
1 - CH 2280 Organic Chemistry Lab.
3 - COMM 1500 Intro. to Human Comm. or
3 - COMM 2500 Public Speaking
3 - PHYS 2080 General Physics II
1 - PHYS 2100 General Physics II Lab.
3 - Science and Tech. in Society Requirement⁴
18

Third Year⁵
72–90 Total Semester Hours

¹ART 2100 or MUSC 2100
²Select any ENGL course from General Education Arts and Humanities (Literature) Requirement.
³See advisor.
⁴See General Education Requirements.
⁵Students planning to receive the Bachelor of Science in Preprofessional Studies degree are required to complete a minimum of 18 additional credit hours which must include MCR 1050, and successfully complete a year at an accredited pharmacy school. See advisor for requirements.

PREREHABILITATION SCIENCES
The Prerehabilitation Sciences major includes concentrations in physical therapy, occupational therapy, communication sciences and disorders, as well as in physician assisting and allied health areas. This curriculum is designed to meet the requirements of the programs in the College of Health Professions at the Medical University of South Carolina and other professional schools. The program requires a minimum of 90 semester hours of undergraduate coursework. In addition, students must apply to a professional school for acceptance into its program.

Because preparation for some of the concentrations, such as the physical therapy, occupational therapy, and communication sciences and disorders programs at MUSC, requires a baccalaureate degree in any area, students are advised to select a major with similar requirements after consultation with the Prerehabilitation Sciences advisor. The following curriculum fulfills the general requirements for those fields requiring less than a baccalaureate degree. Electives should be chosen after consultation with the advisor. Professional schools may change their requirements at any time, so it is imperative that students in this major stay in close contact with their advisor.

For financial aid purposes, students in the Prerehabilitation Sciences program are considered to be enrolled in a degree-seeking program.
MINORS

Following are minors acceptable for students in the College of Science. Students cannot major and minor in the same field or acquire a minor that is not allowed by the degree program.

Accounting
Adult/Extension Education
Aerospace Studies
Agricultural Business Management
Agricultural Mechanization and Business
American Sign Language Studies
Animal and Veterinary Sciences
Anthropology
Architecture
Art
Athletic Leadership
Biochemistry
Biological Sciences
Brand Communications
British and Irish Studies
Business Administration
Chemistry
Chinese Studies
Cluster
Communication Studies
Computer Science
Creative Writing
Crop and Soil Environmental Science
Digital Production Arts
East Asian Studies
Economics
English
Entomology
Entrepreneurship
Environmental Science and Policy
Equine Industry
Film Studies
Financial Management
Food Science
Forest Products
Forest Resource Management
French Studies
Gender, Sexuality and Women’s Studies
Genetics
Geography
Geology
German Studies
Global Politics
Great Works
History
Horticulture
Human Resource Management
International Engineering and Science
Italian Studies
Japanese Studies
Legal Studies
Management
Management Information Systems
Mathematical Sciences
Microbiology
Middle Eastern Studies
Military Leadership
Music
Natural Resource Economics
Nonprofit Leadership
Nuclear Engineering and Radiological Sciences
Packaging Science
Pan African Studies
Park and Protected Area Management
Philosophy
Physics
Plant Pathology
Political Science
Precision Agriculture
Psychology
Public Policy
Race, Ethnicity and Migration
Recreational Therapy
Religious Studies
Russian Area Studies
Science and Technology in Society
Screenwriting
Sociology
Spanish Studies
Spanish-American Area Studies
Sustainability
Theatre
Travel and Tourism
Turfgrass
Urban Forestry
Wildlife and Fisheries Biology
Women’s Leadership
Writing
Youth Development Studies

See pages 38-41 for details.