Application for Admission

Department make admissions decisions based on the compatibility of
the applicant’s goals with departmental resources, the availability of spaces
for new students, and a holistic evaluation of the applicant’s potential for
success in the program. Other considerations might typically include
standardized test scores, grades and/or GPAs, letters of recommendation,
writing samples, research or applied experience, and interviews.

To be considered for admission, the applicant must satisfy the following
requirements:
1. A formal application. Applications for admission are submitted online at
   www.grad.auburn.edu. Domestic applications must be accompanied
   by a fee of $50; international applications must be accompanied
   by a fee of $75. These fees may be paid online via credit cards or by checks
   or money orders (made payable to Auburn University).
2. One official transcript of all undergraduate- and graduate-level study
   from each school previously attended. An applicant who, because
   of current enrollment, cannot provide final transcripts at the time of
   application, must submit transcripts of all completed study, as well as
   incomplete transcripts from the current institution. Applicants do not
   need to provide transcripts for credits earned at Auburn University.
3. Standardized Graduate Record Examinations (GRE) general test
   scores. Management, Finance, Marketing, Business Administration,
   and Accounting applicants must submit scores on the Graduate
   Management Admission Test (GMAT). Management will accept the
   GRE or GMAT. The master of business administration program will allow
   the substitution of the GRE for the GMAT under some circumstances.
   International applicants must also submit Test of English as a Foreign
   Language (TOEFL) scores. In addition to the GRE General Test, the
   English department requires the GRE Subject Test for admission to
   their doctoral program. Applications and dates for these tests may be
   obtained at many colleges and universities; by writing the Educational
   Testing Service, P.O. Box 6000, Princeton, NJ 08541-6000; by
telephoning (609) 771-7670 for the GRE, (609) 771-7330 for the GMAT,
or (609) 771-7100 for the TOEFL; or by accessing the Educational
4. Additional Materials. Academic programs typically require additional
   materials in order to evaluate an applicant’s potential for graduate
   study. Prospective students must also contact the department in which
   they wish to study to obtain information regarding additional admission
   requirements, such as writing samples and letters of recommendation.
   With the exception of the application, official transcripts, and
   standardized test scores, which should be sent to the Graduate School,
   materials requested by programs should be sent directly to the
   academic department.

Admission Requirements

Admission of Transient Graduate Students

Applications and all other relevant material must be
received by the Graduate School at least forty-five days before the
first day of class of the semester in which the student wishes to begin
graduate study. International applicants should submit all required
materials at least ninety days before the first day of class of the semester
in which the student wishes to begin graduate study. Deadlines set by
the Graduate School are listed in the front of this bulletin. However, most
academic units make admission decisions several months in advance.
Thus, applicants should check with the department to which they seek
admission to determine when materials should be submitted. Approval
is valid for a maximum of twelve months beyond the entrance date given
on the application. If the student does not register during this period,
neither a new request for approval must be submitted. Application
materials become the property of Auburn University and may not be returned to the
applicant or forwarded to other institutions.

Student Classifications

For administrative purposes, Auburn University students are assigned
to a class level. Those that apply to graduate students are:
MST - Students who hold full admission to master's programs.
EDS - Students who hold full admission to Specialist in Education
programs.
EDD - Students who hold full admission to doctor of education programs.
PHD - Students who hold full admission to doctor of philosophy
programs.
GND - Special admission for non-degree purposes for students who meet
all admissions requirements to Graduate School or who hold master’s
degrees from accredited institutions and seek professional improvement leading to AA certification or other non-degree objectives. GPR - Students who meet requirements for provisional admission except that they have not taken the GRE or GMAT. This classification is for one semester only, and satisfactory scores must be submitted by the end of that semester. This classification cannot be used by international students, who must submit satisfactory scores on all required examinations before they are admitted.

**Definition of Graduate Course Levels**

To maintain accreditation with the Commission on Colleges, Auburn University must comply with the standards contained in The Principles of Accreditation: Foundations for Quality Enhancement. In particular, Auburn University must be able to demonstrate that "the institution's post-baccalaureate professional degree programs, master's and doctoral degree programs are progressively more advanced in academic content than its undergraduate programs" (Standard 3.6.1). In addition, "the institution structures its graduate curricula (1) to include knowledge of the literature of the discipline and (2) to ensure ongoing student engagement in research and/or appropriate professional practice and training experiences" (Standard 3.6.2). With these standards in mind, the Graduate School offers the following definitions of graduate course levels and guidelines for the submission of course modifications or new course proposals including a justification for graduate credit.

- 5XXX: Courses for professional students in Architecture, Pharmacy, and Veterinary Medicine; and
- 6XXX: Undergraduate courses taught in conjunction with graduate courses
- 7XXX: Graduate courses taught in conjunction with undergraduate courses
- 8XXX: Graduate courses primarily for master's-level students
- 9XXX: Graduate courses primarily for doctoral-level students

Courses numbered 4XXX and below indicate courses for undergraduates and may NOT be taken by graduate students for credit.

**Undergraduate Courses, S/U Option and Auditing Courses**

A graduate student may register for undergraduate courses (1000-4000-level). For students enrolled in Graduate School, grades earned in undergraduate courses will not be used in calculation of the GPA for either retention or graduation, but will appear on the graduate transcript. This policy took effect with the posting of grades fall 1998. For courses taken before fall 1998, grades earned in undergraduate courses may be used in calculation of the GPA for retention, but not for graduation. A graduate student may elect any course to be graded under the Satisfactory (S)-Unsatisfactory (U) option, except for those courses designated as S/U. Similarly, a graduate student may elect to audit any course not on the Plan of Study. The student may not change from audit to credit after classes begin, but may change from credit to audit before the 15th class day. All uses of the S/U and audit option require approval of the Graduate School.

**Graduate Certificate Definition**

**Graduate certificate programs** constitute an integrated curriculum, but not necessarily one aligned with a specific academic program. They may exist within programs, bridge programs or offer content widely useful across programs. Graduate certificate programs consist of a minimum of 9 and maximum of 21 hours of graduate-level course work. The course work may be graded or non-graded. A minimum GPA of 3.0 must be maintained on all graded course work in the certificate program.

Graduate certificate programs pertain to graduate students, whether degree seeking or non-degree seeking. A graduate certificate is distinguished from graduate minors in two primary ways. First, graduate minors are intended exclusively for degree seeking graduate students. Graduate certificates may be directed to both degree seeking and non-degree seeking students. Second, there are limits to the number of course credits taken in pursuit of graduate minors that may be applied to a graduate degree (e.g., masters degrees require 21/30 hours to be in the major discipline). The limiting factor in the application of certificate course credits to graduate degrees is departmental policy or advisory committee recommendations. As an example, if a department developed a certificate program intended only for non-degree seeking students, that department could prevent those certificate courses from applying to a degree. However, in the absence of departmental policy, and with the approval of a student's advisory committee, both degree seeking and non-degree seeking students (if they later change status to degree seeking) may include all certificate-related courses toward degree requirements.

**Non-degree seeking students interested in a graduate certificate** must apply to the certificate program as a certificate student. These applications are made in the same way and require the same materials as those for a degree program, including the application fee. The application options in the on-line application form will list available certificates, and faculty representing the certificate program will review the applications prior to Graduate School action. **Degree seeking students interested in a graduate certificate** will identify certificate-related courses on their regular plan of study. It is not necessary for these students to declare their intent to pursue a graduate certificate prior to beginning the certificate courses.

When new graduate certificates are proposed, they undergo the full process of curriculum review. This same process applies regardless of delivery method (i.e., on campus and distance). Special requirements for applicants may be negotiated between the certificate proposing program and the graduate school at the time the program is proposed. Consistent with Graduate School policy related to the Masters and Specialist degrees, all requirements for a graduate certificate must be accomplished within 5 years from the date the certificate was initiated or a longer time. Certificate Programs that require an exception to this 5 year time limit must be approved by the Graduate Council. Not only must the content of the proposed certificate be appropriate, but the availability of a viable group of graduate faculty to teach the courses in the certificate must be documented. Proposals for graduate certificate programs must identify a specific person who will serve as coordinator. Certificates that bridge departments must have a home department to which all certificate applicants apply. But each affiliated department must also designate a coordinator. Students who fulfill all requirements for a graduate certificate will receive the certificate noted on their transcript when the Graduate School receives a memo signed by the certificate coordinator documenting the successful completion of all certificate requirements.

**Graduate certificates** are to be differentiated from professional development certificates. No comprehensive definition of the latter is offered here, however, in brief, completion of a professional development certificate does not require admission to the Graduate School and is awarded based on participation in non-credit work. The definition of graduate certificate does not limit the ability of departments or other units to define, implement, or awarding professional development certificates. Professional development certificates are not subject to the Auburn University curriculum process, nor are their achievement noted on Auburn University transcripts.

**Two-Campus Studies**

A student seeking a graduate degree at Auburn University, Auburn University at Montgomery, the University of Alabama, the University of Alabama at Birmingham, or the University of Alabama at Huntsville may take up to half the course work at another of these institutions. The courses taken must be approved in advance by the student's Advisory Committee and the respective graduate deans. All credit must be earned at the two institutions in which the student is working, and none may be transferred from another institution.

**Transfer to a Different Degree Program**

For a student to transfer from one department to another requires that the student be in good academic standing, a new application for admission and the usual application fee. Changes in application status (master's to doctoral, doctoral to master's) or enrollment status (master's to doctoral or doctoral to master's) must be requested by the applicant/student involved and endorsed by the department head or chair, major professor, and advisory committee for enrolled students and approved by the dean of the Graduate School. Current international students must recertify full financial sponsorship for the issuance of a new I-20 form.

**Non-Graduate Students and Graduate Work**

An Auburn University undergraduate student may register for graduate courses provided that the following conditions are met: the student has at
least a 3.0 GPA, is with-in 30 semester hours of graduating, has the written consent of the instructor of each graduate course, and obtains approval in advance from the Graduate School. A maximum of 6 semester hours of graduate course work taken in this option later may be applied toward a graduate degree at Auburn University with the approval of the student’s advisory committee provided that appropriate arrangements are made in advance with the Graduate School and a grade of B or higher is achieved on all courses used for graduate credit. The total course load taken at the time the undergraduate student is in a graduate course may not exceed 16 semester hours. The same guidelines apply to undergraduate students taking graduate courses for undergraduate credit. A student may not use the same graduate course for both undergraduate and graduate credit.

Any post-baccalaureate, non-degree student desiring enrollment in a graduate course must receive written consent of the instructor and approval of the Graduate dean in order to register for such a class.

Graduate Study and University Employees

An Auburn University faculty member or employee may pursue a graduate degree outside the school or college of employment with the approval of the head or chair of the employing department and the dean of the employing school or college. Inquiries should be made to the dean of the Graduate School.

Graduate Assistantships

Graduate assistant appointments are temporary. Continuation depends upon availability of funds, level of enrollment, and research needs. Salaries are paid in accordance with the budget policies and pay-roll procedures of the university. The Board of Trustees is obligated to pay certain fixed charges against the institution and thereafter pay salaries in full insofar as funds are available. If for any reason beyond the control of the Board of Trustees funds are not available, salaries will be prorated.

Each graduate assistant must be in a degree-seeking program and registered in the classification of MST, EDS, PHD, EDD, or GPR. The student also must be registered for at least one course (during each academic term of the assistantship), must satisfy the minimum course load specifications of the individual departments and must be making satisfactory progress toward the degree.

Workloads for graduate assistants are defined on the basis of a normal teaching load or the equivalent time in other duties as determined by each department head and the dean of the school or college in which the assistant is employed. For example, a one-third workload is one-third of a normal teaching load. Graduate students may hold multiple assistantships and the assistantships may come from different units on campus, but together they cannot add up to more than a 100 percent appointment. Maximum course loads for graduate assistants are determined by individual departments. It is recommended that graduate students working more than half-time not carry a full academic load.

Requirements that graduate students register for hours not included in the plan of study as a condition of employment or to enhance credit hour production for administrative purposes are inappropriate. Similarly, requiring hours on the plan of study beyond the degree requirements established by the Graduate Faculty for such administrative purposes is also inappropriate unless the additional requirements are required by university policy.

International graduate students on F1 visas cannot hold a greater than 50 percent work appointment. International graduate students on F2 visas cannot hold a work appointment. Multiple assistantships for international graduate students cannot add up to more than a 50 percent work appointment.

International graduate teaching assistants who are assigned to scheduled lecture or laboratory sections must first be certified in spoken English proficiency. Certification may be attained through a minimum score of 50 on the Test of Spoken English (TSE) or a 23 on the speaking section of the Internet Based TOEFL offered by the Educational Testing Service or approval by the director of the English as a Second Language Program (ESL). Applicants who hold a baccalaureate degree from an accredited institution whose instruction is in English may be exempted from this requirement.

Tuition Waiver

Non-Alabama resident graduate assistants may receive a waiver of the out-of-station portion of their tuition if they are on at least a 25 percent graduate assistantship and are paid a minimum monthly stipend set each year by the provost. Such graduate assistants who have been on assistantship for consecutive fall and spring semesters will automatically have the out-of-state portion of their tuition waived for the summer semester whether or not they are on assistantship that semester. Students on assistantship for two consecutive semesters other than fall and spring must request the waiver from Student Financial Services.

Graduate Fellowships

Auburn University provides in-state tuition fellowships to most of its students holding graduate assistantships. Though administered through the Graduate School, applicants should contact the specific academic departments concerning eligibility and availability.

Oak Ridge Associate Universities

Auburn University has been a sponsoring institution of the Oak Ridge Associated Universities (ORAU) since 1946. ORAU is a private, not-for-profit consortium of 82 colleges and universities and a management and operating contractor for the U.S. Department of Energy (DOE) with principal offices located in Oak Ridge, Tennessee. Founded in 1946, ORAU provides and develops capabilities critical to the nation’s technology infrastructure, particularly in energy, education, health and the environment. ORAU works with and for its member institutions to help faculty and students gain access to federal research facilities; to keep members informed about opportunities for fellowship, scholarship and research appointments; and to organize research alliances among our members in areas where their collective strengths can be focused on issues of national importance.

ORAU manages the Oak Ridge Institute for Science and Education (ORISE) for DOE. ORISE is responsible for national and international programs in science and engineering education, training and management systems, energy and environment systems and medical sciences. ORISE’s competitive programs bring students at all levels, K-12 through postgraduate, and university faculty members into federal and private laboratories. Other ORAU activities include the sponsorship of conferences and workshops, the Visiting Scholars program and the Junior Faculty Enhancement Awards. Contact Dr. Bryan A. Chin, (334) 844-4784, for more information about ORAU programs.

Calendar

The university operates on the semester system. The Graduate School calendar at the beginning of this bulletin is also available at the Graduate School and contains the dates of various important deadlines. It should be followed carefully.

Advisors

The dean of the Graduate School is the general counselor to all graduate students. A faculty advisor or major professor will be designated for each student by the head or chair of the major department. There will also be an advisory committee for each student. Some required forms and reports regarding the student’s program must be approved by the major professor, advisory committee, department head or chair and the dean of the Graduate School. Students should ascertain which signatures must be obtained.

Due Process

Each graduate student’s progress toward a degree will be monitored by the student’s advisory committee. If a graduate student is deemed not to be making satisfactory progress toward the degree, the student may be dropped from the Graduate School. Issues of professional and personal development may be considered in determining satisfactory progress toward the degree.

Grades

To receive a graduate degree at Auburn University, a student must earn a cumulative GPA of 3.0 on a 4.0 scale on all courses carrying graduate credit. No more than nine hours beyond the student’s Plan of Study is allowed in obtaining the cumulative graduate GPA (CGGPA). No grade below C (including unsatisfactory grades for courses taken under the S/U option) is acceptable for credit toward a graduate degree. Each graduate course in which a grade below C is received must be repeated at Auburn University whether or not it is listed on the student’s Plan of Study. Both the original grade and the grade for the repeated course will be counted.
in calculating the CGGPA. Course credits transferred from another institution may not be used to satisfy this requirement. Courses taken will not count against the nine-hour limit beyond the student's Plan of Study in obtaining the minimum CGGPA.

Withdrawing from Courses
Courses may be dropped without academic penalty on or before mid-semester. A course may be dropped after mid-semester only under unusual conditions. When the Graduate dean approves dropping the course under such circumstances, a W will be assigned only when the instructor indicates that the student is clearly passing the course. Otherwise a grade of WF (Withdrawn Failing) is assigned. A student dropping the only course or all courses for which the student is registered after the first class day must resign for the semester on a separate form obtained from the Graduate School.

Academic Standing
Only grades in Auburn University courses approved for graduate credit will be used in determining the overall GPA for continuation in the Graduate School. If at the end of any semester the cumulative graduate GPA (CGGPA) falls below 3.0, the student will be placed on academic probation. If the CGGPA remains below 3.0 after the next nine credit hours of graduate enrollment (both graded and ungraded) or two consecutive terms, the student will be placed on academic suspension. The student may be readmitted only after completion of a remediation plan recommended by the academic unit and approved by the dean of the Graduate School. Course work taken as part of the remediation plan must be completed within two consecutive semesters and may count toward both the student’s degree and the CGGPA with the recommendation of the department head and the approval of the graduate dean. Graduate-level courses for which grades below C were earned may not be repeated during the remediation period. Once approved by the graduate dean, remediation plans may not be amended or extended beyond the original deadline. If a student fails to complete the remediation plan as approved or if the student earns a grade of C or below while completing the remediation plan, the student will be dismissed from the Graduate School and the designation ACADEMIC DISMISSAL will be placed on the student’s official record.

Academic Bankruptcy Policy
Auburn University graduate students who have been suspended or expelled because of poor academic performance may petition the Graduate School for a declaration of academic bankruptcy. Academic bankruptcy allows the student to petition his or her department and the Graduate School to restart his or her graduate program after a two-year separation from Auburn University. The student forfeits all graduate courses and credits earned at Auburn University and any transfer courses and credits accepted by Auburn University prior to the declaration. For readmission, the student must submit a new application for admission and must meet the regular admission requirements of the Graduate School and be accepted by the graduate program to which the student is applying. Upon readmission, Auburn University will retain all forfeited courses on the student’s transcript, but will not include forfeited courses in the calculation of the Graduate Grade Point Average. Upon readmission, students may request acceptance of previously forfeited transfer courses, but not courses earned at Auburn and forfeited in accordance with this policy. Students may not declare academic bankruptcy more than once.

Incompletes
A grade of “incomplete” must be removed within the following six months or it will be recorded permanently as an F and the course will have to be repeated. This applies regardless of the student’s enrollment status. A student not enrolled during the following six months is not exempt from this rule. No student may graduate until “incomplete” and “no record” grades are removed, and the removal must be completed at least three weeks before the date of graduation, regardless of whether the course is included on the Plan of Study.

Transfer of Credit from Other Institutions
Graduate credit taken in residence at another approved graduate school may be transferred to Auburn University. No prior commitment is made concerning whether transfer credit will be accepted. A student must earn at least 24 semester hours, or half of the total hours required for a master's degree, whichever is greater, at Auburn University. A program that requires 30 hours of credit will be limited to 6 semester hours of transfer credit. No such limitation is applied to doctoral degrees except 18 semester hours must be earned as a graduate student at Auburn University in graded course work at the 6000-level or above. The credit must be acceptable to the student’s advisory committee and be pertinent to the student's Plan of Study. No transfer credit will be approved without an official transcript. No course on which a grade lower than B was earned may be transferred. Additionally, credit will not be allowed if the combined GPA on graduate work taken at other schools is less than 3.0 on a 4.0 scale, nor may transfer credit be used to improve the GPA on courses taken at Auburn University. All transferred credit to be counted toward a master's or specialist degree must have been earned within five years of the date the Auburn degree is awarded. There is no such time limit on credit for doctoral degrees. Transfer credit is not reflected on the AU transcript for graduate students.

Correspondence Work Unacceptable
Study by correspondence shall not be counted toward a graduate degree.

Graduate Curriculum Model Change
When the university changes a graduate curriculum model, the changes apply to students who matriculate after the approval of the changes. In no case, for students who are continuously enrolled, will the changed curriculum compel them to accumulate additional hours and grade points to graduate. In other words, students must complete the university requirements in place during the term in which they first enrolled. Graduate students who have not been enrolled at Auburn University for a period of five years or more and who are returning to the same curriculum may be subject to different university, college, school or departmental requirements than those which existed when continuous enrollment ceased.

Classified or Proprietary Research
No thesis or dissertation should be based exclusively on a proprietary or classified research project, nor should a thesis or dissertation include proprietary or classified information. Any graduate student and advisor engaged in such research should identify an alternative topic for the thesis or dissertation. Should a thesis or dissertation include such information, the document must be rewritten with offending material excised.

Research Involving Humans
Auburn University established the Institutional Review Board for the Use of Human Subjects in Research (IRB) to evaluate research for compliance with the guidelines and policies of the U.S. Department of Health and Human Services, the Public Health Service, the Food and Drug Administration and other federal, state and local regulations. All research using human subjects – whether it is conducted by faculty, staff or students – must be approved in advance by the IRB, regardless of the source of funding, lack of funding or any other consideration. Research involving human subjects not approved in advance may be disallowed and may incur severe penalties for non-compliance with institutional policy. Information and review forms may be obtained from the Administrator for Special Programs, 307D Samford Hall, (334) 844-5966.

Activities Involving Animals
Auburn University’s Animal Resources Program requires compliance with the Animal Welfare Assurance negotiated with the Office of Protection from Research Risks/National Institutes of Health (OPRR/NIH). A major part of that Assurance involves the Institutional Animal Care and Use Committee (IACUC) that ensures compliance with the Assurance, the policies of the U.S. Department of Health and Human Services, the U.S. Department of Agriculture and all other federal, state and local regulations concerning care, treatment and use of animals. All activities, whether teaching, research, production or display of animals, and whether or not the activity is funded, must be approved in advance by the committee. The use of animals for any purpose that is not approved in advance by the IACUC may involve severe penalties for non-compliance with institutional policy and could jeopardize the university’s Animal Welfare Assurance filed with the OPRR and the NIH. Information may be obtained from the Director of Animal Resources, (334) 844-5667.
Registration and Graduation Requirements
Every student expecting credit toward a graduate degree must be registered with the Graduate School, and no student is considered a candidate for a degree unless properly registered. A student must be registered in the term in which degree requirements are completed. Students who have completed all course requirements but who lack other requirements (non-thesis final exam, internship, etc.) must register for the term in which those requirements are completed. The student also must register in any semester during which the staff or the facilities of the university are used for work on a thesis or dissertation, for the taking of oral examinations, or for removal of an "incomplete" grade. Thesis and dissertation students needing thesis or dissertation final approval and submission and the final examination, or non-thesis graduate students needing to complete projects, would register for 7990 Research and Thesis, 8990 Research and Dissertation, or 7980 Project, as applicable. Non-thesis graduate students requiring only a final examination would register for GRAD 7000. Students who have in a previous term completed all requirements for the degree, upon receipt of a certificate of completion form from the Graduate School, will not be required to register in a future term if their graduation is delayed or postponed.

No student will be permitted to graduate who fails to submit a graduation check request to the Graduate School prior to the semester of expected graduation. Graduation day is the official last day of each semester and, therefore, is the deadline for approved plans of study and graduation checks for graduation the following semester. It is the responsibility of graduate students to check records for compliance with graduation requirements. Students who have completed a graduation check for a previous term must notify the Graduate School of pending graduation before the 15th class day of subsequent semesters. Graduate degrees are awarded at the end of each semester. Candidates wishing to graduate in absentia must inform the Registrar's Office.

A graduate student may carry a maximum course load of 16 hours per semester (14 in the summer term). This includes undergraduate courses, but does not include 7990 (Research and Thesis) and 8990 (Research and Dissertation) when required of all graduate students in a department each semester. Graduate students must carry nine hours per semester or enroll in GRAD 7AA0/8AA0 with concurrent enrollment for a minimum of one hour of 7990/8990 to be classified as full-time students. Enrollment in GRAD 7AA0/8AA0 requires the completion of a certification available at the Graduate School or on the Web at www.grad.auburn.edu.

Master's (thesis option only) students are eligible for up to three semesters of GRAD 7AA0; doctoral students for up to six semesters of GRAD 8AA0. The Master's Degree Program
The minimum requirements for most master's degrees can be satisfied in one academic year of two semesters or nine months. In practice, however, many students need three semesters or longer. Certain departments have special requirements as outlined in this bulletin. In addition, those students who hold assistantships or fellowships, those who engage in time-consuming work off-campus, or those with scholastic deficiencies of any sort cannot meet all requirements in the minimum time. Also, research is unpredictable and frequently requires more time than anticipated. Certain departments offer a master's degree under two plans, referred to as the Thesis Option and the Non-Thesis Option.

Time Limit
All graduate work toward a master's degree must be completed within a period of five calendar years.

Advisory Committee
The student works under the direction of an advisory committee composed of three members recommended by the appropriate department head or chair. Two must be members of the graduate faculty. This committee will approve the student's program of study, conduct required examinations and direct the required field project or thesis. Students in a teaching field (e.g., music education, science education, foreign language education) work under a committee composed of at least two members from the College of Education and one member from a related academic field.

Plan of Study
Early in the graduate program, each student should confer with the appropriate departmental advisor or major professor to select courses and discuss research interests. Then a Plan of Study should be prepared and submitted to the Graduate School. The Plan of Study form is available on the Web at www.grad.auburn.edu. For full-time students, the Plan of Study must be submitted no later than the end of the first semester in Graduate School. No student will be permitted to graduate who fails to submit a Plan of Study. For part-time students, the Plan of Study must be submitted before registration for the fourth course taken in Graduate School. Notification of all changes must be provided before the beginning of the final semester. One to three changes may be made by using the simplified "Change in Existing Plan of Study Form" available at the Graduate School or on the Web. Four or more changes require a new Plan of Study. The student is responsible for carrying out the planned program and for asking the major professor to make necessary changes.

Language Requirement
Some departments require a reading knowledge of one foreign language. These requirements are outlined in the departmental statements in this bulletin. Arrangements to take the foreign language examination should be made with the student's major professor and the head or chair of the department. The student must apply at the Graduate School by the deadline for each semester listed in the calendar.

Residency Requirement
Resident, on-campus study is the foundation for research-based graduate degree programs at Auburn University. Any graduate student enrolled in a degree program culminating in a thesis or dissertation must directly engage in research with the major professor, must have access to the research tools needed for the research activity, must be immersed in the culture of graduate education, must engage in the professional activities of the discipline, and must complete the research activity in a reasonable period of time. Graduation requires the major professor to certify compliance with these requirements.

Summary of Procedures for Master's Degree Program
The student should:
1. Obtain application forms from the Graduate School and apply for admission by submitting completed forms and other required materials as outlined in this bulletin.
2. Apply for an assistantship, if pertinent, with the department involved.
3. Become familiar with requirements for the desired degree as outlined in this bulletin.
4. Consult with departmental advisor and become oriented to departmental procedures.
5. Plan schedule of study for the first semester with advisor.
6. Establish an advisory committee through the department head or chair and departmental advisor; usually done during the first semester of course work.
7. Prepare a proposed Plan of Study in consultation with the advisory committee. Submit a plan approved by the committee and department head to the Graduate School no later than the second semester.
8. Consult with the advisor on approval for the thesis plan, if pertinent, and become familiar with the Guide to the Preparation and Submission of Theses and Dissertations, available in the University Bookstore and on the Web (www.grad.auburn.edu).
9. Fulfill language requirements, if any.
10. Request graduation check in the Graduate School no later than the last day of the semester (graduation day) prior to the semester of graduation.
11. Register for at least one course the semester of graduation.
12. Prepare thesis manuscript, if pertinent.
13. Arrange for final oral examination with advisory committee.

Master's Degree Options
The following general regulations are minimum requirements. The professor or committee in charge of a student's work may impose more than the specified minimum in order to achieve a well-rounded program. All programs require a minimum of 30 semester hours of graduate courses, 6000-level or above.
The Graduate School

The Thesis Option
The master of arts, master of science and master of industrial design are offered under the thesis option. Thesis students register for 7990 Research and Thesis in semesters when working on the thesis, when submitting, defending or awaiting final approval of the thesis, and when taking final examinations.

Major and minor subjects: A student under the thesis option must earn a minimum of 30 semester hours, of which at least 21 semester hours must be in a major area of concentration. Depending on departmental requirements or the wishes of the student’s advisory committee, the remainder of the course work may be taken within the major field or in a separate but closely related area. Specific requirements are set forth in this bulletin.

If a student has not met all undergraduate pre-requisites in any field chosen for major or minor work, these should be scheduled as soon as possible, preferably before graduate work begins. The major professor will indicate these on the student’s Plan of Study.

The topic selected for the thesis must be approved by the student’s major professor and advisory committee. The student conducts the research and prepares the thesis under the direction of the major professor. The course, Research and Thesis, is number 7990 in all departments. The student must register for a minimum of four credit hours of this course but may register for as many as hours as desired. No more than six hours may be counted toward meeting degree requirements. The student may register for one or more hours at a time. No grade is assigned for this course.

The Guide to the Preparation and Submission of Theses and Dissertations, which contains information about requirements for the thesis, is available on the Web at www.grad.auburn.edu. Submission of a thesis is defined as the time at which the first complete draft of such is submitted to the major professor for review. The Graduate School accepts only theses prepared according to the Guide. The Graduate School Calendar lists the deadline for acceptance of final copies of theses by the Graduate School each semester. “Final copies” means that the thesis is perfected and ready for binding. A format check may be obtained at the Thesis and Dissertation Office in the Graduate School. If final copies are found to need corrections, the student’s graduation may be delayed at least one semester. Auburn University reserves the right to make copies of the thesis, but the student retains all publication rights. Effective summer 2005, all theses must be published electronically through AUETD.

All candidates under the thesis option must pass a comprehensive examination covering the major and minor field, as well as the research and thesis. This usually is a two-hour oral examination, but the student’s advisory committee also may require a written examination. Members of the Graduate Faculty not on the advisory committee may attend any oral examination as visitors. The major professor will schedule the oral examination not later than the deadline indicated in the Graduate School Calendar. Successful completion requires the unanimous support of all members of the advisory committee. If a student fails the examination, one re-examination may be given on recommendation of the advisory committee and approval by the dean of the Graduate School. Further examinations will be allowed only under exceptional circumstances and with the approval of the Graduate Council.

The Non-Thesis Option
Information on special or professional master’s degrees not requiring a thesis may be found in this bulletin. Students in these programs must pass a comprehensive examination just as do students under the thesis option. The examination covers the major and minor and any research and special project included. Non-thesis graduate students who complete a special project must register for 7980 Project in semesters when working on the project. Non-thesis students requiring only a final examination register for GRAD 7000 in the semester when the exam is taken. Credit hours for 7990 Research and Thesis cannot be counted toward graduation requirements for non-thesis degree programs. If a student fails the examination, one re-examination may be given on recommendation of the advisory committee and approval by the dean of the Graduate School. Further examinations will be allowed only under exceptional circumstances and with the approval of the Graduate Council.

The Master of Science

The Master of Arts
The master of arts is offered in communication (thesis and non-thesis option), English (thesis and non-thesis option), history (thesis and non-thesis option), sociology (thesis and non-thesis option) and Spanish.

Second Master’s Degree
For a second master’s degree, the student fulfills all major requirements applicable to any other master’s degree, including the thesis, if appropriate. The student may, on recommendation of the advisory committee, transfer credit hours from the previous master’s degree. The student must earn at least 24 semester hours, or half of the total hours required for the master’s degree, whichever is greater, in the second master’s program at Auburn University.

Special or Professional Master’s Degrees
These special or professional degrees are offered: master of accountancy, master of aerospace engineering, master of agriculture (agricultural economics, agronomy and soils, animal sciences, entomology, horticulture, plant pathology, and poultry science), master of applied mathematics, master of aquaculture, master of building construction, master of business administration, master of chemical engineering, master of civil engineering, master of communication disorders, master of community planning, master of design build, master of software engineering, master of education (counseling and counseling psychology, curriculum and teaching, educational foundations leadership and technology, health and human performance, and rehabilitation and special education), master of electrical engineering, master of forestry, master of Hispanic studies, master of industrial design (thesis and non-thesis option), master of industrial and systems engineering, master of landscape architecture, master of management information systems, master of materials engineering, master of mechanical engineering, master of probability and statistics, master of public administration, master of technical and professional communication, and master of biological studies.

The Specialist in Education Degree
This degree is designed for professionals in education and human services areas who want increased competence in a field of specialization. Areas of specialization are offered in the various departments in the College of Education.

Admission
Scholarship, interpersonal orientation and potential for leadership are considered in the screening procedure. Appropriate experience in teaching or a leadership position in education or a human services area is requisite. All work beyond the baccalaureate must have been of high quality with a GPA of at least 3.0 on a 4.0 scale. Students holding a master’s degree from Auburn University are not required to resubmit GRE scores.

Advisory Committee
The specialist student works under the direction of an advisory committee composed of three members recommended by the appropriate department head or chair. All must be members of the Graduate Faculty. This committee will approve the student’s program of study, conduct required examinations and direct the required field project. Students in a
teaching field (e.g., music education, science education, foreign language education) work under a committee composed of two members from the College of Education and one member from a related academic field.

Requirements for Degree
A minimum of 30 semester hours beyond the master's degree must be taken in a program approved by the student's advisory committee. The Plan of Study should be submitted to the Graduate School no later than the second semester of study. Professional educators pursuing sixth-year certification are responsible for adapting their Plans of Study to requirements in the states in which they will need advanced certification. A relevant field project, approved in advance by the student's committee, must be completed under the supervision of the major professor. A final written report on the field project will be submitted to the advisory committee by the student. The advisory committee will conduct a final examination on the area of specialization and the field project.

No student will be permitted to graduate who fails to submit a Plan of Study and graduation check to the Graduate School prior to the semester of expected graduation. Graduation day is the official last day of each semester and, therefore, is the deadline for submitting Plans of Study for graduation the following semester.

Time Limit
All graduate work toward an Education Specialist degree must be completed within a period of five calendar years.

Doctoral Degrees
The doctor of philosophy is offered in aerospace engineering, animal sciences, biological sciences (botany, microbiology and zoology), chemical engineering, chemistry, civil engineering, computer science and software engineering, counseling and counseling psychology, curriculum and teaching, discrete and statistical sciences, educational psychology, electrical and computer engineering, English, fisheries and allied aquacultures, forestry and wildlife sciences, history, horticulture, human development and family studies, industrial and systems engineering, kinesiology, management, materials engineering, mathematics, mechanical engineering, nutrition and food science, physics, plant sciences (agronomy and soils, plant pathology, and entomology), poultry science, psychology, public administration and public policy, and rehabilitation and special education, plus interdepartmental programs in biomedical sciences (anatomy, physiology, and pharmacology; large animal surgery and medicine; pathobiology; radiology; and small animal surgery and medicine), economics (agricultural economics and forestry), integrated textile and apparel science (consumer affairs and polymer and fiber engineering), and pharmaceutical sciences (pharmacal sciences and pharmacy care systems).

The doctor of education is offered in the following departments: Counseling and Counseling Psychology and Educational Foundations, Leadership and Technology.

Admission
Prospective candidates for the degrees of doctor of philosophy and doctor of education are admitted under the same procedures and requirements outlined in the general regulations elsewhere in this bulletin. A student must be admitted to a specific doctoral program, but admission does not mean admission to candidacy for the degree, which occurs only after satisfactory completion of the general oral examination.

Advisory Committee and Plan of Study
After the student has enrolled in the doctoral program, an advisory committee should be selected by the student, major professor and department head or chair. The advisory committee is responsible for developing the student's Plan of Study and conducting the doctoral general and final examinations. It should consist of at least three members of the Graduate Faculty. At least two, including the major professor, must be members of the Graduate Faculty at Level Two. The formal appointment of the advisory committee occurs when the Plan of Study is approved by the Graduate School.

The Plan of Study should be prepared by the student and the advisory committee and filed with the Graduate School as soon as feasible. It should not be delayed beyond the second semester of doctoral work. The Graduate School recognizes that changes may be warranted, and a form is available for amendments as required by student needs, research interests and course availability.

Residency Requirement
Resident, on-campus study is the foundation for research-based graduate degree programs at Auburn University. Any graduate student enrolled in a degree program culminating in a thesis or dissertation must directly engage in research with the major professor, must have access to the research tools needed for the research activity, must be immersed in the culture of graduate education, must engage in the professional activities of the discipline, and must complete the research activity in a reasonable period of time. Graduation requires the major professor to certify compliance with these requirements.

General Doctoral Examination
A general examination, often called the (preliminary examination) is required of all applicants for the degrees of doctor of philosophy and doctor of education. It consists of written and oral testing by the student's advisory committee in the student's major and minor. The written portion of the examination does not require approval in advance by the Graduate School. The oral portion, however, does require such approval. Arrangements for the oral examination must be made by application to the Graduate School at least one week in advance of the examination. The primary purpose of the general examination is to assess the student's understanding of the broad body of knowledge in a field of study. The examination also affords the advisory committee an opportunity to review the student's proposed research and understanding of research methods and literature in the chosen field. If the general examination reveals deficiencies in any of these areas, the advisory committee may recommend remedial work, re-examination, or discontinuation of doctoral study.

The general oral examination should be conducted immediately after the successful completion of the written examination and well before the final examination. At least one complete semester (preferably more than one) must intervene between the general oral and final examinations. The two examinations thus cannot be taken either in the same semester or in consecutive semesters. Some departments have specific requirements for conducting these examinations, and the student should become familiar with these. Successful completion of the oral examination requires unanimous support of the student’s advisory committee. If the general oral examination is failed, a re-examination may be given on recommendation of the committee and approval by the dean of the Graduate School. Further examinations require exceptional circumstances and approval by the Graduate Council.

The student becomes a candidate for the degree on successful completion of the general examination.

Time Limit
Upon admission to candidacy, the student has four calendar years to complete all remaining requirements for the doctoral degree. If unable for any reason to complete the requirements on time, the student may petition the dean of the Graduate School for a maximum of a one year extension. Students failing to complete the degree in the allotted time revert to the status of an applicant and must petition the dean of the Graduate School to retake the general oral examination.

Final Examination
After the first draft of the dissertation has been completed and has been approved by the student's advisory committee, it is submitted to the Graduate School. An outside reader (representing the university's graduate faculty and the Graduate School) will be appointed to review the dissertation. However, the student's advisor may request appointment of the outside reader at any time rather than waiting until after the dissertation is drafted. When the Graduate School has approved the dissertation, the student may apply for the final examination on a form obtained from the Graduate School. The application must be filed with the Graduate School at least one week in advance of the final examination. The examination is administered by the student's advisory committee. The representative of the university's graduate faculty, the outside reader, also attends and participates. The examination, which generally is oral but may be both oral and written, includes the major and minor fields and a defense of the dissertation. Successful completion requires unanimous support of all members of the committee, including the outside reader. Any member of the Graduate Faculty may attend.
If a student fails the final examination, a re-examination may be given on recommendation of the advisory committee and approval by the dean of the Graduate School. Further examination requires exceptional circumstances and approval of the Graduate Council. In addition to successful completion of all examinations, final copies of the dissertation must be submitted to the Graduate School before the degree is conferred (see Graduate School calendar for the deadline).

Summary of Procedures for Doctoral Degree Programs
The student should:
1. Obtain application forms from the Graduate School and apply by submitting all required materials to the Graduate School by the deadlines published in this bulletin. The Graduate School forwards the application to the appropriate departmental screening committee. The department head or chair then makes a recommendation to the dean of the Graduate School, who sends a letter notifying the applicant of the decision.
2. Apply for an assistantship, if applicable, through the department involved.
3. Become familiar with the requirements for the doctoral degree as published in this bulletin.
4. Consult with the departmental advisor and become familiar with departmental procedures.
5. Plan a schedule of study for the first semester with advisor.
6. Submit a proposed schedule for fulfilling the residency requirements.
7. Acquire necessary forms at the Graduate School or on the Web at www.grad.auburn.edu.
8. Establish an advisory committee through the major professor and department head or chair. Official appointment of the advisory committee occurs when the Plan of Study is approved by the Graduate School.
9. Prepare a Plan of Study approved by the advisory committee and department head or chair and submit to the Graduate School.
10. Complete course work, including language requirements, if any, as detailed in the Plan of Study.
11. Arrange for the general written and oral examinations through the advisory committee. After the written examination, schedule the general oral examination at least one week in advance using a form obtained from the Graduate School.
12. Submit the dissertation proposal for approval by the advisory committee and become familiar with The Guide to the Preparation and Submission of Theses and Dissertations, available at www.grad.auburn.edu or the University Bookstore.
13. Request graduation check in the Graduate School no later than the last day of the semester (graduation day) prior to the semester of graduation.
14. Register for at least one course the semester of graduation.
15. Prepare dissertation and submit a committee-approved first draft to the Graduate School for review and approval by the outside reader (representative of the graduate faculty).
16. Study recommendations of the outside reader and make appropriate changes in the dissertation.
17. On approval of the dissertation by the dean of the Graduate School, arrange for final oral examination.
18. File an Academic Residency form.

The Doctor of Philosophy Degree
The doctor of philosophy is conferred in recognition of the mastery of a special field of learning as shown by the satisfactory completion of a prescribed course of study and investigation, the successful passing of general examinations covering the major and minor fields, the preparation of an acceptable dissertation reflecting high achievement in scholarship and independent original investigation, and the passing of a final examination on the dissertation and related subjects. The degree is a research degree. It is not conferred merely upon fulfillment of technical requirements, but awarded in recognition of the ability to think and work independently, originally, and creatively in a chosen field. Some departments have special requirements for the degree, and the student will be governed by those, including the ones listed in departmental statements under Courses of Instruction elsewhere in this publication.

Language Requirement
Language requirements for graduate degrees vary with departments. The Department of Foreign Languages offers proficiency courses in a number of languages. The department also offers reading proficiency examinations for those students who wish to demonstrate proficiency without taking a course. Such students must apply to the Graduate School for these examinations by the deadline listed in the Graduate School calendar at the beginning of this bulletin.

Course Requirements
The Graduate School requires a minimum of 30 semester hours of graded (e.g., A, B, C) graduate course work (6000-level and above) beyond the bachelor's degree, and at least 30 semester hours of additional graduate course work which may include ungraded courses, 7990 and 8990. Although there is no limit to the number of hours a doctoral student can transfer, at least 18 hours must be completed as a graduate student at Auburn University. The minimum number of hours in a doctoral degree program is 60 semester hours beyond the bachelor's degree, but some departments require more, and requirements may vary according to a student's background and interests. A maximum of four hours of 7990 (Research and Thesis) from a completed master's program may be counted.

All doctoral students must complete a minimum of 10 hours of 8990. Enrollment in 8990 may take place at any time the student and the advisory committee deem appropriate. During any one semester, the number of hours of 8990 in which the student enrolls should reflect the amount of time being spent on the dissertation and the degree to which university resources are being utilized. Students may enroll, during any one semester, for as few as one hour or as many as 16 hours of 8990. Dissertation students submitting their dissertation, awaiting committee review and approval, or taking their final examination must register for 8990 Research and Dissertation in the semester(s) when these steps in the process take place. The required 10 hours of 8990 should be included in the Plan of Study. No grade is assigned.

The Dean of the Graduate School is authorized to approve alternatives to these course work requirements in exceptional cases and on an individual basis.

Dissertation
A dissertation is required of all candidates for the degree of doctor of philosophy. It shall constitute an original contribution to knowledge. The student conducts the research and prepares the dissertation under the direction of the major professor. Only dissertations prepared according to The Guide to the Preparation and Submission of Theses and Dissertations, available on the Web at www.grad.auburn.edu, are accepted by the Graduate School. Submission of a dissertation is defined as the time at which the first complete draft of such is submitted to the major professor for review. All dissertations must be microfilmed by University Microfilms International of Ann Arbor, Michigan, which publishes the abstract in Dissertation Abstracts. The student is required to pay for this service. Auburn University reserves the right to make copies of the dissertation, but the student retains all publication rights. Effective summer 2005, all dissertations must be published electronically through AUETD.

The Doctor of Education Degree
The doctor of education is a professional degree conferred in recognition of ability and achievement in some special field or fields of education. This is shown by satisfactory completion of a prescribed course of study, application of scientific principles in classroom teaching, administration, the supervision of instruction, or other aspects of educational programs; preparation of a dissertation demonstrating ability to investigate an education problem with originality and independence of thought; successful completion of examinations showing a satisfactory grasp of a field of specialization and its relation to allied subjects; and recognized leadership in a specialty as shown by at least three years of successful experience.

Course Requirements
The major is divided into general professional education, area of specialization and other approved courses. General professional education includes courses in such areas as research methodology and statistics; evaluation of learning, individuals, or programs; human behavior; development, or learning; and social or political perspectives on education. The College of Education requires a minimum of 30 semester hours of graded (e.g., A, B, C) graduate course work (6000-level and above) beyond the bachelor's degree. At least 18 hours of which must be completed at Auburn University. A doctoral student must also complete 30 semester hours of additional course work (may include ungraded courses, 7990 and 8990). However, some programs require more, and...
requirements may vary according to a student’s background and interest. A maximum of 4 hours of 7990 (Research and Thesis) from a completed master’s program may be counted.

All doctoral students must complete a minimum of 10 hours of 8990. Enrollment in 8990 may take place at any time the student and the advisory committee deem appropriate. During any one semester, the number of hours of 8990 in which the student enrolls should reflect the amount of time being spent on the dissertation and the degree to which university resources are being utilized. Students may enroll, during any one semester, for as few as one hour or as many as 16 hours of 8990. The requisite 10 hours of 8990 should be included in the Plan of Study. No grade is assigned.

The dean of the Graduate School is authorized to approve alternatives to these course work requirements in exceptional cases and on an individual basis.

Dissertation
A dissertation is required of all candidates for the degree of doctor of education. It shall be a critical study of a significant education problem, an original work in a significant field of education, or a creative work involving new and original procedures for the improvement of education. The student conducts the research and prepares the dissertation under the direction of the major professor. Only dissertations prepared according to The Guide to the Preparation and Submission of Theses and Dissertations, available on the Web at www.grad.auburn.edu, are accepted by the Graduate School. Submission of a dissertation is defined as the time at which the first complete draft of such is submitted to the major professor for review. All dissertations must be microfilmed by University Microfilms International of Ann Arbor, Michigan, which publishes the abstract in Dissertation Abstracts. The student is required to pay for this service.

Graduate Degrees Offered

Accountancy - MAc
The Master of Accountancy (MAc) is a professional non-thesis degree program. Criteria for admission and degree requirements are established by the School of Accountancy. This program is available to individuals with a four-year degree business degree from an accredited institution and a strong academic background in the fundamentals of business and accounting.

Requirements for the MAc include 30 semester hours of course work including a capstone course (ACCT 7980/7988) and a four and one-half day on-campus residency. The curriculum offers students the flexibility to tailor the program to meet their specific career objectives. Students take only four core courses and choose three accounting electives and three business electives. The MAc degree can be earned as a traditional, on-campus student or through the video-based outreach program.

Information concerning specific requirements may be obtained by visiting www.mac.business.auburn.edu or contacting the Office of Accounting Graduate Programs, at mac@auburn.edu or (334) 844-6207.

Aerospace Engineering - MAE, MS, PhD
Graduate study in aerospace engineering leads to the degrees of master of science, master of aerospace engineering and the doctor of philosophy. The graduate program prepares students for careers in the aerospace industry, in government laboratories and in academia. Studies for the PhD also are designed to produce research scholars.

Applications should have a bachelor’s degree in aerospace engineering or its equivalent from an institution of recognized standing, plus satisfactory GRE scores. Degrees in mathematics, physics and certain other engineering disciplines may also be appropriate for entrance into the graduate program. Applications must be approved by the department’s committee on graduate study.

For the master of science, the student must complete an approved program of at least 30 credit hours in aerospace engineering or closely related supporting subjects at the 6000 level or above. The master of science degree requirements include the completion of a thesis under the supervision of a major professor and an advisory committee.

The master of aerospace engineering is a non-thesis degree for which the student must complete an approved program of at least 33 hours of course work at the 6000 level or above. A suitable project in aerospace engineering, culminating in a final written report approved by the student’s advisory committee, may be substituted for three credit hours of course work. An oral presentation is also required for the MAE degree.

For both the MS and MAE degrees, at least half of the required credit hours must be completed in aerospace engineering courses.

For the doctor of philosophy degree, the student must complete a minimum of 60 credit hours beyond the bachelor’s degree. A plan of study will be arranged on an individual basis and students may elect to specialize in the general areas of aerodynamics, computational fluid dynamics, control theory, flight dynamics, orbital mechanics, propulsion, structures or structural dynamics. A written qualifying examination and a general doctoral examination, with both written and oral parts, are required of all doctoral candidates. An oral defense of the doctoral dissertation is also required of each student.

There is no language requirement for the master’s or PhD degrees.

Agricultural Economics & Rural Sociology - MS, MAg
Applied Economics - PhD
Graduate degrees in the Department of Agricultural Economics and Rural Sociology (DAERS) include the master of science and master of agriculture in agricultural economics or rural sociology, as well as the applied economics PhD.

Admission to any masters program requires a related bachelor’s degree from an accredited institution with 15 semester hours in related courses including economics, sociology, statistics, or related subjects accepted by the Graduate Committee.

The MS in agricultural economics requires a minimum of 30 semester hours of graduate credit with up to 6 hours of thesis research. At least 20 hours must be in DAERS for the major and the remaining 6 may be in closely related areas. There is a non-thesis option with 36 hours of courses. The program of study, including course work and thesis, will be planned in a field of interest including agricultural marketing, production economics, markets and prices, resource economics, environmental economics, agricultural finance, agricultural policy, international economics, or farm management.

Graduate study in rural sociology in either the MS or MA degree is available through the interdepartmental graduate program involving rural sociologists from DAERS as well as sociologists and anthropologists from the Department of Sociology, Anthropology, and Social Work and the Department of Sociology at AUM. More information can be found in the Interdepartmental Programs.

The master of agriculture in either agricultural economics or rural sociology requires 32 graduate credit hours, 18 in the major, as approved by the advisory committee. A final oral examination is given by the advisory committee.

The MBA in agribusiness or natural resources and environmental management is offered in coordination with the College of Business. Requirements include 36 graduate credit hours with 24 hours in business and 12 hours in agricultural economics or a closely related area approved by the director of the MBA program and the major professor in DAERS.

The Applied Economics PhD involves faculty in the Department of Economics and the School of Forestry. Students must complete 42 credit hours beyond a master’s degree or 60 hours beyond a bachelor’s degree, plus at least 10 hours of dissertation research. Students must also pass written preliminary examinations in microeconomics, macroeconomics, and econometrics. There is an oral examination on the field and proposed dissertation research, and a final oral defense of the dissertation.

Agronomy and Soils - MS, MAg, PhD
Graduate training in this department enables outstanding students to achieve a high level of scholarly attainment in the soil, crop and environmental sciences. Within these broad areas, research training and experience may be gained in the specialized fields of soil fertility and plant nutrition; soil chemistry; soil genesis, morphology and classification; soil mineralogy; soil physics; soil microbiology; plant breeding and genetics; weed science; forage, fiber, bioenergy and grain crop production; crop ecology; environmental quality; and turf management.

There is no specific schedule of courses for graduate students in this department. Candidates for advanced degrees should have adequate training in basic sciences. The Graduate Studies Committee evaluates each applicant’s record and determines prerequisite deficiencies. Qualified students lacking prerequisite subjects can be admitted, but will be required to complete course work to satisfy deficiencies. After clearing pre-requisites, the course of study is determined by the student and advisory committee. Students are encouraged to take courses offered by other departments, especially those offered in chemistry, entomology, plant pathology, plant physiology, physics, botany, statistics, zoology,
The Graduate School

and horticulture.

There is no foreign language requirement.

Three degrees are offered: 1) master of science (MS), earned only under the thesis option; 2) master of agriculture (MAg) earned under the non-thesis option; and 3) doctor of philosophy (PhD), which requires a dissertation. The department also participates in the interdisciplinary minor in environmental studies.

Graduate students in a program requiring a thesis or a dissertation will register for at least one hour of AGRN 7990 or AGRN 8990 per semester. Research Associates and similar classifications who also are graduate students are exempt from this requirement but must complete 10 hours of 7990 in the master’s program or 20 hours of 8990 in a PhD program.

Animal Sciences - MS, MAg, PhD

Graduate study in animal sciences is directed toward the master’s and doctoral degrees. The master of agriculture (MAg) is offered as a non-thesis degree and prepares students for careers in secondary education, Cooperative Extension and agribusiness. Graduate programs leading to the MS and PhD degrees provide advanced education and technical training in preparation for careers in public and private sectors related to animal science and technology, food science and technology, animal biotechnology, agribusiness and university-level research and education. Areas of specialization include animal nutrition, biochemistry and molecular biology, microbiology, behavior, growth biology, meat science and muscle biology, quantitative genetics and reproductive biology. Interdepartmental minor programs in cell and molecular biosciences, ecology and environmental sciences are also available.

The MAg degree requires successful completion of a minimum of 30 credit hours, 21 of which must be in the agricultural or related sciences. Additional courses may be required for individual students. Admission to the MS degree program requires that student have the bachelor’s degree or evidence satisfactory progress toward attainment of the bachelor’s degree in animal sciences or a related area. Applicants lacking suitable preparatory course work in the basic sciences will be required to correct deficiencies by satisfactorily completing additional courses. The MS requires a minimum of 30 credit hours of graduate work, including at least 21 credit hours in the major field of study. The remainder may be in a minor area selected by the student and upon approval by the advisory committee. A research-based thesis is required.

Admission to the PhD degree program usually requires that the student have a master’s degree from a recognized graduate program. However, evidence of exemplary potential may be considered as a criterion for admission with a bachelor’s degree. The doctoral program emphasizes original, scholarly research and includes significant advanced course work. The PhD degree requires a minimum of 60 credit hours beyond the bachelor’s degree and a dissertation describing original research. There is no foreign language requirement, but knowledge of a foreign language may be recommended by the student’s advisory committee.

All graduate students receiving departmental assistantships are expected to be engaged in service to the department’s research and educational programs. Graduate programs are deemed appropriate by the academic advisor and department head. All MS and PhD students must register for at least one credit hour of thesis or dissertation research each term. Classified (FLSA-exempt) research associates holding full admission status in the Graduate School for work toward a graduate degree are exempt from this requirement, but must complete 10 hours of thesis research in a MS program or 20 hours of dissertation research in a PhD program following completion of a master’s degree. A PhD degree program undertaken by classified (FLSA-exempt) research associates but not preceded by a master’s degree must include 30 hours of dissertation research credit.

Audiology Program – AuD

The Department of Communication Disorders offers a first professional degree program of study, the doctor of audiology (AuD) degree. The program is environmental studies. The doctor of audiology (AuD) program is designed to provide students with academic and clinical practicum experiences that will meet or exceed the requirements of the American Speech-Language-Hearing Association (ASHA) for the Certificate of Clinical Competence in Audiology (CCCAUD).

The academic and clinical components of the doctor of audiology program interact in a logical manner as the curriculum progresses over a four year period. A total of 129 hours are required for the degree. The early portion of training is largely academic and the later portions involve mostly applied clinical work. Thus, as the program progresses, the balance of academic and clinical work changes substantially.

During the first two years of the program the emphasis is largely on academic preparation for clinical work. This begins with the bases of clinical audiology which includes courses in research methods, neurology, hearing science, and counseling. In the second year of the academic program the student is exposed to coursework in auditory disorders and clinical methods. Courses include hearing disorders, hearing instruments, aural rehabilitation, central auditory processing disorders, auditory brainstem response, electroneurophysiography and pediatric audiology. In the third year of the program, academic courses are largely involved with advanced seminars on current issues in clinical practice and the completion of an applied clinical research project or “capstone experience.” During this third year of the program students are engaged in a series of intensive clinical internships at local off-campus clinical settings. Students must intern at different clinical settings during the third year and they return to campus to participate in seminars and work closely with their major professors on their capstone project.

In the final year of the program students will participate in a clinical residency during which they will work full-time for a period of nine months. Clinical residencies may be done at any facility in the United States where a certified audiologist agrees to supervise the student within ASHA guidelines.

Biological Sciences - MS, PhD

The Department of Biological Sciences offers graduate training leading to the MS and PhD degrees in biological sciences; a non-thesis master’s degree is optional. Candidates for advanced degrees should have an undergraduate degree in an appropriate area from an accredited institution, with adequate training in biology, chemistry, physics and mathematics. Qualified students lacking pre-requisite subjects can be admitted, but may be required by the departmental graduate studies committee to make up the pre-requisites. A satisfactory score on the general GRE is required (suggested minimums of 500 on verbal and quantitative tests).

A major of at least 30 and 60 semester hours may be taken for the MS and PhD degrees, respectively. MS and PhD students must present at least one departmental seminar on their research during the semester of their oral or final examination. There is no foreign language requirement.

Interdisciplinary minors may be taken in biochemistry, cell/molecular biology, ecology, environmental studies and plant, animal, or microbial molecular biology.

Biosystems Engineering - MS, PhD

Graduate study in the Department of Biosystems Engineering may lead to the master of science or doctor of philosophy through cooperative relationships with other units at Auburn University. Depending on the area of research interest, the student may pursue an MS or PhD degree in chemical engineering, civil engineering or mechanical engineering with an emphasis on a biosystems engineering problem. All applications are reviewed by graduate admissions committees in biosystems engineering and chemical, civil, or mechanical engineering. Applicants must meet admission requirements of the respective cooperating department (i.e. either chemical, civil, or mechanical engineering) and they must indicate at the time of application submission that they are interested in working on a biosystems engineering research problem. Students will be assigned an advisor in biosystems engineering that will serve as the co-chair of their supervisory committee. The student and committee co-chair will develop a supervisory committee composed of faculty from Biosystems Engineering and at least one faculty member from the cooperating department. The plan of study developed by the student in consultation with the supervisory committee will meet the requirements of the particular graduate program (i.e. Chemical, Civil, or Mechanical Engineering). In addition, it is expected that the plan of study will contain courses specifically focused on biosystems engineering and related to the research area. Additional details about the requirements, assistantships, and policies for graduate study in the Biosystems Engineering department are available on the Web at www.eng.auburn.edu/bio.

Building Science - MBC

The McWhorter School of Building Science offers the master of building construction.

The McWhorter School of Building Science’s non-thesis master of building construction program provides its students with an unparalleled educational experience. From conceptual idea to post-occupancy of buildings, the degree content offers a practical and industry-oriented study
of the interdisciplinary and collaborative processes involved in the design, construction, financing and management of the built environment.

For students holding an accredited undergraduate degree in construction, the curriculum consists of 35 semester hours of academic credit, including a core of BSCI graduate courses, taken over a period of three academic terms beginning in the fall of each year.

Students with undergraduate degrees in areas other than construction will embark on their graduate careers here at Auburn beginning with a series of five foundation courses commencing the summer term prior to fall admission. Upon successful completion of these classes, their course of study will merge with the other graduate students during fall semester, and may be completed in four academic terms, for a total of 50 hours.

Admission to the master of building construction is competitive, and enrollment is limited. The admissions committee considers GRE scores, undergraduate GPA, educational background, letters of recommendation, prior construction industry experience, and other relevant information.

**Business Administration - MBA, MS, PhD**

Graduate programs in Business are fully accredited by the Association to Advance Collegiate Schools of Business (AACSB) and include the master of business administration, the master of science (in economics, finance, or human resource management) the master of accountancy, the master of management information systems, the master of science and the doctor of philosophy in management.

Application for admission to graduate programs in Business should be made directly to the Graduate School, with follow-up materials (including letters of recommendation and essays) as required to the specific program. The application should be accompanied by test scores on the Graduate Management Admission Test (GMAT), except for applications to the MS in Economics which should be accompanied by test scores on the Graduate Record Examinations (GRE). Supplemental application forms are also required for the MBA program.

**Chemical Engineering - MChE, MS, PhD**

The Chemical Engineering Department offers graduate programs leading to the degrees of master of science and doctor of philosophy. Specialized courses and research training are provided in a wide variety of specialties within chemical engineering or related interdisciplinary areas. Some of these specialties include: surface science, biochemical engineering, catalysis, pulp and paper engineering, environmental engineering, waste conversion, computer-aided process design and simulation, novel bioseparations systems, chemical kinetics and reactor design, biomedical engineering, process control and optimization, thermodynamics, advanced energy research, mass and energy transfer, electrochemical engineering, polymer engineering, interfacial phenomena, process synthesis, material science, nanotechnology, and space science. Additionally, individualized interdisciplinary programs which cross the traditional departmental boundaries are encouraged. These may include collaborative work in chemistry, engineering disciplines, physics, mathematics, agriculture, forestry, biology, microbiology, genetics and health sciences or other areas.

The applicant must hold a bachelor’s degree or its equivalent from an institution of recognized standing and must have the pre-requisite undergraduate experience in areas of study relevant to the proposed graduate program. If the applicant’s undergraduate degree is other than chemical engineering, an individualized plan of study will be developed to impart the critical skills inherent in the bachelor’s chemical engineering program. All applicants will be evaluated on an individual basis by the Chemical Engineering Graduate Committee.

The master of science may be earned only under the thesis option. There is no language requirement for this degree. A total of 30 semester hours of work is necessary, including formal courses, seminars and directed reading. Students select three of the following core courses: CHEM 7100, CHEN 7110, CHEN 7200 and CHEN 7250. Each student may include advanced undergraduate courses (9 hours) in areas of interests.

The master of chemical engineering, a non-thesis degree oriented toward engineering design and practice, is also offered. It has no residency requirement and can be earned entirely through the Engineering Outreach Program. The degree requires 32 semester hours with a minimum of 16 at the 7000 level. In-depth understanding is provided through a minimum of 21 graduate course hours in the major, chemical engineering, plus eleven graduate course hours in technical electives from engineering, science, mathematics, or business which are tailored individually to the student’s background and interests. There are three core courses: CHEM 7100, CHEN 7200 and CHEN 7250.

The doctor of philosophy provides for advanced course work and emphasizes original, creative research. A dissertation embodying the results of this research represents the major portion of the requirements for this degree. A minimum of 60 semester hours of graduate work past the bachelor’s degree is necessary. Each student may include 10 hours of research dissertation as a part of the 60 hours.

Four calendar years beyond the bachelor’s degree or three past the master’s degree usually are needed to complete the PhD.

The written General Examination is based on the evaluation of performance in core graduate courses: CHEM 7100, CHEM 7110, CHEN 7200, CHEN 7250.

There is no language requirement for the PhD.

**Chemistry and Biochemistry - MS, PhD**

Graduate study in chemistry leads to the M. S. and PhD degrees. Entering students must take four of the five required core courses: CHEM 7100, CHEM 7200, CHEM 7300, CHEM 7500 and BCHE 7200, with the consent of their advisor. By the end of the second semester, graduate students must submit a plan of study which details the courses which will be taken. This is done with the assistance of the major professor and with the consent of the student’s advisory committee. For the MS the plan of study will consist of a minimum of 30 hours, including the core courses listed above (12 hours); CHEM 7990 (4 hours), CHEM 7750 (1 hour), CHEM 7950 (4 hours). For the PhD 60 hours of courses must be completed. These must include the core courses listed above (12 hours), CHEM 8990 (10 hours), CHEM 7750 (2 hours), CHEM 7950 (6 hours). The rest of the courses usually are taken in the major area. Directed Study, CHEM 7930, may be taken for a maximum of 15 hours. MS students must pass three cumulative examinations; PhD students must pass 6 cumulative exams and an oral general examination. All graduate students must orally present their research and defend their theses or dissertations in the final oral examination.

**Civil Engineering - MCE, MS, PhD**

The Department of Civil Engineering offers graduate-level instruction and research programs leading to the degrees of master of civil engineering, master of science and doctor of philosophy. The objectives of these programs are to provide qualified students opportunities for advanced training and specialization and to enable them to gain experience in conducting engineering research and in the interpretation and communication of their findings. The department offers programs in construction engineering and management, environmental engineering, geotechnical engineering, hydraulics/hydrology, pavements and materials, structural engineering and transportation engineering. Course work may be individualized, the student’s primary research area being selected with supportive disciplines such as applied statistics, building science, computer science or mathematics, provided there is justification for doing so. All applicants must have earned a baccalaureate degree in civil engineering - BCE, BS or BSCE - or a closely related area and must have completed such formal training as to warrant advanced study in the major and minor fields. There is no formal foreign language requirement. A thesis is required of all candidates for the MS. A minimum of 30 semester hours of graduate-level course credit must be completed satisfactorily. At least six of the 30 hours must be in CIVL 7990 and at least 24 hours must be in graduate course work other than CIVL 7990. Candidates must pass a comprehensive examination covering the course work, research and thesis.

Admission requirements for the master of civil engineering are basically the same as those for the MS. The program consists of a minimum of 30 semester hours of graduate- level courses. At least three of the 30 hours must be in CIVL 7980 and at least 27 hours must be in graduate course work other than CIVL 7980. Candidates must pass a comprehensive examination covering the course work and the engineering project involved.

PhD program applicants must have earned the master’s degree in civil engineering or a related area, or must have completed at least a year of study at the graduate level. Performance in either case must have been of such quality as to justify admission to the doctoral program.

The PhD is conferred in recognition of mastery of a specific field of knowledge and a contribution to that engineering discipline through the doctoral dissertation. The degree is a research degree, requiring not only completion of certain technical requirements but proof of the candidate’s ability to work independently within an engineering research environment. A doctoral student must complete a written comprehensive examination
with a follow-up oral critique administered by the student’s advisory committee. The examination may not be taken sooner than one year after the student begins doctoral course work. Additional course work may be prescribed to strengthen deficiencies where examination results indicate a lack of significant academic preparation or the student may be denied the right to continue in the program. One retake may be permitted but no earlier than one year after initial failure. Upon successful completion of the examination, the student becomes a candidate for the PhD.

After successfully completing the comprehensive examination, the doctoral candidate will defend the selected dissertation topic, which must represent a significant contribution to state-of-the-art knowledge. This may be included in the oral critique of the comprehensive examination if the advisory committee agrees. Once the committee approves the research topic, the doctoral candidate may proceed with the research and dissertation. When it is completed, the candidate will defend the completed dissertation before the advisory committee and the outside reader appointed by the Graduate School.

**Communication - MA**

The graduate program offers the master of arts. Applicants must hold bachelor’s degrees from accredited institutions. The MA-thesis requires 31 hours beyond the bachelor’s degree, including a thesis. The MA-non-thesis requires 30 hours beyond the bachelor’s degree, including appropriate field experience, but does not require a thesis. Students entering either program without a bachelor’s degree in communication must earn an additional 9 credit hours at the graduate level.

The Communication major requires 31 semester hours in Communication for the MA-thesis and 30 for the MA non-thesis, including COMM 7000, COMM 7010, and COMM 7020. Students must pass a written qualifying examination covering COMM 7000, COMM 7010, COMM 7020 at the completion of these three courses before continuing their program. All students must pass comprehensive examinations.

There is no foreign language requirement.

**Communication Disorders - MCD, MS**

The Department of Communication Disorders offers a program in Speech-Language Pathology which is accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association (ASHA).

Two degree options are available; neither has a language requirement. The master of science (MS) requires a minimum of 41 hours of graduate course work, including CMDS 7990, Thesis. CMDS 7920, Field Experience, is optional, depending on clinical experience. The master of communication disorders (MCD) requires a minimum 43 hours of graduate course work and appropriate field experience. This is a non-thesis degree but it does require the passing of a comprehensive examination.

Master’s-level candidates who enter the communication disorders programs having majored in another field at the undergraduate level must make up certain pre-requisites. This is to ensure an adequate background for the graduate-level courses and that the student will meet the academic requirements for ASHA certification and state licensure. Generally, 10 such courses are prescribed by the student’s advisor. Enough latitude exists that a plan of study may be designed according to the student’s career interests; however, the curriculum planned must conform to academic and practicum requirements for ASHA certification and Alabama licensure. Students then are prepared for careers in school systems, clinics, hospital/rehabilitation centers, physicians’ offices, private practice and for pursuing the doctoral degree.

**Community Planning - MCP**

Graduate study in the community planning degree program leads to the professionally accredited master of community planning (MCP). The program is devised to prepare students with diverse backgrounds for careers in the practice of community planning in both the public and private sectors. The field of community planning demands creativity, technical competence and procedural sensitivity in the search for better communities. Graduates must be skilled at describing and analyzing urban processes and conditions; at creating and evaluating alternatives to shape future growth and development; and at devising and recommending appropriate mechanisms for the implementation of their proposals. The program offers joint degree options with architecture, landscape architecture and public administration (each of which requires a separate application). Students may complete a minor in Economic Development. Entering students must hold a degree from an accredited institution and have acceptable GRE scores. Students will normally complete the required work in two academic years. Studies include a core sequence of required courses, required seminars on focused topics within the field, directed electives, and an individual synthesis project or comprehensive examination undertaken during the final year.

**Computer Science and Software Engineering - MSwE, MS, PhD**

Graduate study in the Department of Computer Science and Software Engineering (COMP) leads to the non-thesis master of software engineering (MSwE) or research oriented master of science (MS) and doctor of philosophy (PhD) degrees in computer science and software engineering. All applications are reviewed by the COMP Graduate Admissions Committee.

To enter the MS or the MSwE, the student must hold a bachelor’s degree or its equivalent from an institution of recognized standing. The student also must have the pre-requisite undergraduate experience in areas of computer science and/or software engineering. If the student has deficiencies in the pre-requisites, he or she will be required to take appropriate undergraduate courses. All applicants must submit Graduate Record Examination scores for the general test.

The MS program requires 30 semester credit hours, including six credit hours for research and thesis. The MSwE program requires 33 semester credit hours, including three credit hours for the software engineering design project. There is no language requirement.

For the PhD program, the applicant must hold a master’s degree or have successfully completed a minimum of one academic year of graduate study, from an institution of recognized standing in an area related to the proposed doctoral study. All applicants must submit GRE scores for the general test. The student will take a written qualifying examination soon after gaining admission to the program. Additional examinations, as described in the general Graduate School requirements, are given throughout the program, culminating with the defense of the dissertation. There is no language requirement for the PhD. The program typically includes at least one academic year of course work and one year of research beyond the master’s level. The PhD program requires a minimum of 66 semester credit hours of course work beyond the bachelor’s level, including 18 hours of research and dissertation.

**Consumer Affairs - MS, PhD**

Graduate study in the Department of Consumer Affairs, College of Human Sciences, leads to the master of science and the doctor of philosophy. Major focus areas are apparel design or merchandising, interiors, and consumer behavior. The department emphasizes integration of basic and applied knowledge from multiple fields to enhance professional skills for careers in textile and apparel product development and design; production management; retail management; merchandising in textile and apparel retail; retail management; interior design with a health care design focus; international retailing; design and product development; and entrepreneurship. Students are encouraged to complete an internship with industry. At least 21 semester hours must be in apparel, interiors, or consumer-related courses.

The MS in Consumer Affairs - Apparel or Interiors offers a Thesis and a Non-Thesis Option. Individually designated focus areas incorporate courses in Consumer Affairs and other departments. Designated specialization tracks include consumer behavior; forecasting; marketing; production management; retail management; interior design with a health care design focus; international retailing; design and product development; and entrepreneurship. Students are encouraged to complete an internship with industry. At least 21 semester hours must be in apparel, interiors, or consumer-related courses.

The Thesis Option requires a minimum of 30 semester hours, including at least four hours of CAHS 7990 Research and Thesis. Required courses include CAHS 7050, CAHS 7950, CAHS 7990 (2 hour minimum each semester during thesis research), ITAS 7200, a course in statistics at the graduate level, plus three additional hours outside the department.

The Non-Thesis Option requires a minimum of 36 semester hours, including CAHS 7050, CAHS 7950, CAHS 7980, ITAS 7200 and a course in statistics at the graduate level plus three hours outside the department. A Final Comprehensive Written Exam is required.

A joint PhD in Integrated Textile and Apparel Science is offered through the Department of Consumer Affairs, College of Human Sciences and the Department of Polymer and Fiber Engineering, Samuel Ginn College of Engineering (See Interdepartmental Graduate Degrees). The focus is on the integration of textile science and apparel science within a research based product management approach for application in the global textile
students should allow at least four semesters for completing alternative master’s degree certification programs. Upon satisfactory completion of alternative master’s degree certification programs, students are awarded MEd degrees and are eligible for Alabama A certificates. Entrance into the alternative master’s degree certification programs in Secondary Science is highly encouraged for the summer term.

Candidates in alternative master’s certification programs are required to participate in the Alabama Prospective Teacher Testing Program including submitting a passing score on each of the Basic Skills Assessments (Applied Mathematics, Reading for Information, and Writing) and a passing score on the appropriate Praxis II subject assessment prior to internship. Graduation requirements for traditional master’s programs in Reading Specialist and English for speakers of other languages include a passing score on the appropriate Praxis II subject assessment.

Specialist in Education degree programs require at least 30 semester hours beyond the master’s degree, including additional course work in professional education and the teaching field. Candidates must also complete a field project.

Doctor of philosophy programs are offered in early childhood, elementary, secondary English language arts, secondary mathematics, secondary science, secondary social science, music, and reading education. A doctor of education program is offered in career and technical education. All PhD programs require at least 80 semester hours beyond the bachelor’s degree; the EdD program in career and technical education requires at least 80 semester hours beyond the bachelor’s degree. Research methods and statistics and foundations of education courses are components of all doctoral programs. The remaining hours are divided between the area of specialization and approved support courses. Plans of study for students in secondary education fields must contain at least 30 semester hours of graduate courses in the appropriate teaching fields. Doctoral students must register for at least 10 semester hours of doctoral research while completing a dissertation.

Design-Build - MDB

The Master of Design-Build program at Auburn University is designed to prepare graduates for success in a new paradigm of integrated project delivery, and to prepare students who will be the professionals leading the future evolution of the design and construction industries. In the U.S., these industries are experiencing significant changes in the relationship between their respective professionals and the delivery systems they employ. Through a variety of models, these formerly fragmented professions are now crafting new ways of working together – and exploiting new collaboration technologies - to create more efficient, economical and sustainable projects in the built environment.

Historically, architecture and construction management students have been trained in separated academic environments that did not capitalize on opportunities to work collaboratively. The Master of Design-Build program at Auburn University seeks graduate students from the design, engineering and construction disciplines who will embrace teamwork, collaboration, and empathy between the differing roles and responsibilities of their counterparts. Commensurate with its mission, the degree will be offered through two tracks: one based on a studio teaching format and designed for graduates aiming for a design-based career path; the other grounded in construction management and designed for graduates interested in a construction-based career path. Each track includes significant collaborative opportunities in the design studio and classroom. Both tracks are three semesters (Fall-Spring-Summer), after which successful candidates would be awarded the Master of Design-Build degree.

The 36 credit-hour program features a refined focus that is unique; jointly housed in the School of Architecture and the McWhorter School of Building Science. Through current models of professional practice, it will deliver the development and study of high performance projects in the built environment via a dynamically collaborative and integrated framework. Among other tools, the program will capitalize on a new generation of digital resources such as BIM, parametric modeling, web-based shared work environments, and other innovations to facilitate collaboration.

See the program’s Web site at www.cadc.auburn.edu/design.build; send inquiries to design.build@auburn.edu.

Economics - MS

Graduate study in economics leads to the MS degree. The graduate program prepares students for careers in business, teaching, government agencies and advanced study in economics at doctorate-granting
The Graduate School

Electrical and Computer Engineering - MEE, MS, PhD

Electrical and Computer Engineering (ECE) offers graduate programs of instruction and research leading to master and doctoral degrees. Instruction is offered and research facilities are available to support graduate study in control systems, digital signal processing and communications, wireless engineering, electromagnetics modeling and analysis, microelectronics, power systems, digital systems, and computer engineering. Additionally, individualized programs that cross the traditional boundaries of engineering, mathematics and the sciences can be accommodated.

For admission at the master’s level, the applicant must hold a bachelor's degree or its equivalent from an institution of recognized standing. Master's degree programs are available to graduates of engineering curricula and, in cases of exceptional academic credentials, to graduates of mathematics and science curricula.

An applicant for admission to the PhD program must hold a master’s degree, or have taken a minimum of one academic year of graduate study, from an institution of recognized standing in an area of study related to the proposed doctoral work. An applicant who holds a bachelor's degree in electrical or computer engineering and has exceptional academic credentials may apply for direct admission to the PhD program.

All applicants must submit Graduate Record Examination scores for the General Test, three recommendation letters, a statement of purpose, and a resume. International applicants must also submit scores for either the TOEFL or IELTS exam.

Applications for admission are reviewed by the departmental graduate faculty. Decisions are based upon the applicant's potential for success in advanced-level study as indicated by letters of reference, GRE scores and previous academic achievement.

The MS degree program of study (the thesis option) requires a minimum of 30 semester hours of work, including 4 to 6 semester hours of research and thesis. MS students must spend at least one semester of full-time study in residence. The MEE degree program (the non-thesis option) requires 33 semester hours of work, including a 3 semester hour project. Both masters programs must include courses in at least three of the major research areas in ECE, no more than 3 semester hours of independent study, and a final examination on either the thesis or the non-thesis project.

Students admitted to the doctoral program will take a written qualifying examination soon after entering, covering fundamental undergraduate material in ECE and first-year graduate material in the major area of study. Additional examinations are given throughout the program. The program generally consists of a minimum of 60 semester hours of course work beyond the bachelor’s level, including at least 10 hours of research and dissertation. A minor of at least 9 semester hours in a closely related field outside of the major area of study, either within or outside of ECE, is required.

English - MA, MTPC, PhD

The Department of English offers programs leading to the master of arts, master of technical and professional communication, and the doctor of philosophy. The graduate program prepares students for careers in teaching and research, writing, editing, business, and other professions seeking broadly educated individuals skilled in analysis and communication. (In addition, individuals holding a teaching certificate may, with an additional graduate course in Communication, earn Alabama Class A or AA certification under a state-approved Strengthened Subject Matter Option program in English/Language Arts.)

For admission to the MA program, the student must normally have a bachelor's degree from an accredited institution with the equivalent of 24 semester hours of credit in upper-division English courses and satisfactory scores on the general portion of the GRE. Qualified applicants with undergraduate degrees in related disciplines will also be considered. Applicants should also submit three letters of recommendation, a sample of their writing and a statement of purpose. Applicants lacking the required undergraduate courses must typically make up these deficiencies before they can be admitted to the degree program. For the MA, students may select a thesis or non-thesis option. The thesis-option requires a minimum of 30 credit hours, including at least four hours of thesis credit. The non-thesis option requires a minimum of 30 credit hours of course work. With the approval of their advisory committee, students in either option may take up to six hours in a minor field. Special concentrations are possible in creative writing (with a creative thesis in poetry or fiction) and in rhetoric and composition. Students must take a four and one-half- or six-hour
written examination over a departmental reading list. Thesis-option students also take a one-hour oral examination over the completed thesis. Students in master’s options must demonstrate a reading knowledge of one foreign language.

For admission to the master of technical and professional communication program, the student must normally have a bachelor’s degree from an accredited institution, satisfactory scores on the general portion of the GRE, and excellent writing skills. The MTTPC requires a minimum of 30 credit hours, consisting of four required courses (ENGL 6000 Technical and Professional Editing, ENGL 6010 Document Design in Technical and Professional Communication, ENGL 6030 Topics in Technical and Professional Communication, and ENGL 7010 Technical and Professional Communication: Issues and Approaches), nine hours of elective courses in English approved by the student’s advisory committee, and nine hours in a coordinated minor approved by the student’s advisory committee. Students must complete a portfolio of work accepted by the student’s advisory committee and pass an oral examination over the major and minor.

For admission to the PhD program, the student must normally have a master’s degree in English and satisfactory scores on both the general portion of the GRE and the subject test. Applicants should also submit three letters of recommendation, a sample of their scholarly writing and a statement of purpose. The PhD requires a minimum of 60 credit hours beyond the BA, including 10 hours of dissertation credit. Students with an MA in English from other institutions usually need only eight or nine additional courses. After completing course work, students take general doctoral examinations, both written and oral, over three related areas. These areas might include historical periods, a genre, a major author, language and linguistics, or a problem in literary theory, British or American literature. There are no required courses or area distribution requirements; however, students should be able to demonstrate a broad knowledge of English studies at their examinations. After passing these examinations, students write and defend a dissertation. Doctoral students must demonstrate a reading knowledge of two foreign languages or advanced proficiency in one foreign language.

The department offers financial aid in two forms, fellowships and assistantships. Graduate Teaching Assistantships are generally available for the most qualified students. The typical teaching appointment is just under half-time. Assistantships are renewable, provided that students teach satisfactorily and make adequate progress toward the degree. A few outstanding applicants also receive first-year fellowships. Review of applications for financial aid will begin on Jan. 15.

Entomology - MS, MA, PhD

Graduate Degree Program study in entomology emphasizes basic and applied aspects of the science of entomology and leads to the degrees of master of science, master of agriculture and doctor of philosophy. Admission is based primarily on a combination of GPA and Graduate Record Examination scores. The graduate program prepares students for careers in teaching, research and extension with a variety of academic, governmental, state, private and industrial opportunities.

Master of science (MS) For a major in entomology at the MS level, the student should have a baccalaureate degree from a recognized institution with pre-requisite training in zoology, botany, chemistry, physics, and mathematics. Qualified students lacking mandatory courses may be admitted but will be required by the student's advisory committee to make up any deficiencies.

The MS program in entomology is available to qualified individuals who wish to pursue a master’s level program that requires a thesis. Importance is placed on both classroom and research training. Students holding baccalaureate degrees in agriculture or the biological sciences may find this degree program helpful to their professional development and career goals. The educational goals and objectives of the MS degree program are to produce graduates who are fundamentally trained in the scientific principles and general knowledge of entomology and related sciences and who are able to apply these principles to successfully solve problems of an entomological nature or employ this knowledge at the advanced level of study and/or apply these principles to solve problems of an entomological nature. The PhD program requires 61 semester hours of course work, including 14 core semester hours (ENTM 7200, 6440, and 6300), ENTM 8950, and a dissertation based on the student’s original research. A graduate-level course in statistics is also required. Of the 61 semester hours, 30 must be graded graduate courses 6000 and above, 20 of which must be completed under the 09 classification at Auburn University while registered in the PhD program. A doctoral student must also complete 30 hours of additional course work (may include ungraded courses and 7990, 8990). There is no language requirement for the PhD.

Finance - MSBA

The MSBA program offers specialized training to graduate students desiring a more intense background in the field relative to the general preparation provided by an MBA The objective of the program is to prepare students for careers in their chosen profession or for further graduate work. The program has a thesis and non-thesis option (the non-thesis option requires additional course work). The program of study is determined by the student and the student’s advisory committee based on the student’s background and areas of interest.

Fisheries and Allied Aquacultures - MA, MS, PhD

Graduate study in the Department of Fisheries and Allied Aquacultures leads to the degrees of master of aquaculture, master of science and doctor of philosophy. The program prepares students for productive careers in the private and public sectors in aquaculture, aquatic ecology, and fisheries biology and management.

Students desiring admission for graduate study should have a degree from a recognized institution and should have adequate course work in biology, zoology, botany, chemistry, physics, and mathematics. Qualified students lacking an adequate background in these areas may be admitted but may be required to correct deficiencies after they enroll at Auburn.

The non-thesis master of aquaculture degree is offered to students seeking broad practical training and preparing for a career in aquaculture management. The degree requires successful completion of a minimum of 39 semester credit hours which includes a 3 to 6 - month internship. A minimum of 9 credits must be taken from other departments, 6 of which are required in business-related courses.

The master of science degree combines classroom study and an introduction to scientific research. A minimum of 30 semester credit hours are required. At least 9 hours must be taken from other departments. Admission to the doctor of philosophy degree program usually requires that the student have a master’s degree from a recognized graduate program. The doctoral program emphasizes original, scholarly research and includes significant advanced course work. The PhD requires a minimum of 60 semester credit hours beyond the bachelor’s degree and a dissertation describing original research. A minimum of 30 hours must be graded graduate courses, 20 of which must be taken at Auburn University.

All graduate students are expected to be engaged in service to the
department's research and education programs as deemed appropriate by the academic adviser and department head. All students receiving departmental assistantships must be registered as full-time students each semester, and all MS and PhD students must be registered for at least one credit hour of thesis and dissertation research each semester.

**Forestry - MNR, MS, PhD**

Graduate study in forestry leads to master of natural resources (MNR), master of science (MS), and doctor of philosophy (PhD) degrees. Three MNR options are available. One, for students with undergraduate degrees in forestry, involves primarily advanced course work and can be completed in one year. A second MNR option is for individuals with baccalaureate degrees in fields other than forestry that are interested in becoming Registered Foresters in Alabama. This option is a two-year program which begins with a 10 week summer Field Practicum. The third MNR option is for individuals with a biologically related baccalaureate degree that are interested in careers in the management and policy making for our natural resources. This option can be completed in 3-4 semesters depending upon coursework selected. The MS program, which involves research and a thesis, and normally requires two years for completion, can be tailored for students with degrees in forestry, the biological sciences, physical sciences, economics, engineering and business. MS and PhD degrees are offered in the fields of forest biology and ecology, forest measurements, forest management/economics, timber harvesting/forest operations and forest products. A PhD in economics is also offered through the interdepartmental program in economics which is administered jointly by the Department of Agricultural Economics and Rural Sociology and the School of Forestry and Wildlife Sciences. An urban forestry minor, administered in cooperation with the Department of Horticulture, is available for MNR, MS, and PhD degrees.

In addition to meeting admission requirements of the Graduate School, applicants are evaluated and recommended for admission by the graduate faculty of the School of Forestry and Wildlife Sciences on the basis of a holistic examination of their scores on the Graduate Record Examination (GRE), their previous academic record, experience, and recommendations. While the following are not absolutes, the faculty generally expects a minimum GPA of 3.0 in previous academic course work and minimum scores of 450 on the verbal and 550 on the quantitative element of the GRE. Applicants not holding a BS in forestry may be required to take necessary background courses. These needs are determined by the student's advisory committee and approved by the dean with due consideration for the student's previous training and experience. There is no foreign language requirement for any of the graduate degrees. The MNR option for students with an undergraduate degree in forestry requires a minimum of 36 semester hours of graduate courses. The MNR option for students with a baccalaureate other than forestry and interested in becoming Registered Foresters requires a minimum of 70 semester hours (34 hours of specified undergraduate course work plus 36 hours of graduate course work). The MNR option for students with a biological baccalaureate requires a minimum of 36 semester hours of graduate course work. All three MNR options include a MNR paper (FORY 7980), Graduate Seminar (FORY7950), and assist with one course during their degree in Practicum for College Teaching (FORY7910).

The MS degree program requires a minimum of 30 hours beyond the bachelor degree at the graduate level, 21 hours of which must be in the major. A minimum of 4 but not more than 6 hours in Research and Thesis (FORY7990) is required. All MS students are required to take Research Methods (FORY7510), Seminar (FORY7950), and assist with one course during their degree in Practicum for College Teaching (FORY7910). A research proposal and thesis based on original research are major components of the MS degree.

The PhD degree requires 60 semester hours beyond the bachelor degree. There must be a minimum of 30 semester hours in graded coursework at the 7000 level or above. Of the remaining 30 semester hours, 10 hours must be Research and Dissertation (FORY8990) and 20 hours of 6000 level or above. While some these 60 hours can be from previous graduate work, such as a MS degree, a minimum of 18 hours of graded coursework at the 6000 level or above must be completed at Auburn. All PhD students are required to take Research Methods (FORY7510), Seminar (FORY7950), and Practicum for College Teaching (FORY7910). A research proposal and dissertation based on original research are required as major components of the PhD degree program. Additional information on forestry graduate programs and degree requirements can be found at www.sfws.auburn.edu/.
degree (of which 43 must be at the 7000 or 8000 level exclusive of thesis or dissertation credit), including HIST 8700, 8710 and a dissertation. Candidates must demonstrate excellence in their major field of history and competence in two minor fields of history on their general examinations. In addition, students must take a minimum of 6 hours of course work outside the major fields, the six minor fields, the six minor be taken in an area other than history. Major fields in history include (1) United States to 1865 (2) United States since 1865 (3) Europe 1500-1815 (4) Europe since 1789 (5) History of Technology. Latin American and World History are offered as minor fields. A specialization in archival studies is also offered for graduate students who wish to prepare for careers in public history as professional archivists.

There is no language requirement for the master's degree. The PhD requires a reading knowledge of at least one foreign language as determined by the student's doctoral committee. Language competency should be demonstrated before the student begins the second year of the doctoral program.

Human Development and Family Studies - MS, PhD

The Department of Human Development and Family Studies offers graduate instruction leading to the master of science and doctor of philosophy degrees. Graduates are prepared for careers in teaching, research, business, production, public service or extension. Master's-level programs are available to students with undergraduate degrees in human development and family studies. For the MS program, students must have a bachelor's degree in human development and family studies or a related area. For the PhD program, students must demonstrate a high level of proficiency in a specific area of industrial and systems engineering.

Applicants must demonstrate excellence in their major field of study and be admitted to the graduate program under condition that a minimum of 43 post baccalaureate credit hours in industrial design be completed at the undergraduate level with a 3.0 GPA. Students without an undergraduate Industrial Design degree are admitted during the summer semester and awarded a bachelor of science in environmental design (NASAD accredited) upon completion of the post baccalaureate program.

Graduate research may focus on relationship studies at any stage of the life cycle, including parent-child, family, marital, non-marital, peer, friendship, family-child care-work and mentor-protégé. Graduate assistantships are available to students who have achieved superior rank in their previous academic work.

Industrial Design - MID

The department offers the master of industrial design degree accredited by the National Association of Schools of Art and Design (NASAD). Applicants must have a bachelor's degree in industrial design or equivalent from an institution of recognized standing. Those with baccalaureate degrees from other disciplines may be admitted to the graduate program under condition that a minimum of 43 post baccalaureate credit hours in industrial design be completed at the undergraduate level with a 3.0 GPA. Students without an undergraduate Industrial Design degree are admitted during the summer semester and awarded a bachelor of science in environmental design (NASAD accredited) upon completion of the post baccalaureate program.

Upon admission to the master's program successful completion of 35 graduate level credit hours, including a thesis is required. A 40 credit hour non-thesis option is available. Credit for IND 7990 Thesis may not exceed five hours. Course content beyond the 14 credit hour core curriculum will be structured to accommodate the student's area of interest. Completion of an industry collaboration studio (IND 7910 Industry Practicum) is required. There is no language requirement. An external terminal document draft review is required. A 3.0 overall graduate GPA is required. Participation in department sponsored international travel programs may be used as credit towards graduation. Students are admitted only in the fall semester. Applications to the graduate program must be complete by 1 February 2010.

Industrial and Systems Engineering - MISE, MISE/MBA, MS, PhD

The department offers the master of industrial and systems engineering, a joint program leading to both MISE and MBA degrees, the master of science in industrial engineering and the doctor of philosophy. These programs are for students with undergraduate degrees in industrial engineering, other engineering disciplines, mathematics and sciences.

All applicants must submit Graduate Record Examination scores for the General Test except MISE/MBA applicants who may instead submit Graduate Management Admission Test scores.

Both the MISE and MS programs require 30 hours of course work. The MISE is oriented toward professional practice. MISE students must take 18 semester hours from a set of core courses, a three hour design project and nine hours in electives. The MS requires the same 18 hours of core courses, six hours of electives and a six-hour thesis.

The MISE/MBA is a 54-hour program administered jointly by I.S.E. and the MBA program. It consists of 18 hours of I.S.E. core courses, 18 hours of MBA core courses, and a three-project hour jointly supervised by I.S.E. and MBA faculty. The remainder consists of 15 hours of electives if the student has more than two years work experience, or a six hour summer internship or international experience and nine hours of electives otherwise. Students must apply separately to each program (MISE and MBA).

Research involvement is the dominant element in the doctoral program. It provides students with a theoretical and substantive grounding in the industrial and systems engineering discipline. The MISE curriculum will be structured to accommodate the student's area of interest. In general, the student's area of interest must be a multidisciplinary subject area and be defined in consultation with the student's committee.

The PhD requires a minimum of 30 semester hours in the child development and family studies concentrations and 50 semester hours in the marriage and family therapy concentration, a thesis, and other fundamental work. See http://www.humsci.auburn.edu/hdfs/grad-admissions.php for specific requirements in these concentrations.

The PhD program requires a minimum of 60 credit hours beyond the BS. This program requires course work with a theoretical and substantive emphasis in family and child relationships, a supporting emphasis that provides a multidisciplinary understanding of children and families, a research and statistics component, and an empirical dissertation.

Graduate research may focus on relationship studies at any stage of the life cycle, including parent-child, family, marital, non-marital, peer, friendship, family-child care-work and mentor-protégé. Graduate assistantships are available to students who have achieved superior rank in their previous academic work.
Kinesiology - MEd, MS, EdS, PhD
Graduate study in the Department of Kinesiology leads to the degrees of master of education (MEd), master of science (MS), specialist in education (EdS), and doctor of philosophy (PhD). The advanced programs prepare students for careers in teaching and research in educational settings, program management in clinical and corporate fitness settings, sport conditioning and management, as well as the fitness and sport-related industry.

For a major in kinesiology at the master’s level, the student must have a bachelor’s degree from an accredited institution and satisfactory Graduate Record Examination scores. Applicants without appropriate undergraduate degree preparation and course requirements may be asked to register in an appropriate undergraduate program before admission to the degree program or may be required to complete specific undergraduate courses prior to degree completion. Areas of specialization for the master’s program include athletic training, biomechanics, exercise physiology, health promotion, motor development, motor learning, sport and exercise psychology, and pedagogy.

Alternative master’s certification programs offer qualified students who hold non-teaching baccalaureate degrees a route to initial teacher certification while simultaneously earning a master’s degree. This alternative route to certification is offered in physical education. Candidates in the alternative master’s program are required to participate in the Alabama Prospective Teacher Testing Program including submitting a passing score on the Basic Skills Assessments (Applied Mathematics, Reading for Information, and Writing) and a passing score on the appropriate Praxis II subject assessment prior to internship.

Graduate students interested in completing a minor in Sports Management must complete one course in each of the following areas: sports studies, sports management, educational leadership and practicum. Six hours beyond the degree requirements are required for the sport management minor.

The EdS degree is a terminal degree and students interested in doctoral study should not enter this program. The master’s degree, satisfactory GRE scores, a statement of goals and references are requirements.

Requirements for the PhD program include the master’s degree, satisfactory GRE scores, a statement of goals, and references. Areas include biomechanics, exercise physiology, motor behavior, and physical education pedagogy.

Landscape Architecture - MLA
Graduate study in landscape architecture leads to the graduate degree of master of landscape architecture (MLA). The MLA consists of 54 semester hours for those students entering with a design baccalaureate and 96 semester hours for students entering with a non-design baccalaureate.

The program is a research, studio design-based course of study that incorporates learning across disciplines of art, architecture, urban design, ecology, information technology, and the natural sciences. Extending the regional agrarian context through the relationships between human dwelling and natural systems, the graduate will be prepared to take action in rebuilding human communities, reconnecting fractured ecosystems, and regenerating diverse habitats. Students, in their final year of study, are required to engage in an individual design and research thesis. Joint degree options between the MLA, bachelor of architecture and the master of community planning are facilitated by a joint thesis option.

To enter the program, a student must have an undergraduate degree, meet the requirements for admission to the Graduate School and complete a statement that describes the candidate’s personal interest and professional goals. Applications to the MLA with a design degree must submit a portfolio statement that describes the candidate’s personal interest and professional goals. Applicants to each master’s program must have completed an undergraduate degree and a common body of knowledge consisting of core courses in business is required. The MSIS program is offered as a traditional, On-Campus program and as a Distance Learning program via Video Outreach.

The PhD program prepares graduates to conduct high-quality research in universities, colleges, government and business. Doctoral students choose one of three areas of concentration: human resource management, organizational analysis and change, or management of information technology and innovation. Individual flexibility is provided in a program of study that develops the conceptual and methodological skills that graduates need to establish a leadership position in their chosen fields. Objectives of the program are accomplished through the completion of a formal program of study, successful completion of a statistics core, preparation and completion of two examination manuscripts, and dissertation research. Students with assistantships may also be required to teach. Students are expected to have a fulltime presence on campus. Application to the PhD program must complete a departmental application and an Auburn University Graduate School application. For full consideration, applications must be received no later than March 1, prior to the fall term.

Materials Engineering - MMtIE, MS, PhD
Materials Engineering offers graduate programs of instruction and research leading to the degrees of master of materials engineering (MMtIE), master of science (MS) and doctor of philosophy (PhD). All applicants must submit GRE scores for the General Test. Students completing all degree programs are expected to have knowledge in the following areas: mechanical properties; materials structure; materials thermodynamics; kinetics; and electrical, optical and magnetic properties of materials. There are no foreign language or minor requirements for Materials Engineering graduate degrees. All students must submit an approved plan of study within one year of matriculating in the program.

The MMtIE is intended for those who expect to enter the engineering profession at an advanced level or are practicing engineers wishing to gain additional fundamental knowledge in the field of materials. Those students lacking the necessary background may be required to take additional course work. The requirements for the degree are 33 credit hours including a final engineering report. The topic of the report will be agreed upon by the student and the advisory committee. Applicants must have a baccalaureate degree in engineering or science from an institution of recognized standing. Students must pass a qualifying examination prior to taking the final general comprehensive examination required by the Graduate School.

The MS is intended for those who seek advanced knowledge in materials science or engineering for a career in research or other professional practice. The applicant must have a baccalaureate degree or its equivalent in an engineering or scientific discipline from an institution of recognized standing. Those lacking the necessary background will be required to take additional course work to ensure the continuity of their educational and professional experience. The MS program consists of 30 credit hours selected from areas of study appropriate to the objectives of the applicant and includes a thesis. Students must pass a qualifying examination prior to taking the final comprehensive examination required by the Graduate School.

The PhD program requires that students pass qualifying examinations (oral and written) with a greater proficiency than master’s students prior to taking the comprehensive examinations. The program is arranged on an individual basis with the student’s advisory committee and in accordance with Graduate School guidelines. Students admitted to the doctoral program are required to take the general comprehensive examination based on a research proposal developed by the student within two years after entering the program. The student should be prepared to be examined in all areas of materials engineering.
Mathematics and Statistics - MS, MAM, MPS, PhD

The Department of Mathematics and Statistics offers programs leading to the master of science and doctor of philosophy in both pure and applied mathematics and statistics, the non-thesis master of applied mathematics, and the master of probability and statistics (also see Statistics). In addition, the department regularly offers actuarial science courses that are approved by both the Society of Actuaries and the Casualty Actuarial Society; they are designed to provide the background and material covered in the first three actuarial exams.

The master of applied mathematics gives students a strong foundation in one of several fundamental areas of applied mathematics. It is a flexible degree with courses being chosen in conjunction with the advisory committee, some of which may be relevant courses offered by other departments. The master of probability and statistics and the master of science in statistics degrees provide a solid foundation for careers involving applications of statistics. The master of science degree in mathematics develops both content knowledge of the student through coursework, and provides the opportunity to delve deeper into an area of mathematics through the writing of a thesis. The PhD is designed to give students a thorough understanding of a broad body of knowledge related to their field of study, as well as to develop their research capabilities. PhD students are required to pass one oral and three written preliminary examinations. A statistics concentration is available for the PhD degree (see Statistics).

The internationally known faculty of around 50 professors works in areas of algebra, analysis, applied mathematics, discrete mathematics, geometry, linear algebra, logic, numerical analysis, partial differential equations, probability, set theory, statistics and topology. Some professors maintain applied research programs associated with several government and industrial laboratories, and one holds the Associate of the Society of Actuaries designation.

Admission to the program is based on a student’s undergraduate record, three letters of recommendation from former teachers, GRE scores and graduate GPA (for doctoral students). The GRE subject test is not required. A bachelor’s degree in mathematics is not required, but students without such a background may be expected to take additional courses to make up deficiencies. The department follows the guidelines for graduate degrees set forth in this bulletin. Doctoral students must satisfy the departmental preliminary examination requirement to continue their teaching assistantship. Course work in mathematics may be transferred from other institutions, subject to university limitations. (See http://www.math.auburn.edu/.)

Most students in the program are supported financially during their studies through Graduate Teaching Assistantships and through tuition waivers given to all teaching assistants (with some restrictions). The Baskerville, Fitzpatrick, and Haynesworth Fellowships (around $5,000 each) are awarded annually to qualified students in the Department of Mathematics and Statistics. The department occasionally has Graduate Research Assistantships available in conjunction with departmental contractual research programs. The department requires that all international GTAs who have responsibility for teaching a class be proficient in English, passing the test of spoken English.

Statistics - MS, MPS

The Department of Mathematics and Statistics offers degree programs leading to a master of science in statistics and a non-thesis master of probability and statistics. The master of science is designed to provide a suitable mix of theoretical and applied background for students interested in a career in statistics. The curriculum provides students with the necessary technical, analytical and interpretive skills required of professional statisticians while concentrating on education in the fundamentals of statistics and its interdisciplinary nature. Course offerings are structured to give students a variety of choices of specialization in order to pursue a career in academia, government or industry and/or further their pursuit of a PhD degree in statistics. For the MS degree the student must complete and defend a thesis and obtain a passing score on the related oral examination. The master of probability and statistics (MPS) is the non-thesis option in which students are required to complete a project that may involve statistical consulting, programming and/or data analysis. A PhD degree in mathematics with concentration in statistics is also available (see Mathematics and Statistics).

For those students whose graduate research includes a substantial amount of statistical methodology or data analysis, but who do not wish to pursue a degree, a graduate minor in statistics is available (see “Statistics” under “Graduate Minors”).

Mechanical Engineering - MS, MME, PhD

The department offers graduate programs of instruction and research leading to the degrees of master of mechanical engineering, master of materials engineering (see separate listing of graduate program in materials engineering), master of science and doctor of philosophy. Educational and research facilities are available to support graduate study in engineering mechanics, experimental mechanics, robotics, vibrations, dynamical systems, engineering design, engineering acoustics, computer-aided design, materials science and thermal/fluid sciences. The applicant must hold a bachelor’s degree or its equivalent from an institution of recognized standing. If the applicant’s undergraduate degree is other than mechanical engineering, an individualized plan of study will be developed to impart the critical skills inherent in the bachelor’s mechanical engineering program. All applicants must submit Graduate Record Examination scores for the General Test and will be evaluated on an individual basis by the Mechanical Engineering Graduate Committee.

Non-Thesis Option: The MME is intended for those who expect to enter the engineering profession at an advanced level. Emphasis is placed on professional development. Requirements for the degree consist of a major of 21 credit hours as a minimum and a coordinated minor of 9 credit hours selected from areas of study appropriate to the applicant’s objectives. There is a required faculty supervised project culminating in a final comprehensive oral examination.

Thesis Option: The MS applicant must have a baccalaureate or its equivalent in an engineering or scientific discipline from an institute of recognized standing. The degree requires a major of 21 credit hours in mechanical engineering courses, including a thesis (seven credit hours) and a minor of 9 credit hours selected from allied areas of study. The minor may consist of a sequence of courses in mathematics, physics, or other related areas. All candidates must pass an oral defense of their thesis including a comprehensive examination covering the major and minor subjects.

The doctor of philosophy provides for advanced coursework and emphasizes original, creative research. A dissertation embodying the results of this research represents a major portion of the requirements for this degree. The PhD program will consist of a minimum of 60 credit hours, including dissertation, beyond the BS degree. PhD students will select their major courses from those at the 7000-8000-level unless otherwise required for more basic courses. The PhD also requires a minor of at least 9 credit hours in a closely related field such as mathematics, physics, or other engineering disciplines. There is no language requirement for the PhD. The program, arranged on an individual basis, usually will consist of a minimum of one academic year of course work and one of research beyond the master’s level.

The General Examination must be taken by those seeking a PhD. It consists of two parts: (1) a written examination based upon the student’s graduate coursework, and (2) an oral examination which may include a review of material covered in the written exam as well as a detailed presentation and defense by the student of his proposed dissertation research.

Nursing - MSN

The School of Nursing offers a MSN program jointly with Auburn University Montgomery. This program focuses on the teaching/learning process as it relates to nursing students, patients and their families, and health care providers. Graduates of this program will possess advanced knowledge of educational principles for diverse populations and the roles of the clinical nurse specialist in the area of pediatrics, geriatrics or adult health.

The MSN program consists of 43-51 semester hours. These include major, support, and elective courses. The curriculum is offered via a hybrid web-enhanced courses and online courses. Classes that meet vary meeting place between AU and the AUM campus. Students may choose to take a thesis or an evidence-based practice project as a capstone experience.

Admission to the program is competitive and enrollment is limited. Minimum requirements include:

- A bachelor of science in nursing from an accredited college or university
- Good academic standing from the last university attended
- Successful completion (C or better) of an undergraduate statistics course
- Overall GPA of 3.0
- Unencumbered Alabama license as a registered nurse
Pharmacal Sciences - MS, PhD

Graduate study in pharmacal sciences leads to the degree of master of science. A doctor of philosophy in pharmaceutical sciences is offered through an interdepartmental program by the departments of Pharmacal Sciences and Pharmacy Care Systems.

The graduate program prepares students for teaching or research careers in academia, the pharmaceutical industry and public or private research institutions. Students are expected to select the following areas of specialization: pharmaceutics, medicinal chemistry or pharmacology and toxicology.

For the MS program, students must have a degree in pharmacy or a bachelor’s in an allied discipline such as biology, zoology, physiology, chemistry, physics, or psychology. Requirements include completion of 30 semester hours and a thesis. For the PhD program, applicants must have a degree in pharmacy or a bachelor’s or master’s in an allied discipline. Students are expected to select a major area from one of the three disciplines in the pharmaceutical sciences. A minor should be selected from a related area within pharmaceutical sciences or from an allied discipline offering PhD-level education. A dissertation is required of all graduates of the PhD program.

Pharmacy Care Systems - MS, PhD

The department offers graduate course work at the master’s level in the fields of pharmacy care systems and health systems pharmacy. A doctor of philosophy in pharmaceutical sciences is offered through an interdepartmental program by the departments of Pharmacal Sciences and Pharmacy Care Systems.

The student pursuing the MS is expected to select either pharmacy care systems or health systems pharmacy. At least half of the student’s work will be completed in the chosen field, including a thesis. The remainder may be selected in other pharmacy fields or may be taken in a related area outside of the James Harrison School of Pharmacy such as accounting and finance, computer sciences, economics, education, industrial engineering, industrial design, architecture, management, psychology, sociology and communication. The MS requires a minimum of 30 semester hours and a thesis. The thesis may be counted toward part of the semester hour requirement. A student may earn a maximum of six credit hours for the thesis.

The student pursuing the PhD will be expected to complete a minimum of 60 semester hours of course work in the chosen field of study. In addition, general examinations and a dissertation are required. A student must earn a minimum of 10 hours credit for the dissertation.

A bachelor’s degree from an accredited college or university and satisfactory scores on the Graduate Record Examination are required. A pharmacy degree is preferred. There is no additional language requirement beyond verbal and written fluency in English.

Physics - MS, PhD

The Department of Physics offers the doctor of philosophy degree to students who have achieved a mastery of the fundamental laws of nature and demonstrated the ability to complete a research project that results in new knowledge in physics. All students complete the basic graduate level courses in Classical Mechanics, Electricity and Magnetism, Quantum Mechanics and Statistical Physics. They demonstrate their mastery of these subjects by passing a General Doctoral Examination that has both a written and an oral component. To increase their knowledge of a broad range of advanced physics topics and to develop expertise in their chosen area of focus, students complete at least 12 additional hours of graded course work with a minimum of nine at the 8000-level. The research project is usually undertaken in one of the research focuses of the Department - plasma physics, condensed matter and surface physics, atomic and molecular physics, space physics, and computational physics. It is completed with the defense of the student’s dissertation. Students are also expected to publish their research in a refereed journal and/or present it at an appropriate professional meeting.

The master of science is also offered. Successful students complete the same basic graduate level courses as PhD students. Students electing the non-thesis option complete an additional 12 hours of graduate level course work. Students electing the thesis option complete at least an additional 6 hours of graduate level course work and at least 4 hours of thesis work. In addition to defending their thesis, they are encouraged to publish their results in a refereed journal or present them at a scientific meeting.

Plant Pathology - MAg, MS, PhD

Graduate study in plant pathology leads to the MAg, MS or PhD degrees. Applicants must have earned a BS from an accredited institution with course work in agronomy, botany, horticulture, microbiology, or closely related areas. Satisfactory scores on the GRE and (if an international student) TOEFL tests are also required. All graduate students must complete core courses. A minor should be selected from a related area in plant pathology. MAg students must conduct independent research for a dissertation and successfully pass two examinations. The “prelim” includes written and oral examinations and is typically taken upon completion of coursework. The
final oral defense examination is taken upon completion of the dissertation research. No foreign languages are required.

**Polymer and Fiber Engineering - MS, PhD**
Graduate study in the Department of Polymer and Fiber Engineering leads to the MS and PhD degrees. The MS in Polymer and Fiber Engineering focuses on polymer synthesis, fiber and film formation, mechanics of flexible structures, and composite materials. Both thesis and non-thesis options are offered. The MS degree requires a minimum of 30 hours of graduate courses.

The PhD in Integrated Textiles and Apparel Science is offered jointly with the Department of Consumer Affairs in the College of Human Sciences. The PhD requires a minimum of 60 hours of graduate courses including a minimum of 10 hours of ITAS 8990 Research and Dissertation. There is no foreign language requirement for the MS or PhD.

**Poultry Science - MAg, MS, PhD**
Graduate studies in Poultry Science lead to Master of Agriculture, Master of Science, and Doctor of Philosophy degrees. These degrees are designed to prepare outstanding students for careers in the commercial poultry industry, allied industries, and academia. Research training and experience can be acquired in the specialized areas of food safety, immunology, management, microbiology, nutrition, parasitology, pathology, physiology, processing and product technology and virology. All applications are reviewed by the departmental Graduate Committee.

Satisfactory scores on the GRE and TOEFL tests are required. Applicants must have a bachelor's degree in agricultural, biological or allied sciences from a recognized institution. The course of study, developed by the student and the advisory committee, may include additional courses to address specific needs or course work deficiencies. There is no foreign language requirement. The Master of Science degree is earned only with a thesis option. The Master of Agriculture requires a research project. Both degrees require a minimum of 30 semester hours of course work and a comprehensive final oral examination. For the PhD degree, a minimum of 30 semester hours of coursework beyond the MS, or 60 hours beyond the bachelor's degree, is required. In addition, the successful completion of written and oral defense examinations, and a dissertation based on an independent research project are required to earn a PhD degree. Additional information about the departmental requirements, policies and available

**Psychology - MS, PhD**
The Psychology Department offers doctoral degrees in three fields—Clinical, Experimental, and Industrial/Organizational Psychology — and a master's degree option in Applied Behavior Analysis in Developmental Disabilities. (Note: Graduate degrees in Counseling, Counseling Psychology, Educational Psychology and School Psychology are offered through departments in the College of Education rather than through the Department of Psychology.)

The Clinical Psychology program utilizes a scientist-practitioner training model that blends basic and applied research with clinical practice. Typically, the program requires five years at Auburn in practicum experiences, course work, and individualized research. In addition, a one-year internship at an APA-approved program is required. The Experimental program offers education in the broad range of experimental psychology, including behavior analysis (basic and applied), cognitive psychology, and biological bases of behavior. The Industrial/Organizational program prepares students for academic, research and/or applied settings. Electives allow students flexibility in developing their own areas of specialization. Practicum placements provide opportunities to gain research and applied experience.

Students enrolled in the doctoral programs complete a sequence of departmental core courses providing a foundation in psychology on which specialization is based. In doctoral study, students are expected to write and defend an empirically-based master's thesis. Admission to doctoral candidacy is contingent upon the successful completion of the general doctoral examination. Students must also write and defend a research dissertation. The total number of semester credit hours of graduate work leading to the PhD ranges from 60 to 92.

The Master's Option in Applied Behavior Analysis in Developmental Disabilities is a full-time non-thesis program requiring three consecutive semesters (12 months) of full-time coursework (25 semester hours) and practicum training (up to 18 semester hours). Students are trained to provide clinical and educational services to individuals with mental retardation and autism spectrum disorders typically developing children in school settings, and families. Degree requirements focus on integrating course work with practicum training, and both components are approved by the Behavior Analyst Certification Board, Inc.

Admissions: Holders of the bachelor's degree in any discipline from an accredited institution will be considered for graduate work in psychology. Students are admitted to all programs fall term only. Applicants should visit the department's Web page (www.auburn.edu/psychology), email bryant@auburn.edu or call (334) 844-6471 for application and program information. To ensure consideration, the application process should be completed by December 1st for the Clinical doctoral program, January 15th for the Industrial/Organizational and Experimental doctoral programs, and February 15th for the master's option in Applied Behavior Analysis.
A reading knowledge of one other foreign language is required. This knowledge may be demonstrated by examination by earning a passing score on the Foreign Language proficiency test, or by completion of the first-year sequence (or equivalent) of a Foreign Language with a grade of B or better.

Teaching assistantships are available to qualified students. For more information, please contact the department.

**Special Education, Rehabilitation, and Counseling/School Psychology Med, MS, EdS, PhD**

This department was created in the fall semester, 2008, when the Department of Rehabilitation and Special Education and the Department of Counselor Education, Counseling Psychology, and School Psychology were merged.

**Programs in Rehabilitation and Special Education – Med, MS, PhD**

Graduate study in Rehabilitation and Special Education leads to the degrees of master of education, master of science, and the doctor of philosophy. Acceptance into these programs is competitive, based on past achievement, scholarship potential, and professionalism. Admission to the master’s degree program requires competitive undergraduate GPA and Graduate Record Examination (GRE) scores, completed application forms, 3 letters of recommendation, and approval of department. Admission to the PhD program requires competitive graduate GPA and GRE scores, completed application forms, 3 letters of recommendation, a current resume, a professional mission statement, and approval of department. Stipends and fellowships are typically available at both the masters and PhD level for highly qualified students.

Students pursuing a master’s degree in the special education program are required to complete a minimum of 30 semester hours. Completion of the program meets the requirement for A-level teacher certification in Alabama. Specializations include early childhood special education (ages birth to 9), and collaborative teacher (K-12). Alternative master’s certification programs for non-education majors are available in these specialized areas. The special education program requires three 120-hour practica. Additionally, alternative master’s students complete a semester-long, full-time internship in a public school setting. They also are required to participate in the Alabama Prospective Teacher Testing Program, with a passing score on each of the Basic Skills Assessments (Applied Mathematics, Reading for Information, and Writing) and, if applicable, a passing score on the appropriate Praxis II subject assessment prior to internship. Graduate students in master’s programs that add a new area of certification to an existing certification must pass, if applicable, the appropriate Praxis II subject assessment(s) as a prerequisite for graduation. Special education students may select a thesis (MS) or non-thesis (MED) program.

The master’s rehabilitation program is accredited by the Council on Rehabilitation Education and provides students with the necessary academic course work and clinical experiences to sit for the Certified Rehabilitation Counselor (CRC) examination. The program provides the opportunity through elective course work to specialize in vocational evaluation and to sit for the Certified Vocational Evaluator (CVE) examination. The rehabilitation program requires a 100 hour practicum taken early in the program and 600 hours of supervised clinical practice generally taken at the end of the program. Rehabilitation students may select a thesis (MS) or non-thesis (MED) program. The thesis option requires 64 semester hours of course work while the non-thesis program is 60 semester hours and requires the student to successfully pass a written comprehensive examination.

The PhD program is offered in rehabilitation and special education. Students are required to take 15 hours of research courses and 9 hours of educational foundations (e.g., historical, psychological, philosophical, sociological). The remaining course work is made up of doctoral “core” and support area course work. A minimum of 48 semester hours beyond the master’s degree, excluding the dissertation hours, is needed to complete the program. Prior to submitting a research proposal for the dissertation, all doctoral students must satisfactorily complete a qualifying paper and a written and oral comprehensive examination. Typically, the program takes a minimum of three years to complete (two years of course work and one year of independent research).
Additional information on wildlife graduate programs and degree requirements can be found at www.sfw.s.auburn.edu/.

Zoology
(See Biological Sciences)

Biomedical Sciences - MS, PhD
All graduate faculty of the College of Veterinary Medicine participate in a college-wide graduate program leading to the master of science and the doctor of philosophy degrees in Biomedical Sciences (BMS or VBMS for curriculum descriptions). Participating departments are: Anatomy, Physiology and Pharmacology (APP); Clinical Sciences (DCS); and Pathobiology (PATHO).

Applicants to the program are required to meet entrance standards established by the College's Graduate Program Committee, the Graduate School, and their intended area of study. Either a baccalaureate degree or the Doctor of Veterinary Medicine (DVM) degree or equivalent is required for admission.

The three departmental programs represent the gateway to areas of concentration. The ten BMS concentrations (MS and PhD programs unless otherwise stated): Anatomy (APP), Animal Genetic Disease (PATHO), Animal Parasitology (PATHO), Clinical Sciences (including all DCS Residency Programs, MS only), Infectious Disease (PATHO), Molecular Oncology (multidisciplinary through PATHO), Pathology (Anatomic and Clinical; PATHO), Pharmacology (APP), Physiology (APP), and Veterinary Sports Medicine (DCS, MS only). The BMS program offers specific enrichment activities including seminars and journal clubs, training in grant writing, participation in scientific meetings, and opportunities to present results of research at national and international meetings.

A graduate student advisory committee is appointed by the Dean of the Graduate School for each student upon recommendation of the college's Associate Dean for Research and Graduate Studies. The student's faculty adviser usually serves as the chair of this committee, and the remaining members, selected from the graduate faculty, should have expertise relevant to the student's area of study. The advisory committee develops a plan of study which must be submitted to the college's Associate Dean for Research and Graduate Studies for approval and then to the dean of the Graduate School. Study programs are designed to meet the student's needs and interests while featuring research training and assuring a strong background in biochemistry, biophysics and/or molecular biology.

Original research is required for all BMS graduates. Courses must be selected in conformity with the regulations of the college's BMS Graduate Program Committee and the Graduate School. For additional information, visit: www.vetmed.auburn.edu/index.pl/graduate_studies.

A dual degree program (DDP) allows students to pursue DVM and graduate degrees simultaneously in a time-and content-integrated manner. Graduates, particularly DVM/PhD graduates, will have strong backgrounds both in veterinary medicine and research so as to be well prepared for successful careers in academia, industry and/or specialty clinics. For the DDP program, students must be admitted into the College of Veterinary Medicine program via application to the Auburn University College of Veterinary Medicine and to the graduate program via application to the Auburn University Graduate School. Students already admitted to the Graduate School may apply for admission to the DVM program in order to gain entry to the combined degree program. Such students must meet specific criteria to be allowed to pursue this course of study (www.vetmed.auburn.edu/index.pl/graduate_studies).

Economics - PhD
This is an interdepartmental program administered through the Department of Agricultural Economics and Rural Sociology and the School of Forestry and Wildlife Sciences. Information is available from the respective Graduate Program Officers.

Integrated Textile and Apparel Science - PhD
A joint PhD in Integrated Textile and Apparel Science is offered through the Department of Consumer Affairs, College of Human Sciences and the Department of Polymer and Fiber Engineering, College of Engineering. The focus is on the integration of textile science and apparel science within a research-based product management approach for application in the global textile industrial complex. The program offers course work
(see also listings for the Department of Consumer Affairs and for Polymer and Fiber Engineering) and research ranging from polymer and fiber science, materials science, composite materials, geotextiles, biomedical materials, enzyme technology for fibers, polymer recycling, statistical process control, polymer and colorant related chemistry, apparel product development and design, design of the near environment, marketing of textile and apparel products, global production and distribution of textile and apparel products, and consumer behavior. Minors can be chosen to take advantage of the unique breadth of the program. A foreign language is not required. Entrants with limited undergraduate backgrounds in their chosen area may need to complete some undergraduate courses. Graduate teaching and research assistantships are available. Students may apply for admission and/or assistantships in either department. Graduate committees include faculty from both departments.

The PhD in Integrated Textile and Apparel Science requires a minimum of 30 semester hours of graded graduate level courses at the 6000 level or above; at least 18 of these hours must be completed at Auburn University. At least 30 additional hours of graduate level course work (6000 level or above) must be completed (may include ungraded 7990 and 8990). A ten-hour core is common to all PhD candidates. Courses include ITAS 7200, 8950, 8960, 8970 and 8990 Research and Dissertation (a minimum of 10 semester hours). Students must register for at least 2 semester hours of ITAS 8990 each semester they are working on dissertation research. Students select either the Consumer Affairs branch track or the Polymer and Fiber Engineering track with the major professor in the department selected. Students must pass a written and an oral General Examination after completing course work. A final oral defense of the dissertation is required.

Pharmaceutical Sciences - PhD

The graduate program in pharmaceutical sciences offers the terminal degree of doctor of philosophy. The primary purpose of the program is to establish a functionally integrated research degree program leading to the doctor of philosophy with a major in the pharmaceutical sciences and specialization in one of the following disciplines: medicinal chemistry, pharmaceutics, pharmacology-toxicology or pharmacy care systems. The interdepartmental program is administered jointly through the Departments of Pharmacal Sciences and Pharmacy Care Systems.

Sociology - MS, MA

The interdepartmental graduate program in Sociology offers study and research leading to the degrees of master of arts and master of science. Anthropologists, criminologists, rural sociologists and sociologists make up the faculty. The program is administered by a three-member coordinating committee from the Department of Agricultural Economics and Rural Sociology, the Department of Sociology, and the Department of Sociology, Anthropology and Social Work, and the Department of Sociology at Auburn University Montgomery.

Both thesis and non-thesis options are available. These two degree options are designed to serve the needs of differing types of students. The thesis option is recommended for students who might be interested in pursuing advanced graduate work and who are interested in gaining research experience. The non-thesis option is designed for individuals who are in mid-career, who wish to learn new skills in order to be more productive professionally, and have no intent on pursuing a more advanced graduate degree.

All students must take SOCY 7000, 7100, RSO S 7700. Students taking the thesis option are required to complete a total of 30 hours. Additionally, a thesis is also required. Students may apply up to six hours of Research and Thesis (SOCY 7990) toward the 30-hour requirement. Students taking the non-thesis option will be required complete a total of 36 hours. Additionally, a major paper is required.

Graduate Minors

Biochemistry and Cell/Molecular Biology

Auburn University offers a graduate minor in Cell and Molecular Biosciences, administered by the Graduate School with faculty from the Cell and Molecular Biosciences Program. The CMB minor requires a suitable background in biochemistry (BCHE 7200, 7210 or equivalent) and the successful completion of at least nine credits from the CMB graduate curriculum. The minor offers in-depth instruction in animal, microbial and plant and cell and molecular biology, and is specifically designed for MS/PhD students in life sciences and allied fields whose thesis or dissertation research will benefit from a broader perspective of cell and molecular biology and bioinformatics. See www.auburn.edu/cmb for more information.

Community Planning

The Community Planning minor is open to graduate students in Building Science and Landscape Architecture, and to others only by permission. This minor affords students with interests in planning, development and urban design the opportunity to explore the discipline. Students must complete 9 credit hours of Community Planning coursework and notify CADC Student Services that they are completing the Planning minor.

Ecology

Ecology is an academic minor administered by the Graduate School in cooperation with faculty and departments that participate in the Auburn University Ecology Group (http://www.auburn.edu/academic/ecology). The Ecology minor is open to graduate students whose thesis or dissertation research will benefit from a broader and enriched perspective in the fundamentals and applications of the ecological sciences. For more information, students should contact any of the following coordinators:

- Agronomy and Soils, Wes Wood ........................................Funchess 202
- Animal Sciences, Russ Muntifering .............................. Upchurch 108
- Biological Sciences, Nanette Chadwick .......................Funchess 331
- Entomology and Plant Pathology, Kira Bowen ...............Rouse 209
- Fisheries and Allied Aquacultures, Dennis Delvries ........Swingle 311
- Forestry and Wildlife Sciences, Ed Loewenstein ..............F&WS 4431

Economic Development

The economic development graduate minor provides a specialization in the theories and practice of economic development, primarily within the U.S. and Alabama. It is an interdisciplinary minor offered by the faculty of participating departments (Agricultural Economics and Rural Sociology, Community Planning, Economics, and Political Science) and is administered by the Economic & Community Development Institute.

Students may apply for economic development graduate minor to their degrees in agricultural economics (MS and PhD), business administration (MBA), community planning (MCP), economics (MS), public administration (MPA), public administration and public policy (PhD), and rural sociology (MS). To earn the graduate minor, students must complete the program's basic course, Economic Development and Competition (POLI 7700), two elective courses selected from an approved list, and a one week non-credit economic development training course sponsored by the Economic & Community Development Institute. Contact the Economic & Community Development Institute for more information.

Environmental Studies

This is an interdisciplinary academic minor administered by the Graduate School in cooperation with participating departments. It is open to any graduate student whose thesis or dissertation is in the environmental area. Participating departments include Aerospace Engineering, Agricultural Economics, Biosystems Engineering, Agronomy and Soils, Animal Sciences, Architecture, Biological Sciences, Chemical Engineering, Civil Engineering, Entomology, Fisheries and Allied Aquacultures, Forestry, Geography, Geology, Horticulture, Landscape Architecture, Pathobiology, Pharmacal Sciences, Physiology and Pharmacology, Plant Pathology, Psychology and Sociology.

Basic guidelines are:

1. The minor is open to any graduate student whose thesis or dissertation is environmentally oriented.
2. The student's department retains primary control over the student's program.
3. One committee member must be from outside the student's department and this member must be involved in environmental research.
4. Each student must take BIOL 3060, or the equivalent and RSO 7650 (Natural Resources and the Environment) or an equivalent.
5. Each student must take at least three hours of environmental-related course work from outside the student's "broad group discipline."
6. Each student must take at least three hours of environmental-related course work from outside the student's home department but with-in the student's "broad group discipline."
7. Each student must meet the degree requirements of the student's home department.
8. At the discretion of the student's advisory committee, graduate-level courses required for this program may also be counted towards the completion of other degree requirements.

For more information, contact Dr. Joe Touchton, Department of Agronomy and Soils, 202 Funchess Hall.
Golf Course Design
The graduate minor in Golf Course Design is open to graduate students in Landscape Architecture, Agronomy and Soils, and Landscape Horticulture, or others with permission. This minor provides students with additional coursework and field experience in landscape form and function for golf course construction. Specifically, the minor requires 19 credit hours in Landscape Architecture and Agronomy, including courses in Soil Resources and Conservation, Advanced Turfgrass Management, Landscape Construction, and Landscape Ecology. The minor is administered through the Department of Agronomy and Soils. For specific information students should contact Dr. Beth Guertal in Agronomy & Soils, eguertal@acesag.auburn.edu.

Statistics
Auburn University offers a graduate academic minor in Statistics administered by the Graduate School in cooperation with the Statistics Coordinating Committee and the Department of Mathematics and Statistics. The objective of the minor is to provide education and training for students whose graduate research includes a substantial amount of statistical methodology and/or data analysis. Students are required to complete 12 hours of graduate level statistics course work (selected from 6110, 6620, 7000, 7010, 7020, 7030, 7040, 7600, 7616, 7700, 7780, 7840, 7850, and 7860) and demonstrate the ability to apply statistical methodology to problems in research. Participants are required to have one committee member from outside the department who is a member of the Statistics Faculty. For more information, contact Dr. Mark Carpenter, Department of Mathematics and Statistics.

Plant Molecular Biology
Auburn University offers an academic minor in plant molecular biology administered by the Graduate School in cooperation with the participating Molecular and Cellular Biology faculty housed in the three departments listed below. The minor is open to graduate students enrolled in these departments whose thesis/dissertation research addresses related studies and who will benefit from broader training in molecular biology. For more information, contact the following department coordinators: Botany and Microbiology

Narendra Singh .................................................Biological Sciences
Sadik Tuzun (Chair) ..........................................Entomology and Plant Pathology

Sport Management
The purpose of the sport management minor is to provide master's degree students with the specialized knowledge of the sport industry and to prepare those students to work in sport organizations as administrators and managers. The minor is administered by the Graduate School. Participating departments include Kinesiology and Educational Foundations, Leadership and Technology. Students selecting the minor must satisfy the degree requirements for the master's degree programs in Kinesiology and Educational Foundations, Leadership and Technology. The Sport Management Minor Committee oversees the program and certifies completion. Minimum requirements are 12 semester hours of graduate course work in sport management, as identified by the Committee, 6 of which must be beyond the minimum hour requirements for the master's degree. At least 6 hours must be approved coursework in sports studies. The student must also complete a minimum of 3 semester hours of work-related experience in sport management (e.g., a practicum course). For additional information, please contact the department head of the participating units.

Urban Forestry
The Department of Horticulture (HORT) and the School of Forestry and Wildlife Sciences (SFWS) offer an Urban Forestry minor for graduate students. Urban Forestry is the design, establishment and maintenance of urban forests to enhance the economic value of cities and to provide a healthier environment for people. The minor promotes interdisciplinary studies and trains students for employment in the urban forestry arena. Auburn University, with its strengths in Horticulture, Forestry, Landscape Architecture, Community Planning and Agriculture and its proximity to major urban centers such as Atlanta, Birmingham, Columbus and Montgomery, offers a unique opportunity for urban forestry research and education.

To be eligible for the minor, students must be enrolled in the master of natural resources, master of agriculture, master of science or PhD degree program in HORT or SFWS. To complete the minor, students must:
1. Develop an advisory committee including faculty from both SFWS and HORT;
2. Complete a thesis/dissertation research project that pertains to urban forestry, or in the case of master of natural resources and master of agriculture degrees, complete an approved 3 to 4 credit hour directed study in urban forestry;
3. Complete FORY 6650, HORT/FORY 7850 and at least one undergraduate or graduate course in tree identification.
4. Complete at least nine semester hours from a list of approved core courses, at least one of which must be outside of the home department or school.

For more information, contact the Graduate Program Officer at the Department of Horticulture or the School of Forestry and Wildlife Sciences.

Veterinary Clinical Sciences
(See Biomedical Sciences)