

Combined BS and MS Degree Programs in Bioengineering

Bioengineering undergraduates at Clemson University may begin a Master of Science (MS) degree program while completing their Bachelor of Science (BS) degree and use a limited number of courses to satisfy the requirements of both their undergraduate and graduate degrees. The following specific requirements apply:

A. Undergraduate/graduate transition

1. Undergraduate students must have an overall GPR of 3.4 or higher through their sophomore year. Students are expected to maintain this GPR to continue enrollment in the combined program.
2. Graduate Record Examination (GRE) scores are required to be submitted as part of their Graduate School application. The normal minimum scores for admission to the graduate program are 450, 650 and 4.0 on the verbal, quantitative and analytical writing sections respectively.
3. Up to 6 semester hours from any 600-level or 800-level Bioengineering course may be used to satisfy the requirements of their BS degree. These courses will be counted as free technical requirements.
4. Graduate assistantships cannot be accepted until full graduate status is attained and contingent on availability of funds in alignment with bioengineering departmental policy.

B. Graduate program

1. Students will be accepted into a thesis or non-thesis program. Most students will be non-thesis with thesis reserved for those who show special interest and ability for research. Beginning in the summer after their senior year, students will enroll in BIO E 891 for thesis option or BIO E 892 for a non-thesis option and must be full-time. The outcome for the thesis student is publishable experimental research. The outcome for the non-thesis student is a paper based on library or limited laboratory work or both. Both types of students will undergo an oral exam in which they defend their project work and are tested on relevant general knowledge of biology and bioengineering.
2. As part of the graduate program, students are required to take:
 - BIO E 801 Biomaterials (3 credits)
 - BIO E 820 Structural Biomechanics (3 credits) or BIO E 847 Elements of Bioengineering (4 credits), or BIOE 870 (3 credits) Bioinstrumentation
 - BIO E 800 Seminar in Bioengineering Research (1 credit per two semesters)
3. During the summer following their senior year, students will enroll in EXST 801 Statistical Methods (4 credits) and BIO E 882 Biomaterials Implantology (4 credits).
4. The thesis option requires 30 credits while the non-thesis option requires 33 credits to be chosen in consultation with the graduate committee.
5. Graduate courses (800 level) may be taken as an undergraduate, but should be selected in consultation with their academic advisors.
6. Students in a combined degree program are conditionally accepted to the graduate program until completion of the BS degree requirements and with acceptable GRE scores.

Students interested in this combined degree program should consult the Bioengineering Graduate Program Coordinator and the Undergraduate Program Coordinator. Application for this program should be made by the end of the junior year, but no later than one semester prior to the expected BS graduation. Application details are available in the Academic Regulations section of the Graduate School Announcements.

APPROVALS:

Approved by the Bioengineering Faculty _____ February 19, 2007 (date)



(Dr. Martine LaBerge, Chair)