

# Agricultural and Biological Engineering

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Graduate study is offered in the Department of Agricultural and Biological Engineering leading to the degree of Master of Science in Agriculture with a concentration in Engineering Technology or a Doctor of Philosophy in Agricultural Sciences with a concentration in Engineering Technology.

## Admission Criteria

Prerequisites for admission into the graduate program include all the general requirements of the Office of the Graduate School, completion of the GRE general test and the submission of scores, and identification of a departmental professor who is willing to serve as research director for the master's or Ph.D. project. International students must obtain a TOEFL score of 550 PBT (79 iBT) or an IELTS (International English Language Testing Systems) score of 6.5 or higher. Exceptions to these requirements are considered on a case-by-case basis and require approval of the Department Chair.

## Provisional Admission

A student who has not fully met the GPA or other requirements stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

## Academic Performance

Unsatisfactory performance in the graduate program in Agricultural and Biological Engineering is defined as any of the following:

- failure to maintain a 3.00 average GPA in attempted graduate courses after admission to the program;
- a grade of U, D, or F in any one course;
- more than two courses with a grade of C;
- failure of the research defense;
- unsatisfactory evaluation of a thesis;
- or failure of a required component of the program of study.

Any one of these, or a combination of these, will constitute the basis for review for possible dismissal. The graduate coordinator will review the record, along with the student's graduate committee, and take a final course of action which will be immediate dismissal or the establishment of a probationary period in which corrective action must take place. Appeal of dismissal can be made by submitting a written appeal statement to the department head. If the dismissal is upheld by the department upon the student's appeal, the student can then submit a written appeal to the dean of the College of Agriculture and Life Sciences.

The Department of Agricultural and Biological Engineering also offers the Master of Science degree in Biological Engineering and Doctor of Philosophy degree in Engineering; both programs are housed in the College of Engineering. See program information in the James Worth Bagley College of Engineering section of this publication.

## Master of Science in Agriculture with Engineering Technology Concentration - Thesis

ST 8114	Statistical Methods	4
Select one of the following:		1
ABE 8911	Agricultural and Biological Engineering Seminar	
ABE 8921	Agricultural and Bio Engineering Seminar	
ABE 8XXX	Minimum of 12 hours in 8000-level or higher courses	12
Graduate-level coursework		7

ABE 8000	Thesis Research/ Thesis in Agricultural and Biological Engineering	6
<b>Total Hours</b>		<b>30</b>

The Master of Science degree in Agriculture with a concentration in Engineering Technology requires a minimum of 24 credit hours of coursework beyond the baccalaureate degree. A thesis and an oral comprehensive examination in defense of the thesis are required. Once the student's research plan has been established, the student is required to present his/her research plan to the faculty in the form of a departmental seminar.

## Master of Science in Agriculture with Engineering Technology Concentration - Non-Thesis

ST 8114	Statistical Methods	4
Select one of the following:		1
ABE 8911	Agricultural and Biological Engineering Seminar	
ABE 8921	Agricultural and Bio Engineering Seminar	
Graduate-level coursework		25
<b>Total Hours</b>		<b>30</b>

The non-thesis option for the Master of Science in Agriculture with a concentration in Engineering Technology requires a minimum of 30 credit hours of coursework with at least 15 hours at the 8000-level. The major professor and graduate committee will determine specific course requirements for the student's program. The student must submit a research paper.

## Doctor of Philosophy in Agricultural Sciences with Engineering Technology Concentration

Select two of the following:		2
ABE 8911	Agricultural and Biological Engineering Seminar	
ABE 8921	Agricultural and Bio Engineering Seminar	
ABE 8XXX	Minimum of 30 hours in 8000-level or higher courses	30
ABE XXXX	Coursework	8
ABE 9000	Dissertation Research/ Dissertation in Agricultural and Biological Engineering	20
<b>Total Hours</b>		<b>60</b>

Doctoral students are required to complete a minimum of 60 credit hours of coursework beyond the baccalaureate degree. A preliminary examination, a dissertation, and an oral examination in defense of the dissertation are required. Once the student's research plan has been established, the student is required to present his/her research plan to the faculty in the form of a departmental seminar.