AGRICULTURAL & BIOLOGICAL ENGINEERING, B.S. AND AGRICULTURAL ENGINEERING & AGRICULTURAL SCIENCE, B.S.A.G.

Dual Degree – Five Year Academic Program

Students who successfully complete this five-year academic program receive the Bachelor of Science with a major in Agricultural and Biological Engineering from the College of Engineering as well as the Bachelor of Science with a major in Agricultural Engineering and Agricultural Science from the College of ACES.

Students enroll in the College of ACES and then transfer to the College of Engineering after two years. Students then complete the ABET-accredited degree in Agricultural and Biological Engineering in the College of Engineering before entering a fifth year in ACES, in the Agricultural Engineering Sciences major. The suggested program of study that follows fulfills graduation requirements for both the College of Engineering and the College of ACES.

Agricultural and biological engineering is the application of mathematics, physical and biological science, and engineering to agriculture, food systems, energy, natural resources, the environment, and related biological systems. This program has special emphasis on environmental protection and the biological interface of plants, animals, soils, and microorganisms with the design and performance of environments, machines, mechanisms, processes, and structures. Graduates are employed by industry, consulting firms, and government for research, education, and manufacturing.

Overview of Curricular Requirements

The curriculum for the dual major requires 158 hours for graduation, of which 128 hours are specified for the major in Agricultural and Biological Engineering from the College of Engineering. Curriculum requirements specific to the dual major are organized as follows.

### Code | Title | Hours
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Completion of Agricultural and Biological Engineering, B.S. | 128


### Code | Title | Hours
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Communication | 3

1. CMN 101 Public Speaking

### Code | Title | Hours
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Biological Sciences Coursework | 4

1. 15

### Code | Title | Hours
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Agricultural Sciences Coursework | 15

2. Open Electives

3. Total hours required to receive a B.S. in Agricultural and Biological Engineering and a B.S.A.G. in Agricultural Engineering and Agricultural Science | 158

In addition to the Biological and Natural Sciences Elective hours required for Agricultural and Biological Engineering (6 hours), a further 4 hours of biological sciences must be completed to make up a total of 10 hours. These hours can be selected from the Biological and Natural Sciences Electives (https://abe.illinois.edu/undergraduate/biological-natural-sciences-electives) list.

Fifteen hours of agricultural sciences with courses from at least two subject areas other than Agricultural and Biological Engineering and Technical Systems Management, and approval of advisers are required.

Sufficient open electives selected to total minimum curriculum requirement of 158 hours. All requirements of the combined curriculum must be completed to satisfy the requirements for both degrees.