The world today is dependent on biological and agricultural systems in the production of food, feed and fiber and the conservation of our natural resources. Today’s engineering and technology graduates must be qualified to contribute to our rapidly expanding technology base and to play an integral part in the decision-making process.

The Department offers two degree programs. The biological engineering program is jointly administered by the College of Agriculture and Life Sciences and the College of Engineering. Graduates of this program are engineers who develop engineering solutions to problems in biology and agriculture. Problem areas include food and biological product processing and preservation, water and waste management, air and water quality control, environmental control for animal and plant production systems, and machine systems for agricultural and biological systems. The agricultural and environmental technology program prepares students in the application of science, technology, and business principles to effectively manage agricultural and environmental systems.

Career Opportunities
Employment opportunities for graduates are highly diverse. Jobs in biological engineering and the technology program fields frequently involve a combination of indoor and outdoor work. Engineering jobs may involve product design and development, plant engineering and management, engineering consulting, design of systems dealing with biological and natural resources and the environment, graduate study, research and teaching.

Agricultural and environmental technology graduates are typically employed in jobs that involve the application and management of engineering designs in the conservation and utilization of natural resources, agricultural production systems, water and animal waste management, structures and environmental controls, and agribusiness management.

Research
The Department has strong research programs in a number of areas. These include environmental engineering, bioprocessing, machine systems, and controlled environment agriculture.

Course Work/Curriculum
The biological engineering degree is accredited by the Accreditation Board for Engineering and Technology (ABET) and is strong in the basic sciences, mathematics, engineering sciences, engineering design, and the humanities and social sciences. Specialization takes place through the selection of electives, a biological engineering concentration, basic and engineering sciences, and a year-long senior design project.

In the agricultural and environmental technology curriculum, a series of applications-oriented courses are taken in the various areas of agricultural engineering technology and the physical, biological, and applied sciences.

Graduate Study
The Department offers graduate study leading to the Master of Biological and Agricultural Engineering, the master of science, and the doctor of philosophy degrees. Candidates normally prepare for such study by completing an ABET accredited biological and agricultural engineering curriculum; however, nonengineering graduates may be accepted in these graduate programs after completing specified additional undergraduate engineering requirements.

Co-Curricular Activities
Students in both programs have departmental clubs that are affiliated with the state and national organizations of the American Society of Agricultural Engineers. In addition, students are involved with both the Agri-Life and Engineer’s councils. Both programs have departmental honor societies. Alpha Epsilon for the engineering students and Alpha Mu for the technology students.

Career Services
In addition to faculty advisers, CALS Career Services is available to provide information about career and employment opportunities. The office assists students and alumni with a variety of career needs such as choosing a major, resume tips, and job search strategies.