Engineer your Future

Whether your interest lies in engineering or agriculture, the programs offered through the Department of Agricultural and Biological Engineering can help you reach your goals.

Students with an undergraduate degree in Engineering may choose to further their technical and analytical skills to obtain the Master of Engineering. Students without an undergraduate degree in engineering who desire to advance their science background within the framework of an engineering discipline may choose the Master of Science. The engineering Ph.D. is an advanced graduate degree for students who wish to pursue a career in education or research.

Advanced degrees in Agricultural Operations Management (AOM) include the Master of Science degree for students who desire to advance their management skills through course work and graduate level research. The AOM Ph.D. degree is an advanced degree in technical management.

For students with a basic science degree, the Applied Science Ph.D. degree provides advanced training in problem-solving capabilities, interdisciplinary research, and methods for applying science to real world problems and issues.

Limited Resources... Unlimited Solutions
Graduate Degrees in ABE

The ABE Graduate Program at the University of Florida is your key to success in a world that increasingly depends on the expertise of graduates in agriculture and engineering.

Our programs provide unique opportunities to expand your skills in engineering, management, and modeling of agricultural, biological, and natural ecosystems. Learn to bring a systems-approach and precision technologies to water, nutrient, pesticide, and waste management in diverse agricultural and natural ecosystems, including space-based systems.

A graduate degree allows you to gain knowledge & skills in a specialized area and will provide an opportunity for you to obtain more challenging and higher paying professional career positions in industry, research or academia. Employers include water management districts, government agencies, universities, consulting engineering firms, food companies, pharmaceutical companies and many others.

Broad research topics within the Department of Agricultural and Biological Engineering offer unique opportunities for graduate students to acquire expertise in a wide variety of areas.

Biological Engineering

Includes biofuels, post-harvest operations, biosensors, bioprocess design, plant biotechnology, process microbiology, environmental biotechnology, food process engineering, bioreactors and packaging engineering.

Land & Water Resources

Includes soil-water-plant relations, irrigation, water quality, watershed hydrology, BMP and TMDL studies, hydrologic modeling, ecological and risk modeling, ecological restoration, waste management, and water reuse.

Information Systems

Includes development and application of GIS and remote sensing, communications, mathematical modeling, environmental decision analysis and expert systems techniques to biological and agricultural systems.

Agricultural Production Engineering

Includes development and application of precision agriculture concepts and tools, pesticide application, robotics and other machine systems, and environmental control systems. Applications to plant space biology are included in cooperation with NASA at Kennedy Space Center.

International & Interdisciplinary

Students from over a dozen countries are represented in the ABE graduate studies program. Opportunities are provided for graduate students to travel internationally in order to gain experience in their field, conduct research, meet leading scientists and acquire useful contacts in the scientific community.

Faculty and Facilities

The UF/ABE program is supported by a diverse, highly qualified faculty of 36 professors, some at research & education centers around the state.
- ABE receives academic support from one of the leading Engineering Colleges in the southeast.
- It is ranked among the top graduate programs nationally by U.S. News & World Report.
- ABE exceeded $5 million in contract and grant expenditures last year.

Graduate students have an opportunity to work in laboratories in Frazier Rogers Hall, which is centrally located on the main campus of the University of Florida.

Agricultural and Biological Engineering Department laboratories include:
- Water Resources
- Biofuels/Cellulosic Ethanol
- Remote Sensing
- Water Reuse
- Field Automation
- Design Assembly & Robotics
- Post Harvest
- Packaging Technology
- Crop Simulation/Information Systems
- Waste Management Lab & Pilot Plant
- Bio-Processing Plant
- Hydrologic Modeling
- Physical Properties