

# **BIOLOGICAL AND AGRICULTURAL ENGINEERING** Graduate Programs

#### **PROGRAM OVERVIEW**

Our graduate program is one of the premier national programs in biological and agricultural engineering. Over the past few years, our department has had significant growth in nanotechnology, biotechnology, and biomedical engineering concentrations to expand our traditional agricultural and coastal engineering emphasis. An increasing number of young and active mid-level professors, winners of major national awards, work to continue to grow significant programs, garner large grants, and author excellent articles and books. Some of the best students in the country join our program. We recently welcomed students with National Science Foundation (NSF) fellowships, Board of Regents fellowships, and Diversity (ETD) fellowships. Our graduate program is an excellent choice for students interested in working with some of the finest scientists and engineers in their fields, as well as enjoying the unique culture and cuisine Louisiana has to offer.

#### **DEGREES OFFERED**

The Master of Science in Biological and Agricultural Engineering is offered in both thesis and non-thesis options. The MS degree is usually completed between 18 to 24 months. The thesis option requires 24 hours of coursework beyond the bachelor's and a publishable thesis. Non-thesis options require 36 hours beyond the bachelor's and a project. A guide for students pursuing the MS degree that describes the detailed requirements and a timeline from admission to graduation is available at lsu.edu/eng/bae/files/ updated2019baegraduatehandbook.pdf

The Doctor of Philosophy program, or PhD program, typically requires three years of work beyond the master's degree, including a minimum of 42 hours of approved coursework beyond the bachelor's degree, at least half of which must be engineering courses and at least 12 hours in biological engineering, as well as a dissertation based on original research. A guide for students pursuing the PhD degree that describes the detailed requirements and a timeline from admission to graduation is available at lsu.edu/ eng/bae/files/updated2019baegraduatehandbook.pdf

#### FINANCIAL ASSISTANCE

Research and teaching assistantships are available to qualified students on a competitive basis. PhD students may compete for Alumni Association or Board of Regents Graduate Fellowships.

## GRADUATE COORDINATOR

**Cristina Sabliov, PhD** csabliov@lsu.edu 225-578-1055

### **ADMINISTRATIVE** COORDINATOR

**Angela Singleton** asingleton@agcenter.lsu.edu 225-578-1055



#### FACULTY RESEARCH AREAS

**Carlos Astete** caste1@lsu.edu — nanotechnology, bioactive delivery systems, and bioprocessing

**Richard Bengston** bengston@lsu.edu — water pollution, soil erosion, hydrologic modeling

**Dorin Boldor** dboldor@lsu.edu — food process engineering and bioenergy

**David Constant** hscons@lsu.edu — transport and fate of hazardous substances, environmental engineering, bioremediation

**Stacia Davis** sdavis@agcenter.lsu.edu — irrigation water management

**Kevin Hoffseth** khoffseth1@lsu.edu — deformation and failure in biological composite materials

Jangwook Jung jjung1@lsu.edu — engineering biomaterials for tissue regeneration, stem cell bioengineering Yongchan Kwon yckwon@lsu.edu — synthetic biology and bioengineering

Marybeth Lima mlima1@lsu.edu — bioprocessing engineering, value-added processing

Elizabeth Carol Martin emart93@lsu.edu — biomedical research

**Todd Monroe** tmonroe@lsu.edu — molecular and cellular engineering

**Cristina Sabliov** csabliov@lsu.edu — bioprocessing, nanotechnology, FEA modeling

**Chandra Theegala** theegala@lsu.edu — by-product utilization, bioenergy, wastewater treatment, biosensing