

MASTER OF SCIENCE

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RESEARCH SCIENTIST

Lisa K. Moore, Ph.D.

MASTER OF SCIENCE DEGREE PROGRAM

The marine environment is a rich source of pharmaceuticals, polymers, diagnostic reagents and genetically diverse organisms. The biological processes of the majority of marine organisms are not well understood and the biotechnology industry lacks individuals trained to develop and practice biotechnology using marine animals, plants and microorganisms. The master's program in biotechnology is a nonthesis program that builds on Florida Tech's unique location on the Atlantic coast, and its established strengths in marine biology, marine ecology, natural products chemistry, molecular biology and biochemistry to provide a path for students who aspire to learn biotechnology and earn jobs in industry. The program is focused on those areas of biotechnology related to microbiology, natural products chemistry and molecular biology of marine organisms. Students are provided with a diverse combination of classroom experience, field studies, chemical and molecular biological laboratory techniques and development of communication skills most appropriate for an industrial or academic research career.

SUMMER INTERNSHIPS

The goal of this training program is to produce individuals with a strong interdisciplinary background in biology and chemistry, who will be qualified to meet the needs of biotechnology in industrial or academic settings. To provide additional experience with state-of-the-art technology, students in this program have the opportunity to include summer internships in an industrial laboratory as part of their degree training. In most cases, these internships are related to collaboration between Florida Tech faculty and a particular laboratory in a biotechnology firm. Internship sites include Merck, Sharp and Dohme (Rahway, N.J.), Lederle Labs (Pearl River, N.Y.) and Zymogenetics (Seattle, Wash.). Those students wishing to receive internship training locally may substitute a research experience with Florida Tech faculty, subject to approval.

ADMISSION REQUIREMENTS

The applicant must have a bachelor of science degree in biology, chemistry, biochemistry or equivalent. Applicants deficient in organic chemistry, genetics, biochemistry or microbiology are required to take undergraduate courses before starting the master of science program. Admission decisions for fall semester enrollment are made by March 15, and for spring semester enrollment by October 1.

DEGREE REQUIREMENTS

The master's degree in biotechnology is a nonthesis option and requires the satisfactory completion of 33 credit hours, including a maximum of 27 hours formal course work (six credit hours of research may substitute for six credit hours of formal course work), seminars (BIO 5990), and up to 12 credit hours of industrial internship (BIO 5997) and/or summer laboratory experience (BIO 5537) at Florida Tech. A project report on the research experience is written, presented and defended before a committee. The committee, the composition of which is similar to that for the master's degree, may ask questions relating to previous course work.

CURRICULUM

The adviser assists the student in devising a program of study that is approved by the Graduate Academic Steering Panel and department head. The student must complete courses appropriate for the option, chosen from any academic unit in the College of Science, College of Engineering, College of Psychology and Liberal Arts and College of Business.

Summary of Program Requirements

Formal course work	21-27
Biological Sciences Seminar	0
Research*	0-6
Internship or summer laboratory experience.....	6-12
TOTAL CREDITS REQUIRED 33	

*Research may focus on biology, chemistry, computer sciences or another area approved by the student's adviser.



Florida Institute of Technology

College of Science
Department of
Biological Sciences

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FINANCIAL AID

Graduate student assistantships for instruction and research are available to well-qualified master's and doctoral degree students. Assistantships carry stipends plus a tuition waiver. In some cases, a tuition waiver alone may be awarded for a limited amount of service. Assistantships for master's degree students are normally for an academic year; assistantships for doctoral students are renewable on a yearly basis.

THE UNIVERSITY

Florida Institute of Technology is a distinctive, independent university, founded in 1958 by a group of scientists and engineers to fulfill the need for specialized, advanced educational opportunities of Florida's Space Coast.

Florida Tech is the only comprehensive, independent scientific and technological university in the southeast. Supported by both industry and the community, Florida Tech is the recipient of many research grants and contracts, a number of which provide financial support for graduate students.

LOCATION

Melbourne is located on the central east coast of Florida. The area offers a delightful year-round subtropical climate and is 10 minutes from the ocean and beaches. Kennedy Space Center and the massive NASA complex are just 45 minutes north of Melbourne. The city of Orlando, Walt Disney World, EPCOT and many other attractions are one hour west of Florida Tech's main campus.

FOR MORE INFORMATION

To obtain more detailed information about this Graduate Program or to obtain application materials, visit our home page at www.fit.edu/grad or the *University Catalog* at www.fit.edu/catalog, or contact:

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