Operations Research

Program Director
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Graduate Certificate Awarded
Advanced Graduate Certificate in Operations Research

Website
http://www.stonybrook.edu/spd/graduate/operations.html

Operations Research

The Advanced Graduate Certificate in Operations Research provides students with the fundamental applied mathematics tools for developing protocols for the efficient management of private companies, government agencies and non-profit organizations. In today's global marketplace, organizations need to be efficient to survive. The Operations Research program will provide formal training in methods of optimization, modeling and statistics used in operations research. The objective of this program is to help individuals assist organizations to make efficient use of their resources so as to maximize efficiency and minimize net cost. Graduates of this program may be able to advance in management and organizational planning positions within their current employment or obtain new employment. It is recommended that applicants to the program hold a bachelor's degree in mathematics, engineering or computer science.

The program is offered in collaboration with the Department of Applied Mathematics and Statistics in the College of Engineering and Applied Sciences and articulates with the M.S. in Applied Mathematics and Statistics as well as the Master of Arts in Liberal Studies offered through SPD. If you intend to pursue the M.S. in Applied Mathematics and Statistics, please refer to the University's Graduate Bulletin for any additional admission requirements.

Gainful Employment Regulation Disclosures

Coaching Admissions

A. Personal statement.

B. A bachelor’s degree, with a cumulative 3.0 grade point average. It is recommended that applicants to the program hold a bachelor's degree in mathematics, engineering or computer science.

C. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

Computer Support Services

Students in this program are welcome to use the University's Computing Center, the central facility for instructional, research, and administrative computing. All students are eligible for a campus-based computer account and may use dial-up numbers for access from off-site locations.

Certificate Requirements

This advanced graduate certificate program consists of 6 three-credit courses, chosen from the graduate curriculum of the Department of Applied Mathematics and Statistics. There are five required courses in the program and one elective course. The core courses have been carefully chosen to provide a broad-based background as well as in-depth exposure to the applied mathematical and statistical tools required to be successful on the job-site. The elective course can be any graduate course in applied mathematics and statistics, management and policy, or computer science, which has been approved in concert with the student's advisor as appropriate.

REQUIRED COURSES - 15 credits
AMS 507/CET 551 Introduction to Probability
AMS 540/CET 552 Linear Programming
AMS 550/CET 553 Stochastic Models
AMS 553/CET 554 Simulation and Modeling
AMS 576/CET 555 Statistical Methods for Social Scientists

ELECTIVE - 3 credits
Any graduate course in applied mathematics and statistics, management and policy, or computer science, which has been approved by the student's advisor.

Time to Completion

All certificate requirements must be completed within three (3) years from the semester date of admission as a matriculated student unless the student is also matriculated in a master's degree program. Master's students have five (5) years to complete the certificate requirements.

Stony Brook University Graduate Bulletin: www.stonybrook.edu/gradbulletin
Faculty

The program's faculty is composed of faculty from the University's Department of Applied Mathematics and Statistics.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*