Educational Computing

Program Coordinator
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Graduate Certificate Awarded
Advanced Graduate Certificate in Educational Computing

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

Educational Computing Program Description

Educational computing is a diversified area of study which is concerned with the design, implementation and assessment of computer-based technologies to enhance education and training. The advanced graduate certificate program was designed to provide professionals in all fields with the necessary expertise to use technological concepts and devices to improve the performance and management of specific systems. Students in this program focus on one of two professional tracks - education or business and industry. This advanced graduate certificate program is approved by the New York State Education Department (HEGIS 0799).

TWO TRACKS, MULTIPLE OPPORTUNITIES

Students in this program focus on one of two professional tracks: education or business & industry. Experts in educational computing can find employment with:

- Schools and colleges that need highly-skilled faculty and administrators
- State departments of education that seek curriculum developers and technology planners
- Government and public service agencies that require trainers for skills development programs
- High-tech manufacturers that hire experts to develop products for the education market
- Publishing companies that need educational software developers for the mass market
- Corporations that hire skilled professionals as instructors and designers of in-house training programs
- Business and organizations, that are expanding their operations to embrace electronic commerce

This certificate is offered in collaboration with the University’s Department of Technology and Society, part of the College of Engineering and Applied Sciences. Courses from this program may also be used to fulfill requirements for the Master of Science degree in Technology Systems Management as well as for SPD's Master of Arts in Liberal Studies.

Gainful Employment Regulation Disclosures

Educational Computing Admissions

A. Personal statement.

B. A bachelor’s degree, with a cumulative 3.0 grade point average.

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

Certificate Requirements

This certificate program consists of 6 three-credit courses, selected from the list below. Students select either the School Track or Business/Industry Track. Several of the courses are available online.

1. Required Courses - 12 credits

- EST 565 Foundations of Technology in Education
- EST 567 The Internet, Social Networking and Collaborative Environments
- EST 570 Educational Technology Lesson Development
- EST 571 Educational Technology Research Methodologies

2. Professional Tracks - 3 credits

SCHOOL TRACK (choose one)
- EST 563 Computer Literacy for Educators
- EST 573 Design of Multimedia Courseware
- EST 585 Technology in Learning Systems

OR

BUSINESS/INDUSTRY TRACK (choose one)
EMP 509 Management Information Systems
EST 520 Computer Applications and Problem Solving
EST 530 Electronic Commerce

3. Elective - 3 credits

EST 528 Teaching with Interactive Whiteboards and Immersive Technologies
EST 529 Supporting Common Core Standards Through Educational Technology
EST 574 Distance Learning and Virtual Environments
EST 576 Geographic Information Systems (GIS) in Research and Education
EST 589 Technology-Enhanced Decision Making
EST 590 Project Seminar in Educational Computing
EST 591 Independent Study in Educational Computing
EST 596/CEY 596 Simulation Models for Environmental & Waste Management
CEI 511 Communication Technology: Impact on Education, Business, and Society
CEN 580 Assessment of Socio-Technological Problems

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.

Faculty

The program's faculty is composed of practitioners and researchers who are leaders in the field of educational technology. While they may present at national conferences, most also retain their full-time administrative positions. Their experience informs their instruction, allowing them to connect the theories that they are teaching to real-world situations.

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