College of Engineering and Computing Course Catalogs

NSU Course Catalogs and Course Descriptions

1994

MS Computer Science, MS Computer Information Systems, MS Computer Technology in Education, MS Management Info System

Nova Southeastern University

MS/COMPUTER SCIENCE

MS/COMPUTER INFORMATION SYSTEMS

MS/COMPUTING TECHNOLOGY IN EDUCATION

MS/MANAGEMENT INFORMATION SYSTEMS

M.S./COMPUTER SCIENCE (MS/CS)

The program blends educational theory and practice into a learning experience that develops skills applicable to complex, real-world problems. The curriculum is consistent with recommendations for a model curriculum in computer science as outlined by the Association of Computing Machinery (ACM). Specializations in Computer Science include programming languages, operating systems, computer-communication networks, software engineering, database management systems, artificial intelligence, computer system architecture, and computation theory.

COURSE OFFERINGS

- CISC 610   Programming Languages
- CISC 612   Concurrent Programming Languages
- CISC 615   Design/Analysis of Algorithms
- CISC 620   Modeling and Simulation
- CISC 622   Numerical Analysis
- CISC 630   Compiler Design Theory
- CISC 631   Language Theory and Automata
- CISC 632   Compiler Implementation
- CISC 634   Complexity Theory
- CISC 640   Operating Systems
- CISC 643   Array Processors and Supercomputers
- CISC 644   Operating Systems Implementation
- CISC 645   Microprogramming and Microprocessors
- CISC 646   Distributed Computing Systems
- CISC 647   Advanced Computer Architecture
- CISC 650   Network Design and Analysis
- CISC 651   Data/Computer Communications
- CISC 660   Database Management Systems
- CISC 661   Database Practicum
- CISC 662   Distributed Databases
- CISC 663   Object-Oriented Database Systems
- CISC 670   Artificial Intelligence
- CISC 671   Robotics
- CISC 680   Software Engineering
- CISC 681   Interactive Computer Graphics
- CISC 682   Software Engineering Implementation
- CISC 683   Object-Oriented Design
- CISC 690   Special Topics

M.S./COMPUTER INFORMATION SYSTEMS (MS/CIS)

This program utilizes course work, basic and applied research activities, and specialized projects. The curriculum is consistent with recommendations for a model curriculum in computer information systems as outlined by the Association of Computing Machinery (ACM). Specializations in computer information systems include the structure of computer information systems, computer-communication networks, human-computer interaction, decision support systems, database systems, systems analysis and design, artificial intelligence and expert systems, and the management of information system projects and resources.

COURSE OFFERINGS

- MCIS 610 Data and File Structures
- MCIS 620 Structure of CIS
- MCIS 621 Management of IS Projects
- MCIS 622 Office Automation Systems
- MCIS 623 Legal and Ethical Aspects of Computing
- MCIS 624 Computer Integrated Manufacturing
- MCIS 625 Computer Graphics for Information Managers
- MCIS 630 Database Systems
- MCIS 631 Database Management Systems Practicum
- MCIS 632 Distributed Database Management
- MCIS 640 System Test and Evaluation
- MCIS 650 Computer Networks
- MCIS 651 Telecommunications
- MCIS 652 Computer Security
- MCIS 660 Information Systems Analysis
- MCIS 670 Artificial Intelligence and Expert Systems
- MCIS 671 Decision Support Systems
- MCIS 672 Computer-Aided Software Engineering
- MCIS 680 Human-Computer Interaction
- MCIS 682 Information Systems Project
- MCIS 683 Data Center Management
- MCIS 690 System Design and Implementation
- MCIS 691 Special Topics in Computer Information Systems

TRANSFER POLICY

Up to six graduate credits may be transferred from a regionally accredited institution. Courses proposed for transfer must have received grades of at least "B". Students must request approval of transfer credits in writing.

M. S./COMPUTING TECHNOLOGY IN EDUCATION (MS/CTE)

The program is designed to meet the needs of working professionals such as teachers, educational administrators, and trainers working in both public and private sectors. The program blends educational theory and practice into a learning experience that develops skills applicable to complex, real-world problems. Specializations include *computer education* and *training and learning*. Students sit for instruction at an *institute* held at the University. Computer-based activities include NSU's real-time electronic classroom sessions, online real-time computer discussions and conferences, electronic submission of completed assignments, NSU's electronic library and off-campus library services, and NSU's information retrieval service.

COURSE OFFERINGS

- MCTE 610 Structured Programming in Pascal and Logo
- MCTE 615 Online Information Systems
- MCTE 620 Computer Literacy and Educational Reform
- MCTE 625 Survey of Courseware
- MCTE 626 Authoring Systems Design
- MCTE 630 Database Systems
- MCTE 640 Computing Technology Facilities Planning
- MCTE 650 Computer Networks
- MCTE 660 Multimedia and Emerging Technologies
- MCTE 670 Learning Theory and Computer Applications
- MCTE 680 Human-Computer Interaction
- MCTE 690 Computer-Based Statistics
- MCTE 698 Directed Study in Training and Learning I
- MCTE 699 Directed Study in Training and Learning II

PROGRAM FORMATS

The 36-semester-hour program is designed so it can be completed in as few as 18 months or 24 months. Program formats are as follows:

On campus format (18-month): *
9 core courses and 3 electives
On campus format (24-month): *
8 core courses and 4 projects
Field based cluster format (18-month): *
12 core courses
Institute/computer-based format: **
12 core courses

* CS, MIS, and CIS programs only
** CTE, CIS, and MIS programs only

M.S./MANAGEMENT INFORMATION SYSTEMS (MS/MIS)

The program focuses on the application of information system concepts to the collection, retention, and dissemination of information for management planning and decision making. The program blends theory and practice into a learning experience that develops skills applicable to complex, real-world problems. The program is designed to give the student a thorough knowledge of the field through course work and specialized projects. Specializations in management information systems include decision support systems, systems analysis and design, database applications, computing environment organization, project management, telecommunications and computer networking, human-computer interaction, quantitative methods, and the application of microcomputer systems.

COURSE OFFERINGS

- MMIS 610 Survey of Computer Languages
- MMIS 615 Quantitative Methods
- MMIS 620 Management Information Systems
- MMIS 621 Information Systems Project Management
- MMIS 622 Office Automation Systems
- MMIS 623 Legal and Ethical Aspects of Computing
- MMIS 624 Computer Integrated Manufacturing
- MMIS 625 Computer Graphics for Information Managers
- MMIS 626 Application of Microcomputer Systems
- MMIS 630 Databases in MIS
- MMIS 631 Database Management Systems Practicum
- MMIS 632 Distributed Database Management
- MMIS 640 System Test and Evaluation
- MMIS 641 Organization of the Computing Environment
- MMIS 652 Computer Security
- MMIS 653 Telecommunications and Computer Networking
- MMIS 654 Applications of the Internet
- MMIS 660 Systems Analysis
- MMIS 670 Artificial Intelligence and Expert Systems
- MMIS 671 Decision Support Systems
- MMIS 672 Computer-Aided Software Engineering
- MMIS 680 Human-Computer Interaction
- MMIS 683 Data Center Management
- MMIS 690 Systems Design

PLEASE SEND ME AN APPLICATION FORM AND ADDITIONAL INFORMATION ON THE FOLLOWING PROGRAM.

☐ M.S./COMPUTER SCIENCE

☐ M.S./COMPUTER INFORMATION SYSTEMS

☐ M.S./COMPUTING TECHNOLOGY IN EDUCATION

☐ M.S./MANAGEMENT INFORMATION SYSTEMS

NAME _____
(please print)

ADDRESS _____

_____

CITY _____

STATE _____ ZIP _____

HOME
TELEPHONE (___) _____

WORK
TELEPHONE (___) _____

or call (800) 986-2247, Ext. 7352,
or (305) 475-7352.

NOVA
SOUTHEASTERN
U N I V E R S I T Y

ACCREDITATION

Nova Southeastern University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools. Because Nova Southeastern has undergone scrutiny to meet regulations in some 30 states, it is among the most evaluated universities in the country.

ADMISSION REQUIREMENTS

The program is designed for students with undergraduate training in a related field in computer science, computer information systems, management informtion systems engineering, mathematics, or physics. Applicants should have an undergraduate major in one of the above areas or a related area and must meet the following requirements:

1. Have a bachelor's degree from a regionally accredited college or university representing completion of course work that fulfills prerequisites for graduate work in a related field of computer science (computer information systems, management information systems, and computing technology in education).
2. Submit official transcripts of all prior graduate and undergraduate work.
3. Have at least a 2.5 undergraduate G.P.A. (3.0 in the undergraduate major).
4. Submit a completed application with application fee.
5. Provide three letters of recommendation.
6. Submit a G.R.E. score or portfolio with appropriate work experience and credentials.
7. Applicants must have knowledge of data structures, computer architecture, structured programming, systems software (compilers or operating systems), undergraduate mathematics: calculus (differential and integral calculus), and discrete mathematics.

TUITION AND FEE SCHEDULE

Application	$40
Registration (per term)	$30
Tuition (per credit)	$295 *
Graduation	$50

* subject to change without notice.

Nova Southeastern's Center for Computer and Information Sciences (CCIS) has become a major force in educational innovation. It is distinguished by its ability to offer both traditional and nontraditional choices in educational programs and formats that enable the professional to pursue an advanced degree without career interruption. Consistent with Nova Southeastern's philosophy and mission, programs of the Center are designed to provide breadth and depth of knowledge as the basis for a quality education that keeps pace with rapidly changing professional and academic needs. Research activities stress a blend of theory and practice in an applied setting. Today, CCIS faculty and staff serve the educational needs of undergraduate and graduate students throughout the United States via a range of programs and specializations. Degrees offered by the Center include the B.S., M.S., Ph.D., Ed.D., and Sc.D.

NOVA SOUTHEASTERN UNIVERSITY

CENTER FOR COMPUTER AND INFORMATION SCIENCES
C.S./C.I.S./C.T.E./M.I.S. Programs
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