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Masters of Science Degree Programs in Computer Science Brochure

Nova Southeastern University

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The School of Computer and Information Sciences

MASTER OF SCIENCE DEGREE PROGRAMS
(On Campus or Online)

COMPUTER SCIENCE

COMPUTER INFORMATION SYSTEMS

COMPUTING TECHNOLOGY IN EDUCATION

MANAGEMENT INFORMATION SYSTEMS
M.S. in COMPUTER SCIENCE

This program is designed to give students a thorough knowledge of the field and provide an enduring foundation for future professional growth. It blends 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 as outlined by the Association of Computing Machinery (ACM).

The program's formats offer professionals the opportunity to earn the master's degree in 18 months while continuing to work in their current positions. To earn the degree in 18 months, the student must enroll in two courses per term. Terms are 12 weeks long and there are four terms each year. The program can be taken in the evening on the campus or online. Each three-credit on-campus course meets once a week for three hours. The online student may participate in courses from anywhere in the United States or outside the U.S. where Internet access is available. The online format is described in a separate section of this brochure.

COURSE OFFERINGS

- CISC 610 Programming Languages
- CISC 615 Design and Analysis of Algorithms
- CISC 630 Compiler Design Theory
- CISC 640 Operating Systems Theory and Design
- CISC 650 Data and Computer Communications I
- CISC 660 Database Management Systems
- CISC 670 Artificial Intelligence
- CISC 680 Software Engineering
- CISC 612 Concurrent Programming Languages
- CISC 620 Modeling and Simulation
- CISC 622 Numerical Analysis
- CISC 631 Language Theory and Automata
- CISC 632 Compiler Implementation
- CISC 634 Complexity Theory
- 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 651 Data and Computer Communications II
- CISC 661 Database Management Systems Practicum
- CISC 662 Distributed Databases
- CISC 663 Object-Oriented Database Systems
- CISC 671 Robotics and Automated Processing
- CISC 681 Interactive Computer Graphics
- CISC 682 Software Engineering Implementation
- CISC 683 Object-Oriented Design
- CISC 685 Human-Computer Interaction
- CISC 690 Special Topics
M.S. in COMPUTER INFORMATION SYSTEMS

This program focuses on the technological foundations of computer information systems. The curriculum is consistent with the model curriculum in computer information systems outlined by the ACM. The program's formats offer professionals the opportunity to earn the master's degree in 18 months while continuing to work in their current positions. To earn the degree in 18 months, the student must enroll in two courses per term. Terms are 12 weeks long and there are four terms each year. The program can be taken in the evening on the campus or online. Each three-credit on-campus course meets once a week for three hours. The online student may participate in courses from anywhere in the United States or outside the U.S. where Internet access is available. The online format is described in a separate section of this brochure.

COURSE OFFERINGS

- MCIS 610 Data and File Structures
- MCIS 611 Survey of Programming Languages
- MCIS 615 Computer Operating Systems
- MCIS 620 Computer Information Systems
- MCIS 621 Information Systems Project Management
- 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 Systems Practicum
- MCIS 632 Distributed Database Management Systems
- MCIS 640 System Test and Evaluation
- MCIS 650 Data and Computer Communications I
- MCIS 651 Data and Computer Communications II
- MCIS 652 Computer Security
- MCIS 654 Applications of the Internet
- MCIS 660 Systems Analysis and Design
- MCIS 661 Object-Oriented Applications for CIS
- MCIS 670 Artificial Intelligence and Expert Systems
- MCIS 671 Decision Support Systems
- MCIS 672 Computer-Aided Software Engineering
- MCIS 680 Human-Computer Interaction
- MCIS 681 Multimedia and Emerging Technologies
- MCIS 682 Information Systems Project
- MCIS 683 Data Center Management
- MCIS 691 Special Topics in CIS
M.S. in COMPUTING TECHNOLOGY IN EDUCATION

This program is designed to meet the needs of working professionals such as teachers, educational administrators, and trainers working in either the public or the private sector. The program blends educational theory and practice into a learning experience that develops skills applicable to complex real-world problems. It will enhance knowledge of how computers, software, and other forms of high technology can be used to improve learning outcomes. The program's online format offers professionals the opportunity to earn the master's degree in 18 months while continuing to work in their current positions. The program is only offered in online format. Courses involve a range of online activities that facilitate frequent interaction with faculty, classmates, and colleagues. Teachers and students interact in real time during scheduled electronic classroom sessions that include lectures and discussions. Online activities also include interactive bulletin boards, electronic submission of assignments for review by faculty, electronic mail, the electronic library, and NSU's distance library services. Learning and interaction are facilitated by hypertext menuing systems. The Internet is also used extensively for research. Courses in the program have been approved for teacher certification in computer science (grades K - 12) or recertification by Florida's Bureau of Teacher Certification.

COURSE OFFERINGS

- MCTE 615 The Internet
- MCTE 625 Survey of Courseware
- MCTE 626 Authoring Systems Design
- MCTE 630 Database Systems
- MCTE 645 Spreadsheet, Database, and Graphing Applications
- MCTE 650 Computer Networks
- MCTE 660 Multimedia and Emerging Technologies
- MCTE 661 Advanced Instructional Delivery Systems
- MCTE 670 Learning Theory and Computer Applications
- MCTE 680 Human-Computer Interaction
- MCTE 690 Research Methodology
- MCTE 691 Master's Project in CTE
- MCTE 695 Special Topics in CTE
M.S. in MANAGEMENT
INFORMATION SYSTEMS

This program focuses on the application of information system concepts to the collection, retention, and dissemination of information for management planning and decision-making. Its formats offer professionals the opportunity to earn the master’s degree in 18 months while continuing to work in their current positions. To earn the degree in 18 months, the student must enroll in two courses per term. Terms are 12 weeks long and there are four terms each year. The program can be taken in the evening on the campus or online. Each three-credit on-campus course meets once a week for three hours. The online student may participate in courses from anywhere in the United States or outside the U.S. where Internet access is available. The online format is described in a separate section of this brochure.

COURSE OFFERINGS

- MMIS 610 Survey of Computer Languages
- MMIS 611 Computer Structures & Algorithms Using COBOL
- 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 Databases in MIS 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 and Design
- MMIS 670 Artificial Intelligence and Expert Systems
- MMIS 671 Decision Support Systems
- MMIS 672 Computer-Aided Software Engineering
- MMIS 680 Human-Computer Interaction
- MMIS 681 Multimedia and Emerging Technologies
- MMIS 683 Data Center Management
PLEASE SEND ME AN APPLICATION FORM AND ADDITIONAL INFORMATION ON THE FOLLOWING MASTER'S DEGREE PROGRAM(S).

☐ COMPUTER SCIENCE

☐ COMPUTER INFORMATION SYSTEMS

☐ COMPUTING TECHNOLOGY IN EDUCATION

☐ MANAGEMENT INFORMATION SYSTEMS

NAME ____________________________

ADDRESS ____________________________________________________________

_______________________________________________________________________

CITY ____________________________

STATE ___________ ZIP __________

HOME TELEPHONE ( ) ________________

WORK TELEPHONE ( ) ________________

E-mail: scisinfo@scis.nova.edu or call 800-986-2247, Ext. 7352, or (954) 475-7352.
ADMISSION REQUIREMENTS
Applicants must meet these requirements (see catalog):
An earned bachelor's degree from a regionally accredited
college or university with an appropriate undergraduate
major; official transcripts of all graduate and undergraduate
education showing an undergraduate G.P.A. of at least 2.5
and a G.P.A. of 3.0 in a major field; a completed application
and application fee; three letters of recommendation; score
report of the G.R.E. or a comprehensive portfolio of
appropriate professional experience and credentials; and
English proficiency.

THE ONLINE FORMAT
Online courses are taken via computer and modem from
home, office, or on the road while traveling. The student may
participate in courses from anywhere in the United States via
local call or outside the U.S. where Internet access is
available. Courses involve a range of online activities that
facilitate frequent interaction with faculty, classmates, and
colleagues. Teachers and students interact via the real time
electronic classroom, interactive bulletin boards, e-mail,
hypertext menus, and electronic submission of assignments.
Learning is facilitated by the electronic library and NSU's
distance library services. The Internet is also used for
research.

ORIENTATION & ADVISEMENT PROGRAM
New students must attend an orientation weekend on the
campus in Fort Lauderdale, which includes an introduction
to the program office staff and faculty, instruction in online
computer requirements and connections, and training in
the use of UNIX and the Internet. The orientation also
includes an introduction to the library services that are
available to on-campus and online students. Advisement is
conducted regularly by the student's program office with
the assistance of the faculty.

COMBINED MASTER'S–DOCTORAL OPTION
This option provides the opportunity to earn the doctorate
in a shorter time. Students must first be accepted in the
master's program. Once eight courses (24 credits) are
completed in the master's program with a G.P.A. of at least
3.25, the student may apply for acceptance into a doctoral
program. If accepted, after completing 12 credits in the
doctoral program, the student is awarded the M.S. degree.
The School of Computer and Information Sciences (SCIS)

A major force in educational innovation, the School is distinguished by its ability to offer both traditional and nontraditional choices in educational programs and formats that enable professionals to pursue advanced degrees without career interruption. The School offers programs leading to M.S. in computer information systems, computer science, computing technology in education, and management information systems; the Ph.D. in computer information systems, computer science, information systems, and information science; and the Ph.D. or Ed.D. in computing technology in education. Combined master's-doctoral degree programs are available. Programs are timely yet provide the student with an enduring foundation for future professional growth. The School has over 700 graduate students from across the U.S. and other countries, and has been awarding graduate degrees since 1984.

Nova Southeastern University (NSU) is the 47th largest private academic institution in the United States and the largest in Florida. It has a 250-acre campus in Fort Lauderdale with over 10,000 students on campus and 4,000 students in programs elsewhere in Florida, in 24 other states, and in several foreign countries. In addition to SCIS, NSU has an undergraduate college and graduate schools of medicine, law, clinical psychology, education, business, oceanography, social and systemic studies, and humanities and the arts. Currently there are more than 40,000 NSU graduates who work and contribute with distinction to their businesses and professions worldwide.

The School of Computer and Information Sciences offers master's degree programs in the evening on the campus and in online format. Doctoral programs are offered in an on-campus cluster format and in a combined institute and online format.

The School's master's degree programs require 36 credit-hours for graduation. Doctoral programs require 64 or 68 credit-hours beyond the master's degree for graduation.

The School of Computer and Information Sciences
3100 SW 9th Avenue, Fort Lauderdale, FL 33315-3025
800-986-2247, Ext. 7352 or (954) 475-7352
E-mail: scisinfo@scis.nova.edu

Nova Southeastern University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award bachelor's, master's, educational specialist, and doctoral degrees. The University admits students of any race, sex, age, color, nondisqualifying handicap, religion or creed, national or ethnic origin.