Doctor of Education Specialization in Computing and Information Technology

Nova Southeastern University

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Doctor of Education

Specialization in: Computing and Information Technology

Term begins: January 1993

NOVA UNIVERSITY
Abraham S. Fischler Center for the Advancement of Education
1992-1993
January 4, 1993

Dear Colleague:

I hope you are still interested in earning your Ed.D. degree. Recently you were mailed material which described the Programs for Higher Education (PHE) and the three specializations offered (Adult Education; Higher Education; and Vocational, Technical, Occupational Education).

We now offer another specialization--Computing and Information Technology. This specialization is designed for postsecondary professionals working with computers and/or having responsibilities for processing and managing information. The core seminars will be offered at local cluster sites with two of the specialization seminars, the practicums, and the MARP being completed in the "on-line" format. In-class seminars combined with electronic communication and delivery--an exciting and appropriate blend of tradition and technology.

If you have questions, please do not hesitate to contact Wendy Putnam at 1-800-541-6682, extension 7352.

Sincerely,

Ross E. Moreton
Director

REM:mr
Doctor of Education
Specialization in Computing and Information Technology

Nova University recognizes that there is a continuing need in higher education for professionals who are educated in managing computer and information resources. Typically, these roles have been filled by individuals who have a range of backgrounds, from computer scientists to librarians. Although doctoral degree programs exist in these fields, the content has not always focused on the needs of practitioners in computing and information technology. The program described here uses the best of our knowledge about computer-based and cluster delivery of professional education along with summer institutes to provide knowledge and skills needed to meet the challenges of modern computer and information technology environments.

CURRICULUM
Students take a core in the local or international cluster format. Students will complete 67 credits by taking the following courses along with four practicums (four @ 4 sh) and a MARP - Major Applied Research Project (21 sh).

Core Seminars:
- ECD 8003 Curriculum and Program Planning
- ECD 8007 Governance and Management
- ECD 8008 Human Resources Development
- ECD 8009 Leadership
- ECD 8013 Research Methodology
- ECD 8021 Societal Factors Affecting Education

Specialization Courses:
- DCT 7350 Assessment of Emerging Technologies (ET)
- DCT 8350 ET Practicum
- DCT 7370 Database Management Systems (DBM)
- DCT 8370 DBM Practicum
- DCT 7380 Management of Technology (MOT)
- DCT 8380 MOT Practicum
- DCT 7390 Computer Information Networks (CIN)
- DCT 8390 CIN Practicum
- DCT 8395 MARP (variable credit)

CLUSTER FORMAT
In most Nova University field-based programs all students are organized into groups called clusters. Clusters provide the vehicle through which instruction and other services are provided to students. All students belong to a cluster, and all clusters are headed by a cluster coordinator. All cluster coordinators are professional educators with earned doctorates.
INSTITUTE REQUIREMENTS
Each student must attend two summer institutes to take DCT 7040 and DCT 7060. Summer Institutes are week-long conferences that bring together students, cluster coordinators, practicum evaluators, MARP advisors, national practicum evaluators, national lecturers and central staff to express and share ideas. Material is presented that explores the deeper implications of the seminars and that elaborates on the application of theory to current issues in education. Both formal and informal activities provide ample opportunities for mutual teaching and learning among students and other educators from across the country. While there are no additional fees for the summer institutes, students must be currently registered and paid for the summer term and are responsible for their own transportation and living expenses. Hotel rooms are available at special convention rates.

COMPUTER COMMUNICATIONS AND UNIX TRAINING WORKSHOPS
Students are required to demonstrate UNIX competency by taking an online test prior to registration. An optional one-day introductory session on computer communications and UNIX is offered in a workshop format. New students are urged to attend the workshop during the summer institute or at regional symposia prior to beginning the program.

COMPUTER REQUIREMENTS
If students do not currently own a computer and a modem, they are required to purchase either an IBM compatible or Macintosh computer and modem. It is the student's responsibility to determine that the IBM clone is fully compatible. This will ensure that the student can make use of the CCIS-developed instructional software and other applications.

STUDENTS ARE ADVISED TO CONTACT THE CENTRAL CCIS OFFICE IF THEY ANTICIPATE PURCHASING A NEW SYSTEM PRIOR TO JOINING THE PROGRAM.

PRACTICUMS
Students receive four semester hours credit for each practicum approved. Practicums are projects that are designed to promote the solution to current problems in the students' institutions. These projects are highly structured opportunities to put theory into practice and to submit newly gained knowledge and skills to the test of reality.

COMPREHENSIVE EXAMINATION
The comprehensive examination consists of a written examination that will demonstrate an individual's competence to address broadly significant issues in higher education based on a foundation of knowledge and perspective. Students are eligible for the comprehensive exam upon passing six core courses and three practicums. Successful completion of the comprehensive examination is a prerequisite to admission to candidacy status and the assignment of a MARP committee.
MAJOR APPLIED RESEARCH PROJECT
Students receive 21 semester hours credit for completing this project. The major applied research project, or MARP, is the capstone of doctoral study. MARPs utilize the processes of the practicums. Whereas practicums sharpen skills in planning and conducting applied research, the MARP is the final demonstration that those skills have been mastered. Students will be assigned to a MARP committee after completing the comprehensive examination and after six courses and three practicums have bee satisfactorily passed.

ADMISSION REQUIREMENTS
Applications are received and considered throughout the year. Admission to the program requires a master's degree from a regionally accredited institution, current full-time employment in a job related to the applicant's area of specialization, three letters of recommendation, an interview with a Nova University representative and a portfolio are required. Specific criteria for admission include:

- A person employed in adult education;
- A faculty member or administrator employed in a postsecondary educational institution that awards college credit; or
- A faculty member or administrator employed in vocational, technical, or occupational education.

An individual who wishes to apply for admission should:
1. Complete the graduate admissions application and submit $40 fee
2. Submit the required Certification Waiver form
3. Request that the official transcript of academic work leading to the Master's degree be sent directly to Nova University
4. Submit three letters of recommendation from supervisors or administrators who can attest to the nature of his/her performance.
4. Submit portfolio
5. Submit GRE scores for students of the Greenwood Cluster (South Carolina).

TERMS
Fall: October 1 - December 31
Winter: January 1 - March 31
Spring: April 1 - June 30
Summer: July 1 - September 30

TUITION
Tuition for the 1992-93 academic year is $6,000 (four partial payments of $1,500 each). Tuition beyond the third year is $900 per three-month term. Students who enroll and pay tuition beyond the third year (beyond 12 terms of enrollment) will receive a refund of $500 if they complete all requirements for the degree within the first month of the term.
COMPUTING AND INFORMATION TECHNOLOGY

COURSE DESCRIPTIONS

DCT 7350 ASSESSMENT OF EMERGING TECHNOLOGIES (3 credits)
This course focuses on the latest advances in the expanding field of computing technology and their impact on applications in both education and industry. Topics examined include new computer architectures, operating system software, optical storage and retrieval, hypertext and hypermedia, imaging systems, educational information systems and tools and techniques for computer-assisted and computer-managed instruction. Strategies for implementing innovative technologies that satisfy specific user expectations and comply with requirements in the workplace are presented.

DCT 7370 DATABASE MANAGEMENT SYSTEMS (3 credits)
This course examines methods and techniques for determining database requirements and effectively managing organizational data resources. Strategies for designing database management systems are presented. Components and architectures of the relational data model are analyzed. Topics discussed include data administration, database languages, development of database applications, the user interface, databases and expert systems, milestones in DBMS development, object-oriented technology and information storage and retrieval in a distributed environment. Students will review commercially available DBMS products and tools.

DCT 7380 MANAGEMENT OF TECHNOLOGY (3 credits)
Major concepts, issues, theories, and methodologies related to the management of technology are introduced. Topics covered include budget and financial control, marketing, the congruency between organization structure and strategy, and the life cycle approach to strategic planning. Components and structure of a management information system (MIS) are presented. Case studies illustrating the role of management in developing and implementing specific strategies that have succeeded in the marketplace are reviewed. Software programs for planning, tracking, and managing computing technology projects are examined.

DCT 7390 COMPUTER INFORMATION NETWORKS (3 credits)
This course focuses on the latest advances in the expanding field of computer networks and their impact on information systems applications. Communications principles and techniques of information acquisition, storage, retrieval, transfer, reception and security are presented. Computer communications and the design of distributed systems are examined. Topics covered include voice, video, image and data transmission, radio and satellite networks, the Integrated Services Digital Network (ISDN), electronic data interchange (EDI), protocols and software, network management, network security and control, inter-networking and LANs, MANs, and WANs.
Cluster Sites

Nova University is a fully accredited, independent institution in its third decade of operation. Nova offers courses of study leading to the bachelor’s, master’s, educational specialist, and doctoral degrees. The University has over a quarter century of experience in providing students quality education in a non-traditional format. The following is a list of doctoral clusters that are accepting applications for admission:

1. Bay Area (California)
2. Calgary (Alberta Canada)
3. Chicago, Illinois
4. Dallas, Texas
5. Greenwood, South Carolina
6. Hampton/Richmond, Virginia
7. L.A. North (California)
8. Massachusetts
9. Orange County
10. Philadelphia
11. Phoenix
12. South Florida (Ft. Lauderdale)
13. Springfield, Missouri
14. Tampa, Florida
15. West Florida (Pensacola)
16. Western Pennsylvania
17. International Cluster (Phoenix, AZ)

For additional information on this or other programs, please call the Center for Computer and Information Sciences at 1-800-541-6682, Ext. 7352.