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Summer 1991

## Center for Computer and Information Sciences Master of Science in Computer Information Systems Summer Courses 1991

Nova Southeastern University

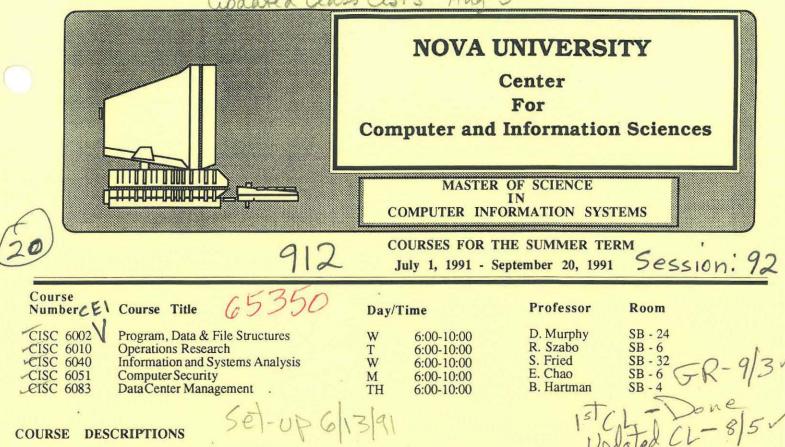
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grade rooter: Sept. 3 updated Class Lists: Aug 5



CISC 6002 PROGRAM, DATA, AND FILE STRUCTURES - Since reliable information systems require reliable programs, this course presents modern, structured techniques in "C" and PASCAL. Topics include control structures (e.g., loops and branching), data structures (g., stacks, queues, linked lists, trees, hashing), and file structures (e.g., access methods, ISAM, VSAM, BTrees). Also covered are design methods such as stepwise refinement, top-down, information hiding, and structured design.

CISC 6010 OPERATIONS RESEARCH - An introduction to the theory and methodology of mathematical programming (linear and nonlinear programming), optimization theory, deterministic and probabilistic models, scheduling models (simulation), and queuing methods. The student will learn to apply mathematical models and their implications for the control of complex systems and processes.

CISC 6040 INFORMATION AND SYSTEMS ANALYSIS - The analysis stage is the first step in an information system's life cycle. Topics include application development strategies, problem identification, feasibility assessment, requirements analysis, logical specification of the planned system, project management, documentation and standards, and the new "object-oriented" methods of systems analysis. Material on individual behavior and group dynamics in the development process, techniques for project management, feasibility assessment, and post implementation evaluation will be presented.

CISC 6051 COMPUTER SECURITY - This course provides a foundation for understanding computer and communications security issues and a framework for creating and implementing a viable security program. Topics covered will include hardware, software, and network security; the regulatory environment; personnel considerations; protective measures against a variety of potential threats including hackers, disgruntled insiders, and software viruses; and techniques for responding to incidents not prevented. Through this course, the student will learn about strategic and analytic tools and contingency methods that can be used to safeguard computer and communications systems.

CISC 6083 DATA CENTER MANAGEMENT - This course stresses information center methods for building systems between users and analysts. The traditional life-cycle development will be reviewed. The role and services of the information center will be discussed within the context of these issues: user support, goals in terms of user education and training, promoting systems support and development services, and promulgating and monitoring use of standards for software and for protection of data resources. Other topics in this course include principles of application generators, prototyping, user and provider roles in an information center. Students will be able to identify strengths and limitations of the information center approach.



PHONE - In Broward, 475-7563 or Toll Free, 1-800-541-NOVA, ext. 7563 to request registration forms and a current course schedule.