

LIFE LONG LEARNING = LIFE LONG EMPLOYABILITY

ESSENTIALS OF INFORMATION SYSTEMS MANAGEMENT CERTIFICATE WHICH LEADS TO A BACHELOR'S OF SCIENCE IN INFORMATION TECHNOLOGY

Certificate Includes

IT 101:	Introduction to Information Technology I
IT 120:	Introduction to Network Technology
IT 201:	Information Design Techniques
IT 202:	Internet and Applications
MIS 245:	Introduction to Management Information Systems
MRKT 330:	Principles of Marketing
HRM 301:	Organizational Behavior
MGMT 380:	Principles of E-Commerce

IT 101 - Introduction to Information Technology

Overview of emerging information technologies and the principles behind these developments. Discusses applications developed around evolving Internet infrastructure and their impact on business, information technology professionals and society. Covers such topics as multimedia systems and standards, distributed and network computing, e-commerce applications and data management all in the context of problem solving and program development, which are integrated throughout the course using a modern development environment as a vehicle to illustrate the concepts.

IT 120 - Introduction to Network Technology

An introduction to the basics of networking in a modern operating system environment. Emphasis is placed on the application and management of networking technology. Topics to be covered include: the OSI model, network hardware and technologies, network protocols, wired and wireless networks, TCP/IP. Whenever possible, concepts will be explained through the use of hands-on exercises that reinforce the lecture material.

IT 201 - Information Design Techniques

Prerequisite: IT 101 or equivalent and permission from Advisor. This course presents an introduction to the theory and practice of information design. Topics covered include the theoretical foundations of information design, graphic design, content design, interaction design, usability, multimedia design, sound and video, animation, and an introduction to 3D modeling.

IT 202 - Internet Applications

Prerequisites IT 102 and CIS 113 or equivalents and permission from Advisor. This course covers Internet programming and applications. A variety of software technologies are used to illustrate important concepts in Information Technology, from the client-server paradigm to text-based protocols like HTTP. HTML is introduced as the standard tool for information layout for web documents and for transferring information to/from a server-side program. The client-side language Javascript that interfaces with HTML is introduced including some of the Document Object Model [DOM]. The eXtended Markup Language (XML), Document Type Definition grammars [DTD] and Cascading Style Sheets (CSS) are used to illustrate technologies for structuring information and uniformizing the presentation of information. A server-side language (like JSP) is considered in some detail, together with a database (like Access) and the Structured Query Language (SQL) to allow implementing a three-tier web application. As time allows, other topics will be discussed.

MIS 245 - Introduction to Management Information Systems

Concepts of information systems, business process, hardware, software, systems analysis, e-commerce, enterprise systems and computer applications in organizations, techniques of systems analysis, systems designs, implementations, and information management (both technical and behavioral) are studied in the organizational context of management information needs.

MRKT 330 - Principles of Marketing

Fundamentals of marketing in a global context are covered using lectures, cases and class projects. Topics include product management, buying behavior, segmentation, total quality management, and social responsibility.

Mgmt 380 - Principles of E-Commerce

This course is designed to provide an overview of electronic commerce technologies, e-commerce strategies and their implications for work organizations. The course focuses on how the Internet has transformed business and the emergence of the digital firm.

HRM 301 - Organizational Behavior

A foundation course in individual and group behavior in organizations. Processes such as perception, motivation and leadership are examined with a focus on issues central to technology-based organizations (innovation, creativity, managing technical professionals).

For more information on Information Systems at NJIT visit: <http://it.njit.edu/>