UNIVERSITYOFWISCONSINATWHITEWATER

GRADUATE

UW
W **STUDIES**

College of Business & Economics

*COMPUTER INFORMATION
SYSTEMS COURSES (MCS)*

MCS-724
Object-Oriented Programming I 3 cr

This course teaches students professional computer programming development techniques using an object-oriented computer programming language emphasizing proper program design, correct programming style, and the use and reuse of objects. Basic understanding of programming concepts such as variables, language constructs and control structures and statements is
developed. The course also introduces students to object-oriented design and concepts including classes, objects,
encapsulation, constructors, overloading, polymorphism, and inheritance.
Prereq: Familiarity with concepts of programming in some language, e.g. Visual Basic, C++, Delphi, Java.

MCS-725
e-Business: Technology, Applications and Issues 3 cr

This course is designed to provide graduate students with an overview of internet technologies and electronic business phenomenon currently sweeping the global economy. The course provides an opportunity for students to identify, analyze, and discuss issues and challenges from a strategic, organizational and technology perspective. These issues and challenges need to be
addressed by nations, industries, and corporations in their attempt to be a part of the e-business marketplace. The goal of the course is to cover the major topics rather than be encyclopedic. The course makes use of lecture, discussions, readings, cases, and student research projects.
The course also has a technical component that teaches internet technologies such as HTML, JavaScript and the Document Object Model that help form the foundation of all Web development. What this course is NOT: Because this course is an IS course, we will not discuss e-business from a marketing perspective. The student is expected to be familiar with information technologies associated with the delivery of Internet sites. These topics will be discussed only briefly.

MCS-735
Telecommunications and Networking 3 cr

Designed to provide an overview of network and information architecture options available to designers and information managers. Covers hardware, software, communication, and interface standards. Presents issues and approaches to integrating legacy systems with new client/server architectures. Technical infrastructure choices are discussed along with the implications of these decisions for security, performance, and operations management.

MCS-740
Information Systems Strategy And Policy 3 cr
Acquaints students with the issues, procedures, and opportunities associated with the organizational use of information technology and with the management of the IS function. Topics include the role of IS technology in organizations, planning, organization, and control of the IS function, IS support for corporate reengineering and strategic initiatives, IS operations management, and the maturity of the IS function.

MCS-744
Object-Oriented Programming II 3 cr
This course builds upon the OO- Programming I course, and further aspects of software design and implementation. Concepts such as information hiding, data abstraction, and object-based and object-oriented software construction are expanded upon. Advanced programming topics are covered including: abstract data types, recursive techniques, Graphical User Interfaces (GUIs), event driven software, Threads, and Java Beans. Emphasis will be placed on the design of business objects.
Prereq: MCS-724

MCS-754
Object-Oriented Analysis and Design 3 cr
This course will update student knowledge and skills concerning methods, procedures, and tools used to develop modern business applications. Object-oriented development, JAD and RAD approaches, rapid prototyping, and client/server development, including Internet/Intranet applications, are topics to be covered as well as CASE tools and event-driven, GUI development.
Prereq: MCS-724 or consent of program coordinator. Students must be admitted to the CIS Master's Degree program.

MCS-760
Topics In Information Technology And Management 3 cr
This course addresses a changing milieu of topics concerning information systems business. Topics may include new methodologies and products that implement them, new problem solving approaches, or emerging business and environmental concerns.

MCS-770
Advanced Database Design And Management 3 cr
This course is designed to provide the knowledge needed for organizations to increase the effectiveness of using database technology. The course is divided into three parts, (1) Database Fundamentals, (2) Advanced Technical Issues, and (3) Management Related

Issues.

MCS-774
Web Development 3 cr
This course is designed to give students a capstone experience in developing web applications using dynamic HTML and Active Server Pages or Java technologies. Web applications are web pages that behave as client/server applications by dynamically reacting to user actions and have the capability to read and update databases on the server side. Concepts covered include HTML and web page design, client-side and server-side programming, Document Object Model, Java Server Pages, Servlets, and SQL.
Prereq: MCS-744 and MCS-725.

MCS-785
Information Systems Project Management 3 cr
This course will provide students with pragmatic guidance in the management of IS projects by analyzing critical success factors, skills and techniques required to successfully organize, plan, schedule, monitor, and control projects. Cost and schedule estimation techniques are presented together with proposal writing, project planning, team building, negotiation/ communication, risk management, alternative technology assessment, and quality measurement techniques.
Prereq: MCS-754 and students must be admitted to the CIS Master's Degree program.

MCS-790
Workshop 1-6 cr

MCS-791
Travel Study

MCS-798
Individual Studies 1-6 cr