

COAP - Computer Applications

COAP 5000 Introduction to Web Services (3)

This course is designed to be a literacy course that explains Web services, explores the benefits they provide to businesses, and discusses key concepts related to the technology. The course provides a broad overview of new technologies that are involved in the implementation of Web services, introduces Web service strengths and weaknesses, and examines the protocols and technologies involved in Web services.

COAP 5010 Web Development Technologies (3)

This is a course to cover Web design and development topics for students of management information systems (MIS) and business administrators that are interested in developing Web services. The course covers the practical aspects of XHTML, JavaScript, validation, file sizes, and file formats.

COAP 5020 Principles of Data Exchange (3)

This course guides the student through the process of creating XML documents and displaying them on the Web. Hands-on exercises are used to learn the essential techniques of handling XML data on the Web. The student will learn how to use data binding and XML Document Object Model scripts to display XML in HTML Web pages. **Prerequisite:** COAP 5010.

COAP 5030 Web Services Protocols (3)

This course examines the key standards that form the foundation for Web services, XML, WSDL, SOAP, UDDI. The course introduces the main ideas and concepts behind core and extended Web service technologies, and summarizes the major architectural approaches to Web services, .NET and J2EE. **Prerequisite:** COAP 5000.

COAP 5040 Databases in Web Services (3)

This course is designed to provide examples of database use in a variety of Web services. The student will have the opportunity to use a variety of tools to create Web Services, including one or more of the following toolkits: ASP.NET, Visual Studio.NET, the J2EE platform, IBM Toolkit, JDeveloper. Students will have the opportunity to work with various database platforms as they create a series of professional projects. **Prerequisite:** COAP 5000.

COAP 5050 Web Services Security (3)

This course explains how to implement secure Web services and includes coverage of trust, confidentiality, cryptography, authentication, authorization, and Kerberos. Details on Security Assertion Markup Language (SAML), XML Key Management Specification (XKMS), XML Encryption, Hypertext Transfer Protocol-Reliability (HTTP-R) are also discussed. **Prerequisite:** COAP 5000.