

IS-Information Systems Courses

Courses

IS 204. Introduction to Business Programming. 3 Hours.

An introductory course addressing the concepts, structures, and use of an event-driven programming language to implement business solutions. Emphasis is placed on developing general problem-solving strategies and implementing solutions through algorithm development.

Prerequisites: MA 105 [Min Grade: C]

IS 301. Introduction to Database Management Systems. 3 Hours.

An introductory course on database management systems. Emphasis is placed on providing students with the fundamental knowledge necessary to model business data needs, design logical data models, and design, implement, and use of a physical database in application development.

Prerequisites: IS 321 [Min Grade: C]

IS 302. Business Data Communications. 3 Hours.

A study of data communications technologies used for business. The technologies include local and wide area networks, as well as telephony. Network management and security are also emphasized.

IS 303. Information Systems. 3 Hours.

A survey course covering the theory and application of management information systems in business environments. Includes planning, development and implementation of business strategies that leverage information systems for competitive advantage.

IS 321. Systems Analysis. 3 Hours.

Focuses on the planning, decision making tasks and requisite skills necessary for the analysis of information systems.

IS 413. Introduction to Information Security. 3 Hours.

This course serves as an introduction to the field of information security where students will develop a basic understanding of the information security principles. Students will be able to understand the business value of information security and its legal/ ethical considerations. Students will also gain an appreciation for security planning and risk management and how risk may be mitigated through technical, physical, and administrative controls.

IS 414. Information Security Planning and Management. 3 Hours.

Primary objectives of the course are for the student to develop an understanding of key information security concepts, develop an understanding of how people, technology, and organizational policies should be developed and managed to safeguard an organization's information resources, learn how to manage under uncertainty and risk, develop policies and procedures to make information systems secure, and learn how to audit and recover from security breaches.

Prerequisites: IS 413 [Min Grade: C]

IS 417. Introduction to Business Intelligence. 3 Hours.

This course covers topics of knowledge management and business intelligence from an organizational IT perspective. The content of the course includes discussion of and readings on the nature of knowledge; knowledge discovery, generation, capture, transfer, sharing, and application; and includes discussion of the core IT capabilities necessary to deliver Business Intelligence in organizations. The development and use of data warehouses and data marts to support business analytics is discussed.

IS 418. Applied Data Science for Information Systems. 3 Hours.

A course in Business Analytics focusing on the extraction and preparation of data for analysis, applying analysis methods, and reporting analysis results. Students will also examine issues related to data stewardship and provenance.

IS 464. IS Internship. 1-3 Hour.

Work experience enabling students to better integrate academic knowledge with practical applications by exposure to information systems and the business environment. 2.0 GPA in IS courses and permission of instructor required. Must be an Information Systems major. Sponsoring business may require additional courses.

Prerequisites: GPAO 2.00

IS 491. Current Topics in Information Systems. 3 Hours.

A study of selected current developments in information systems emphasizing development and managerial implications. Permission of instructor required.

IS 499. Directed Readings. 1-3 Hour.

Readings and independent study in selected areas.