

# INFORMATION SYSTEMS (ISYS)

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## **ISYS 198 Information Systems Spreadsheet Make-Up (Unit: 1)**

Prerequisite: Consent of instructor.

Additional study to make up the spreadsheet component of otherwise equivalent courses in order to receive full credit. (CR/NC grading only)

## **ISYS 263 Introduction to Information Systems (Units: 3)**

Prerequisite: GE quantitative reasoning course or DS 212.

Application of information systems (IS) in a business environment. Topics include information technology (IT), networks and internetworks, types of information systems and their development, problem solving using end-user tools, and social impact of IT. Classwork, 2 units; laboratory, 1 unit.

## **ISYS 338 Information Technology in a Global Society (Units: 3)**

Prerequisite: ENG 214 or equivalent.

Study of increasingly interconnected technology and sharing of information in the 21st century. The important role technology plays in the U.S. and the world. Exploration of the information age in several social contexts.

(This course is offered as ISYS 338 and CSC 338. Students may not repeat the course under an alternate prefix.)

## **ISYS 339 Information Technology for International Hospitality and Tourism (Units: 3)**

Prerequisite: ENG 214 or equivalent.

Information technology needs of international tourism businesses. Internet and information technology that influence multicultural hospitality and tourism worldwide businesses, customer marketing, and hospitality company goals. Emphasis on e-marketing, e-commerce, and online information distribution to commercial success.

(This course is offered as HTM 339 and ISYS 339. Students may not repeat the course under an alternate prefix.)

### **Course Attributes:**

- UD-D: Social Sciences
- Global Perspectives

## **ISYS 350 Building Business Applications (Units: 3)**

Prerequisite: ISYS 263 with a grade of C- or better.

Development of a multi-tier e-business application using high level tools. Design and implement a business rule tier, presentation tier, and data access tier in order to rapidly deliver innovative and extensible business solutions. Mini-projects culminate into a complete solution for an e-business application.

## **ISYS 363 Information Systems for Management (Units: 3)**

Prerequisites: ISYS 263 and ACCT 100 with grades of C- or better.

Information systems for management decision-making. Information system development from the end-user's perspective. Applications software used to develop solutions to business problems. Classwork, 2 units; laboratory, 1 unit.

## **ISYS 463 Information Systems Analysis and Design (Units: 3)**

Prerequisites: ISYS 350 and ISYS 363 with grades of C- or better.

Analysis and design of computer-based information systems. Classwork, 2 units; laboratory, 1 unit.

## **ISYS 464 Managing Enterprise Data (Units: 3)**

Prerequisites: ISYS 363 and ISYS 350 with grades of C- or better.

Principles and use of database management systems in business. Database design and implementation. Database definition, manipulation and control using SQL. Classwork, 2 units; laboratory, 1 unit. Plus-minus letter grade only.

## **ISYS 471 E-Commerce Systems (Units: 3)**

Prerequisites: ISYS 363 with grade of C- or better.

Electronic commerce systems including E-commerce models, the technologies behind E-commerce, and planning and implementing E-commerce systems. Class work 2 units; laboratory 1 unit.

## **ISYS 475 Building Web Applications with Open Source Software (Units: 3)**

Prerequisites: ISYS 363 and ISYS 350 with grades of C- or better.

Concepts, techniques, and tools to develop Internet-oriented business application systems with emphasis on the web. Classwork, 2 units; laboratory, 1 unit.

## **ISYS 512 Business Application Design and Development with .NET (Units: 3)**

Prerequisites: ISYS 350 and ISYS 363 with grades of C- or better.

Theory and practice of distributed business application design and development. Architecture and components of a business application system, how to design and develop a business application, and how to develop the web-based components of a business application. (Plus-minus letter grade only.)

## **ISYS 556 Building Mobile Business Applications (Units: 3)**

Prerequisite: Upper division standing; ISYS 350 or one semester of programming with grade of C- or better.

Design and develop applications for mobile devices including tablet computers and smartphones. Building successful business applications for mobile devices that interfaces with backend system. Lecture, 2 units; laboratory, 1 unit. [Formerly ISYS 573 - topic Building Mobile Business Applications]

## **ISYS 557 Managing Open Source (Units: 3)**

Prerequisite: ISYS 363; seniors only.

Detailed study of the management of open source software and related processes: open source management issues, integration of open and proprietary software, licensing, copyright and intellectual property rights. Also examines open source business models in the enterprise. [Formerly ISYS 573 - topic Managing Open Source]

## **ISYS 565 Managing Enterprise Networks (Units: 3)**

Prerequisite: ISYS 363 with grade of C- or better.

Hardware and software for communications and their application to the distributed data processing environment. Terminal-to-host communication, local and wide area networks, transaction processing monitors. Classwork, 2 units; laboratory, 1 unit.

**ISYS 567 Information Systems Internship (Units: 3)**

Prerequisites: ISYS 363, ISYS 367 or ISYS 368, consent of instructor, completed application form, and minimum GPA of 3.0 in ISYS courses.

Provides Information Systems majors the opportunity to participate in a field experience in their chosen concentration. Major report required.

**ISYS 568 Multimedia Business Applications Development (Units: 3)**

Prerequisite: ISYS 363 with grade of C- or better.

Methodology and tools for the development of multimedia business applications. Classwork, 2 units; laboratory, 1 unit.

**ISYS 569 Information Systems for Business Process Management (Units: 3)**

Prerequisite: ISYS 363 with grade of C- or better.

Design of information systems that closely aligned with business processes; business modeling languages and techniques; real world applications. (Plus-minus letter grade only.)

**ISYS 575 Information Security Management (Units: 3)**

Prerequisite: ISYS 363 with "C-minus" or better.

Information security from a management perspective. Identification of organization's information assets, threats to these assets, information security strategy to protect assets. Classwork, 2 units; laboratory, 1 unit.

**ISYS 650 Business Intelligence (Units: 3)**

Prerequisite: ISYS 363.

Analysis and design of business intelligence systems that are aligned with business processes. Identification and use of business data, (re)design of information and knowledge systems, business modeling methodology. Classwork, 2 units; laboratory, 1 unit. (Plus-minus letter grade only.)

**ISYS 663 Information Technology Project Management (Units: 3)**

Prerequisite: ISYS 463 with grade of C- or better.

Managing information technology projects including both technical and behavioral aspects, Managing IT project scope, cost, time, quality, risk, human resources, communications, procurement, and outsourced IT projects. Senior IT management role.

**ISYS 699 Independent Study (Units: 1-3)**

Prerequisite: Consent of instructor, adviser, and department chair.

Intensive problem analysis under the direction of a business computer information systems faculty member. Open only to upper division students who have demonstrated ability to do independent work.

**ISYS 814 Information Systems for Strategic Advantage (Units: 3)**

Prerequisite: BUS 782. Restricted to graduate business student; graduate students in other majors with the consent of the Faculty Director of Graduate Programs.

In depth treatment of three topics: derivation of an Information Systems (IS) strategy, specification of information system requirements, and design and implementation of an information-based solution. (Plus-minus letter grade only.)

**ISYS 850 Seminar in Business Intelligence (Units: 3)**

Prerequisite: BUS 782. Restricted to graduate business student; graduate students in other majors with the consent of the Faculty Director of Graduate Programs.

Tools and techniques for extracting business intelligence from data to support strategic decision making. Applications of business intelligence and analytics methodologies in different functional areas. Managerial implications. (Plus-minus letter grade only.)

**ISYS 856 Enterprise Mobile Applications (Units: 3)**

Prerequisite: BUS 782. Restricted to graduate business student; graduate students in other majors with the consent of the Faculty Director of Graduate Programs.

Focus on enterprise mobile technologies in the workplace that enable new business models to connect customers and enterprises; Design Thinking methodology to facilitate the creative design of enterprise mobile strategy and solutions; employment of Enterprise Resource Planning (ERP) mobile development platform to help prototype and develop innovative mobile solutions. (Plus-minus letter grade only)

**ISYS 869 Business Process Management (Units: 3)**

Prerequisite: BUS 782. Restricted to graduate business student; graduate students in other majors with the consent of the Faculty Director of Graduate Programs.

Design of business processes and their implementation through change management. Modeling and analysis of business processes. (Re)design and implementation of systems that enable them. Business modeling languages and techniques. (Plus-minus letter grade only.)

**ISYS 871 Electronic Commerce (Units: 3)**

Prerequisite: BUS 782. Restricted to graduate business student; graduate students in other majors with the consent of the Faculty Director of Graduate Programs.

Electronic commerce from a managerial perspective. B2C and B2B e-commerce. E-commerce business and revenue models, security and payment, support services. Planning, implementing, and managing e-commerce in organizations. (Plus-minus letter grade only.)

**ISYS 882 Managing the Digital Enterprise (Units: 3)**

Prerequisite: ISYS 814 or equivalent. Restricted to graduate business student; graduate students in other majors with the consent of the Faculty Director of Graduate Programs.

Principles and practice of managing information technology and digital enabled processes of an enterprise. Strategic, tactical, and operational planning for integration of IT throughout an enterprise.

**ISYS 895 Research Project in Information Systems (Units: 3)**

Prerequisites: DS 814/ISYS 814 and 3 800-level required courses in student's emphasis. Open only to computer information systems and electronic commerce MSBA candidates; consent of instructor and approval of Advancement to Candidacy (ATC) and Culminating Experience (CE) forms by Graduate Studies. Research methodology and supervised research culminating in oral and written presentations. Advancement to Candidacy and Proposal for Culminating Experience Requirement forms must be approved by Graduate Studies before registration. (Plus-minus letter grade; no CR/NC allowed; RP)

**ISYS 899 Independent Study (Units: 1-3)**

Prerequisites: Consent of instructor, adviser, and department chair.

Intensive study of a particular problem under the direction of an Information Systems faculty member. Open only to graduate students of demonstrated ability to do independent work. (Plus-minus letter grade only)