INFORMATION SYSTEMS MANAGEMENT (ISMM1-UC)

ISMM1-UC 702 Database Design (4 Credits)
Typically offered occasionally
Focuses on data modeling techniques that will identify and structure all requisite data items for efficient storage and retrieval. The student also learns the SQL query language to develop answers to questions based on the stored data.
Grading: UC SPS Graded
Repeatable for additional credit: No

ISMM1-UC 710 Project & Innovation Management (4 Credits)
Typically offered occasionally
This course focuses on how to use project management methodologies and tools within the information systems development process. Students learn how to control project budgets and completion schedules, how to motivate the project team for greater productivity, and how to avoid potential people problems.
Grading: UC SPS Graded
Repeatable for additional credit: No
Prerequisites: ISMM1-UC 752.

ISMM1-UC 720 Networking Architecture & Protocols (4 Credits)
Typically offered occasionally
Networking Architecture and Protocols will provide the student with a detailed understanding of networking technologies and network principles and how they are used in distributed information systems. Topics include: the OSI model, client server concepts, proprietary and open source computing platforms and network operating systems; current and legacy network architecture including Ethernet and Token Ring; data packet architecture and the TCP/IP protocol suite.
Grading: UC SPS Graded
Repeatable for additional credit: No
Prerequisites: ISMM1-UC 751.

ISMM1-UC 721 Network Administration and Management (4 Credits)
Typically offered occasionally
Networking Administration and Management prepares students to install servers; administer resources; manage and troubleshoot hardware and drivers; monitor and optimize system performance and reliability; develop and implement backup procedures; use diagnostic tools; configure, install, and troubleshoot protocols and services including DNS, DHCP, WINS, TCP/IP, and NAT. The course will also introduce students to enterprise security solutions.
Grading: UC SPS Graded
Repeatable for additional credit: No
Prerequisites: ISMM1-UC 751.

ISMM1-UC 723 Networking Security & Privacy Issues (4 Credits)
Typically offered occasionally
This course covers the fundamental concepts of information security focusing on intrusion detection and analysis, viruses, worms, trojan horses, computer forensics, and legal and privacy issues. The course also introduces the student to the issues surrounding HIPPA and Sarbanes-Oxley compliance legislation
Grading: UC SPS Graded
Repeatable for additional credit: No

ISMM1-UC 725 Disaster Recovery & Continuity Planning (4 Credits)
Typically offered occasionally
This course addresses key professional competencies involved in enterprise continuity and disaster planning. Natural disasters, cyber-attacks, and national emergency situations such as terrorism represent significant dangers to the ongoing operations and objectives of an organization. Likewise, significant structural changes due to mergers and acquisitions, outsourcing, and reorganization can also threaten the ongoing operations of an enterprise. This course gives students the skills to analyze risks, assess business impacts, create an enterprise continuity strategy, as well as construct, test, and maintain a recovery and continuity plan.
Grading: UC SPS Graded
Repeatable for additional credit: No
Prerequisites: ISMM1-UC 771.

ISMM1-UC 727 Design and Programming for the Web (4 Credits)
Typically offered occasionally
This course teaches JavaScript as it relates to web page development. The course discusses JavaScript core language, including JavaScript data types and variables, expressions and operators, functions, arrays, and objects. The course also examines the Document Object Model and the JavaScript event model and explains how you can combine these to interact with HTML components to create dynamic web content. The course also explores how to interact with HTML forms, and how to create, manipulate and save client-side cookies.
Grading: UC SPS Graded
Repeatable for additional credit: No
Prerequisites: ISMM1-UC 746.

ISMM1-UC 728 Programming Languages: (2 Credits)
Typically offered occasionally
This course provides students with an introduction to different programming languages and programming techniques using lectures, demonstrations, and labs. The course is designed for students who already have some programming experience. Extensive lab exercises throughout the course provide opportunities to gain practical experience. Topics include: types, variables, and operators, methods, conditionals, loops, classes and objects, packages, interfaces, inheritance, exceptions, file I/O.
Grading: UC SPS Graded
Repeatable for additional credit: Yes

ISMM1-UC 729 Mobile Application Development: (4 Credits)
Typically offered occasionally
This course is an introduction to developing native applications for mobile devices. The course alternates focusing on common mobile platforms, including: Blackberry, iOS, and Android. The course is intended to be project-based and assumes participants already have a strong background in programming. During the semester students will complete weekly small labs and one substantial course project. May be repeated for credit twice if different platforms are being covered.
Grading: UC SPS Graded
Repeatable for additional credit: No
Prerequisites: ISMM1-UC 746.

ISMM1-UC 731 Introduction to Cloud Computing (4 Credits)
Typically offered occasionally
Cloud computing is a term that is used to describe a variety of computing concepts that involve a large number of computers connected through a real-time communication network such as the Internet. This course introduces students to the emerging cloud computing paradigm and explores several systems topics in cloud computing, including: concept and motivation, virtualization technologies, architectures, networking, storage and file systems, programming models, and application development.
Grading: UC SPS Graded
Repeatable for additional credit: No
Prerequisites: ISMM1-UC 702 AND ISMM1-UC 746.

ISMM1-UC 741 Database Administration (4 Credits)
Typically offered occasionally
This course focuses on using a DBMS effectively and insuring that the data is both accurate and secure. Legal requirements regarding privacy will be presented. Course topics will include: fine tuning system performance, data validity and data security and privacy issues, data dictionaries, backup procedures, disaster recovery planning, distributed databases and report generator software.
Grading: UC SPS Graded
Repeatable for additional credit: No
Prerequisites: ISMM1-UC 702.

ISMM1-UC 742 Business Intelligence (4 Credits)
Typically offered occasionally
This course examines how to use existing business data to develop optimum business strategies. Having the information on a DBMS or other machine-readable form and being able to make the data compatible for analytic applications, as well as examples of such analysis will be the focus of this course. Course topics will include: type of data available: transactional, non-operational, metadata; nomenclature of data: classes, clusters, associations, patterns; levels of analysis: decision trees; rule induction, statistical, etc.; technology infrastructure required, presentation of analysis.
Grading: UC SPS Graded
Repeatable for additional credit: No
Prerequisites: ISMM1-UC 702.

ISMM1-UC 746 Fundamentals of Computing (4 Credits)
Typically offered occasionally
This course introduces the intellectual enterprise of computing through object-oriented design and programming. Topics include: abstraction, algorithms, classes, data structures, encapsulation, generics, inheritance, object identity, polymorphism, and software engineering. Concepts are reinforced through practical exercises inspired by real world domains.
Grading: UC SPS Graded
Repeatable for additional credit: No

ISMM1-UC 751 Networking (4 Credits)
Typically offered occasionally
Focuses on the benefits and problems in installing and using local area networks. LAN standards; LAN connectivity; and LAN administration issues are explored in detail. The functionality of a network operating system and a comparative analysis of available systems are also key topics.
Grading: UC SPS Graded
Repeatable for additional credit: No
Prerequisites: (MATH1-UC 1141 OR MATH1-UC 1105).

ISMM1-UC 752 Systems Analysis (4 Credits)
Typically offered occasionally
Focuses on the concepts and techniques involved in analyzing, designing, and documenting the requirements for business information systems. Topics include feasibility, justification, specifications, design, implementation, documentation, and performance evaluation.
Grading: UC SPS Graded
Repeatable for additional credit: No
Prerequisites: EXWR1-UC 7502.

ISMM1-UC 761 Management of Risk and Quality (4 Credits)
Typically offered occasionally
Every enterprise needs to be focused on the delivery of quality, whether such quality pertains to production/manufacturing, customer service, or internal technology capabilities (IT infrastructure and software). Quality can be achieved by disciplined application of managed processes for designing, building, testing, and deploying enterprise capabilities; by engaging in continuous process improvement; and by proactively discovering and mitigating risks. This course explains the fundamental concepts of quality, reviews the frameworks provided through international standards, and establishes an understanding of enterprise risk management. Many project planning approaches concentrate on estimating, network aspects of planning, and process-driven execution of the work plan. This is of little value if the project manager does not give sufficient consideration to quality and risk challenges that could either arise during the project's execution or be be the result of the project delivering its scope. Successful project managers manage quality up and risk down. This requires a well-founded and practical way of planning the project's execution with an appropriate focus on quality and risk.
Grading: UC SPS Graded
Repeatable for additional credit: No
Prerequisites: ISMM1-UC 771.

ISMM1-UC 762 Information Security Management (4 Credits)
Typically offered occasionally
This course looks at the information vulnerabilities and threats facing the enterprise from a management perspective. While examining various processes and issues (identification of assets, data security, archiving and backing up, information destruction, intellectual property rights, and forensics) it focuses on the development of written policy documents and review processes.
Grading: UC SPS Graded
Repeatable for additional credit: No
Prerequisites: ISMM1-UC 771.

ISMM1-UC 771 Management Info Systems (4 Credits)
Typically offered occasionally
Focuses on the information needs at each level of management in a corporation and how these needs must be met by an integrated information system. The tasks necessary in the development, maintenance, and operation of the information system are defined.
Grading: UC SPS Graded
Repeatable for additional credit: No
Prerequisites: EXWR1-UC 7502.

ISMM1-UC 1971 Independent Study (1-4 Credits)
Typically offered occasionally
Students conduct an independent investigation of selected topics outside the boundaries of the classroom. Independent study allows students to pursue specialized interests, within the framework of the curriculum, that are not available in existing courses. Although self-directed, students work closely with a faculty mentor who guides and evaluates their work.
Grading: UC SPS Graded
Repeatable for additional credit: Yes

ISMM1-UC 7942 Internship: Information Systems Management (2-4 Credits)
Typically offered occasionally
Information Systems Management students may undertake an internship earlier in their academic career which can be 2 or 4 credits. To qualify for an ISMM internship, students should be in good standing within their program and have the approval of their advisor. Students wishing to consider doing an ISMM internship should submit a proposal outlining their internship which must then be approved by the Internship Program Coordinator. After the proposal is approved, students undertake an internship which typically entails outplacement in an organization related to the student's interests or academic concentration. A minimum of 100 hours is required over the course of the semester. In addition to the hours at their internship, students meet regularly with the internship coordinator and other interns, maintain a weekly journal, and (required for a 4 credit internship) complete a final paper or work portfolio.
Grading: UC SPS Graded
Repeatable for additional credit: No

ISMM1-UC 7990 Spec Top in Information Systems Management (2-4 Credits)
Typically offered occasionally
Provides the opportunity for intensive study of specific topics in Information Systems Management, focusing on a different theme of a topic each time it is offered. The specific topic is listed in the course schedule for the semester.
Grading: UC SPS Graded
Repeatable for additional credit: Yes

ISMM1-UC 7991 Senior Project: Seminar Information Systems Management (4 Credits)
Typically offered occasionally
The seminar allows students to develop a project under the guidance of a faculty mentor. The seminar requires regular class attendance to discuss projects and to document them, as well as individual meetings with the mentor. The projects themselves may be in one of the degree's various concentration areas. Projects must be the student's individual, original work and include the product, the technical documentation, and a learning experience essay summarizing the process and skills used. Prerequisites: Completion of at least 90 units and 12 units of concentration coursework.
Grading: UC SPS Graded
Repeatable for additional credit: No

ISMM1-UC 7992 Senior Project: Internship (Information Systems Management) (4 Credits)
Typically offered occasionally
The graduation project consists of either a seminar project or an internship. The internship provides an opportunity for students to use knowledge gained in their major combined with the knowledge provided by professionals in a variety of industry settings. Students are required to complete a minimum of 100 hours during the semester to earn four credits. (Students' full-time jobs cannot serve as internships.) In addition to hours at their placement, they meet regularly with the internship coordinator, maintain weekly logs or journals, and complete a final learning experience essay summarizing the outcome, including samples of work completed. Prerequisites: Completion of at least 90 units and 12 units of concentration coursework.
Grading: UC SPS Graded
Repeatable for additional credit: No