INFORMATION SYSTEMS (IS)

IS 071 Computer Workshop (0 credits)

IS 96T Topic: Network Security:Making Systems Safe (3 credits)

IS 111 Assembly Language Programming (3 credits)

IS 120 Accounting Information Systems (3 credits)

IS 123 Advanced Cobol Programming (3 credits)

IS 133 Applied Artificial Intelligence (3 credits)

IS 199 Special Topics in Computer and Information Systems (1-6 credits)

IS 199B Unix and C in Perspective (3 credits)

IS 199H Topic: Introduction to Multimedia (1 credits)

IS 199J Topic: Computer Applications Using Spreadsheets (1 credits)

IS 199K Topic: Introduction to Information Super Highway (1 credits)

IS 199M Special Topics: Business Application for Non-Computer Majors (3 credits)

IS 199N Topic: Local Area Networks (3 credits)

IS 199P Special Topics: Personal Computer Application in Humanities (3 credits)

IS 199R Topic: Business Applications for Computer Majors (3 credits)

IS 199S Special Topics: Unix and C in Perspective (3 credits)

IS 199T Special Topic: Business Applications for Computer Major (3 credits)

IS 201 Programming Languages (3 credits)

IS 202 Advanced Cobol Programming (3 credits)

IS 205 Advanced Assembler Language Programming (3 credits)

IS 207 Information Systems Design (3 credits)

IS 209 Management Information Systems (3 credits)

IS 211 Information Center Approach: Tools, Techniques, Applications (3 credits)

IS 212 System Implementation (4 credits)

IS 213 Business Data Communications (3 credits)

IS 217 Database Management and Organization (3 credits)

IS 220 Operating Systems Concepts (3 credits)

IS 222 Cobol Programming (4 credits)
Techniques for applying structured COBOL to the solution of business problems. Programs are developed, coded, compiled, tested and documented. Topics covered include sequential organization and sequential access theory; preparation of printed reports, data validation procedures, and introduction to indexed master files and related computer runs.

IS 224 Fundamentals of Visual Programming (1 credits)
Students will be introduced to a visual programming language in a windows development environment. The course is a hands-on which, focuses on the implementation of traditional applications in a visual environment using features of that environment, such as text boxes and buttons.

IS 227 Database Programming Techniques (3 credits)

IS 230 Distributed Computing Systems (3 credits)

IS 237 Comparative Database Systems (3 credits)

IS 243 Information Systems Design (3 credits)
Concepts of information systems design. Design of procedures, programs and man/machine design issues. Complex system testing, evaluation, conversion and documentation problems.

IS 295 CIS/MIS Internship (1-9 credits)

IS 296 Topics in Information Systems (3 credits)

IS 299 CIS Seminar (3 credits)

IS 299A CIS Seminar: Programming in C (3 credits)

IS 299B CIS Seminar: Business Applications in C++ (3 credits)

IS 322 Advanced Cobol Programming (3 credits)

IS 328 Programming Languages (3 credits)

IS 341 Magagement Information Systems (3 credits)

IS 343 Information Center Approach: Tools, Techniques, Applications (3 credits)

IS 357 Network Programming (4 credits)
This course introduces the concepts and tolls used by information systems developers creating applications for the Internet. Topics include HTML, client-side programming with JavaScript. In this hands-on lab course, students will analyze, design and implement an Internet application.
Course Rotation: NY and PL: Spring.

IS 381 Data Structures (3 credits)
An introduction to data organization and its application to writing computer programs are discussed in this course. Data structures are presented in terms of the logical components of a structure, the set of operations natural to the structure, and feasible storage representations of the structure as dictated by its components and set of operations.

IS 382 Managing Information Technology Outsourcing (3 credits)
This course explores the important area of Information Technology Outsourcing. Outsourcing is more than the headline grabbing news about jobs lost abroad; it is about corporate strategy to reduce costs by performing common business processes. We will focus on IT outsourcing and examine the strategies, benefits and pitfalls of offshore outsourcing. This course will investigate how the culture and politics of the receiving countries play a role in the success of the outsourcing business model. Additional topics will cover the effect outsourcing has on the US economy, job market, and politics.
Course Rotation: NY and PL: Fall and Summer.

IS 383 International Perspectives on Network Security (4 credits)
The importance of network security in today's world is increasingly becoming a global concern. It is imperative to have an understanding of how the international community addresses network security to insure the reliability of our own data communications infrastructure. The online portion of this course will provide an introduction to the issues of globalization and the technology of telecommunications and networking. Topics will include techniques and policies for securing networks, and an overview of cybercrime and its prevention. Abroad, students will participate in seminars with academic and industry professional to get the international perspective.
Course Rotation: NY and PL: Spring.

IS 390 Honors Project in Information Systems (3-4 credits)

IS 391 Topics in Computer and Information Systems (1-6 credits)

IS 391H Introduction to Multimedia (2 credits)

IS 391J Computer Applications-Business Using Spreadsheet (1 credits)

IS 391K Topic: Internet-Introduction to Information Super Highway (1 credits)

IS 391N Topic: Local Area Networks (3 credits)

IS 395 Independent Study in Information Systems (1-6 credits)

IS 396A Topic: Computer Applications Using Spreadsheets (1 credits)

IS 396B Topic: Introduction to Client and Server Programming (3 credits)

IS 396C Topic: Visual Programming Techniques (3 credits)

IS 396D Topic: Introduction to Network Programming (3 credits)

IS 396E Topic: Java Programming (3 credits)

IS 396G Topic: Pervasive Computing: Human Computer Interaction (3 credits)

IS 396H Topic: Introduction to Multimedia (4 credits)

IS 396J Topic: Computer Applications Using Spreadsheets (1 credits)

IS 396K Topic: Internet -Introduction to Information Super Highway (1 credits)

IS 396L Introduction to Cobol Programming (3 credits)

IS 396M Topic: Project Management, Planning and Policy (3 credits)

IS 396N Topic: Local Area Networks (3 credits)

IS 396P Topic: Seminar in Introduction to Web Development (3 credits)

IS 396Q Topic: Emerging Technologies in Information System (3 credits)

IS 396R Topic: Advance Topics in Internet Development (3 credits)

IS 396S Java Script Programming (3 credits)

IS 396T Topic: Network Security: Making Systems Safe (3 credits)

IS 396V Topic: Web Design for Non-profit Organization (3 credits)

IS 397 Topics in Information Systems (4 credits)
This course offers the opportunity to study special topics in computer and information systems. Please refer to the current schedule of classes for announcement of courses offered under this title.
Course Rotation: TBA.

IS 397A Interface Design for Web Applications (4 credits)
This course introduces students to the theories of Human-Computer Interaction and Usability and presents methodologies for analyzing and designing user-centered interactive interfaces. Through readings, case studies and hands-on analysis, students will experience the iterative interface design process and complete a prototype interactive interface design.

IS 397E Topic: Introduction to Geographic Information Systems (4 credits)
Geographic Information Systems are characterized by spatial objects that have locations (e.g. addresses, landmarks, geopolitical boundaries, rivers, roads, etc.) and data associated with them (e.g. quantities, statistics, etc.). Emerging applications and research involves solving problems which asks IS related questions about geospatial information and applied in many situations including customer analysis, market analysis, site selection, etc. In this class students will learn how to use ArcGIS to analyze and develop GIS solutions.
Course Rotation: TBA.

IS 397F Topic: Technology for E-commerce (4 credits)

IS 397G Topic: Pervasive Computing: Human Computer Interac (4 credits)

IS 397K Topic: Privacy Design for Web 2.0 (4 credits)
Global participation in Web 2.0 communities has outstripped the ability of the design community to provide robust privacy management tools. This course will explore the design requirements for a new privacy architecture for Web 2.0. Course topics include social, legal, and philosophical definitions of privacy, privacy enhancing technologies, and design considerations for socio-technical systems. Course activities include extensive readings, two research papers, and a final privacy design project.

IS 397L Topic: Cyber Law: Legal Issues in Information Technology (4 credits)
This course will introduce the student to the legal environment of business with primary focus on legal issues affecting information systems. Among the topics to be covered are: an introduction to the American legal system; jurisdiction; constitutional law; the law of crimes such as pertaining to destruction of data and unlawful appropriation; computer torts including defamation and invasion of privacy; securities, antitrust and taxation issues and intellectual property issues relating to computer and Internet technology.

IS 397N Topic: Strategic Information Systems and IT Strategy (4 credits)
This course will cover the strategic use of information technology that is critical for supporting business strategies and enhancing organizational performance. Topics include: IT and strategy, strategic alignment of IT, organizational transformation, strategic potential of IT, business value of IT, e-business, extended enterprise and IT strategy.

IS 397P Topic: Artificial Intelligence (4 credits)
This course surveys the types of artificial intelligence that exist. Algorithmic vs. heuristic programming; search trees, search algorithms, information retrieval, robotics and expert systems are areas to be explored. State of the art and future trends of these and other forms of artificial intelligence will be explored. A significant aspect of the course is a comprehensive introduction to intelligent decision support.

IS 397U Topic: Visualizing Information Systems: an Introduction to Geographic Information Systems (4 credits)
Geographic Information Systems are characterized by spatial objects that have locations (e.g. addresses, landmarks, geopolitical boundaries, rivers, roads, etc.) and data associated with them (e.g. quantities, statistics, etc.). Emerging applications and research involves solving problems which asks IS related questions about geospatial information and applied in many situations including customer analysis, market analysis, site selection, etc. In this class students will learn how to use ArcGIS to analyze and develop GIS solutions.

IS 414 Operating Systems Concepts (4 credits)
An operating system is responsible for the optimal allocation, utilization and user interface of a computer system. This course introduces the techniques used and problems encountered in operating systems for modern computing environments.
Course Rotation: NYC: TBA. PLV: Spring.

Prerequisites: IS 112 and IS 241 or permission of chair.

IS 431 Applied Artificial Intelligence (3 credits)
Survey of the types of artificial intelligence that exist. Algorithmic vs. heuristic programming; search trees, search algorithms, information retrieval, robotics and expert systems are areas to be explored. State of the art and future trends of these and other forms of artificial intelligence will be explored.
Course Rotation: TBA.

Prerequisites: IS 351 and IS 481 or permission of chair.

IS 451 Business Telecommunications and Networking (4 credits)
Computer communications and networks and their role in telecommunications. Detailed presentation of network management and network design fundamentals are important areas that will be included in the course. Digital, voice, and video signals and transmission will be discussed.
Course Rotation: TBA.

Prerequisites: IS 351 or permission of chair.

IS 490 Independent Study in Information Systems (1-4 credits)
With the approval of the appropriate faculty member, the department chair, and the academic dean, students may select a topic for guided research that is not included in the regular course offerings. The student meets regularly with the faculty member to review progress. A research project or paper must also be submitted.
Course Rotation: TBA.

Prerequisites: Junior standing and minimum CQPA of 3.50.

IS 495 Information Systems Internship (1-4 credits)
Practical experience in programming and system analysis provided through internship assignments with major corporations or government agencies is required. Internship assignments require a minimum of 15 hours of work per week, for which students may be compensated. A research study or paper is required to integrate the work assignment with studies in the major.
Prerequisites: Additional paperwork and department chair approval required prior to registration.

IS 499 Information Systems Seminar (3 credits)
This seminar draws upon the knowledge acquired by the student in previous IS courses and focuses it on issues of current professional interest.
Course Rotation: TBA.

Prerequisites: Senior standing in a computer-related major and/or permission of chair.