Computer Information System

CS 150. Introduction to Computer Science. A preliminary course for all students who would like to take any of the computer science courses. The course emphasizes two topics: Survey of Computer Science and Systematic Problem Solving. Prerequisite: None. **3 credits.**

CS 206. Introduction to Web Technology. This course will introduce the Hyper Text Markup Language (HTML) used to develop a Web site. This course also builds upon basic skills in Web authoring. Various Web authoring tools are introduced. Upon completion, students will be able to use these tools to develop basic Web sites. Prerequisite: CS 150 or permission of instructor. **3 credits.**

CS 212. Formal Thinking. Practice in using scientific and mathematical patterns of thinking, especially the effective use of constraints in solving problems. An introduction to topics in philosophy of science, such as “explanation” and “evidence,” and some mathematically-oriented ideas, such as “probability,” “decision,” “information,” and “control systems.” Prerequisite: None. **3 credits.**

CS 250. Fundamentals of Programming Language. This course is an introductory programming course. The course emphasis the fundamental concepts, such as data types, the concept of variable scope, structures, functions, structured programming, and implementation on computer programs. Prerequisite: CS 150 or permission of instructor. **3 credits.**

CS 215. Essentials of Project Management. Project Management Essentials offers a critical introduction to the planning, implementation and evaluation of specific projects in addition to the evaluation of the success of the project. This includes the basic concepts of the five fundamental project management processes, defining requirements, schedules, risk management and project control. Prerequisite: None. **3 credits**.

CS 262 Discrete Mathematics Not in Catalog

CS 300 Information Security & Policy Not in Catalog

CS 302 Computer Information Systems Not in Catalog

CS 371. Research Methods. This course will introduce basic research methods in Computer and Information Systems. The course includes both experimental and non-experimental research design, qualitative and quantitative approaches to data analysis. The student will interpret maps, charts, graphs, write and revise reports. Prerequisite: CS 250 or CS 370. **3 credits.**

CS 316. Project Risk and Leadership Management. This course is designed to avoid risks and capture opportunities relative to product process, implementation and project problems in addition to containment of such problems. The ability to strategically seek and receive cooperation from planning to implementation of projects will be carefully explored. Prerequisites: CS 215 or CS 315 or permission of instructor. **3 credits.**

CS 330. Network and Data Communication. This course examines the underlying technology that makes data communication possible. The course will cover various transmission media, digital and analog signals, modulation, multiplexing, circuit switching, error control and flow control. The course will also cover many real-world examples of data communication, including modems, DSL, Ethernet, wireless LANs, and cell phones. Prerequisites: CS 250 & CS 309. **3 credits.**

CS 350. Introduction to Software Engineering. This course will cover the fundamentals of software engineering. Topics will include understanding system requirements, finding effective methods of design, coding, and testing, and usage of the software tools, e.g., MS Visio or Rational. Prerequisites CS 351 & CS 352. **3 credits.**

CS 370. Computer Ethics. This course introduces the ethical issues faced by computer users. Topics include privacy, intellectual property, cybercrime, games, social justice, and codes of professional ethics. Prerequisite: None. **3 credits.**

CS 416. Internship. The goal of an internship is to give students an opportunity to apply lessons learned in the classroom to real-world experience set in a practice-oriented environment. In addition, students will have the opportunity to demonstrate and develop their technical skills and soft skills such as teamwork, effective communication, social interactions, professional networking and critical thinking. Prerequisite: Junior or Senior status. **5 credits.**

CS 411. Systems Analysis and Design. Provides tools and structured methodology for understanding and communicating about data processing systems; early phases of systems design are also addressed. Current application software will be used to enhance the process required in this course. Prerequisite: CS350. **3 credits.**

CS 410. Database Management Systems I. This course covers experimental research. Research design, data collection, analysis, validity, and report writing will all be covered. Substantial parts of the course requirements are written. The format of the course will be a mixture of lecture and discussion, writing, and demonstrations. Prerequisite: CS 250. **3 credits**.

CS 412. Database Management Systems II. Introduction to techniques of data base systems design and implementation with emphasis on data integrity and file security techniques. Current database application software will be used to illustrate the development, testing and maintenance of computer data bases as well as perform structured query application. Prerequisite: CS 410. **3 credits**.

CS 432. Computer Architecture. Describes how computers are organized, including what components one has and how they are controlled and coordinated, with special emphasis on central processors. Prerequisites: CS 309 or CS 431. **3 credits**.

CS 413 Electronic Commerce Not in Catalog

CS 475. Seminar. This course covers experimental research. Research design, data collection, analysis, validity, and report writing will all be covered. A substantial part of the course requirements is written. The format of the course will be a mixture of lecture and discussion, writing, and demonstrations. Prerequisite: Senior status. **3 credits**.