

## **COMPUTER INFORMATION SYSTEMS (CIS)**

CIS 100. (3) **Introduction to Keyboarding/ Word Processing.**

Keyboarding at the computer. Word processing and the ten key numeric keypad are introduced with basic proficiency in keyboarding being accomplished. Documents, such as letters, memorandums, and reports are prepared.

CIS 125. (3) **Business Applications of Microcomputer Software.**

A study of the application of microcomputer software to the business environment. Included are word processing, data management, and spreadsheet software programs. (Fall, Spring)

CIS 201. (3) **Programming in C++.** An introductory course using the C++ language, with emphasis on object-oriented programming concepts. This course focuses on the development of business-oriented programs. Prerequisite: CIS 125. (Fall, Spring)

CIS 207. (3) **COBOL.** A study of commercial computer programming systems using COBOL (Common Business Oriented Language) in the solution of problems occurring in the business environment. (Fall, Spring)

CIS 225. (3) **Visual BASIC.** A course in the fundamentals of the Visual BASIC language on microcomputers. This course covers the foundational logic of programming, processing arrays, and sequential files as well as object-oriented programming concepts. Prerequisite: CIS 125. (Fall, Spring)

CIS 240. (3) **Word Processing Applications.** Further development of concepts of word processing. Implications of word processing on procedures and personnel in performing the basic information processing functions of origination, production, reproduction, distribution, and storage are addressed. Microcomputers are used to prepare documents with advanced word processing features. Prerequisite: CIS 125.

CIS 315. (3) **Advanced Object Oriented Programming.** An advanced programming course using the microcomputer. May include advanced elements from C++, Visual BASIC, JAVA and other object-oriented languages. Prerequisites: CIS 125, 201. CIS 225 is also recommended. (Spring)

CIS 320. (3) **COBOL Application.** A continuation of Computer Information Systems 207, with emphasis on advanced applications. Prerequisites: CIS 207 (Fall, Spring)

CIS 330. (3) **Introduction to Systems Analysis and Design.** A study of the Systems Development Life Cycle, with emphasis on the application of the concepts, methodologies, and tools related to the analysis, design, and implementation of successful information systems. Prerequisite: CIS 125. Recommended: CIS 201 or 207 or 225.

CIS 350. (3) **Multimedia in Business Reports and Meetings.** A study of business reports, both written and oral. Proposals, feasibility studies, progress reports, and formal analytical reports with graphic presentations are included. Interpersonal and intercultural communication, along with business ethics and problem analysis, are integrated with communication process and theory. A review of business grammar and communication is included in the course. Distance meeting formats are included. Prerequisite: CIS 125.

CIS 365. (3) **Electronic Spreadsheet Applications.** Applications course concentrating on the use of spreadsheet software to analyze and summarize mathematical, statistical, and financial data of business organizations. Prerequisite: CIS 125.

CIS 375. (3) **Applications of the Internet and WWW.** A basic introduction to the functions available on the Internet including e-mail, FTP (File Transfer Protocol or downloading files from the Internet), TELNET, Gopher. The emphasis is placed on the first two functions. Students also study the World Wide Web. The focus of this portion of the curriculum is on using a browser (Microsoft Internet Explorer and Netscape Navigator/Communicator) and developing a simple Web site of two web pages on personal data. Open to all majors. Prerequisite: CIS 125 or equivalent.

CIS 400. (3) **Application Programming.** A study of batch processing for business transactions. Five types of computer programs are emphasized: the edit program, the file update program, the register program, the action document program, and the summary program. The course covers the development, design, implementation, and documentation of business applications and files. Prerequisites: CIS 320, 330.

CIS 404. (1) **Transition to Business World.** Open to senior majors, this weekly seminar will focus upon those issues faced by graduates as they enter and progress in their business careers. The topics will include career decisions, keys to personal success, ethical dilemmas, balancing work and family responsibilities, continued personal growth, and adapting to and being effective in a corporate environment. Also listed as AC 404, MG 404, and MK 404 but creditable only in field for which registered.

CIS 410. (3) **Case Projects.** A course in which the student, individually or in a group, is involved in the design, implementation, documentation, and presentation of an information processing system. Prerequisites: CIS 201, 207, 320, 400.

CIS 420. (3) **Information Systems Seminar.** Current problems in information systems through the reading of periodicals, government publications, books, and Web pages which have had a profound effect on the rapidly changing technology. Prerequisite: 12 hours in CIS or approval of instructor.

CIS 425. (3) **Design and Evaluation of Training Software.** Analysis, synthesis, and evaluation of instructional software designed for and applied to various learning situations. Creating web-based tutorial software for business training purposes.

CIS 430. (3) **Special Topics.** Select topics varying according to the need and interest of students. Prerequisite: approval of instructor

CIS 435. (3) **Database Records Management.** Applications course concentrating on electronic data management and record keeping using a computer. The course includes an introduction to Computer. Generated Input (CGI) forms in web pages. Prerequisite: CIS 125.

CIS 445. (3) **Database Management Systems.** Theory and practice of database design and processing within a Management Information Systems (MIS) framework. This includes fundamental design concepts, technical aspects of databases, use of specific DBMS software, and using data to enhance decision-making for managers. Prerequisites: CIS 201 or 207 or 225. Recommended: CIS 330.

CIS 470. (3) **Managing Computer Technology.** Lab setup and management, software and hardware installation, routine PC maintenance, and basic network management. The course will also include the physical, mechanical, and electronic considerations for effective management of technology-based learning laboratories. Prerequisite: CIS 125.

CIS 475. (3) **Teaching Career Technical Business and Marketing Education.** Techniques involved in carrying out the functions of secondary business and marketing education programs. A study of the functions of the classroom teacher/coordinator to include the appraisal of selected experiences, methods, materials, and use of multimedia resources; business/marketing lesson plans based on state courses of study and national standards; and sponsoring youth organizations. - procedures are studied for conducting job opportunity surveys; problems and procedures in organizing and operating a cooperative education program; and methods of relating class instruction to on-the-job training. The philosophical foundations of career-technical education are covered, including local, state, and federal relationships in the administration of career-technical education. Research and analysis of business and marketing occupations and skill standards will be included.

CIS 480. (3) **CIS Internship.** A work related experience in the University or other public or private organization where the student will have hands-on experience in the day-to-day operation and management of computer systems. Must be a junior or senior. Prerequisites: CIS 125 or

equivalent and CIS 201 or 207 or 225 or equivalent and approval of instructor.

CIS 485. (3) **Data Communications and Networking.** This course provides a study of the fundamentals of data communications and networking including terminology, components, and models. Includes an examination of the construction, operation, and management of communications networks. Prerequisite: CIS 330. (Spring)

CIS 490. (3) **Seminar in Small Business Operations.** Application of classroom learning to problems of small business in the community. Student is given the opportunity to apply business concepts and develop analytical skills. Upon completion of selected readings relevant to small or minority enterprises, students are assigned a project on the basis of interest, ability, and experience. Students work in teams under the supervision of a participating professor within the College of Business. Also listed as AC 490, MG 490, and MK 490 but creditable only in field for which registered. Prerequisite: approval of the Dean of the College of Business. (Fall, Spring)

CIS 492. (3) **Management Information Systems.** A capstone course covering common and emerging applications of information systems and focusing on management and executive decision making and strategic use of information systems. Emphasis on technological developments, globalization, and ethical issues. Prerequisite: CIS 330. Recommended: CIS 445, 485.

CIS 495. (3) **Desktop and Web Publishing for Business.** Development of desktop publishing concepts. Advanced applications of preparing promotional, periodical, informational, stationery, and specialty publications with a business emphasis. Advanced multimedia and web page design in business. Study of web site creation and management, using forms, frames, etc. and the integration of databases. Includes sound, photo editing, and animation utilizing microphones, digital cameras, digital video and scanning techniques as they relate to the business world. Prerequisites: CIS 125, 375.

CIS 496. (3) **Information Systems Auditing.** This course will cover a variety of facets related to Information Systems (IS) auditing—from simple to complex computer systems. The course will present tools, concepts, and techniques necessary to properly audit IS. Also listed as AC 496 but creditable only in field for which registered. Prerequisite: AC 390. Recommended: CIS 330, 445.

CIS 499. (3) **Independent Study-Practicum.** Open to senior majors on approval of the department chair. Provides for study, research, or special field experience on departmental determination, supervision, and evaluation.