

Computer & Information Technology Courses		
Course Number/Title/Credit Hours	Description	Prerequisite
CIT 101 - Computing Skills (1)	<p>Hands-on introduction to the use of current popular software and information retrieval tools. Self-paced and traditional instruction methods are used. A head note specifies the instructional method and particular software tool. Credit/no credit only. Not open to CSA majors.</p> <p>101.F Computing Skills: Web Animation 101.G Computing Skills: Presentation Graphics/Multimedia 101.H Computing Skills: World Wide Web, Publishing, Home Page Construction 101.I Computing Skills: Using the Internet 101.O Computing Skills: Getting Started 101.V Computing Skills: Digital Video Editing 101.W Computing Skills: Word Processing</p> <p>Note: a maximum of nine credit hours of CSA/CIT 101, CSA 141, CSA/CIT 154, and MIS 185 can be used toward degree requirements. A maximum of three credit hours will be awarded among CIT 101W, 101S, and 101D, and CIT 154.</p>	None
CIT 154 - Personal Computer Concepts and Applications (3)	<p>Survey course for students who wish to become computer literate and make practical use of microcomputers. Survey of various hardware components and software systems used by current microcomputers. Includes hands-on experience with various software packages including word processing, spreadsheet, database management, and graphics. Not open to CSA baccalaureate majors. Credit not awarded for both CSA 141 and CSA 154.</p>	None
CIT 162 - Fundamentals of Computer Program Design (1)	<p>A language-independent, pre-programming course emphasizing problem solving, algorithm development and program design. Topics include the stored program concept, fundamental hardware organization, the program development life cycle, data representation, fundamentals of programming and design, and documentation technique. Common program design tools will be presented. It is recommended that students take this course concurrent with the first programming course in their curriculum.</p>	High school intermediate algebra or equivalent (e.g. MTH 102).
CIT 172 - Web Client Programming (3)	<p>An introduction to web client programming using current markup languages, scripting languages, and web publishing tools. Includes the fundamental concepts required to construct web pages without using high-level toolkits, as well as an introduction to such tools. Basic programming concepts and techniques are also introduced. Topics include use of markup languages, web page design and layout, web standards and accessibility, web interface styles, scripting languages, client-side security issues, and the use of high-level web development environments.</p>	CIT 154 or above (not CIT 182), CSA 151 or above, or BTE 181, or permission of instructor

CIT 182 - Ethical Issues in Information Technology (3)	Inquiry into a wide range of information technology issues, from moral responsibilities affecting computer professionals to wider ethical concerns associated with information technology in day-to-day living. Topics include professional codes of ethics in IT; privacy, security and reliability in using computer systems and the internet; issues and responsibilities in internet usage; legal issues in IT; and general problems related to responsible computing.	None
CIT 214 - Database Design and Development (3)	Practical and applied approach to database management design and development. Introduction to database planning, design and management, data modeling and representation, and fundamental concepts of database access. Includes study of the relational model and other models, database and internet interaction, and study of commonly used database systems. Emphasis on applications of database querying, forms and reports, generic SQL (Structured Query Language), and VBA (Visual BASIC Applications). Will include hands-on experiences.	CIT 101D or CIT 154, or CSA 141, or BTE 181, or experience with databases.
CIT 219 - Survey of Operating Systems (3)	General introduction to and survey of operating systems. Includes the fundamental purposes and functions of operating systems and an in-depth study and application of the operations, commands, and functions of specific, commonly-used operating systems. Course also studies operating systems and the environments in which they are used (such as personal computer, mainframe, server, networks). Topics include disk, file and directory structures; resource allocation; configuration; user interface (command-line, GUI); system security; and related topics.	CSA 174
CIT 220 - Professional Practice (0-2)	This course is designed for students who are participating in a co-op or internship work experience. It provides a structured, formal connection between the student's co-op /internship job and his/her academic program of study. Students will keep a portfolio of their work experiences, meet periodically with their instructor and other students, and reflect on their experiences noting connections to their academic experiences. Both the instructor and the employer will evaluate each student. Cross listed with ENT 220.	Permission of departmental internship coordinator. Offered Credit/No Credit.
CIT 253 - Contemporary Programming Languages (3)	Presents syntax and semantics of a particular programming language currently popular in industrial or academic settings. Addresses fundamental program construction, good software design and programming style, and development of applications focused on the strengths and special features of the language. Covers fundamental and advanced topics in the language. Course may present languages such as C++ (in 253.C), Perl (in 253P), and others as they may emerge.	CSA 163 or CSA 174 or permission of instructor
CIT 263 - Advanced Topics in Visual BASIC (3)	Topics include using multiple file formats including databases, creating menus, multiple form projects, using ActiveX controls, modules, executable files, VB Scripting, and VBA. Work with mouse events and OLE. Additional concentration on debugging, error detection and testing programs for robustness.	CSA 163 and MS Office experience

CIT 270 - Special Topics (1-3, maximum 6)	In-depth study and analysis of a topic of special or emerging interest in Computer and Information Technology.	Sophomore standing or permission of instructor.
CIT 276 - Systems Analysis and Design (3)	Review of systems development fundamentals including requirements gathering and analysis; the analysis process; the essentials of design, system implementation, and support. Additional topics include teams, testing, project management issues, planning, and system maintenance. A complete system is analyzed and designed by student teams. Not open to CSA or MIS majors.	CSA 163 and any 200-level CIT or CSA course.
CIT 286 - Network Administration and Security (3)	Essentials of network administration with an emphasis on network-based and Internet-based security applications and standards. Topics include planning, maintaining, and upgrading a network, core security concepts, and existing security architectures and systems.	ENT 294 or CSA 283