

	Computer & Information Technology Courses	
Course Number/Title/Credit Hours	Description	Prerequisite
CIT 101 - Computing Skills (1)	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. 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 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.	None
CIT 154 - Personal Computer Concepts and Applications (3)	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.	None
CIT 157 - Foundations of Information Technology I (3)	An introduction to the fundamental concepts of information technology. Includes IT history, applications, and current practices. Uses current web design technologies. Investigates computing systems architecture, operating systems, and their relationship to IT. Uses current PC operating systems including Microsoft Windows and Linux. Describes fundamental network communication tools and protocols. Topics include the primary areas of IT (such as networking, programming, operating systems, web development) and their applications in current technologies. Course contains hands-on work with operating systems, web development, networking, and related topics.	None
CIT 158 - Foundations of Information Technology II (3)	An introduction to IT applications including fundamental concepts of programming design, implementation, and integration. Topics include problem-solving techniques, algorithm development, current design methodologies, programming paradigms, testing and debugging, and data representation. Current issues and technologies will also be addressed.	Math 101 or equivalent
CIT 173 - Multimedia Fundamentals (3)	An introduction to digital image creation, manipulation, and animation through the use of various editing tools. Students will understand the fundamentals of digital images, create and import digital images, create and export digital movies, use video editing software and address integration issues. Students will have hands-on experience with computer software packages.	CIT 154 or equivalent experience with MS Office

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 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 dept. internship coordinator or dept. chair  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/CSA 262 - Technology, Ethics and Global Society (3)	Inquiry into a wide range of information technology issues, from moral responsibilities affecting professionals to wider ethical concerns associated with information technology in day-to-day living. Topics include general aspects of ethics; common ethical theories; 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; global perspectives of computing issues; and general problems related to ethical and responsible computing. (previously CIT 182)	ENG 111 and a minimum of 20 credit hours earned
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 268 - Human-Computer Interaction (3)	Inquiry into a wide range of Human Computer Interaction (HCI) issues ranging from the understanding and advocacy of the user in the development of IT applications and systems, to the technical components of design. Topics include foundations of HCI, the nature of the HCI design process, technical aspects and limitations of selected "technologies" related to HCI, user-centered methodologies for development and deployment, task analysis, ergonomics, accessibility standards, emerging technologies, and principles and methodologies of effective interface design and evaluation. This course will also address appropriate communication skills for effective human-to-human interaction as the foundation for developing effective, user-centered designs.	CIT 157 and CIT 158

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 273 - Web Application Development (3)	This course addresses the development of interactive web applications using both client and server side technologies. Topics include client-side scripting, server-side scripting, data persistence, connectivity issues and their implementation, access and updating of databases via web interfaces, and the use of embedded multimedia. Current technologies will be used to program and implement the web applications.	CIT 158 and CIT 214
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
CIT 348 – Information Management Retrieval	This course is in development and currently not available.	
CIT 358 - Information Technology Assurance and Security	This course provides a foundational knowledge of the key issues associated with protecting information assets by addressing current issues and techniques in information security and information assurance. Topics will include the impact of security in the system development life cycle methodology, security threats, risks, and assets, incident response, cryptography, disaster recovery, data and information protection tools, information privacy, and regulatory compliance.	CIT 214 or CIT 276 or permission of instructor
CIT 448 - Global and Strategic Issues in Information Technology	While information technologies remain the same across national borders, their usage and context change according to country cultures and national laws. Features such as information infrastructure, languages, business practice, intellectual property protection, and tariffs impact the adoption of IT in a transnational organization. In this course, students will define global technology issues and their impact, understand cultural differences and their effect on standards for the use of technology, develop resources to make informed decisions personally and professionally, and generally raise global awareness within an IT context.	CIT/CSA 262 or permission of instructor
CIT 458 - Collaborative System Development and Integration	This course is in development and currently not available.	