COMPUTER INFORMATION SYSTEMS (CIS)

CIS 0026. Information and Communication Technology Essentials
Units: 4
Formerly known as CST 30
Hours: 72 lecture
Provides an introduction to the computer hardware and software skills needed to help meet the growing demand for entry-level ICT professionals. Focuses on the fundamentals of computer hardware and software as well as advanced concepts such as security, networking, and the responsibilities of an ICT professional. Preparation for CompTIA's A+ certification exam. (C-ID ITIS 110) (CSU)

CIS 0028. Independent Study
Units: 1-3
Designed for students interested in furthering their knowledge at an independent study level in an area where no specific curriculum offering is currently available. Independent study might include, but is not limited to, research papers, special subject area projects, and research projects. See Independent Study page in catalog. (CSU)

CIS 0030. Computer Literacy for College Success
Units: 3
Advisory: Concurrent enrollment in CIS 30L; completion of ESL 515 with grade of "C" or better for non native speakers
Hours: 72 (54 lecture, 18 laboratory)
Hands-on introduction to computer skills for students with little prior experience. Development of computer keyboarding technique, accuracy and speed. Creating, saving and organizing basic word processing and spreadsheet files. Includes computer activities to develop college success strategies. Introduces students to online learning system, using Windows, basic web searching, and using web-based email. (CSU)

CIS 0030L. Computer Literacy for College Success - Supplemental Laboratory
Units: 0.5
Corequisite: Concurrent enrollment in CIS 30
Hours: 36 laboratory
Optional problem solving course to accompany and support success in CIS 30. For students with little prior computer experience. Basics of using Windows, web browsers, college email, online learning system, word processor, spreadsheet. Development of computer keyboarding technique, accuracy and speed. (pass/no pass grading) (not transferable)

CIS 0050. Applying Computer Software
Units: 3
Advisory: Completion of CIS 30 with grade of "C" or better
Hours: 72 (54 lecture, 18 laboratory)
An overview of business and academic use of common office application software for word processing, spreadsheets, charting data, databases, and presentations. Using current operating system software, managing files, using online tools, transmitting files via the Internet. Common computer hardware and software system concepts; impact of computers on society, networks and security. (CSU)

CIS 0050L. Applying Computer Software - Supplemental Laboratory
Units: 0.5
Corequisite: Concurrent enrollment in CIS 50
Hours: 36 laboratory
Optional problem solving course to accompany and support success in CIS 50. Practice use and application of common office application software for word processing, spreadsheets, charting data, databases, and presentations. Practice using current business operating system software and online tools. (pass/no pass grading) (not transferable)

CIS 0052. Creating a Virtual Office
Units: 3
Also known as BUS 52
Advisory: Eligibility for ENGL 1A
Hours: 54 lecture
Introduction to the Virtual Office Profession. Explores issues to be addressed when creating a virtual office. Topics include managing time, customizing workplace environment, evaluating and buying technology, communicating with technology, and business ethics. (not transferable)

CIS 0053. Marketing a Virtual Office
Units: 3
Also known as BUS 53
Advisory: Completion of BUS 52/CIS 52 and CIS 70 with grades of "C" or better
Hours: 54 lecture
Introduction to marketing techniques and skills needed for a virtual or home-based office. Students identify, evaluate, and employ various virtual marketing techniques such as online networking, developing marketing kits and plans, researching professional organizations, creating websites, and utilizing Web-based resources and social media to market skills, services, and products. (not transferable)

CIS 0054. Managing a Virtual Office
Units: 3
Also known as BUS 54
Advisory: Completion of CIS 50, BUS 52/CIS 52, and BUS 53/CIS 53 with grades of "C" or better
Hours: 54 lecture
Examines specialized professional administrative concepts and documents used to manage information in the virtual workplace. Organizational concepts, decision making, effective business relationships, time and stress management, business plans, ethics, customer service, virtual business technology, and teamwork skills are emphasized. (not transferable)

CIS 0062. Business Information Systems
Units: 3
Advisory: Eligibility for ENGL 1A
Hours: 72 (54 lecture, 18 laboratory)
Examination of information systems and their role in business. Focus on information systems, database management systems, networking, e-commerce, ethics and security, computer systems hardware and software components. Application of these concepts and methods through hands-on projects developing computer-based solutions to business problems. (C-ID BUS 140 and C-ID ITIS 120) (CSU)

CIS 0065. Computer Network Fundamentals
Units: 3
Formerly known as CST 40
Advisory: Completion of CIS 26 with grade of "C" or better
Hours: 72 (54 lecture, 18 laboratory)
Introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP (Internet Protocol) addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for further study of computer networks. Uses OSI (Open Systems Interconnection) and TCP (Transmission Control Protocol) layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. Preparation for the CompTIA Network+ certification exam. (C-ID ITIS 150) (CSU)

CIS 0066. Routing and Switching Essentials
Units: 3
Prerequisite: Completion of CIS 65 with grade of "C" or better
Hours: 72 (54 lecture, 18 laboratory)
Architecture, components, and operations of routers and switches in a small network. Configuring a router and a switch for basic functionality. Configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. Along with CIS 65, prepares students for the current version of the Cisco Certified Entry-level Network Technician (CCENT) certification examination. (CSU)

CIS 0067. Foundations for Creating Web Pages
Units: 3
Advisory: Completion of CIS 50 with grade of "C" or better
Hours: 54 lecture
Introduction to building Web pages using HTML and basic Web-authoring software; technical and design concepts behind Web pages: how the Internet works, connection technologies, Web search techniques, evaluating Web pages, file transfer and management, file compression, browser tips and tricks, mailing lists, Internet security. (CSU)

CIS 0070. Word Processing-Beyond the Basics
Units: 3
Advisory: Keyboarding skill of 25 w.p.m.; completion of CIS 50 and SKDV 10 with grades of "C" or better
Hours: 72 (54 lecture, 18 laboratory)
Advanced word processing techniques, including styles and outlines, generating form letters, mailing labels and envelopes using mail merge, working with master documents, indexes and tables of content, creating reports using wizards and templates, applying macros, integrating software, creating web pages and online forms. (CSU)

CIS 0080. Spreadsheets in a Business Environment
Units: 3
Advisory: Completion of CIS 50 and SKDV 10 with grades of "C" or better
Hours: 72 (54 lecture, 18 laboratory)
Design and use of "what-if" analysis, static and dynamic web pages, financial functions, data and lookup tables, amortization schedules and templates. Includes working with multiple worksheets and workbooks, analyzing worksheet results, sorting and querying a worksheet database, using macros, and integrating software. (CSU)

CIS 0088. Computer Forensics Fundamentals
Units: 3
Advisory: Completion of ADMJ 54 and CIS 147 with grades of "C" or better
Hours: 54 lecture
Introduction to the methods used to properly conduct a computer forensics investigation, beginning with a discussion of ethics, while mapping the objectives of the International Association of Computer Investigative Specialists (IACIS) certification. Topics covered include an overview of computer forensics as a profession; the computer investigation process; understanding operating systems boot processes and disk structures; data acquisition and analysis; technical writing; and a review of familiar computer forensics tools. (CSU)

CIS 0090. Database Management
Units: 3
Advisory: Completion of CIS 50 with grade of "C" or better
Hours: 72 (54 lecture, 18 laboratory)
Developing database systems using the current version of Microsoft Access. Includes designing database structures: tables, queries, forms, reports, and more. Also includes integrating with the Web, Excel and other programs. Emphasis on hands-on learning. (CSU)

CIS 0095. Internship in Computer Information Systems
Units: 0.5-4
Designed for advanced students to work in an area related to their educational or occupational goal. Provides new on-the-job technical training under the direction of a worksite supervisor, allowing students to expand knowledge and skills in the chosen field. Mandatory orientation session and faculty approval to determine eligibility. One unit of credit is equal to each 60 hours of non-paid work, or each 75 hours of paid work. Students may earn up to a total of 16 units in internship courses (any course numbered 95 and PDEV 94). (CSU-with unit limitation)

CIS 0100. Software for Dynamic Presentations
Units: 3
Advisory: Completion of CIS 0050 with grade of "C" or better or equivalent digital fluency
Hours: 72 (54 lecture, 18 laboratory)
Amplify your message by integrating graphics, animation, music, video and use various software applications to develop unique, effective, professional quality presentations. Design and customize high quality presentations employing best practices. (CSU)

CIS 0105. Microsoft Outlook-Managing Information
Units: 3
Advisory: Completion of CIS 50 with grade of "C" or better
Hours: 54 lecture
Includes managing email folders; sending, receiving, forwarding email messages; using "netiquette" and distribution lists; scheduling appointments, meetings, events; creating contacts, address books and calendars; tracking tasks; setting reminders; sharing information and publishing schedules via the web. (not transferable)

CIS 0120. Creating Business Graphics with Microsoft Publisher
Units: 3
Advisory: Completion of CIS 50 or 70 with grade of "C" or better
Hours: 54 lecture
Designed to assist the office professional in utilizing Microsoft Publisher to create high-quality desktop publishing documents. Learning activities include preparation of a flyer, newsletter, logo, CD liner, business card, tri-fold brochure, calendar, catalog, event program, coupon, and certificate. (CSU)

CIS 0136. Project Management Concepts and Software
Units: 3
Formerly known as the combination of CIS 135 and 136
Hours: 72 (54 lecture, 18 laboratory)
Explores Project Management concepts and terminologies along with the use of Microsoft Office Project and other project management tools through discussions, hands-on exercises and classroom learning experiences. Includes WBS, budgeting, and resource allocation and other important PM topics such as Scope and Project Team Development. Helps prepare students to use the software package in their daily duties as a project manager or project assistant. (not transferable)

CIS 0141. Installing, Configuring and Administering a Client OS
Units: 3
Formerly known as CST 45
Advisory: Completion of CIS 65 with grade of "C" or better
Hours: 72 (54 lecture, 18 laboratory)
Setup and support for a desktop operating system using a current desktop operating system in a networked environment. Creation of local and domain-level accounts, creation of shared resources, use of network services, remote access, resource management and monitoring, and security considerations. (CSU)

CIS 0142. Systems and Network Administration
Units: 3
Formerly known as CST 50
Prerequisite: Completion of CIS 65 with grade of "C" or better
Advisory: Completion of CIS 62 with grade of "C" or better
Hours: 54 lecture
Course provides knowledge and skills required to build, maintain, troubleshoot and support server hardware and software technologies. Covers environmental issues, disaster recovery, physical/software security procedures, industry terminology and concepts, server roles, specializations, and interaction within the overall computing environment. (C-ID ITIS 155) (CSU)

CIS 0147. Introduction to Information Systems Security
Units: 3
Formerly known as CST 70
Prerequisite: Completion of CIS 65 with grade of "C" or better
Advisory: Completion of CIS 142 with grade of "C" or better
Hours: 54 lecture
Introduction to the fundamental principles and topics of Information Technology Security and Risk Management at the organizational level. Addresses hardware, software, processes, communications, applications, and policies and procedures with respect to organizational Cybersecurity and Risk Management. Preparation for the CompTIA Security+ certification exams. (C-ID ITIS 160) (CSU)

CIS 0148. Virtualization Concepts and Technologies
Units: 3
Formerly known as CIS 421
Advisory: Completion of CIS 65 with grade of "C" or better
Hours: 54 lecture
Knowledge and skills necessary to understand and implement Virtualization Concepts. The core concepts of creating and managing virtual machines, network servers, and network design presented. Labs demonstrate benefits associated with virtualization such as fault tolerance and high availability. Successful completion of this course meets the educational requirement for VMware certification. (CSU)

CIS 0151. Information Storage and Management
Units: 3
Advisory: Completion of CIS 147 with grade of "C" or better
Hours: 54 lecture
Introduction to principles of information storage and management including the emerging field of virtualization technologies. Covers Direct Attached Storage (DAS), networked storage models such as Network Attached Storage (NAS), Storage Area Network (SAN), and Content Addressed Storage (CAS); and applications in business continuity, replication, disaster recovery, and cloud computing. Includes exposure to real-world storage networking technologies. (CSU)

CIS 0152. Introduction to Cybersecurity: Ethical Hacking
Units: 3
Advisory: Completion of CIS 147 with grade of "C" or better
Hours: 54 lecture
Immerses IT Professionals in hands-on intensive environment providing in-depth knowledge and experience with current essential security systems. Provides understanding of perimeter defenses and leads to scanning and attacking networks; no real networks are harmed. Students learn how intruders escalate privileges and the steps to be taken to secure a system. Also covers Intrusion Detection, Policy Creation, Social Engineering, DDoS Attacks, Buffer Overflows, and Virtual Creation. Focus includes legal and regulatory requirements, ethical issues, basic methodology and technical tools used for ethical hacking and penetration tests. Students establish a pre-test agreement with the enterprise, discover and exploit vulnerabilities, participate as a member of a pen test team and prepare a penetration test report. (CSU)

CIS 0153. Principles of Cybersecurity Analysis
Units: 3
Prerequisite: Completion of CIS 147 with grade of "C" or better or CompTIA Security+ certification as determined by the Computer Information Systems department chair
Hours: 72 (54 lecture, 18 laboratory)
Focuses on the critical knowledge and skills required to prevent, detect and combat cybersecurity threats; includes the application of behavioral analytics to improve the overall state of IT security. Covers exam objectives relating to the CompTIA Cybersecurity Analyst (CSA+) industry certification. (CSU)