CIS 014A  Internet Principles and Protocols  3 Units
Students will study the principles and protocols of the Internet. Students learn methods used to move data from one location to another over the Internet including TCP/IP, Internet security, routing, DHCP, DNS, and VPN. Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: L Recommended: CIS 041 Advisory Level: Read: 3 Write: 3 Math: 3 Transfer Status: CSU Degree Applicable: AA/AS CSU GE: None IGETC: None District GE: None

CIS 017A  Windows  3 Units
Students acquire skills installing, planning, implementing, configuring and maintaining the Windows operating system. Students are introduced to remote desktop and virtual mode, printing, managing data storage, network services, speech recognition, remote access services, and network monitoring. The course also includes information on virtualization support, backup and data recovery, and managing system reliability and availability. Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: L Recommended: CIS 041 or equivalent Advisory Level: Read: 3 Write: 3 Math: None Transfer Status: CSU Degree Applicable: AA/AS CSU GE: None IGETC: None District GE: None

CIS 017B  Windows Server  3 Units
Students will acquire skills installing, planning, implementing, configuring and maintaining the Windows Server operating system. Students are introduced to Active Directory and account management, printing, managing data storage, network services, deploying Internet Information Server (IIS) services and Certificate Authority, remote access services, server and network monitoring. The course also includes information on virtualization, application services, data provisioning, backup and data recovery, and managing system reliability and availability. Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: L Prerequisite: CIS 017A with C or better Advisory Level: Read: 3 Write: 3 Math: None Transfer Status: CSU Degree Applicable: AA/AS CSU GE: None IGETC: None District GE: None

CIS 017C  Microsoft Windows Server Active Directory  3 Units
Students learn various aspects of planning, implementing, configuring, and maintaining Microsoft Windows Active Directory infrastructure. Students will acquire skills of active directory design and security concepts, account management, and group policy configuration. Students will also learn new features of Windows Active Directory such as active directory federation services, active directory certificate services, and read only domain controllers. Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: L Prerequisite: CIS 017B with C or better Advisory Level: Read: 3 Write: 3 Math: 4 Transfer Status: CSU Degree Applicable: AA/AS CSU GE: None IGETC: None District GE: None

CIS 017D  Microsoft Windows Server Network Infrastructure  3 Units
Students acquire in-depth knowledge of Windows Server, TCP/IP networking, Domain Name System (DNS), Dynamic Host Configuration Protocol (DHCP), Active Directory Domain services, file services, printers and print services, network policy and access service, security, and managing the Windows server network infrastructure. Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: L Prerequisite: CIS 017B with C or better Advisory Level: Read: 3 Write: 3 Math: 4 Transfer Status: CSU Degree Applicable: AA/AS CSU GE: None IGETC: None District GE: None

CIS 018A  CCNA R&S: Introduction to Networks  3 Units
Students are introduced to the fundamentals of networking concepts and technologies. Students acquire the skills necessary to plan and implement small networks across a range of applications. Topics include the OSI model and industry standards, network topologies, IP addressing, IPv4, IPv6, subnet masks, networking components, and basic network design. Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: L Recommended: CIS 041 or equivalent Advisory Level: Read: 3 Write: 3 Math: None Transfer Status: CSU Degree Applicable: AA/AS CSU GE: None IGETC: None District GE: None

CIS 018B  CCNA R&S: Routing and Switching Essentials  3 Units
Students acquire knowledge of how a router "learns" about remote networks and determines the best path to those networks. Students study topics including both static routing and dynamic routing protocols. Students acquire the skills necessary to plan and implement small networks using Cisco IP routers and basic switches. Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: L Prerequisite: CIS 018A with C or better Advisory Level: Read: 3 Write: 3 Math: None Transfer Status: CSU Degree Applicable: AA/AS CSU GE: None IGETC: None District GE: None

CIS 018C  CCNA R&S: Scaling Networks  3 Units
Students learn the design of a Local Area Network (LAN) and prepare for the Cisco Certified Network Associate (CCNA) test. Students will design and configure an actual network for a typical LAN. Topics covered include IPX addresses and access lists, advantages of LAN segmentation using bridges, routers, and switches. The course also covers features and benefits of Fast Ethernet connections and Virtual Local Area Networks (VLANs). (The course is a part of the CISCO Academy.) Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: L Prerequisite: CIS 018B with C or better Advisory Level: Read: 3 Write: 3 Math: None Transfer Status: CSU Degree Applicable: AA/AS CSU GE: None IGETC: None District GE: None
CIS 018D  CCNA R&S: Connecting Networks  3 Units
Students acquire knowledge of (Wide Area Network) WAN technology used to provide network access to resources across large geographical locations. Students study topics including network security and dynamic IP addressing services that are necessary to implement small networks for a range of applications. Students learn to implement WAN using Cisco networks.
Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: O
Prerequisite: CIS 018C with C or better
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  IGETC: None  District GE: None

CIS 020  XML Fundamentals  3 Units
Students will create their own XML documents, XML document type definitions, and schemas to describe their structure and content in building dynamic web pages. Students will also discover how to use cascading style sheets (CSS) to render XML documents using an ordinary web browser.
Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  IGETC: None  District GE: None

CIS 020A  Advanced XML  3 Units
Students will study XML markup language to develop advanced, real world applications. Topics will include XML schema languages, web services, APIs, and databases.
Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Recommended: CIS 020 or equivalent
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  IGETC: None  District GE: None

CIS 022  Database Technology  3 Units
Students will study SQL (Structured Query Language), and create access to the Internet. Students will study database concepts, structure, access methods, and design considerations. The class will focus on object-relational databases.
Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  IGETC: None  District GE: None

CIS 023  JavaScript Programming  3 Units
Students will study how to use JavaScript to create dynamic web pages, and how to add animation and interactivity to make Web pages come alive. Students will learn how to use Document Object Model (DOM), Browser Object Model (BOM), and Dynamic HTML (DHTML) to be able to develop well-formed web pages.
Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Recommended: CIS 041 or CIT 010
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  IGETC: None  District GE: None

CIS 023A  Advanced Javascript  3 Units
Students study advanced JavaScript techniques to develop code for real applications. Topics include forms, validation, cookies, hierarchical menus, XML, security, style sheets, browsers, and DOM (Document Object Model) programming.
Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  IGETC: None  District GE: None

CIS 024A  Perl Programming  3 Units
Students will study Perl, the leading web-server dynamic language used in the industry. Knowledge of Perl will prepare students to use this leading web technology to develop, create, and maintain industry-standard web sites across all computing platforms.
Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  IGETC: None  District GE: None

CIS 024B  PHP Programming  3 Units
Students will learn PHP programming to develop, create, and maintain industry-class web sites. Topics include mixing PHP and HTML, building web pages, and developing web browsers.
Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  IGETC: None  District GE: None

CIS 024C  Python Programming  3 Units
Students will study the use of Python, a programming language, to create stand-alone and web-based applications. Students will acquire skills necessary to locate, evaluate, and utilize open source web materials.
Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Recommended: CIS 041 or CIT 010
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  IGETC: None  District GE: None

CIS 036  Web 2.0 Programming  3 Units
Students learn to use and integrate the technologies that form the foundation of Web 2.0 to produce rich web applications such as podcasts, blogging tools, XML, HTML, HTTP, and user interface.
Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  IGETC: None  District GE: None

CIS 037  SQL Fundamentals  3 Units
Students learn and apply SQL (Structured Query Language), to access and manipulate relational databases. Topics include simple and multiple queries, database creation, dynamic and embedded SQL, and data warehousing.
Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  IGETC: None  District GE: None
CIS 041 Introduction to Computer Information Systems 3 Units
Students will learn basic computer concepts with an emphasis on both the personal computer and enterprise computing. Students cover topics including hardware, application and system software, the internet and World Wide Web, communications, e-commerce, societal issues, database management, systems analysis and design, programming, information systems, career opportunities, certifications in the computer field, and computer trends. Students will get hands-on practice of introductory level skills in word processing, spreadsheets, database, presentation graphics, and use of the internet. Students will be expected to program using a programming language. (C-ID ITIS 120)
Lecture Hours: 3 Lab Hours: 1 Repeatable: No Grading: L
Advisory Level: Read: 3 Write: 3 Math: 2
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: D IGETC: None District GE: D

CIS 047 Introduction to Web Development 3 Units
Students will study how to manage and maintain industry-class websites. Students will study the basics of open-source web-server (Apache). Students will gain knowledge to use and implement the most widely used open-source server-side scripting language (PHP) along with the most popular open-source relational database (MySQL).
Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: L
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None IGETC: None District GE: None

CIS 054 C/C++ Programming 3 Units
Students will study C, a general-purpose programming language that features brevity of expression, modern control flow and data structures, and a rich set of operators. Students will also study C++, an object oriented programming language that is built using the C language as a base. Students will learn the importance of portability and efficiency through a variety of programming assignments. This course includes application programs and/or systems software.
Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: L
Recommended: CIS 041 or equivalent
Advisory Level: Read: 3 Write: 3 Math: 2
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None IGETC: None District GE: None

CIS 055 Data Structures 3 Units
Students learn a language-independent treatment of topics including computer organization, data formats, recursion, and abstract data types. Data structures covered include abstract data types, arrays, pointers, link lists, stacks, queues, trees, heaps, hash tables, and graphs. Applications of recursion and searching, as well as measuring algorithm performance and data structure efficiency using Big-O notation, are presented.
Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: L
Prerequisite: CIS 054 or CIS 084, both with C or better
Advisory Level: Read: 3 Write: 3 Math: 5
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None IGETC: None District GE: None

CIS 059 Object Oriented Design and Programming 3 Units
Students learn the fundamentals and techniques of Object Oriented Programming (OOP). Topics covered include the elements of OOP, classes and objects, inheritance, polymorphism, overloading, overriding, member functions, member access, virtual functions, constructors, derived classes, dynamic objects, and exception handling. Modern programming and debugging techniques will be stressed throughout the course. Design Patterns and UML will also be introduced.
Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: L
Prerequisite: CIS 054 or CIS 084 both with C or better
Advisory Level: Read: 3 Write: 3 Math: 4
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None IGETC: None District GE: None

CIS 060 Systems Analysis and Design 3 Units
Students apply the concepts of the systems analysis development cycle which includes problem definition; data collection, and analysis, analysis of system alternatives, determination of feasibility, development of the system proposal, pilot or prototype systems development, systems design, program development, systems implementation, systems review, and evaluation.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
Advisory Level: Read: 3 Write: 3 Math: 4
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None IGETC: None District GE: None

CIS 062A Introduction to PC Hardware and Diagnostics 2 Units
Students acquire basic hands-on skills to operate and support today's personal computer (PC) hardware. Students study the hardware architecture and major components of the PC including diagnostic tests, processors, motherboards, memory, storage devices, peripherals, and video. This class is the first step towards acquiring the skills needed for the CompTIA A+ certification.
Lecture Hours: 1.5 Lab Hours: 1.5 Repeatable: No Grading: L
Advisory Level: Read: 3 Write: 3 Math: 2
Transfer Status: None Degree Applicable: AS
CSU GE: None IGETC: None District GE: None
CIS 062B  A+ PC Hardware Technology  2 Units
Students acquire the hands-on skills needed to diagnose hardware problems, configure PC components, and replace defective computer parts. Students learn how to install boards, configure multiple hard drives, add peripheral devices, work with network adapters, solve basic printer problems, and modify CMOS setups. Other topics include diagnostic software, hardware procedures, virtualization and hard drive imaging. This class prepares students for the current CompTIA A+ certification exams.
Lecture Hours: 1.5 Lab Hours: 1.5 Repeatable: No Grading: L
Prerequisite: CIS 062A with C or better
Advisory Level: Read: 3 Write: 3 Math: 2
Transfer Status: None Degree Applicable: AS
CSU GE: None IGETC: None District GE: None

CIS 062C  A+ Core PC Operating Systems Technology  2 Units
Students will acquire skills to diagnose, load and setup a wide array of operating systems. Topics include the use of the command prompt, essential utilities, boot files, system files, OS installation procedures, Windows configuration, hard disk partitioning, backup, and disaster recovery. The Cloud, Virtualization, and hard disk imaging solutions will be discussed. This class prepares students for CompTIA's A+ certification exams.
Lecture Hours: 1.5 Lab Hours: 1.5 Repeatable: No Grading: L
Prerequisite: CIS 062A with C or better
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None IGETC: None District GE: None

CIS 068  Administering Microsoft SQL Server  3 Units
Students acquire skills needed to install and upgrade Microsoft SQL database. Topics include database storage configuration, database backup and restore, data security, disaster recovery, data replication, high availability, and troubleshooting. Students apply effective data management and administration of SQL database environment.
Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: L
Prerequisite: CIS 017B with C or better
Advisory Level: Read: 3 Write: 3 Math: 4
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None IGETC: None District GE: None

CIS 073  Visual Basic Programming  3 Units
Visual Basic is a programming language that allows rapid development of the Microsoft Windows graphical user interface. Students will learn to use Visual Basic .NET concepts, tools, and programming methodology to create user friendly Microsoft Windows applications.
Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: L
Advisory Level: Read: 3 Write: 3 Math: 2
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None IGETC: None District GE: None

CIS 084  Java Programming  3 Units
Students are introduced to the Java programming language, data types, and data structures using an object-oriented approach. Topics include problem solving, classes, variable passing, Graphical User Interface (GUI), input/output, Java libraries, applets, and exception handling.
Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: L
Recommended: CIS 041 or equivalent
Advisory level: Read: 3 Write: 3 Math: 2
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None IGETC: None District GE: None

CIS 098  Directed Study in Computer Information Systems  0.5-9 Units
Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.
Lecture Hours: None Lab Hours: 1.81 Repeatable: Yes Grading: O
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None IGETC: None District GE: None

CIS 106  Technest 1: Introduction to Computer Coding  3 Units
As the first course in the Technest Coding Academy, students will learn to think algorithmically to create code and to solve programming problems. Utilizing MIT-created instructional videos, SJCC faculty will guide, coach, and assist students in creating code. After students view the MIT lecture videos, faculty will answer questions, assist students with lab assignments, and proctor exams. Enrollment in this class is contingent upon acceptance into the Technest Coding Academy. Interested students will need to contact personnel listed in the schedule of classes. This is the MITx6.00 Introduction to Computer Science course.
Lecture Hours: 1.5 Lab Hours: 4.5 Repeatable: No Grading: O
Recommended: Although no formal programming background is needed, students without prior programming experience will find there is a steep learning curve and may have to put in more than the estimated time effort.
Advisory Level: Read: 3 Write: 3 Math: 3
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None IGETC: None District GE: None

CIS 107  Technest 2: Data Science Coding  3 Units
As the second course in the Technest Coding Academy, students learn the three main factors of data science: inferential thinking, computational thinking, and real-world relevance. Topics include critical concepts and skills in computer programming and statistical inference, and the analysis of real-world datasets, as well as social issues surrounding data analysis such as privacy and design. This is the UC Berkeley Data 8 Foundations of Data Science course.
Lecture Hours: 1.5 Lab Hours: 4.5 Repeatable: No Grading: O
Recommended: Successful completion of the assessment exercises must be done before student can enroll.
Advisory Level: Read: 3 Write: 3 Math: 3
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: B4 IGETC: None District GE: B4
CIS 108  Technest 3: Internet of Things  3 Units
As the third course in the Technest Coding Academy, students are exposed to the emerging platform called the Internet of Things (IoT). Topics include: exploration of the convergence of multiple disciplines leading to modern smartphones; exploring the emerging IoT platform, enabling unprecedented, innovative products and services; learn how information from physical devices in the real world gets communicated to smartphone processors; interfacing common sensors and actuators to hardware; developing software to acquire sensory data, process the data and actuate stepper motors, LEDs, etc. for use in mobile-enabled products.
Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Prerequisite: Successful completion of the assessment exercises must be done before student can enroll.
Advisory Level: Read: 3  Write: 3  Math: 3
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  IGETC: None  District GE: None

CIS 132  Creating Web Pages with HTML and CSS  3 Units
Cascading Style Sheets (CSS) and HTML are the foundation languages of all web development. Whether your website is built using a content management system like WordPress, Drupal, or Joomla!, or a WYSIWYG tool like Dreamweaver, becoming fluent in these two languages is critical to the development of top-notch websites. In this introductory course, students will learn the fundamentals of coding, publishing, and putting together of web pages into web sites. Students will learn in this introductory course, the fundamentals of coding, publishing, and compiling web pages into websites. They will gain knowledge and use Cascading Style Sheets (CSS) and HTML languages.
Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Advisory Level: Read: 3  Write: 3  Math: 3
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  IGETC: None  District GE: None

CIS 138  Work Experience  1-8 Units
Work Experience is designed for students who work or volunteer in a field related to their career major. Students are required to provide evidence that they are enrolled in a career program (e.g., education plan or coursework in a career/technical subject area). Students can earn one unit of credit for each 60 hours of unpaid volunteer time or 75 hours of paid work during the semester. Students can repeat Career/Technical Work Experience, combined with General Work Experience, or alone, up to a maximum of 16 units. Internship/job placement is not guaranteed.
Lecture Hours: None  Lab Hours: 2.07  Repeatable: Yes  Grading: O
Corequisite: Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status.
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  IGETC: None  District GE: None

CIS 157  Introduction to Unix/Linux  3 Units
Students are introduced to the Unix/Linux operating systems. Topics covered include a basic editor, shells, directory and file structure, file permissions, passwords, security, redirection, pipes, filters, regular expressions and shell programming. Additional topics include the use of I/O devices, Internet access, and an introduction to system administration.
Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  IGETC: None  District GE: None

CIS 158  Linux System Administration  3 Units
Students study the concepts of Linux system administration. Topics include Linux installation, Unix/Linux file systems, managing user accounts, user shells, security, system resources, system and file backup and restore, printers and print spooling systems, TCP/IP networking configuration and/or management, network access using telnet and ftp, ssh (secure shell), interface to networks using NFS 3 and SAMBA, electronic mail systems, system kernel builds, and system tuning. Students use shell scripts to demonstrate system administration.
Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Prerequisite: CIS 157 with C or better
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  IGETC: None  District GE: None

CIS 160  Introduction to Information Systems Security  3 Units
Students are introduced to the fundamental principles and topics of Information Technology Security and Risk Management at the organizational level. They will gain knowledge in hardware, software, processes, communications, applications, and policies and procedures with respect to organizational Cybersecurity and Risk Management. This course prepares students for the CompTIA Security certification exams.
Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Prerequisite: Take CIS 014A; with a C or better.
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  IGETC: None  District GE: None
Credit by Exam: Yes

CIS 164  Introduction to Cybersecurity: Ethical Hacking  3 Units
Students will be introduced to the various methodologies for attacking a network. They will learn the concepts, principles, and techniques, as well as gain supplemental hands-on experience attacking and disabling a network within the context of properly securing a network. The course will emphasize network attack methodologies with the emphasis on student use of network attack techniques and tools, and appropriate defenses and countermeasures. Students will receive course content information through a variety of methods including lectures and demonstration of hacking tools in addition to a virtual environment.
Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Prerequisite: Take CIS 160; with a C or better.
Advisory Level: Read: 3  Write: 3  Math: 2
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  IGETC: None  District GE: None
CIS 165  Digital Forensics Fundamentals  3 Units
Students will be introduced to the methods used to properly conduct a digital forensics investigation beginning with a discussion of ethics, while mapping to 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 digital forensics tools.
Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Prerequisite: Take CIS 160; with a C or better.
Advisory Level: Read: 3  Write: 3  Math: 2
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  IGETC: None  District GE: None