COMPUTER SECURITY AND INFORMATION SYSTEMS

See also Computer Science

CSIS 1 - Computer Information Systems (3 units)
Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 34 hours lecture; 51 hours lab
This course offers an examination of information systems and their role in business. Focus is on information systems, database management systems, networking, e-commerce, ethics and security, computer systems hardware, and software components. Application of these concepts and methods is achieved through hands-on projects developing computer-based solutions to business problems. Portions of instruction may be offered online; may also be offered fully online. [C-ID ITIS 120]

Advisory: Completion of or concurrent enrollment in ENGL C1000
Credit transferable: Transfers to CSU & UC

CSIS 9 - Programming Fundamentals: Python (3 units)
Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 34 hours lecture; 51 hours lab
This course introduces the fundamental ideas in computer science using Python, an interpreted, object-oriented programming language known for its ease of use. Students develop skills in the design and implementation of algorithms while working with numerical computation, text processing, graphics, image processing, and networking applications. This is the recommended first course for computer science majors. Portions of this course may be offered online; also offered fully online. May be offered fully online. [C-ID [C-ID COMP 112]]

Advisory: CSIS 1; completion of or concurrent enrollment in ENGL 1A
GE Credit: MPC A2 Communication and Analytical Thinking

CSIS 50 - MS Office Applications (2 units)
Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 34 hours lecture
This course is an introduction to office applications as supported by integrated software, both Web-based and MS Office Suite of applications programs - MS Word, Excel, Access and PowerPoint. Portions of instruction may be offered online; may also be offered fully online.

Corequisite(s): CSIS 50L
Credit transferable: Transfers to CSU

CSIS 50L - MS Office Applications Lab (1 unit)
Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 51 hours lab
This lab provides computer laboratory exercises and analysis of the topics presented in CSIS 50, including introduction to Windows OS, e-mail and Web access, and PC- and Internet-integrated software for word processing, electronic spreadsheets, relational databases, and presentation graphics. Portions of instruction may be offered online; may also be offered fully online.

Corequisite(s): CSIS 50
Credit transferable: Transfers to CSU

CSIS 72A - Administering Windows Server Core Infrastructure (3 units)
Letter Grade (LG) Only • Total hours: 34 hours lecture; 51 hours lab
This course presents terminology, concepts, and skills necessary to administer Windows Server workloads using on-premises, hybrid, and cloud technologies. Students will gain expertise in implementing and managing solutions for identity, management, computer networking, and storage. Provide necessary knowledge to pass the Microsoft AZ-800: Administering Windows Server Hybrid Core Infrastructure Certification Exam. Portions of instruction may be offered online; may also be offered fully online.

Advisory: CSIS 83A
Credit transferable: Transfers to CSU

CSIS 72B - Configuring Windows Server Hybrid Advanced Services (3 units)
Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 34 hours lecture; 51 hours lab
This course will teach the requirements for the Microsoft Certification AZ-801: Configuring Windows Server Hybrid Advanced Services. Students will learn to secure Windows on-premises and hybrid infrastructures, implement and manage high availability servers, implement disaster recovery, migrate servers and workloads, and monitor and troubleshoot Windows Server environments. Portions of instruction may be offered online; may also be offered fully online.

Prerequisite(s): CSIS 72A
Advisory: Completion of or concurrent enrollment in ENGL C1000
Credit transferable: Transfers to CSU

CSIS 75 - Introduction to Computer Hardware/A+ Prep (4 units)
Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 51 hours lecture; 68 hours lab
This course covers maintenance and installation of computer hardware and basic electronics to understand digital circuits. The class covers the information necessary to complete the CompTIA A+ Exam Core 1 industry certification. Portions of instruction may be offered online; may also be offered fully online.

Advisory: Completion of or concurrent enrollment in ENGL C1000
Credit transferable: Transfers to CSU

CSIS 76A - Cisco Certified Network Associate (CCNA) 1 (3 units)
Letter Grade (LG) Only • Total hours: 34 hours lecture; 68 hours lab
This course introduces networking concepts and builds basic networking skills. Students learn layered models (TCP/IP and OSI), Ethernet networking, basic routing, IPv4 and IPv6 addressing, and cabling. Students design and configure a basic network. This Cisco Academy course is the first of a three-part sequence to prepare for CCNA certification. Portions of instruction may be offered online; may also be offered fully online.

Advisory: CSIS 1; completion of or concurrent enrollment in ENGL C1000
Credit transferable: Transfers to CSU

CSIS 76B - Cisco Certified Network Associate (CCNA) 2 (3 units)
Letter Grade (LG) Only • Total hours: 34 hours lecture; 68 hours lab
This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. The course also covers configuring and troubleshooting routers and switches and resolving common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. This Cisco Academy course is the second of a three-part sequence to prepare for CCNA certification. Portions of instruction may be offered online; may also be offered fully online.

Prerequisite(s): CSIS 76A
Credit transferable: Transfers to CSU

CSIS 76C - Cisco Certified Network Associate (CCNA) 3 (3 units)
Letter Grade (LG) Only • Total hours: 34 hours lecture; 68 hours lab
This course introduces Dynamic routing and Access Control list (ACL) concepts and configurations. Students configure NAT, VPN and evaluate techniques for QoS, network security, design, troubleshooting and virtualization. This Cisco Academy course is the last of a three-part sequence to prepare for CCNA certification. Portions of instruction may be offered online; may also be offered fully online.

Pre/Corequisite(s): CSIS 76B (or CSIS 177A)
Credit transferable: Transfers to CSU

CSIS 80 - Introduction to UNIX and Linux (3 units)
Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 34 hours lecture; 51 hours lab
This course provides an introduction to the UNIX and Linux operating systems that includes file and directory manipulation, access permissions, process control, networking, security, shell commands and shell programming. This course also prepares students to sit for the Linux+ industry certification exam. Portions of instruction may be offered online; may also be offered fully online.

Advisory: CSIS 1
Credit transferable: Transfers to CSU & UC

CSIS 81 - ITIL Essentials (1 unit)
Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 17 hours lecture
This course provides students with a basic understanding of ITIL framework and how it can be used to enhance IT service management. Students learn to facilitate creation of value with customers and stakeholders. Material includes the guiding principles of ITIL, understanding of Lean, Agile, and DevOps and how they can deliver business value, and how to maintain this value and demand. Students will also learn the information and skills necessary to take the ITIL Foundation industry certification exam. Portions of instruction may be offered online; may also be offered fully online.

Advisory: Completion of or concurrent enrollment in ENGL C1000
Credit transferable: Transfers to CSU

CSIS 83A - Microsoft Client Operating System (3 units)
Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 34 hours lecture; 51 hours lab
This course presents concepts and skills necessary to install, configure, and administer a Windows client operating system environment. Topics include the skills and knowledge necessary to enable students to prepare for the certification in the Microsoft Windows Client Operating System. Portions of instruction may be offered online; may also be offered fully online.

Advisory: Completion of or concurrent enrollment in ENGL C1000. Completion of or concurrent enrollment in CSIS 75.
Credit transferable: Transfers to CSU

CSIS 86 - Network Security Fundamentals/Security+ Prep (3 units)
Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 34 hours lecture; 68 hours lab
This course covers the fundamentals of security, using simulators to give hands-on experience with servers, routers and other security devices. Students learn about different types of attacks, security policy, encryption, access control, PKI, authentication, and cryptography. This course covers material necessary to prepare for the CompTIA Security+ certification. Portions of instruction may be offered online; may also be offered fully online.

Advisory: Completion of or concurrent enrollment in ENGL C1000
Credit transferable: Transfers to CSU

CSIS 87 - Computer Forensics (3 units)
Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 51 hours lecture; 17 hours lab
This is an introductory course in computer forensics. Students learn to collect and analyze data to uncover attacks and malware. Topics include forensic techniques, using tools based on fundamental understanding of data, security principles, and forensic data analysis to uncover computer crime and computer security incidents. Portions of instruction may be offered online; may also be offered fully online.

Pre/Corequisite(s): CSIS 86 (or CSIS 198)
Credit transferable: Transfers to CSU

CSIS 88 - Security Practices: Penetration Testing and Discovery (3 units)
Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 34 hours lecture; 51 hours lab
This is an introductory course in developing penetration testing within the context of properly securing the network from attacks. It covers fundamental concepts of system vulnerability assessment, penetration testing, exploits, and countermeasures. Students are exposed to many computer attack methodologies to enable them to recognize and prevent malicious activity through defense techniques designed to develop better organizational security. The course also helps prepare students for the CompTIA PenTest+ industry certification exam. Portions of instruction may be offered online; may also be offered fully online.

Pre/Corequisite(s): CSIS 86
Advisory: CSIS 76A, CSIS 80, CSIS 83A, and completion of or concurrent enrollment in ENGL C1000
Credit transferable: Transfers to CSU

CSIS 89 - Preparation for Cybersecurity Analyst Certification (CYSA+) (3 units)
Letter Grade (LG) Only • Total hours: 34 hours lecture; 68 hours lab
This advanced cybersecurity course covers network security concepts, and techniques used in a Security Operations Center (SOC) to find threats on a network using a variety of popular security tools. The course covers the material required for students to take the COMPTIA CYSA+ certification exam. Portions of instruction may be offered online; may also be offered fully online.

Prerequisite(s): CSIS 88
Advisory: CSIS 86 and CSIS 76B; completion of or concurrent enrollment in ENGL C1000
Credit transferable: Transfers to CSU

CSIS 95 - Network Fundamentals (2 units)
Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 17 hours lecture; 51 hours lab
This course teaches fundamental network concepts including access management, transmission media, cloud, connectivity and basic security. This course is a bridge course which will add breadth knowledge to our CCNA class sequence and allow students who complete both to be prepared to take the CompTIA Network+ industry certification exam. Portions of instruction may be offered online; may also be offered fully online.

Prerequisite(s): CSIS 76C
Advisory: Completion of or concurrent enrollment in ENGL C1000
Credit transferable: Transfers to CSU

CSIS 98 - Project Development (2 units)
Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 36 hours lecture
This course provides students experience in project development in a computer-related area of study. Students learn project conceptualization and selection strategies, assessing prior solutions, brainstorming, writing proposals, prototyping, schedule and resource allocation, overcoming obstacles, and assessing and reporting on final deliverables. Students will also learn the information and skills necessary to take the CompTIA Project+ industry certification exam. Portions of instruction may be offered online; may also be offered fully online.

Credit transferable: Transfers to CSU

CSIS 472A - Administering Windows Server Core Infrastructure (0 units)
Pass/No Pass (P/NP) Only • Total hours: 34 hours lecture; 51 hours lab
This course presents terminology, concepts, and skills necessary to administer Windows Server workloads using on-premises, hybrid, and cloud technologies. Students will gain expertise in implementing and managing solutions for identity, management, computer networking, and storage. Provide necessary knowledge to pass the Microsoft AZ-800: Administering Windows Server Hybrid Core Infrastructure Certification Exam. Portions of instruction may be offered online; may also be offered fully online.

Advisory: CSIS 83A; Completion of or concurrent enrollment in ENGL C1000
Repeatable: Noncredit

CSIS 472B - Configuring Windows Server Hybrid Advanced Services (0 units)
Pass/No Pass (P/NP) Only • Total hours: 34 hours lecture; 51 hours lab
This course will teach the requirements for the Microsoft Certification AZ-801: Configuring Windows Server Hybrid Advanced Services. Students will learn to secure Windows on-premises and hybrid infrastructures, implement and manage high availability servers, implement disaster recovery, migrate servers and workloads, and monitor and troubleshoot Windows Server environments. Portions of instruction may be offered online; may also be offered fully online.

Prerequisite(s): CSIS 72A or CSIS 472A
Advisory: Completion of or concurrent enrollment in ENGL C1000
Repeatable: Noncredit

CSIS 475 - Introduction to Computer Hardware/A+ Prep (0 units)
Pass/No Pass (P/NP) Only • Total hours: 45 hours lecture; 68 hours lab
This course covers maintenance and installation of computer hardware and basic electronics to understand digital circuits. The class covers the information necessary to complete the CompTIA A+ Exam Core 1 industry certification. Portions of instruction may be offered online; may also be offered fully online.

Advisory: Completion of or concurrent enrollment in ENGL C1000
Repeatable: Noncredit

CSIS 476A - Cisco Certified Network Associate (CCNA) 1 (0 units)
Pass/No Pass (P/NP) Only • Total hours: 34 hours lecture; 68 hours lab
This course introduces networking concepts and builds basic networking skills. Students learn layered models (TCP/IP and OSI), Ethernet networking, basic routing, IPv4 and IPv6 addressing, and cabling. Students design and configure a basic network. This Cisco Academy course is the first of a three-part sequence to prepare for CCNA certification. Portions of instruction may be offered online; may also be offered fully online.

Advisory: CSIS 1; completion of or concurrent enrollment in ENGL C1000

CSIS 476B - Cisco Certified Network Associate (CCNA) 2 (0 units)
Pass/No Pass (P/NP) Only • Total hours: 34 hours lecture; 68 hours lab
This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. The course also covers configuring and troubleshooting routers and switches and resolving common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. This Cisco Academy course is the second of a three-part sequence to prepare for CCNA certification. Portions of instruction may be offered online; may also be offered fully online.

Prerequisite(s): CSIS 76A or 476A
Repeatable: Noncredit

CSIS 476C - Cisco Certified Network Associate (CCNA) 3 (0 units)
Pass/No Pass (P/NP) Only • Total hours: 34 hours lecture; 68 hours lab
This course introduces Dynamic routing and Access Control list (ACL) concepts and configurations. Students configure NAT, VPN and evaluate techniques for QoS, network security, design, troubleshooting and virtualization. This Cisco Academy course is the last of a three-part sequence to prepare for CCNA certification. Portions of instruction may be offered online; may also be offered fully online.

Prerequisite(s): 76A or 476A
Repeatable: Noncredit

CSIS 480 - Introduction to UNIX and Linux (0 units)
Pass/No Pass (P/NP) Only • Total hours: 34 hours lecture; 52 hours lab
This course provides an introduction to the UNIX and Linux operating systems that includes file and directory manipulation, access permissions, process control, networking, security, shell commands and shell programming. This course also prepares students to sit for the Linux+ industry certification exam. Portions of instruction may be offered online; may also be offered fully online.

Advisory: CSIS 1
Repeatable: Noncredit

CSIS 481 - ITIL Essentials (0 units)
Pass/No Pass (P/NP) Only • Total hours: 17 hours lecture
This course provides students with a basic understanding of ITIL framework and how it can be used to enhance IT service management. Students learn to facilitate creation of value with customers and stakeholders. Material includes the guiding principles of ITIL, understanding of Lean, Agile, and DevOps and how they can deliver business value, and how to maintain this value and demand. Students will also learn the information and skills necessary to take the ITIL Foundation industry certification exam. Portions of instruction may be offered online; may also be offered fully online.

Advisory: Completion of or concurrent enrollment in ENGL C1000
Repeatable: Noncredit

CSIS 483A - Microsoft Client Operating System (0 units)
Pass/No Pass (P/NP) Only • Total hours: 34 hours lecture; 51 hours lab
This course presents concepts and skills necessary to install, configure, and administer a Windows client operating system environment. Topics include the skills and knowledge necessary to enable students to prepare for the certification in the Microsoft Windows Client Operating System. Portions of instruction may be offered online; may also be offered fully online.

Advisory: Completion of or concurrent enrollment in ENGL C1000. Completion of or concurrent enrollment in CSIS 75.
Repeatable: Noncredit

CSIS 486 - Network Security Fundamentals/Security+ Prep (0 units)
Pass/No Pass (P/NP) Only • Total hours: 34 hours lecture; 68 hours lab
This course covers the fundamentals of security, using simulators to give hands-on experience with servers, routers and other security devices. Students learn about different types of attacks, security policy, encryption, access control, PKI, authentication, and cryptography. This course covers material necessary to prepare for the CompTIA Security+ certification. Portions of instruction may be offered online; may also be offered fully online.

Advisory: Completion of or concurrent enrollment in ENGL C1000
Repeatable: Noncredit

CSIS 488 - Security Practices: Penetration Testing & Discovery (0 units)
Pass/No Pass (P/NP) Only • Total hours: 34 hours lecture; 51 hours lab
This is an introductory course in developing penetration testing within the context of properly securing the network from attacks. It covers fundamental concepts of system vulnerability assessment, penetration testing, exploits, and countermeasures. Students are exposed to many computer attack methodologies to enable them to recognize and prevent malicious activity through defense techniques designed to develop better organizational security. The course also helps prepare students for the CompTIA PenTest+ industry certification exam. Portions of instruction may be offered online; may also be offered fully online.

Pre/Corequisite(s): CSIS 86 or CSIS 486
Advisory: CSIS 76A, CSIS 80, CSIS 83A, and completion of or concurrent enrollment in ENGL C1000
Repeatable: Noncredit

CSIS 489 - Preparation for Cybersecurity Analyst Certification (CYSA +) (0 units)
Pass/No Pass (P/NP) Only • Total hours: 34 hours lecture; 68 hours lab
This advanced cybersecurity course covers network security concepts, and techniques used in a Security Operations Center (SOC) to find threats on a network using a variety of popular security tools. The course covers the material required for students to take the COMPTIA CYSA+ certification exam. Portions of instruction may be offered online; may also be offered fully online.

Advisory: CSIS 86 or CSIS 486 and CSIS 76B or CSIS 476B; completion of or concurrent enrollment in ENGL C1000
Repeatable: Noncredit

CSIS 495 - Network Fundamentals (0 units)
Pass/No Pass (P/NP) Only • Total hours: 17 hours lecture; 51 hours lab
This course teaches fundamental network concepts including access management, transmission media, cloud, connectivity and basic security. This course is a bridge course which will add breadth knowledge to our CCNA class sequence and allow students who complete both to be prepared to take the CompTIA Network+ industry certification exam. Portions of instruction may be offered online; may also be offered fully online.

Prerequisite(s): CSIS 76C
Advisory: Completion of or concurrent enrollment in ENGL C1000
Repeatable: Noncredit

CSIS 498 - Project Development (0 units)
Pass/No Pass (P/NP) Only • Total hours: 36 hours lecture
This course provides students experience in project development in a computer-related area of study. Students learn project conceptualization and selection strategies, assessing prior solutions, brainstorming, writing proposals, prototyping, schedule and resource allocation, overcoming obstacles, and assessing and reporting on final deliverables. Students will also learn the information and skills necessary to take the CompTIA Project+ industry certification exam. Portions of instruction may be offered online; may also be offered fully online.

Repeatable: Noncredit