

CSIS -CISCO Track Year 1

Semester 1

Class Number	Class Name	Class Description	Credit Hours
COLL 100	First-Year Seminar	The course is designed to help students adjust to the MCC community, develop a better understanding of the learning process, and acquire essential academic survival skills.	1
EHSS 111	Introduction to Health and Safety for General Industry	This course provides the participants with an overview of the Occupational Safety and Health Administration (OSHA) standards relevant to general industry. Among the subjects covered in the program are: an introduction to OSHA, fire protection, electrical safety, hazard communication, bloodborne pathogens, walking and working surfaces, personal protective equipment, machine guarding and safety and health programs. Students will receive a 10-hr General Industry Safety and Health Outreach Card.	1
CSIS 110	Information Technology Fundamentals	Introduces Information Technology vocabulary and fundamentals related to computer hardware, software, networking, security, and basic IT literacy. This course helps prepare students for the CompTIA IT Fundamentals certification exam.	3
CSIS 112	Introduction to Networks CCNA 1	This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. It uses the OSI and TCP layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. Labs use a model Internet to allow students to analyze real data without affecting production networks. Packet Tracer (PT) activities help students analyze protocol and network operation and build small networks in a simulated environment. At the end of the course, students build simple LAN topologies by applying basic principles of cabling, performing basic configurations of network devices such as routers and switches, and implementing IP addressing schemes.	4
BSAD 221	Business Communications	Business Communications identifies the scope and structure of communications within a business environment. The areas of study include writing processes involving a wide variety of business correspondences. Current methods of communication by technology are covered with direct applications utilizing Internet, Email, PowerPoint presentations, electronic files, employee and data privacy, resumes and interviewing techniques. Emphasis is placed on formal reports within the APA and MLA formats/structures.	3

Semester 2

Class Number	Class Name	Class Description	Credit Hours
CSIS 113	Routing and Switching Essentials CCNA 2	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. By the end of the course, students will be able to 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. Students complete hands-on labs, virtual labs and interactive media activities. These labs and other activities reinforce new concepts and allow students to model and analyze routing and switching processes that may be difficult to visualize or understand.	4
CSIS 111	Computer Hardware, Maintenance, and Troubleshooting	This course introduces the student to maintenance, upgrading, setup, and expansion of personal computer hardware. Students will explore microcomputer architecture, functions, and components as well as methods and procedures for installation, troubleshooting, and modifications of computer systems. This course helps students prepare for the first of two tests required for the current CompTIA A+ Certification.	3
CSIS 151	Microsoft Operating System Concepts	This course introduces the student to maintenance, upgrading, setup, and expansion of personal computer hardware. Students will explore microcomputer architecture, functions, and components as well as methods and procedures for installation, troubleshooting, and modifications of computer systems. This course helps students prepare for the second of two tests required for the current CompTIA A+ Certification.	3
INTE 107	Industrial Electrical Safety	This course will introduce the student to electrical safety rules and procedures in the industrial arena. The student will learn the NFPA 70E requirements, meter safety and how to safely work around electrical circuitry in the workplace. Student will complete CPR certification.	2

CSIS -CISCO Track Year 2

Semester 3

Class Number	Class Name	Class Description	Credit Hours
CSIS 212	Scaling Networks CCNA 3	This course describes the architecture, components and operations of routers and switches in larger more complex networks. Students learn how to configure router and switches for advanced functionality. By the end of the course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP and STP in both IPv4 and IPv6 networks. Students also develop the knowledge and skills necessary to implement WLAN in a small-to-medium network.	4
CSIS 115	Computer Concepts and Applications	This course provides basic technology skills needed for success in college-level coursework and career preparation. Topics include file management on local, network and cloud-based storage media. Additional topics include word processing, spreadsheet, database, and presentation software as well as navigation of web-based information, data security and personal information assurance. Test out option available upon request.	3
CSIS 213	Connecting Networks CCNA 4	This course discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students will also develop the knowledge and skills needed to implement virtual private network (VPN) operations in a complex network.	4

Semester 4

Class Number	Class Name	Class Description	Credit Hours
CSIS 272	Network Security	This course helps students develop the skills needed to succeed in IT related degree programs and prepare for the CCNA Security certification. It provides a theoretically rich, hands-on introduction to network security, in a logical sequence. The goals of this course are to: provide an in-depth, theoretical understanding of network security, provide students with the knowledge and skills necessary to design and support network security, provide an experience-oriented course that employs industry-relevant instructional approaches to prepare students for associate-level jobs in the industry, and enable students to have significant hands-on interaction with IT equipment to prepare them for certification exams and career opportunities.	4
CSIS 152	Linux Operating System	This course provides a comprehensive overview and hands-on experience with the Linux operating system.	3
CSIS 123	Programming Fundamentals	Introduction to the principles of good design and the characteristics common to all programming languages. Experience writing code in a particular programming language, and compare to other common programming languages. Write well structured, procedural programs based on problem solving strategies.	3
CSIS 290	Field Competencies and Employment Strategies	This course prepares the student for entry into the computer science workforce. It includes strategies for successful career goal setting, job seeking, and obtaining employment in the industry. Topics will include verbal communication, written communication, problem solving and decision making, professionalism, teamwork and team building. Participation in actual or simulated job interview and technical content pertinent to the program assessment being delivered. Instructor approval required to enroll in the course.	3