

Computer Science - Computer Systems Support (Certificate)

Certificate of Mastery

Minimum of 18 credit hours

Do you have a natural curiosity about how computers and their programs work? Do you like to put your knowledge to good use helping others? Are you a good communicator, or would you like to become one? Then, a career as a Computer Systems Support Specialist would be a good choice for you! At Oklahoma City Community College, you can earn an associate degree in applied science or a certificate of mastery in computer science with a computer systems support option. Either program option will get you out of school quickly and into the job market. Just talk with a faculty advisor about which would be the best choice for your lifestyle and career goals. OCCC provides a strong foundation in computer science and is a National Center of Academic Excellence in Information Assurance.

Course Sequence

Course ID	Course Name	Credits	Type	Min Gd
Term 1				
CS 1103	Introduction to Computers and Applications	3	Major	C
CS 1153	Introduction to Computing Technologies	3	Major	C
Term 2				
CS 1353	Computer Operating Systems	3	Major	C
CS 1413	Computer Hardware	3	Major	C
Term 3				
CS 2153	Cloud Computing	3	Major	C
CS 2713	Principles of Information Security	3	Major	C

Course Grouping

Major Courses: (18 credit hours) Computer Science: CS 1103 (C); CS 1153 (C); CS 1353 (C); CS 1413 (C); CS 2153 (C); CS 2713 (C)

General Education Courses: None

Life Skills Courses: None

Support Courses: None

Program Notes

Notes: A Certificate of Mastery program is designed to meet the needs of an individual who wants to enter the job market following the completion of the certificate.

Must have a grade of "C" or higher in all Computer Science courses.

Degree Program Course Descriptions

CS 1103 - Introduction to Computers and Applications

Prerequisites: MATH 0103 or adequate math placement; ENGL 0203, adequate placement score, or by meeting determined placement measures

3 Credits This hands-on course affords students a basic understanding of computers and their application. Upon completion of this course, the student will be able to demonstrate the ability to use a computer operating system, an office suite, productivity tools, as well as the Internet at an introductory level. Advanced Standing is available. This course satisfies the computer proficiency requirement.

CS 1153 - Introduction to Computing Technologies

Prerequisites: ENGL 0203, adequate placement score, or by meeting determined placement measures; MATH 0103 or adequate math placement.

3 Credits Students will learn fundamental concepts of computing technologies. Topics will include computer hardware, operating systems, application software, networking, information security and privacy, information systems, program development, database management systems, social aspect of computing technologies, and cloud computing. This course satisfies the computer proficiency requirement.

CS 1353 - Computer Operating Systems

Prerequisites: ENGL 0203, adequate placement score, or by meeting determined placement measures; MATH 0203 or adequate math placement; prerequisite or co-requisite CS 1103

3 Credits Students will learn the following important areas through a combination of lectures and hands-on projects: installing, maintaining and optimizing Windows operating systems, troubleshooting Windows and applications, connecting to and setting up a network, Windows resources on a network, computer security strategies, mobile devices, and client-side virtualization. A+ Certification Preparation Course. This course satisfies the computer proficiency requirement.

CS 1413 - Computer Hardware

Prerequisites: ENGL 0203, adequate placement score, or by meeting determined placement measures; MATH 0203 or adequate math placement; prerequisite or co-requisite CS 1103

3 Credits Students will learn the following through class lectures and hands-on projects: identification, configuration, maintenance, troubleshooting, and repair of PC hardware including mainboards, BIOS, processors,

memory, storage devices, peripherals, and printers. Other IT-related issues such as networks, safety and environmental concerns, customer relations, and professionalism are also presented. A+ Certification Preparation Course. This course satisfies the computer proficiency requirement.

CS 2153 - Cloud Computing

Prerequisites: CS 1353

3 Credits Students will demonstrate their understanding of planning, configuring, implementing, and maintaining cloud computing infrastructure, as well as the services it supports such as Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS). This course satisfies the computer proficiency requirement.

CS 2713 - Principles of Information Security

Prerequisites: ENGL 0203, adequate placement score, or by meeting determined placement measures; MATH 0203 or adequate math placement; CS 1353

3 Credits Students will complete a comprehensive overview of network security, with an introduction to a variety of security problems faced by the computing industry. This course is mapped to the CompTIA Security+ Certification Exam. The course covers topics in general security concepts, communication security, infrastructure security, cryptography basics, and operational/organizational security. This course satisfies the computer proficiency requirement.