

# CTS-COMPUTER TECH & SKILLS (CTS)

---

## CTS 1131 A+ Hardware (3 Credits)

This course prepares students for the current CompTIA A+ Hardware exam. Students will have the knowledge required to assemble components based on customer requirements, install, configure and maintain devices for end users, understand the basics of networking and security/forensics, properly and safely diagnose, resolve and document common hardware issues while applying troubleshooting skills. Students will also learn how to provide appropriate customer support, understand the basics of printers, laptops, and deployment.

## CTS 1133 A+ Software (3 Credits)

This course prepares students for the current CompTIA A+ Software exam. Students will have the knowledge of how to install operating systems based on customer requirements, install, configure and maintain software for end users, understand the basics of networking and security/forensics, properly and safely diagnose, resolve and document common software issues while applying troubleshooting skills. Students will also learn how to provide appropriate customer support; understand the basics of virtualization, desktop imaging, and deployment.

## CTS 1138C PC Hardware and Operating Systems (A+) (3 Credits)

This course equips students with the essential hardware and software knowledge needed to thrive in today's IT industry. Get ready for the industry-standard CompTIA A+ exams by learning to install, configure, troubleshoot, and maintain computer systems, mobile devices, and operating systems through virtual and hands-on labs and practice exams.

## CTS 1155 Help Desk Customer Service (3 Credits)

This course is designed to provide students interested in a technical customer support career with the knowledge and skills to be successful in that field. This course will introduce the business, technical, and interpersonal skills necessary to provide customer support. Students will obtain a better understanding of the various careers in the customer support industry and the knowledge and skill sets necessary to enter and advance in those careers.

**Prerequisite:** C or higher in CGS 1100

## CTS 1205 MS Excel (3 Credits)

This course provides comprehensive instruction in Microsoft Excel. Topics include use of the ribbon; entering constant values and formulas; constructing, formatting, and printing worksheets; use of functions (including conditional, lookup, and database functions); list management; creating and printing charts; using large worksheets and multiple worksheets; using range names in formulas; creating and using macros; integration; worksheet design and documentation; and other advanced topics. Students will have daily hands-on experience. Additional practice time will be required. Adequate keyboarding and mouse skills are helpful.

**Prerequisite:** CGS 1100 or documented consent of instructor

## CTS 2134 Network+ Concepts (3 Credits)

This course prepares students for the current CompTIA Network+ exam and serves as a general introduction to current network technologies for local area networks (LANs), wide area networks (WANs) and the Internet. The course provides an introduction to the hardware, software, terminology, components, design and connections of a network, as well as the topologies and protocols for LANs. It covers LAN-user concepts and the basic functions of system administration and operation.

**Prerequisite:** C or higher in CGS 1000, or documented consent of instructor, may also be taken as a corequisite

## CTS 2142 Project Management Concepts (3 Credits)

This course delves into the Project Management Body of Knowledge as outlined by CompTIA Project+. It explores the processes, methods, tools, and techniques that organizations leverage to effectively manage information systems projects. Students will gain a comprehensive understanding of the systematic methodology used for initiating, planning, executing, controlling, and closing projects.

**Prerequisite:** C or higher in CGS 1100

## CTS 2145 Cloud Essentials (3 Credits)

This course explores both the business and technical aspects of cloud technologies. Learn how cloud solutions work, the benefits of migration, and best practices for cloud governance. Prepare for a successful IT career by gaining the knowledge to navigate cloud environments and earn the CompTIA Cloud Essentials+ certification.

**CTS 2321 Linux System Administration (3 Credits)**

This course provides students with the knowledge and skills necessary to install, configure and troubleshoot client and server versions of the Linux operating system. It includes lectures, demonstrations and labs regarding system installation, file systems, administration (users, groups and policies), network protocols and services, print services, security and reliability. Topics regarding backup operations, software deployment, and network management will employ leading third party products.

**Prerequisite:** C or higher in CTS 1133

**CTS 2334 Server Administration (3 Credits)**

This comprehensive course equips students with the skills to manage Microsoft Windows environments. Through a combination of lectures, demonstrations, and hands-on labs, students gain expertise in installing, configuring, and troubleshooting both client and server versions of the Windows Operating System. Key areas of focus include system installation, file systems, user and group administration with policy management, network protocols and services, print services, security best practices, and system reliability. By successfully completing the course, students will be well-prepared to take the current CompTIA Server + industry certification exam.

**Prerequisite:** C or higher in CGS 1000, or documented consent of instructor, may also be taken as a corequisite

**CTS 2655 Routing and Switching Fundamentals (3 Credits)**

This course emphasizes design, installation, and management of WANs and LANs using routers and routed protocols. Students install and configure routers and hosts for IP. WAN access technologies, including ISDN, PPP and frame relay, are introduced, and routers are installed and configured. The use and configuration of switches, VLANs, firewalls and proxy servers are also covered.

**Prerequisite:** C or higher in CTS 2134 or documented consent of instructor