

Computer Science: Computer Hardware and Software Maintenance

Identify and explain motherboard components. [CHSM1](#)

1 Identify and explain motherboard components. [CHSM1](#)

Identify, install, configure, and upgrade personal computer components. [CHSM2](#)

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Perform the following: device driver installation, scheduled maintenance, and memory and firmware updates [CHSM3](#)

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Identify the following: common tools, basic diagnostic procedures, troubleshooting techniques, and preventative maintenance methods [CHSM4](#)

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Explain and apply the troubleshooting process to diagnose and repair common hardware and software problems. [CHSM5](#)

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Demonstrate and understanding of conversion between

6 Demonstrate and understanding of conversion between binary, decimal, hexadecimal number systems [CHSM6](#)

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Compare and contrast
client operating systems
and their
features. [CHSM7](#)

Use multiple user
interfaces, including
command-line, to
perform operating
system management
tasks, to configure,
optimize and upgrade
the current client
operating system and to
diagnose network
connection issues [CHSM8](#)

Use and manage file
systems, operating
system utilities, backup
programs, and
optimization
tools. [CHSM9](#)

Describe the process to
install, configure, secure
and troubleshoot a basic
small or home office
network. [CHSM10](#)

Identify the
fundamental principles
of networking and
security. [CHSM11](#)

Describe and apply
appropriate operational
procedures including
safety, environmental
procedures, good
communication skills,
and professional
behavior. [CHSM12](#)

7 Compare and contrast client operating systems and their features. [CHSM7](#)

8 Use multiple user interfaces, including command-line, to perform operating system management tasks, to configure, optimize and upgrade the current client operating system and to diagnose network connection issues [CHSM8](#)

9 Use and manage file systems, operating system utilities, backup programs, and optimization tools. [CHSM9](#)

10 Describe the process to install, configure, secure and troubleshoot a basic small or home office network. [CHSM10](#)

11 Identify the fundamental principles of networking and security. [CHSM11](#)

12 Describe and apply appropriate operational procedures including safety, environmental procedures, good communication skills, and professional behavior. [CHSM12](#)