

Computer Hardware & Software

Career Cluster	Information Technology
Course Code	10251
Prerequisite(s)	Introduction to Information Technology Careers (Recommended), Computer Applications (Recommended)
Credit	.5-1
Program of Study and Sequence	Computer Hardware & Software is recommended as a prerequisite for two pathways: Programming and Networking & Hardware.
Student Organization	Skills USA, Future Business Leaders of America, CyberPatriots
Coordinating Work-Based Learning	Job Shadowing, Guest Speakers, Tours, Personal Portfolios
Industry Certifications	None
Dual Credit or Dual Enrollment	TBD
Teacher Certification	Information Technology Cluster Endorsement; Networking Systems & Information Support Pathway Endorsement; Computer Repair & Maintenance Endorsement; K-12 Educational Technology; K-12 Classroom Technology
Resources	

Course Description: The Computer Hardware & Software course will prepare students to become more knowledgeable about the integral components of a computer system. Topics covered in the class include individual hardware components, upgrading and troubleshooting a computer, installing operating systems, and configuring basic network services.

Program of Study Application

Computer Hardware & Software is cluster course leading to the Programming and Networking & Hardware pathways.

Course Standards

INDICATOR # CIT 1. Apply knowledge of hardware design, operation and maintenance.		
<i>Webb Level</i>	<i>Sub-Indicator</i>	<i>Integrated Content</i>
Level 3: Strategic Thinking	CIT 1.1 Understand how to design and assemble systems that use computer programs to interact with hardware.	
Level 3: Strategic Thinking	CIT 1.2 Install and configure essential computer hardware and software components .	
INDICATOR # CIT 2. Understand the relationships among computer hardware, networks, and operating systems.		
<i>Webb Level</i>	<i>Sub-Indicator</i>	<i>Integrated Content</i>
Level 1: Recall	CIT 2.1 Identify new IT technologies relevant to computer hardware.	
Level 2: Skill/Concept	CIT 2.2 Determine compatibility of hardware and software.	
Level 2: Skill/Concept	CIT 2.2 Understand the difference between an operating system, utility programs, and application software.	
INDICATOR # CIT 3. Understand basic networking services.		
<i>Webb Level</i>	<i>Sub-Indicator</i>	<i>Integrated Content</i>

Level 2: Skill/Concept	CIT 3.1 Understand the basics of Internet protocol (IP) addressing.	
Level 4: Extended Thinking	CIT 3.2 Troubleshoot basic hardware and software problems.	
INDICATOR # CIT 4. Explore careers in information technology.		
Webb Level	<i>Sub-Indicator</i>	<i>Integrated Content</i>
Level 1: Recall	CIT 4.1 Identify skills, interests, and abilities related to information technology.	
Level 2: Skill/Concept	CIT 4.2 Identify personal interests using survey instruments with information technology occupations.	
Level 3: Strategic Thinking	CIT 4.3 Research labor market information for information technology.	
Level 2: Skill/Concept	CIT 4.4 Demonstrate necessary job skills needed for Information and Technology industries.	