Introduction to Information Technology

Career Cluster	Information Technology
Course Code	10003
Prerequisite(s)	Recommended that a student has taken from the Foundation Courses Computer Applications.
Credit	.5
Program of Study and Sequence	Intro to Information Technology is recommended as a prerequisite for two career pathways in the Information Technology: 1) Programming; 2) Networking and Hardware.
Student Organization	SkillsUSA
Coordinating Work-Based Learning	Tours, Guest Speakers, Job Shadowing
Industry Certifications	None
Dual Credit or Dual Enrollment	TBD
Teacher Certification	Information Technology Cluster Endorsement; K-12 Educational Technology; K-12 Classroom Technology
Resources	

Course Description:

Introduction to Information Technology prepares students with knowledge and background of technology careers, programming, and hardware. This course explores new and emerging technologies for both professional and personal use.

Program of Study Application

Introduction to Information Technology is recommended as a prerequisite for two pathways: Programming and Networking & Hardware.

Course Standards

INDICATOR # IT 1. Understand the need and impact of technology.		
Webb Level	*Sub-Indicator*	*Integrated Content*
Level 1: Recall	IT 1.1 Define the relationship between electronic devices and computers.	
Level 1: Recall	IT 1.2 Describe the functional areas in which computers assist people.	
Level 1: Recall	IT 1.3 Describe how technology is impacting community.	
Level 1: Recall	IT 1.4 List physical and mental health dangers associated with computer use.	

INDICATOR #IT 2. Understand computer hardware required to meet specific needs.		
Webb Level	*Sub-Indicator*	*Integrated Content*
Level 1: Recall	IT 2.1 Understand how computer information is represented.	
Level 1: Recall	IT 2.2 Identify hardware components and their relationship to computer usage.	
Level 2: Skill/Concept	IT 2.3 Understand different types of memory and storage.	
Level 1: Recall	IT 2.4 Identify input and output devices to meet the needs of users.	
Level 2: Skill/Concept	IT 2.5 Understand the decision-making process involved in purchasing computer systems.	

INDICATOR #IT 3. Understand software solutions for personal and professional use.		
Webb Level	*Sub-Indicator*	*Integrated Content*
Level 2: Skill/Concept	IT 3.1 Explain how software is created, distributed, installed, and maintained.	
Level 1: Recall	IT 3.2 Describe the functions of system software and operating systems.	
Level 2: Skill/Concept	IT 3.3 Describe different types and purposes of productivity software.	
INDICATOR #IT 4. Understand technology used for the Internet.		
Webb Level	*Sub-Indicator*	*Integrated Content*
Level 1: Recall	IT 4.1 Describe how the Internet developed.	
Level 1: Recall	IT 4.2 Explain how hardware, protocols, and software work together to create the Internet.	
Level 2: Skill/Concept	IT 4.3 Explain the underlying structures and technologies used to support the Internet.	
INDICATOR #IT 5. Understand computer network and telecommunications technologies.		
Webb Level	*Sub-Indicator*	*Integrated Content*

Level 1: Recall	IT 5.1 Understand the fundamentals of data communications.	
Level 1: Recall	IT 5.2 List the types of media, devices, and software needed for networking services.	
Level 1: Recall	IT 5.3 List and describe the popular forms of wireless technologies.	

INDICATOR #IT 6. Understand the needs and uses for digital media.

Webb Level	*Sub-Indicator*	*Integrated Content*
Level 1: Recall	IT 6.1 Understand the uses of digital media.	
Level 2: Skill/Concept	IT 6.2 Discuss how interactive media is used to educate and entertain.	

INDICATOR #IT 7. Understand computer crime and information security.

Webb Level	*Sub-Indicator*	*Integrated Content*
Level 1: Recall	IT 7.1 Describe methods of keeping electronic devices secure.	
Level 2: Skill/Concept	IT 7.2 Discuss the threats and defenses for networks.	
Level 3: Strategic Thinking	IT 7.3 Describe the threats posed by hackers, software, scams and the methods of defending against them.	

INDICATOR #IT 8. Understand technology ethics in a global society.

Webb Level	Sub-Indicator	Integrated Content
Level 2: Skill/Concept	IT 8.1 Describe the negative and positive impacts of social media.	
Level 2: Skill/Concept	IT 8.2 Explain the ways in which technology is used to invade personal privacy.	
Level 1: Recall	IT 8.3 Identify ethical issues related to digital technology.	

INDICATOR #IT 9. Explore careers in information technology.

Webb Level	Sub-Indicator	Integrated Content
Level 1: Recall	IT 9.1 Identify skills, interests, and abilities related to information technology.	
Level 2: Skill/Concept	IT 9.2 Compare personal interest survey results with information technology occupations.	
Level 3: Strategic Thinking	IT 9.3 Research labor market information for information technology.	
Level 2: Skill/Concept	IT 9.4 Demonstrate necessary job skills needed for Information and Technology industries.	

INDICATOR #IT 10. Demonstrate knowledge of the software development process.

Webb Level	Sub-Indicator	Integrated Content

Level 4: Extended Thinking	IT 10.1 Apply tools for developing software applications.	
Level 3: Strategic Thinking	IT 10.2 Demonstrate knowledge of programming structures.	