



Name _____
 Learner ID _____
 School/College/University _____

SAMPLE

Information and Technology

Career Cluster Plan of Study for ► Learners ► Parents ► Counselors ► Teachers/Faculty

This Career Cluster Plan of Study (based on the Information Technology Career Cluster) can serve as a guide, along with other career planning materials, as learners continue on a career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. *This Plan of Study, used for learners at an educational institution, should be customized with course titles and appropriate high school graduation requirements as well as college entrance requirements.

EDUCATION LEVELS	GRADE	English/ Language Arts	Math	Science	Social Studies/ Sciences	Other Required Courses Other Electives Recommended Electives Learner Activities	*Career and Technical Courses and/ or Degree Major Courses for Information and Technology	SAMPLE Occupations Relating to This Career Cluster
Interest Inventory Administered and Plan of Study Initiated for all Learners								
SECONDARY	9	English/ Language Arts I	Algebra I or Geometry	Earth or Life or Physical Science	World History	All plans of study should meet local and state high school graduation requirements and college entrance requirements. Certain local student organization activities are also important including public speaking, record keeping and work-based experiences.	** <i>Introduction to Information Technology</i> ** <i>Information Technology Applications</i>	<ul style="list-style-type: none"> ► Animator ► Database Administrator ► Data Systems Designer ► E-Business Specialist ► Game Developer ► Information Technology Engineer ► Media Specialist ► Network Administrator ► Network Security Analyst ► PC Support Specialist ► Programmer ► Software Applications Specialist ► Systems Administrator ► Telecommunications Network Technician ► User Support Specialist ► Virtual Reality Specialist ► Web Architect/Designer
	10	English/ Language Arts II	Geometry or Algebra II	Biology	U.S. History		** <i>Fundamentals of Computer Systems</i>	
	11	English/ Language Arts III	Algebra II or Pre-Calculus or Trigonometry	Chemistry	Political Science Economics		Continue courses pertinent to the pathway selected. (Students are encouraged to have an internship/capstone experience to reinforce workplace skills.)	
	College Placement Assessments-Academic/Career Advisement Provided							
	12	English/ Language Arts IV Technical Reading	<i>Dependent on chosen pathway</i>	Applied Physics				
Articulation/Dual Credit Transcribed-Postsecondary courses may be taken/moved to the secondary level for articulation/dual credit purposes.								
POSTSECONDARY	Year 13	English Composition English Literature	Calculus	Chemistry	American Govt. Psychology	All plans of study need to meet learners' career goals with regard to required degrees, licenses, certifications or journey worker status. Certain local student organization activities may also be important to include.	Continue courses pertinent to the pathway selected.	
	Year 14	Speech/ Oral Communication Technical Writing	Computer Applications	Biological Science Physics	American History Geography			
	Year 15	Continue courses in the area of specialization.						
	Year 16							

**See course descriptions on page 2.



SAMPLE

Information Technology Course Descriptions

(Course content may be taught as concepts within other courses.)

#1

Introduction to Information Technology: This course introduces the student to the knowledge base and technical skills for all careers in the information technology cluster. Learners will study the nature of business and demonstrate knowledge of the functions of information systems in business. Emphasis will be placed on maintaining a safe working environment and on building interpersonal skills needed for working in the IT environment. Students will demonstrate appropriate knowledge and behaviors of legal responsibilities by IT professionals. Students will explore a variety of IT career opportunities and develop a personal career plan to meet their career goals and objectives. This may be taught as a career exploration course in conjunction with other foundation Career Cluster courses.

#2

Information Technology Applications: Students will use technology tools to manage personal schedules and contact information, create memos and notes, prepare simple reports and other business communications, manage computer operations and file storage, and use electronic mail, Internet applications and GIS to communicate, search for and access information. Students will develop skills related to word processing, database management, and spreadsheet applications. Students will demonstrate knowledge of hardware components, classes of software, basic data communications components and trends, and technical knowledge of the Internet including Internet protocols. Students will demonstrate understanding of Internet security issues, how to use and troubleshoot Internet connections including Internet software, how to use virus protection techniques and how to use the Internet to communicate and collaborate. Students will install and configure software programs, demonstrate knowledge of Web page basics, apply knowledge of operating system principles, employ computer system interfaces and demonstrate a basic knowledge of quality assurance concepts.

#3

Fundamentals of Computer Systems: Students will demonstrate knowledge and problem-solving skills in the area of operating systems and computer hardware. This would include, but not be limited to, storage and drives, system boards, processors, memory, peripherals and networks. Emphasis will be placed on speech and client-oriented communication skills.