



Name _____

Learner ID _____

School/College/University _____

SAMPLE

Science, Technology, Engineering and Mathematics

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

This Career Cluster Plan of Study (based on the Science, Technology, Engineering and Mathematics 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 Science, Technology, Engineering and Mathematics	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	Biology	State History Civics	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.	Continue courses pertinent to the pathway selected.	► Aerospace Engineer ► Agricultural Engineer ► Analytical Chemist ► Anthropologist ► Architectural Engineer ► Astrophysicist ► Biomedical Engineer ► CAD Technician ► Civil Engineer ► Computer Programmer ► Ecologist ► Geologist ► Geothermal Engineer ► Math Teacher ► Mathematician ► Metallurgist ► Statistician ► Survey Technician ► Zoologist	
	10	English/ Language Arts II	Geometry or Algebra II	Chemistry	U.S. History		<i>Information Technology Applications:</i> 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.		
	11	English/ Language Arts III	Algebra II or Trigonometry Pre-Calculus or Statistics	Physics	World History World Geography				
	College Placement Assessments-Academic/Career Advisement Provided								
	12	English/ Language Arts IV	Trigonometry or Pre-Calculus/ Calculus or AP Calculus or Math Analysis	<i>Dependent on chosen pathway</i>	Economics Entrepreneurship				
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	Algebra or Trigonometry Calculus I Calculus II	Chemistry Physics	Psychology Global Issues	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 Professional and Technical Writing	Introduction to Differential Equations Calculus III Statistics	<i>Dependent on chosen pathway</i>	American History Sociology Ethics and Legal Issues				
	Year 15	Continue courses in the area of specialization.							
	Year 16								