



Name _____

Learner ID _____

School/College/University _____

SAMPLE

Architecture and Construction

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

This Career Cluster Plan of Study (based on the Architecture and Construction 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 Architecture and Construction	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	Earth or Life or Physical Science	State History Civics or World History	All plans of study should meet local and state high school graduation requirements and college entrance requirements. Certain local student organization activities such as SkillsUSA are also important including public speaking, record keeping and work-based experiences.	** <i>Introduction to the Built Environment</i>	<ul style="list-style-type: none"> ► Architect ► Carpenter ► Civil Engineer ► Construction Foreman/Manager ► Contractor ► Demolition Engineer ► Drafter ► Drywall Installer ► Electrician ► Electronic Systems Technician ► Equipment/Material Manager ► General Contractor/Builder ► Heating, Ventilation, Air Conditioning and Refrigeration Mechanic ► Interior Designer ► Painter ► Paperhanger ► Plumber ► Project Estimator ► Project Inspector ► Roofer ► Safety Director ► Sheet Metal Worker ► Tile and Marble Setter 	
	10	English/ Language Arts II	Geometry	Biology	U.S. History		** <i>The Language of Architecture and Construction</i> ** <i>Information Technology Applications</i>		
	11	English/ Language Arts III Technical Writing	Algebra II	Physics	Economics Psychology		** <i>Safety, Health and the Workplace Environment</i>		
	College Placement Assessments-Academic/Career Advisement Provided						Continue courses pertinent to the pathway selected.		
	12	English/ Language Arts IV	<i>Dependent on chosen pathway</i>	Chemistry					
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	<i>Dependent on chosen pathway</i>	Physics	American Govt. or History, plus Psychology/ Interpersonal Skills	All plans of study need to meet learner's career goals with regard to required degrees, licenses, certifications or journey worker statuts. Certain local student organization activities may also be important to include.	Continue courses pertinent to the pathway selected.		
	Year 14	Speech/ Oral Communication	<i>Dependent on chosen pathway</i>	Environmental Science	Sociology Business Law				
	Year 15	Continue courses in the area of specialization.							
	Year 16								

**See course descriptions on page 2.



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Architecture and Construction Course Descriptions

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

#1

Introduction to the Built Environment : This is a core course for the Architecture and Construction Career Cluster which will build a knowledge base and technical skills in all aspects of the industry. Learners will be exposed to a broad range of architecture and construction careers and cluster foundation knowledge and skills including basic safety, plan reading, use of tools and equipment, basic rigging, and how to employ positive work ethics in their careers. Possible student certifications to be earned include NCCER Core, Basic First Aid and CPR. Participation in SkillsUSA will reinforce cluster knowledge and skills. It is recommended that a construction mathematics course be offered in conjunction with this introductory skills course. This may be taught as a career exploration course in conjunction with other foundation Career Cluster courses.

#2

The Language of Architecture and Construction: Students will build the skills necessary to understand what is being communicated through drawings and documents, and in turn, convey ideas, duties, and tasks to others in a form representing the industry. Students will use and follow industry-specific verbal and visual skills to accomplish workplace/jobsite communications. Students will exhibit public relations skills and enhance communication skills by listening to and speaking with a variety of individuals. Students will learn universal signs and symbols such as colors, flags, stakes, and hand signals to function safely in the workplace.

#3

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.

#4

Safety, Health and the Workplace Environment : Students will develop in-depth skills for maintaining a safe and productive environment including following regulations to perform inspections, participate in emergency response teams to perform emergency drills, identify unsafe conditions and take corrective actions, and provide a safety orientation to train other employees in safe practices and emergency procedures. Students will ensure that equipment is being used safely in the workplace, suggest processes and procedures to support safety in the workplace, and fulfill safety and health requirements for maintenance, installation and repair. Students will monitor equipment and operator performance to assure workplace safety and compliance with both company and national regulations.

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