

Architecture and Construction Cluster Sample Education Plan

	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	OTHER REQUIRED COURSES	CAREER AND TECHNICAL COURSES	
9 TH GRADE	English 9	Algebra I	Physical Science	World History to the Present	<ul style="list-style-type: none"> • Physical Education -1 • Health – ½ • Fine Arts – ½ • Computer Application – ½ • Foreign Language I • Foreign Language II 	<ul style="list-style-type: none"> • Architecture, Construction, Manufacturing • Construction Site Preparation and Foundations • Construction Framing • Construction Finishing and Interior Systems • Cabinetmaking I, II, & III • Carpentry I & II • Carpentry for Industrial Specialties • Carpentry for Commercial Specialties • Carpentry for Residential Interiors • Carpentry for Residential Exteriors • Introduction to Masonry • Block Wall Construction • Residential Masonry I & II • Composite Masonry Construction • Commercial Masonry • Masonry in High-Rise Construction • Masonry Special Applications and Finishes • Specialty Masonry Construction • Basic Wiring • Residential Wiring • Industrial Wiring • Commercial Wiring • Motor Control • Advanced Motor Control • National Electrical Code and Journeyman's Preparation • Direct Current • Alternating Current • Electromechanical Controls • Introduction to Welding • Applied Welding I with Plasma Arc Cutting • Applied Welding II with Carbon Arc Cutting 	<ul style="list-style-type: none"> • Applied Welding III - Groove Welds and Inspection • Applied Welding IV - Advanced Groove Welds and Testing • Gas Metal Arc Welding • Flux Cored Arc Welding • Gas Tungsten Arc Welding I & II • Introduction to Drafting Design • Intermediate Drafting Design • Advanced Drafting Design • Introduction to Architectural Design • Intermediate Architectural Design • Advanced Architectural Design • Three-Dimensional Solid Model Design I & II • Structural Drafting • Plumbing and Pipefitting I, II, & III • Electrical Technology • Basic Compression Refrigeration • Introduction to Heating, Ventilation, Air-Conditioning, and Refrigeration • Heating, Ventilation, Air-Conditioning, and Refrigeration Maintenance • Introduction to Electricity for Heating, Ventilation, Air-Conditioning, and Refrigeration Systems • Heating, Ventilation, Air-Conditioning, and Refrigeration • Electrical Components and Controls Refrigerants • Commercial Refrigeration • Heating and Heat Pump Systems • Safety and Health Regulations
10 TH GRADE	English 10	Geometry	Biology	United State History to 1877			
11 TH GRADE	English 11	Algebra II with Trig	Chemistry	United States History from 1877 to the Present			
12 TH GRADE	English 12	Pre-Calculus or High Level Mathematics	Physics	Economics/ United States Government			
COMMUNITY COLLEGE	<ul style="list-style-type: none"> • Cluster/Degree/Certification Course Work 		<ul style="list-style-type: none"> • Cluster/Degree/Certification Course Work 		<ul style="list-style-type: none"> • Cluster/Degree/Certification Course Work 		<ul style="list-style-type: none"> • Cluster/Degree/Certification Course Work
HIGHER EDUCATION	<ul style="list-style-type: none"> • Degree completion requirements 		<ul style="list-style-type: none"> • Degree completion requirements 		<ul style="list-style-type: none"> • Degree completion requirements 		<ul style="list-style-type: none"> • Degree completion requirements