

Manufacturing 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 • Introduction to Computer Numerical Control • Intermediate Computer Numerical Control • Introduction to Manufacturing • Computer-Aided Design and Computer-Aided Manufacturing I & II • Coordinate Measuring Machine • Introduction to Robotics • Robotics Applications • 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 • Safety and Health Regulations • Introduction to Precision Machining • Introduction to Lathe • Introduction to Milling, Drill Press, and Surface Grinder • Intermediate Lathe and Benchwork • Intermediate Mill and Surface Grinder • Introduction to Manufacturing
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	Physics	Economics/ United States Government			
COMMUNITY COLLEGE	• Cluster/Degree/Certification Course Work		• Cluster/Degree/Certification Course Work		• Cluster/Degree/Certification Course Work		• Cluster/Degree/Certification Course Work
	• Degree completion requirements		• Degree completion requirements		• Degree completion requirements		• Degree completion requirements

Maintenance, Installation, and Repair Pathway