



Course Overview: Planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities.

Production

Career Goal (O*NET Code): Precision Metal Production (51-4041), Welder, Cutters, Solderers and Brazers (51-4121), Machine Operator (51-4081), Inspector, Testers, Sorters, Samplers (51-9061).

Student Name: _____

Grade: _____

School: _____

SUGGESTED COURSEWORK					EXTENDED LEARNING EXPERIENCES								
Middle School	8th	HS Courses:				Curricular Experiences: BEST Robotics, Inc FIRST High School Robotics Competition SkillsUSA Technology Student Association	Extracurricular Experiences: Language Immersion Programs National Engineering Design Competition Odyssey of the Mind School Newspaper Student Government UIL Academic Competitions Yearbook						
	9th	Core Courses:	English I	World Geography	Professional Communications			Career Learning Experiences: Apprenticeship Career Preparation Internship Job Shadowing	Service Learning Experiences: Boy Scouts of America Campus Service Organizations Community Service Volunteer Girl Scouts of the USA Habitat for Humanity Peer Mentoring / Peer Tutoring				
			Algebra I	Physical Education									
	Career-Related Electives:	Biology			Languages other than English I								
		Principles of Manufacturing											
	10th	Core Courses:	English II	World History						COLLEGE CREDIT OPPORTUNITIES -- High School			
			Geometry	Languages other than English II									
	Career-Related Electives:	Chemistry											
		Intriduction to Metal Working											
11th	Core Courses:	English III	United States History		Students should take Advanced Placement (AP), International Baccalaureate (IB), dual credit, Advanced Technical Credit (ATC), or locally articulated courses (Tech Prep), if possible. List those courses that count for college credit on your campus.								
		Algebra II											
Career-Related Electives:	Physics or PT												
	Advanced Welding or Advanced Technology and Manufacturing Academy												
12th	Core Courses:	English IV	Government/Economics										
		Precalculus	Fine Arts										
Career-Related Electives:	Engineering Design and Problem Solving												
	Advanced Precision Metal Manufacturing or Advanced Technology and Manufacturing Academy or Career Preparation												
On-the-Job Training	Certificates	Drafting/CADD Assistant							Machinist Assistant Production Associate	Shop Helper	Professional Associations: American Iron & Steel Institute American Machine Tool Distributors Association American Society for Nondestructive Testing American Society for Testing and Materials American Welding Society Composites Fabricators Association National Association of Manufacturers National Tooling & Machining Association Precision Metalforming Association Society of Plastics Engineers Society of Manufacturing Engineers		
		NOTE: These experiences may be started and/or completed as part of the high school experience.											
		NCCER Welder/Ironwoker/Core Safety			Drafting	OSHA CareerSafe							
Associate Degrees	Bachelor Degrees	AWS Entry Level Welder			Machine Operator				Career Options: Assembler	Machine Operator			
		NOTE: Students may earn all or part of these certificates as part of the high school experience.											
		Industrial Equipment Maintenance and Repairers			Mechanical Engineering-Related Technologies	Welder							
Graduate Degrees	Bachelor Degrees	Technology Management			Design Technology			Career Options: Precision Layout Worker Solder and Brazier				Welder	
		Industrial Technology											
		Engineering Technology			Design Technology	Industrial Safety							
Graduate Degrees	Bachelor Degrees	Production Manager			Industrial & Manufacturing Engineer								Career Options: Calibration Technician
		Industrial Safety											
		Design Technology											

Students may select other elective courses for personal enrichment purposes.

This plan of study serves as a guide, along with other career planning materials, for pursuing a career path and is based on the most recent information as of 2009. All plans meet high school graduation requirements as well as college entrance requirements.