



CAREER PLAN OF STUDY: PRECISION MACHINING

CAREER CLUSTER: MANUFACTURING

CAREER PATHWAY: PRODUCTION

SAMPLE OCCUPATIONS: Pattern Makers - Metal and Plastic, Tool and Die Makers, Milling and Planing Machine Operators, Machinists, CNC Machine Tool Operators, CNC Machine Tool Programmers, Sawing Machine Operators, Cutting and Slicing Operators, Lathe and Turning Machine Tool Operators.

CERTIFICATION: NIMS Machining Level I and II

PRECISION MACHINING PROGRAM OF STUDY

CTE Courses offered grades 9-12

HIGH SCHOOL PLAN OF STUDY	GRADE	Suggested Program of Study					OTHER REQUIRED COURSES
		CAREER AND TECHNICAL EDUCATION COURSES	ENGLISH (4 Credits)	MATH (4 Credits)	SCIENCE (3 Lab)	SOCIAL STUDIES (3 Credits)	
	9	IT41 - Introduction to Engineering Design	EN09 - Freshman English	MA27 - Algebra I	SC09 - Essential Elements of Science	SS22 - World History/ Geography	Practical Art - 1 Credit OR ↓
	10	**IT80 - Advanced Manufacturing I	EN47 - Sophomore English	MA30 - Geometry	SC49 - Biology		Fine Arts 1 credit
	11	**IT81 - Advanced Manufacturing II	EN48 - Jr. English	MA40 - Algebra II	SC81 - Physics OR SC79 - AP Physics	SS35 - American/AZ History	PE - 1 Credit
	12	CT79 Manufacturing Internship	EN49 - Sr. English	MA43- Contemporary Math with Modeling OR MA42 - College Algebra/Trigonometry		SS51 - Government SS77 - Principles and Practices of Economics	World Language - 2 Credits university entrance
LEGEND	CTE Program of Study (Meets practical art requirement)		**Dual Enrollment Option - College credit may be available				
	Refer to each university's website for specific admission requirements						
POST SECONDARY	COMMUNITY COLLEGE PROGRAM(S)		*UNIVERSITY PROGRAM(S)		TECHNICAL PROGRAM(S)		
	Mesa Community College https://www.mesacc.edu/high-school/career-pathways		Arizona State University https://webapp4.asu.edu/programs/t5/undergrad		Maricopa Skills Center http://www.maricopaskillcenter.com/machining		
	Gateway Community College http://www.gatewaycc.edu/production-technology		Grand Canyon University http://www.gcu.edu/degree-programs/		Precision Manufacturing Apprenticeship Program http://www.azpmap.org/index.php/if-you-want-to-be-an-apprentice		
					East Valley Institute of Technology http://evit.com/programs		
Go to www.mpsaz.org/cte/programs for more information on this and other CTE Programs of Study.							
CAREER PLANNING LINKS				PROFESSIONAL ORGANIZATION LINKS			
MPS Career and Technical Education -www.mpsaz.org/cte				National Tooling and Machining Association - www.ntma.org			
MPS Career Planning System-www.mpsaz.kuder.com				Manufacturing Institute - www.themanufacturinginstitute.org			
MyMPS - http://www.mpsaz.org/mymps				Arizona Manufacturing Partnership - www.amparizona.com			