Manufacturing
Manufacturing Technology

WILDCAT WORKFORCE
INSPIRE • ENGAGE • PREPARE

MANUFACTURING TECHNOLOGY COURSE PATHWAY

EXPLORATION — Mechanics & Metal Technologies (optional, 8th grade)
Principles of Manufacturing

INVESTIGATION — Precision Metal Manufacturing I

PREPARATION — Precision Metal Manufacturing II

APPLICATION — Practicum in Manufacturing

EXPANDED LEARNING OPPORTUNITIES

Career & Technical Student Organization

SkillsUSA

Work-based Learning

Local business or industry apprenticeship
American Welding Society

INDUSTRY BASED CERTIFICATION OPPORTUNITIES

Machining Measurement, Material, & Safety Level 1

DUAL CREDIT OPPORTUNITIES

Discuss dual credit opportunities with your counselor

The Manufacturing Technology program of study focuses on the development and use of automatic and computer controlled machines, tools, and robots that perform work on metal or plastic. Students learn how to set up and operate a variety of machine tools to produce precision parts and instruments. Students will also learn how to modify parts to make or repair machine tools or maintain individual machines, and how to use hand-welding or flame-cutting equipment.

POSTSECONDARY OPPORTUNITIES

ASSOCIATE'S DEGREE

- Welding Technology/Welder
- Machine Shop Technology/Assistant
- Operations Management and Supervision
- Occupational Safety and Health Technology/Technician

BACHELOR'S DEGREE

- Welding Engineering Technology/Technician
- Biomedical Technology/Technician
- Operations Management and Supervision
- Environmental Health

MASTER'S, DOCTORAL, & PROFESSIONAL DEGREES

- Welding Engineering Technology/Technician
- Occupational Health and Industrial Hygiene
- Operations Management and Supervision
- Environmental Health

CONNECTED OCCUPATIONS

Occupation	Median Wage	Annual Openings	% Growth
Mechanical Engineering Technicians	$57,117	453	9%
CNC Machine Operators	$39,250	1,319	12%
Aerospace Engineering and Operations Techni-	$60,757	114	9%
Electrical and Electronics Engineering Technicians	$60,382	1,439	9%
Industrial Engineering	$61,672	326	9%

Successful completion of the Manufacturing Technology program of study fulfills requirements of a Business and Industry endorsement and STEM endorsement if math and science requirements are met.

Temple ISD Course Details

COURSE NAME	PREREQUISITES	GRADES	TISD COURSE CODE	SERVICE ID and COURSE CREDIT
Mechanics & Metal Technologies 8th grade	None	8	V13022	13002200 (1 credit)
Principles of Manufacturing	None	9-12	V14100+	13032200 (1 credit)
Precision Metal Manufacturing I	Principles of Manufacturing Algebra I or concurrent enrollment	10-12	V14106+	13032500 (2 credit)
Precision Metal Manufacturing II	Precision Metal Manufacturing II Algebra I	11-12	V14108+	13032600 (2 credits)
Practicum in Manufacturing*	Each of the above courses (Mechanics & Metal Tech optional)	12	V14110	13033005 (3 credits)

*Travel and costs are associated with this course

+Minimum requirements to meet CTE Completer status

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