

# Tigard High School



# MANUFACTURING

## For students interested in:

- Dual credit
- Industry certifications
- Problem solving
- Product design
- 3D modeling
- Manufacturing
- College and/or career
- Graduation cord

## Students will learn how to:

- Use industry standard software and manufacturing equipment.
- Improve products by analyzing data and building prototypes.
- Verify the quality of physical parts before customers receive them.
- Use project management techniques to better plan large projects
- Be safe around industrial machinery.

## Sequence of Courses

### Introductory

- Exploring Engineering and Design (9<sup>th</sup> grade, 0.25 credit)
- Engineering & Design 1 (9-12<sup>th</sup> grade, 1.0 credit)
- Robotics 1 (9-12<sup>th</sup> grade, 0.5 credit)

### Intermediate

- Engineering & Design 2 (10-12<sup>th</sup> grade, 1.0 credit)
- Robotics 2 (9-12<sup>th</sup> grade, 0.5 credit)

### Advanced

- Engineering & Design Capstone (11-12<sup>th</sup> grade, 1.0 credit)

## Career Options

Welders, Cutters, Solderers, and Brazers	\$61,577
Machinists	\$61,914
Industrial Machinery Mechanics	\$74,915
Sheet Metal Workers	\$78,268
Computer Numerically Controlled Tool Programmers	\$78,662
Structural Iron and Steelworkers	\$86,730
Industrial Engineers	\$112,325

2024 median annual salary for tri-county area high wage and high demand  
-Oregon Employment Division

## Dual Credit Offerings

- PCC – CADD 105 – Digital Design and Fabrication Fundamentals (3 credit hours)
- PCC – CADD 175 – SolidWorks Fundamentals (3 credit hours)



Click QR Code  
to connect to  
Industry  
Sheet

## Current Industry Partners

- Ascentec Engineering
- Lam Research
- RapidMade
- Pentagon EMS
- Multi-Craft Plastics
- TAP Plastics
- Chemwest
- Code Ninjas

