



# Sherwood High School

# ENGINEERING

## For students interested in:

- Developing new technologies
- Creating original products and designs
- Designing devices for improving various products and industries
- Planning construction

## Sequence of Courses

### Introductory

- ENGR1 – Intro to Drafting & Design (9-12th grade, 0.5 credit)
- Architecture 1 (9-12th grade, 0.5 credit)

### Intermediate

- ENGR2 – Rapid Prototyping (9-12th grade, 0.5 credit)
- ENGR3 – Advanced Drafting & Design (9-12th grade, 0.5 credit)
- Architecture 2 (9-12th grade, 0.5 credit)
- CAD for College Engineering (9-12th grade, 0.5 credit)

### Advanced

- ENGR4 – Advanced Digital Manufacturing (9-12th grade, 0.5 credit)
- ENGR5 – Engineering Projects (9-12th grade, 0.5 credit)
- Architecture 3 (9-12th grade, 0.5 credit)
- Architecture 4 (9-12th grade, 0.5 credit)
- CTE Apprentice – Eng/Arch (9-12th grade, 0.5 credit)

## Students will learn:

- To utilize an iterative design process
- Computer-Aided Design (CAD) software to create engineering designs
- To develop written & verbal communication skills
- To apply design principles to identify and solve problems
- To optimize product designs for and operate; 3D printers, vinyl & laser cutters, & CNC machines

## Career Options

Electrical and Electronic Engineering Technologists and Technicians	\$63,190
Electrical Engineers	\$103,934
Mechanical Engineers	\$100,922
Architectural and Civil Drafters	\$61,464
Computer Hardware Engineers	\$132,288

2022 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 160 – Drafting Fundamentals (4 credit hours)
- PCC - CADD 175 – SolidWorks Fundamentals (3 credit hours)

## Current Industry Partners

- DW Fritz
- Shields MFG
- Mentor Graphics
- Engineered Solution Group