



# Forest Grove High School

## MECHATRONICS

### For **students** interested in:

- Developing new technologies
- Building with tools
- Creating original products
- Applying learning in a real-world environment
- Computers

### Sequence of Courses

#### Introductory

- Mechatronics 1 (9-12th grade, 0.5 credit)
- Mechatronics 2 (9-12th grade, 0.5 credit)
- Mechatronics Design – SolidWorks CAD (9-12th grade, 0.5 credit)

#### Intermediate

- Mechatronics 3 (10-12th grade, 0.5 credit)
- Mechatronics 4 (10-12th grade, 0.5 credit)

#### Advanced

- Mechatronics Processes (9-12th grade, 0.5 credit)
- Advanced Mechatronics Processes (10-12th grade, 0.5 credit)
- Advanced Mechatronic Design – Advanced SolidWorks (9-12th grade, 0.5 credit)

### Dual Credit Offerings

- PCC - CADD 175 – SolidWorks Fundamentals (3 credit hours)
- PCC - MT 101 – Introduction to Semiconductor Manufacturing (1 credit hour)
- PCC - MT 102 – Introduction to Semiconductor Devices (1 credit hour)
- PCC - MT 103 – Introduction to Micro and Nano Processing (1 credit hour)
- PCC - MT 121 – Digital Systems I (3 credit hours)

### Students will learn:

- To create solutions to real-world problems
- To create products/programs that meet specifications
- How to work in teams and other professional skills
- To use computer-aided drafting software
- To create with 3D printers and other technologies
- How to practice safe, legal, and ethical work habits

### Career Options

Electrical, Electronic Electromechanical Assemblers	\$45,647
Semiconductor Processing Technician	\$57,285
Mechanical Engineering Technicians	\$72,084
Electrical & Electronics Technologists/Technicians	\$75,722
Electrical & Electronics Equipment Repairers/Technicians	\$80,589
Electronics Engineer	\$104,466
Electrical Engineer	\$107,665
Mechanical Engineer	\$109,399
Computer Hardware Engineer	\$147,315

2022 median annual salary for tri-county area high wage and high demand -Oregon Employment Division

### Current Industry Partners

- ASM
- Jireh Semiconductor
- Applied Materials
- Lam Research
- City of Hillsboro
- Qorvo Semiconductor
- Intel

### Industry Recognized Credentials

- SolidWorks CSWA Exam & Certification