**Novato High School** 

# **Product Design Pathway**

Industry Sector: Manufacturing and Product Development

CTE Pathway: Product Innovation and Design





Why Product Design Pathway?

- Students are introduced to design thinking, traditional construction (woodshop), modern construction (3D printer, laser cutter, CNC milling), electronics, software, and presentation
- Work within teams to produce projects.
- Use the design center and work with mentors.
- Support Student interests, offers the space for student creativity.
- Structured to help students discover meaningful career pathways.
- Learn design while practicing skills aligned with student interest.





With the chance to learn cutting-edge skills and to utilize both state-of-the-art and tried and true equipment, students are empowered to confidently face the dynamic technological developments of the 21st century.

Students utilize "additive design" techniques as they develop projects from concept to finished product. Student designers are encouraged to experiment, work through trial and error, and utilize creative solutions as they critique each other's work to come up with their best project designs. They also learn the value and importance of collaboration in the design process and will team up to complete larger projects.

Key to successfully developing projects are charting time lines and work flow parameters, along with detailed blueprints, plans and design specifications.

### Have fun and learn valuable skills!

For more information, visit:

MSA: Product Design
or speak with your counselor!



## **Pathway Sequence of Courses**

Introduction (9)

Concentrator (10)

Concentrator (11)

Capstone (12)

**Pathway** Courses

**Product Design 1:** Intro to design and **Product Design 2: Design Product** Management

**Product Design 3:** 3D Art Design Production

**Product Design 4: Virtual** Design Experience

Recommended Work-Based Learning

Recommended College of **Marin Classes** 

Manufacturing

Job Shadows.

**Informational** 

**Interviews** 

Job Shadows. **Informational Interviews** 

Internships, **Job Shadows**  **Summer Career Academy: Building Construction Engineering** 

**WELD 101:** Introduction to Welding

**WELD 102:** Intermediate **GMAW/MIG Welding** 

**MACH 101:** Intro to Machine **Technology** 

**MACH 102:** Intermediate Machine **Technology** 

#### **Areas of Study** Learn skills in these areas:

- Academic
- Social
- Professional
- Community **Networking**
- Job Shadows
- Student Research
- Field trips

**Start your career** path in various high-growth, high-paying industries!

### **Potential Occupations**

- Lathe and Turning **Machine Tool Setters**
- Mechanical Drafters
- Electrical and Electronics **Engineering Technician**
- Fashion and Interior Designers
- Design for Manufacturing
- Welding
- Prototype Production
- Entrepreneurship

**Labor Market Information - Bay Area Region** High-growth careers available in related industry sectors:

Commercial and **Industrial Designers** 

Median Annual Wage: \$115,907

**Fashion** Designer

Median Annual Wage: \$95.883

**Electrical Engineers** 

Median Annual Wage: \$119,581

Source: CA Employment Development Department's Labor Market Information Division (EDD/LMID), long-term (10-year) Occupational Employment Projections for California and substate areas. Published April 2021. The above data is projected for the Bay Area Region, representing the North Bay, East Bay, Mid-Peninsula, Silicon Valley, and Santa Cruz-Monterey subregions.