

# Construction & Architecture Track

# 1

## Home and Auto Maintenance

- 1/2 Year Class (0.5 Credits)
- How to change a tire, jump starting, oil change
- How to frame a wall, plumbing, electrical, drywall

# 2

## Materials Processing

- Year Class (1 Credit)
- Learn how to turn your ideas into reality
- Use a Laser Engraver

# 3

## Civil Engineering and Architecture

- Year Class (1 Credit)
- Use Architectural Software
- Design your own Building

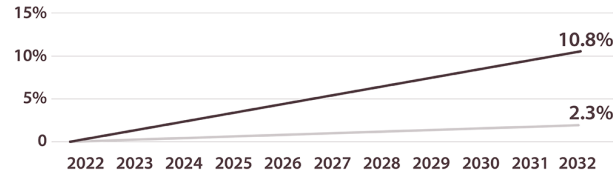
**40%**  
**CURRENT CONSTRUCTION WORKERS**

set to retire by 2031

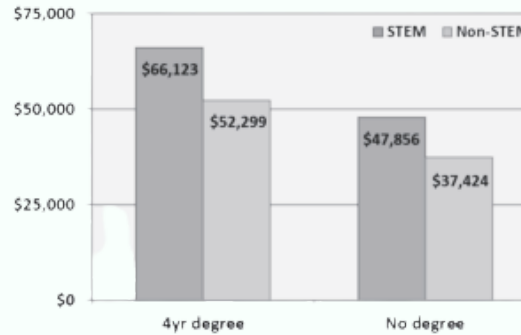
# Technology Education Stats

From 2022 and 2032

## STEM Jobs Are Projected to Grow Faster Than Others



Source: Bureau of Labor Statistics <https://www.bls.gov/emp/tables/stem-employment.htm>  
[www.codewizardsqh.com](http://www.codewizardsqh.com)



## Contact Us

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Technology Education  
Course Descriptions



2024 - 2025

# Rocky Hill High School

## Technology Education Department



Technology Education Slides



## Computer Science Track

**1A**

### Computer Technology

- ▶ 1/2 Year Class (0.5 Credits)
- ▶ How To Build a Computer
- ▶ Intro to Coding & Interface

— OR —

**1A**

### Intro to Robotics

- ▶ 1/2 Year Class (0.5 Credits)
- ▶ VEX Robotics
- ▶ Introduction to Programming

**1B**

### Advanced Robotics

- ▶ 1/2 Year Class (0.5 Credits)
- ▶ SEAPERCH Robotics
- ▶ Arduino circuit boards

**2**

### AP Computer Science

- ▶ Full Year Class (1.0 Credits)
- ▶ Programming with JavaScript
- ▶ College Credit

## Engineering Track

1.0 Credit - Full Year Courses  
(Eligible for College Credit)

**1**

### Introduction to Engineering Design

- ▶ Teamwork & Collaboration
- ▶ Computer Aided Design
- ▶ Activity Based Problem Solving

**2**

### Civil Engineering and Architecture

- ▶ Use Architectural Software
- ▶ Design your own Building
- ▶ Conduct a Site Survey

**3**

### Principles of Engineering

- ▶ Explore Engineering Careers
- ▶ Engineering/ Physics exposure
- ▶ Activity Based Problem Solving

**4**

### Engineering Design and Development

- ▶ Develop your own Product
- ▶ Create a Business
- ▶ Self Guided Learning

## Manufacturing Track

1.0 Credit - Full Year Courses

**1**

### Materials Processing

- ▶ Turn your ideas into reality
- ▶ Complete Building Challenges
- ▶ Use a Laser Engraver

**2**

### Advanced Materials Processing

- ▶ Learn how to monetize products
- ▶ Project Based Learning
- ▶ Use a CNC Router Machine

**3**

### Engineering Design and Development

- ▶ Develop your own Product
- ▶ Create a Business
- ▶ Self Guided Learning



**60%**

of all new jobs in STEM are in computing

The median annual wage for engineering is

**\$83,700**

**25%**

of all U.S. aircraft engine parts manufacturing is located in Connecticut