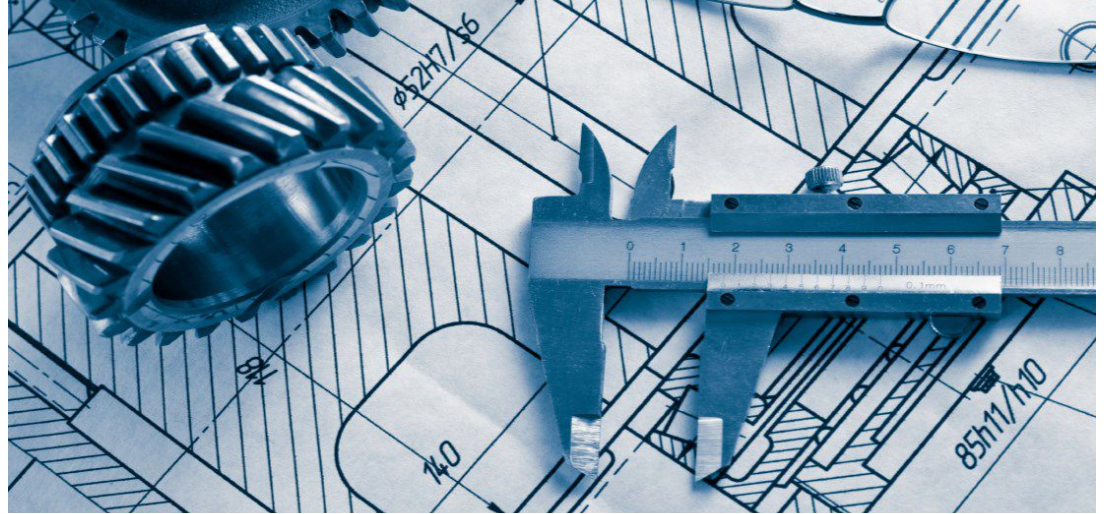


# MATERIALS & MANUFACTURING

Career  
Pathway

## Course Offerings/Credits

- Exploring Technology Processes (1 credit)
- Intro to Engineering Design (1 credit)
- Introduction to Business (earn 3 URI credits)
- College Accounting (earn 3 URI credits)



## Career Choices

- Construction
- Manufacturing
- Design
- Fabrication
- Welding

## Learning Opportunities

- CNC routing/Shopbot
- Welding
- Complete Woodworking Facility
- 3D Printing/ Makerbot
- Design/Build/Test
- Robotics Team

## Pathway Description

Manufacturing engineering or manufacturing process are the steps through which raw materials are transformed into a final product. The manufacturing process begins with the product design, and materials specification from which the product is made. These materials are then modified through manufacturing processes to become the required part.

Manufacturing takes turns under all types of economic systems. In a free market economy, manufacturing is usually directed toward the mass production of products for sale to consumers at a profit. In a collectivist economy, manufacturing is more frequently directed by the state to supply a centrally planned economy. In mixed market economies, manufacturing occurs under some degree of government regulation.

## Pathway Recommendations

Students interested in pursuing a pathway in this area should meet with their guidance counselor to select the best sequence of courses that will satisfy the North Smithfield High School graduation requirements and at the same time, meet the criteria to receive a seal of concentration in materials and manufacturing.

Students will also develop a manufacturing related focus which will culminate in field experience for the required senior project.

It is recommended that students choosing this concentration, actively seek postsecondary schools to further their education in this field.