

# Why Technology?

According to Forbes Magazine, employment in Science, Technology, Engineering and Mathematic (STEM) occupations is projected to grow nearly two times faster than the average for all occupations over the next four years. During that time, tech companies alone will need to fill 430,000 STEM jobs. The Technology Department is designed to meet the needs of local and national workforce demands in engineering and applied sciences. Project-based, hands-on learning approach is woven throughout the curriculum.

The technology program is designed to encompass four full years. The first two years focuses on the foundations and principles of technology as well as digital electronics. The third and fourth years provides students advanced opportunities to enhance, while applying the same skills learned earlier in their education. These opportunities lay a solid foundation and provide an opportunity to pursue a technology/engineering career path in high school.

## Courses

#### **INTRODUCTORY COURSES**

PRODUCTION SYSTEMS
DESIGN & DRAWING FOR PRODUCTION
ELECTRICAL TECHNOLOGY
Drone Technology
COMPUTER AIDED TECHNICAL DRAWING I
COMPUTER AIDED ARCHITECTURAL DRAWING
ROBOTICS I
ROBOTICS AND ANIMATION PROGRAMMING

#### **ADVANCED COURSES**

MATERIALS PROCESSING
WOOD TECHNOLOGY I & II
COMPUTER AIDED TECHNICAL DRAWING II
COMPUTER AIDED TECHNICAL DRAWING 3D
ARCHITECTURAL DESIGN
PRINCIPLES OF ENGINEERING
ROBOTICS II

# Program Components

#### Design

Ever wonder how to design something new or draw out an idea to show your friends? Stop wondering and do it, using state-of-the art 3D design software to take an idea from the design process through product testing, manufacturing and production.

#### **Engineering**

Go beyond "myth busting" to solution building! Students tackle real world challenges involving energy sources and applications, machine systems, fluid power, material strength and durability testing.

#### **Architecture**

New building plans look impressive onscreen, but how would that cool structural design stand up to a flood, earthquake, city inspector, or historical commission? Using 3D modeling software you will create and test your own residential and commercial designs.

## **Development**

Research, design, and construct solutions to openended technical problems.

## **Project-Based Learning**

Courses are project-based where students learn interesting, relevant, challenging problems through hands-on, fun activities using machinery, tools, and computer design programs used by industry professionals



Science, Technology, Engineering and Mathematics (STEM)

For more information visit the website and view Program of Studies at <a href="https://www.pmschools.org">www.pmschools.org</a>

A Comprehensive program that:

- Captures the interest of students and makes learning relevant.
- Provides a rigorous education combined with real-world, hands-on experiences.
- Exposes students to resources to the world of technology/engineering.
- Utilizes state-of-the-art computer applications and new technology.
- Explores the principles of the design process and applies them to emerging technologies.

# **Technology Program**





## **Board of Education**

Kelli Anne Jennings, President Marc A. Negrin, Vice President Diana Andrade Teresa Baldinucci-Greenberg Thomas P. Donofrio Jennifer A. Krieger Bernadette M. Smith

**Dennis M. Logan, District Clerk** 

#### **District Administration**

Donna Jones, Ed.D. Superintendent of Schools

Lori Cannetti
Assistant Superintendent for
Curriculum and Instruction

Joey J. Cohen, Ed.D. *Assistant Superintendent for Human Resources* 

Jessica Lukas, Ed.D. Assistant Superintendent for Special Education and Pupil Personnel Services

Frank Mazzie
School Business Administrator

## **High School Administration**

Randy E. Rusielewicz, Ed.D., Principal

Garrett Comanzo, Assistant Principal Kristin Pucilowski, Assistant Principal Derek Robinson, Assistant Principal Dennis Sullivan, Ed. D., Assistant Principal

# Patchogue-Medford High School Technology Education



# TECHNOLOGY

Ray Ruiz,
Director of Career and
Technical Education

631-687-6628 rruiz@pmschools.org