R.H.H.S.
Technology Education Department
Freshman Course Offerings
2021 - 2022

Have you ever said, "What do I need to know this for?"

Well, TECHNOLOGY EDUCATION is where you use what you have learned in all of your other courses!

TECHNOLOGY EDUCATION is education through the application of multiple disciplines to benefit an expanding technological society.

So What Tech. Ed. Courses Can You Take As A Freshman?

TE 6531/6532 Intro. to Robotics Engineering

In this half year STEM class, students will learn and apply the Engineering Design Process to a series of team-based robotics challenges that highlight different aspects of robotics such as stability, motion, logic and programming. Students will use the VEX platform to design and build robots of their own imagination and creativity. Students will also work in Scratch, a program that helps teach beginner and intermediate level programmers the fundamentals of programming. (Note: This course meets the S.T.E.M. graduation requirement)

TE 6533/6534 Advanced Robotics Engineering

In this half year STEM course, students build on concepts learned in the introductory course. There is a greater focus on autonomy by utilizing sensors and learning more advanced coding structure. Students will work in teams and collaborate through the design process in order to develop machines that can complete complicated tasks. Students will also be exploring a new platform known as SeaPerch, which is an underwater ROV (remotely-operated vehicle), which will be tested in the RHHS pool. Although there is little programming with SeaPerch, students will gain hands-on experience in soldering and manipulating various household materials while incorporating concepts such as buoyancy and propulsion. Students will continue developing coding skills with the drones unit. Students will use both manual and autonomous programming for a series of drone tasks. (Note: This course meets the S.T.E.M. graduation requirement)

TE 6062/6063 Home & Auto Maintenance

In the first portion of this half year class, students will learn the subsystems within a home such as structure, electrical, plumbing and finishing and the associated general maintenance all homeowner's should know. Students will build a 3'x4' wall section to imitate the various subsystems inside a home. The second portion of the class focuses on the subsystems within an automobile and the maintenance associated with those. Projects include: changing a flat tire, checking and changing vehicle fluids (especially oil), electrical system checks, and proper jump starting procedures. (Note: This course meets the S.T.E.M. graduation requirement)

TE 654 Materials Processing/Woods

This course is a full year, full credit class in which you will work with many different materials. Students will be introduced to the principles of design which they will employ when completing a couple of design challenges. Over the course of the design challenges students will gain hands on experience when constructing the items that they have designed. Upon completion of the design challenges students will be able to choose from a wide variety of projects to build and keep. Examples of possible projects include adirondack chairs, baseball bats, cutting boards, and tables. (Note: This course meets the S.T.E.M. graduation requirement)

TE 670/671 Computer Technologies

This course is a half year, half credit class in which you will learn about all the hardware that is inside your computer. You will take apart a computer down to the mother board and then reassemble it. Finally we troubleshoot any problems and then load on an operating system. (Note: This course meets the S.T.E.M. graduation requirement)

Project Lead The Way Pre-Engineering Program

The PLTW Pre-Engineering Program is a great way for you to explore your interest in the field of engineering. Our classes get you ready for college engineering programs and they satisfy future S.T.E.M. (Science, Technology, Engineering, & Math) requirements. Most of the Project Lead The Way courses can earn you college credit while right here at Rocky Hill High School, even as a freshman!

TE 682 Introduction to Engineering Design

IED, as it is known, is a full year, full credit class that gives you experience using state of the art computer aided drafting and design (CADD) software and also teaches you how to think through and solve problems like an engineer. This is the first course in a series of pre-engineering classes offered at RHHS and is elegible for University of New Haven credits. (Note: This course meets the S.T.E.M. graduation requirement)

PROJECT LEAD THE WAY
PLTW

What Other Tech. Ed. Courses Can You Take AFTER Freshman Year?

TE 658 Advanced Materials Processing *
TE 688 Principles of Engineering ^
TE 690 Civil Engineering & Architecture ^^
TE 698 Engineering Design & Development ^
TE 6536 AP Computer Science Principles

* NOTE: Independent Study is also available for students who excell in these advanced courses
^ NOTE: Students taking these courses can earn University of New Haven credits
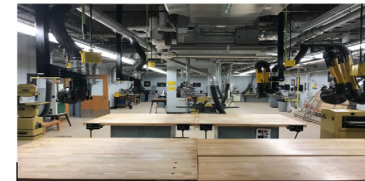^^ NOTE: Students taking this course can earn Rochester Institute of Technology credits

Auto Lab

Engineering Computer Lab

Materials Lab

Engineering Fabrication Lab

Robotics/Computer Tech Lab

We encourage both girls and boys to take Tech. Ed. Classes. If you have any questions about our courses please contact us.

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