

Technology Education for the Putnam web site

Course Descriptions

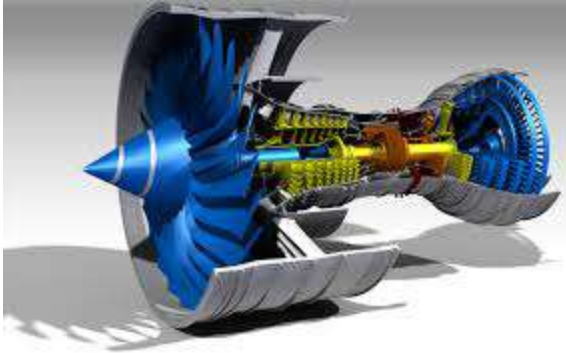
TECHNOLOGY

Course: **AUTOCAD I**
#1660
Length: Semester
Prerequisite: None

Level: College Prep, ½ credit
Open to Grades: 9, 10, 11, 12

Course Description: The class is an introductory CAD course where students would learn the techniques of generating graphic images with computers. Topics that students would learn include: overview of CAD technology, computer technology, hardware/software descriptions and requirements, file manipulation and management, two and three-dimensional geometric construction, symbol library creation, dimensioning, scaling, sectioning, plotting, detail and assembly drawing including tolerance studies. Students would have the opportunity to earn high school credit along with receiving credit from Quinebaug Valley Community College (QVCC).





Course: **BLUEPRINT READING**
#1641

Length: Semester
Prerequisite: None

Level: College Prep, ½ credit
Open to Grades: 9, 10, 11, 12

Course Description: This is an initial course in blueprint reading. It includes the study of orthographic projection. Topics include lines and their uses, auxiliary views, sectional views, basic and special dimensioning, dimensioning practices for holes, chamfers, angle, tapers, keyways diameters, radii, and geometric tolerancing. Students would have the opportunity to earn high school credit along with receiving credit from Quinebaug Valley Community College (QVCC).



Course: **COMMUNICATION & INFORMATION TECHNOLOGY 1**
#1630

Length: Semester
Prerequisite: None

Level: College Prep, ½ credit
Open to Grades: 9, 10, 11, 12

Course Description: Students will learn the various methods of communication and the progression of technology as it relates to current applications. Methods of communication will include audio, visual and electronic applications. Students will learn Desktop Publishing skills and other forms of printed communication

Course: **COMMUNICATION & INFORMATION TECHNOLOGY 2**
#1631

Length: Semester
Prerequisite: None

Level: College Prep, ½ credit
Open to Grades: 9, 10, 11, 12

Course Description: Students will learn the various methods of communication and the progression of technology as it relates to current applications. Emphasis will be on digital camera techniques. Students will also learn the proper use and maintenance of equipment in each of these specific areas. Students will explore Graphic Communication and Desktop publishing and other forms of printed communication.



Course: **INTRODUCTION TO ENGINEERING**
#1640

Length: Semester
Prerequisite: Integ Math Course 1,
Integ Math Course 2 and Algebra 2 Concurrently

Level: College Prep, ½ credit
Open to Grades: 11, 12

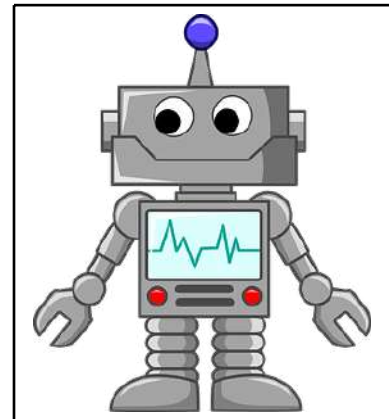
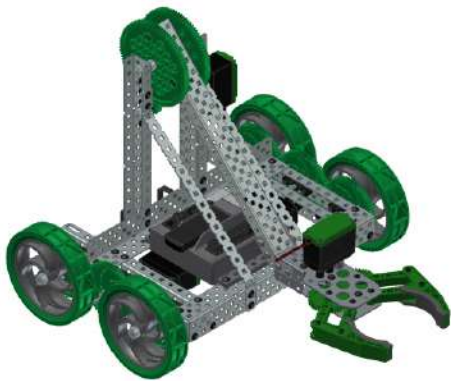
Course Description: Students will be introduced to the fields of engineering through design and graphics and comprehensive engineering projects. Topics include sketching, charts, graphs, forces, energy, electrical circuits, mechanisms, materials testing, manufacturing technologies and fundamentals of engineering economics. Students would have the opportunity to earn high school credit along with receiving credit from Quinebaug Valley Community College (QVCC).

Course: **ROBOTICS**
#1644

Length: Semester
Prerequisite: None

Level: College Prep, ½ credit
Open to Grades: 9, 10, 11, 12

Course Description: This course will give students the opportunity to design, build and program small, mobile robots, both autonomous and radio controlled, using Gears Robotics. Students will also build a radio-controlled pneumatic throwing arm on their robot. The course will use a hands-on and problem-solving approach so that students may also be introduced to related fundamental concepts such as computer science, programming, mechanics, electronics, principles of engineering and career exploration. Other disciplines engaged in this class will include creative design activities, teamwork, and problem solving. Students should also develop an understanding of how robotics is utilized today and what the future holds for emerging technology and security. Students will compete with their robots.





Course: **VIDEO PRODUCTION 1**
#1638

Length: Semester
Prerequisite: None

Level: College Prep ½ credit
Open to Grades: 9, 10, 11, 12

Course Description: This course will introduce students to the many aspects of video production. Students will learn basic skills such as storyboarding/pre-production, taping, and editing/post-production. Through this course, students will learn the proper technique not only in relation to shooting video, but also with regard to sound and lighting. Students will be evaluated based upon sample videos relating to such themes as documentaries, advertisements, entertainment, and video journalism.

Course: **VIDEO PRODUCTION 2**
#1639

Length: Semester
Prerequisite: Video Production 1

Level: College Prep ½ credit
Open to Grades: 9, 10, 11, 12

Course Description: Video Production 2 will focus on studio presentation and learn how to use studio equipment. Students will learn to use professional video cameras, lighting, teleprompter, and graphic generator.