

Westmont High School

Industrial Technology Courses

Production Technology 1 and 2



The Westmont High School Production Technology and Manufacturing Technology courses have been designed to teach students about shop safety, design, constructing and fabrication using industry based standards. Students that want to pursue a career in engineering are highly encouraged to take these courses.

Production Technology 1

Students in Production Technology 1 will be introduced to shop safety, the proper use of hand tools, power tools, and major woodworking machines that would be found in industry. Emphasis is on student planned projects including construction, assembly and finishing. This course is a full year.

Production Technology 2

Students in Production Technology 2 will have the opportunity to do advanced design, styling, planning, and construction employing hand and power tool techniques on student designed projects. Major emphasis is on advanced projects, such as furniture and cabinet construction, using trade and industrial techniques. This course is a full year.

Manufacturing Technology 1 and 2



Westmont High School Manufacturing courses have been designed to teach students general metalworking skills, manual and CNC machining skills that will be useful in many different areas of industry. Students are encouraged to explore and learn many different facets of manufacturing to better understand their college and career choices.

Manufacturing Technology 1

Students in Manufacturing Technology 1 will produce projects in sheet metal, forging, arc/mig/tig welding oxyacetylene welding, manual and CNC machining. Students will learn how to identify and safely use all of the hand and power tools that they would find in a modern metal fabrication business. Students will learn about opportunities for advanced training and employment and how to take advantage of those opportunities. This course is a full year.

Manufacturing Technology 2

Students in Manufacturing Technology 2 must have instructor permission and a grade of "C" or better in Manufacturing 1 to enroll in Manufacturing 2. Students in this class will be working independently on projects of their own selection. These projects should challenge the student to refine skills learned in the previous course. Students in this course will also be expected to complete at least one community service project during the year to benefit the school or other community group. As part of this course, students may be presented with engineering and manufacturing challenges. Students in this course will be encouraged to obtain additional training to specialize in a trade, articulate to a community college, attend a 4 year university or go directly into the workforce. This course is a full year.

Industrial Technology

Planning for Your Future

Do you ever wonder what you are going to do when you get out of high school? I know that I did when I was in high school and I know that many current high school students have the same concerns. Here are some suggestions that may help you in your future endeavors.

College...Is it the right choice for me?

In a word, yes. In our society, it is very difficult to obtain jobs that provide for a decent standard of living without additional training beyond high school. When talking of college, most people think that means a Bachelor's degree at a university. That does not mean that a 4-year university is right for everyone. If a university education will help you get the job that you desire, our courses will be of great benefit to you. If you do not think that a 4-year degree is right for you, there are other training opportunities for students that don't seem to fit the mold of a typical college student, and we can definitely help you prepare for that training.

How do Industrial Technology courses help me?

Westmont's Industrial Technology courses are designed to give students a strong foundation in the basics of working with tools and machines. They are also designed to allow students an opportunity to see if they like working in a certain field before they commit to it as a career. Our courses are also designed to help students that may pursue careers in related fields to get ahead of the competition.

Future University Students

For students planning to enter universities, our courses have been shown to be very beneficial to students going into engineering, medicine and even law. In a conversation I had with Dr. Martin Koch, a professor at Cal Poly San Luis Obispo, I found out that students that had taken Industrial Technology classes in high school were much more likely to be successful in engineering courses at the university level than those that had not. He said that it was difficult for students to keep up when they had to learn the fabrication process in addition to actually making the project that they had designed. Students in the medical field are working with more mechanical devices every day. Everything from prosthetics to pacemakers to mechanical hearts to designing their own surgical tools can be part of a new doctor's training.

Non-University Training

In any industrial trade, experience can make the difference between being employable and not being employable. If a student begins learning to work with the tools and processes in high school, when they get to the training for their specific career, they should already be familiar with the processes that they are using and just need the information specific to the industry that they are training for. Craftsmanship is typically underrated in our society of mass-production, but it takes a level a quality and skill to build things to the expectations of society that only experience can teach.