

## **Attention: Future 9th Graders**

### **Chippewa Valley High School 2021-2022**

## **Elective Class Opportunity**

## What is Design Technology????

The Design Technology Program is a planned series of career preparation courses. These courses provide students with an in depth, sequenced educational experience in mechanical design, engineering and STEM (Science, Technology, Engineering & Mathematics) career pathways. The design program here at Chippewa Valley High School will help students to better understand the technical world around them, how products are designed and the career opportunities that await students after graduation.

Our Design Technology Program will challenge students to "think outside the box," become more creative, explore different technologies and work in teams. Our goal is to give students the design skills needed to enter the workforce as a CAD designer, enter into engineering colleges, receive internships and apprenticeships related to mechanical engineering fields.

## **Year 1: Technical Design**

Class Title:		Grade Taken In:	Credits:
Technical Design 1A	(1 Hr)	9	.5
Technical Design 1B	(1 Hr)	9	.5

### **Technical Design 1A/1B: 9501/9502 (1 HR)**

This is the first course of a possible four year vocational and pre-professional program. It introduces the student to basic drafting and design techniques. Students will be practicing the techniques of sketching, lettering, measuring, tool line work, geometric construction, orthographic projection, computer aided design and isometrics. Students will be learning how to use AutoCad 2018 and Inventor Professional 2018 Solid Modeling design software. Students will also be participating in a variety of "hands-on" projects related to design and preengineering.

# 9th Grade Elective Choice: Technical Design 1A & 1B (Full-Year)

(Course #) Class Title: Grade Level: Credits:

(9501/9502) Technical Design (1 Hr-1 Year) 9

Special Note: This is a year-long class. If you only take Technical Design 1A in 9th grade and not Technical Design 1B, you will not be able to take the class until the following year (10th grade) which will slow your progression through the Design Technology Program. This is NOT recommended, but can be an option for scheduling.



## **Focus Areas of our Design Program:**

- Computer Aided Design (CAD)
- Technical Sketching, Measuring & Lettering
- Mechanical Design
- 3D Solid Modeling
- Build Projects & Fabrication
- Problem Solving Activities
- STEM Projects (Science, Technology, Engineering & Mathematics)
- 3D Printing & Prototyping
- LEGO Robotics & Hydraulic Powered Robotics
- Club Activities: MITES & Square One Education Network
- <u>Industry Software Taught:</u> Autocad 2018, Inventor 2018, Solid Works 2018, MicroSoft Office Products
- MAT2 Apprenticeship Program (Work & College Fully Paid)

## **Career and College Choices**

What Are Your Plans?
What Do You Want to Do In Your Future?
What Job or Career Do You Think You Want?
What College Are You Going To?

### **Designers Are Needed In These Fields**

- ♦ Automotive Exterior & Interior Design
- ♦ Architectural Home & Commercial Design
- ♦ Civil Engineering: Structural and Site Planning
- ♦ Survey Engineering: Plot, Site and Development
- **♦** Mechanical Engineering: Product Development
- ♦ Mechanical Modeling and Simulation
- ♦ Interior Home & Commercial Design
- ♦ Manufacturing & Production of Engineered Parts
- **♦** Material Science and Plastics Engineering
- Graphic Artists & Photo-Realistic Rendering

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#### For Additional Information, please contact:

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Chippewa Valley High School Website Link: http://www.chippewavalleyschools.org/profiles/Jason Youngblood Profile/

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