

West De Pere High School  
Technology Education Department

**Fundamentals of Engineering**

Instructor: Mr. Glinski  
Office: B 153  
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**Course Description:**

This course will explore the relationship between math, science, physics and technology. It will be organized around a set of concepts, skills and attitudes that are fundamental and necessary to all engineering endeavors such as The Design Process, Project Definition and planning, Concept generation, Product generation, Safety, and Human factors in design. The concepts will be taught through a set of real-world case studies.

**Pre-requisites:**

*Math:*

College Prep Algebra \*pass with a B or better

*Science:*

Science 9 \*pass with a B or better

*Tech Ed:*

CAD \*pass with a B or better

**Course Objectives:**

Upon completion of this course students will be able to:

- Describe how technology is important in today's society
- Demonstrate safe practices in a modern, multi-functioning lab environment
- Accurately read dimensioned engineering drawings
- Use basic engineering equipment
- Demonstrate professional skills and methods of today's engineers

**Attendance and Make-up work:**

Much of the content in this course is sequential; therefore, it is expected that you will attend each class period. Attendance and tardiness problems will have a detrimental effect on your course grade. Not being present for demonstrations will prevent you from properly completing laboratory activities and/ or could become a safety hazard for you and those around you.

**Evaluation:**

The grade earned in this course will be determined by the quality of student work based on the parameters outlined by the instructor. Students will be evaluated on several laboratory projects and activities, quizzes, exams, and participation.

### Grade distribution

- Assigned Lab activities and projects 50%
  - Engineering Articles
- Participation 30%
  - Discussions
  - Clean-up / Misc.
  - **\*\*GAMES\*\***
- Exams and Quizzes 20%

92-100	A	72-77	C
90-91	A-	70-71	C-
88-89	B+	68-69	D+
82-87	B	62-67	D
80-81	B-	60-61	D-
78-79	C+	0-59	F

### Weighted Grades

A = 5.0 A- = 4.67 B+ = 4.33 B = 4.0 B- = 3.67 C+ = 3.33 C = 3.0 C- = 2.67

### Projects

- Trebuchet
- Tower Crane/ Bridge
- Car Crash
- Recycling/Timing
- Capstone Project\*

Lockers: You will be assigned a locker in the metal shop. You will need a combination lock for your locker and need to file the combination with instructor.

### Materials needed:

- Lock
- SAFETY GLASSES

### Lab Clean-up Procedures:

- Clean-up begins 8 minutes before the bell rings
- Any tools or equipment used must be cleaned and put away
- All table tops will be brushed off
- NOBODY will leave the room until the instructor approves all stations

**SAFETY GLASSES WILL BE WORN AT ALL TIMES IN  
THE LAB!!!**

