

Syllabus

Teacher: Mr. Davis

Time Frame:

* 2 Slots per 7 day cycle (1 hour classes)

* 50 hours (approx.)

Course Evaluation

Unit 1 - Big Ideas 20%

Unit 2 - Basic Skills 20%

Unit 3 - Design Activity

* Design Process 6%

* Design Portfolio 24%

* Solution 18%

* Report 12%

Course Description, Objectives and Outline

The Energy and Power Module is the fourth of four modules to be delivered at the Intermediate level. It is recommended students complete the Energy and Power Module after completing the Control Technology Module at the grade 8 level, as each module builds on knowledge and skills obtained in previous modules. The recommended delivery order of modules is: Grade 7 Communications, Grade 8 Production, Grade 8 Control, and Grade 9 Energy & Power Modules

In this module students receive a practical introduction to the principles of physics related to work, energy and power. They explore the production, conversion and transmission of energy; consequences of energy consumption on society, new technologies for energy conservation; and the measurement of energy transmission. In addition, students work in design teams to complete hands-on projects using the problem solving process.

Unit 1: Big Ideas is intended to introduce ideas, terminology and concepts related to production technology. Evaluation will focus primarily on student's understanding of this information. This unit does NOT have "design and make" activities. (SEP – NOV)

Unit 2: Basic Skills is intended to introduce tools and basic tool skills related to production. Specifically, this will involve interpreting and using technical drawings, selecting materials for production and using simple tools and/or machines for the purposes of production. Evaluation will focus primarily on student's understanding of these tools and procedures, and, to some extent, on the development of basic skills. (DEC – FEB)

Unit 3: Design Activity will provide students with experience in designing and developing a product.. This is primarily a design team activity, but it is reasonable to expect individuals to maintain a portfolio, or be responsible for specific parts of the design team portfolio and communications product development and production. (MAR – JUN)