

Design & Drawing for Production - PLTW

September/October

- Set up engineering portfolio
- Design process-Harley Davidson video
- Principles and elements of design
 - Project—slide show/poster
 - Resource--DWR.com
- Career opportunities in Engineering
 - Project—Powerpoint presentation
- Sketching
 - Pictorial
 - Techniques
 - Project—soap dish
 - Automobile concept



November/December

- Geometric relationships
 - Projects—Puzzle block
 - Geometric silhouette
- Introduction to modeling
 - Projects—Inventor drawings
 - Futuristic auto design



May/June

- Design for manufacturability
- Production & Marketing
 - Manufacturing Systems
 - Quality Control
 - Packaging
- Prepare for Rochester Institute of Technology final exam



Key Ideas / Concepts

- Understand and utilize the design process
- Communicate ideas through sketches, drawings, models and presentations
- Develop an engineering portfolio
- Demonstrate advanced 3D modeling techniques

March/April

- Advanced Inventor Design Problems
 - Projects--Parametric product design
 - Reverse engineering



January/February

- Research ergonomics and consumer products
 - Project--consumer product design
 - Model Analysis
 - Cost Analysis