

GATEWAY TO TECHNOLOGY

Student Outcomes

Design/Modeling Automation/Robotics

Course Objectives

- Students will develop an understanding for the design process
- Students will demonstrate skills of the design process through projects
- Students will understand/demonstrate the importance of teamwork
- Students will demonstrate knowledge of Science Technology, Engineering & Math (STEM)
- Students will identify different types of mechanisms
- Students will identify different types of energy transfers
- Students will show knowledge of engineering terminology

Content Topics

Design Process
Measurement
Sketching/Dimensioning
3D Modeling
Automation/Robotics
Mechanical Systems
Automated Systems

Course Projects

Spaghetti Towers
Pop Can Racer
Dragster Design
Mag Lev Design
Air Domes
Paper Towers
7-8 Quizzes
Simple Mechanisms
Automated Systems

Grading Policy

90%-100% = A's
80%-89% = B's
70%-79% = C's
60%-69% = D's
59% and lower = U