

GOAL STATEMENT

Engineering Applications

Thomas Jefferson High School

The Engineering Applications course is designed for students to complete a self-selected, self-guided research and development project, culminating the knowledge and skills that have gained in the previous three classes. The independent project can be derived from an architectural problem or be mechanical in nature. Students will complete advanced studies in computer operated tools and machines through software and hands-on applications.

During the course the student will:

1. Identify, apply, and analyze the technological design process in addition to using parametric modeling software to solve problems.
2. Apply advanced tools and machines to solve complex problems.
3. Apply technological resources to solve specific societal needs.
4. Analyze physical technologies including structural design and engineering to solve real-world problems.
5. Evaluate the impacts of technological solutions.