



Course resumes showcase the technical skills students obtain in each PLTW course. Each resume outlines the computational skills, analytical skills, and knowledge acquired in the course. Course resumes also detail student experience with tools, software, lab work, and engineering design. The detailed skills listed within course resumes illustrate the immediate, applicable contributions that students can make within a workplace.

Engineering Design Process Experience

- Exhibit professional skills needed to successfully contribute to work in a team
- Determine how to proceed through possible alternate routes of a design process
- Solve a problem using an engineering design process
- Document in detail the engineering design process used to solve a problem or design a product
- Create a detailed and comprehensive design brief

Professional Skills

- Team collaboration
- Project management
- Problem solving
- Communication skills
- Presentation skills
- Technical writing

Tools and Software

- Microsoft® Office (Excel®, Word, PowerPoint®)
- 3-D solid modeling software
- Variety of measuring devices

Course Knowledge

- Careers
 - Engineering disciplines
 - STEM careers related to engineering
 - Professional ethics
- Design Process
 - Define the problem
 - Generate concepts
 - Develop a solution
 - Construct and test a prototype
 - Evaluate a solution
 - Present a solution
 - Product life cycle
 - Design teams
- Application of STEM Principles and Practices
 - Technical sketching and drawing
 - Modeling in engineering
 - Computational and analytical skills
 - Measurement