



Three (3) transferrable Engineering college credits are available through NNU!

Below are the PLTW courses offered at Timberline:

- **IED (TE 1502)** - Intro to Engineering & Design - open to All
- **POE (TE 1501)** – Principals of Engineering - open to all who have had IED
- **CEA (TE 1520)** – Civil Engineering & Architecture - open to all who have had IED
- **EDD (TE 1525)** – Engineering Design & Development (**IED2**) – Capstone class – must have had IED.

Introduction to Engineering Design (IED, 1 year)

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3D modeling software, and use a Portfolio to document their work. All projects require certifications in the use of the shop, 3D printers and the Laser mills as well as hard copies of their solutions.

Principles of Engineering (POE, 1 year)

This class assumes a working knowledge of Inventor, Slicer for Fusion, CorelDraw, 3D printers and Laser Mills. Students will build, model and program robots using VEX EDR. They will explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Projects will be individual and in small groups helping develop collaboration skills, research and development, coding, process documentation and presentation. Students will compete in competitions with the other 3 high schools.

Civil Engineering and Architecture (CEA, 1 year)

This class assumes a working knowledge of Inventor, Slicer for Fusion, CorelDraw, 3D printers and Laser Mills. Students will learn important aspects of building and site design and development. They apply math, science, and standard engineering practices to design a detailed residential and home, document their work using photos, software and a portfolio. Students will compete against the other 3 high schools by building a tiny house sponsored by a local tech company.

Engineering Design & Development (IED2, 1 year)

This class assumes a working knowledge of Inventor, Slicer for Fusion, CorelDraw, 3D printers and Laser Mills. The knowledge and skills students acquire throughout PLTW Engineering come together in EDD as they identify real problems and develop real solutions. They present the process and their solution to a panel of engineers. Students apply the professional skills they have developed to document the entire design process to standards. Completing EDD they will be ready to take on any post-secondary program or career. Students can compete in the State SkillsUsa competition.

My Email: scott.steckel@boiseschools.org

