Engineering Pathway
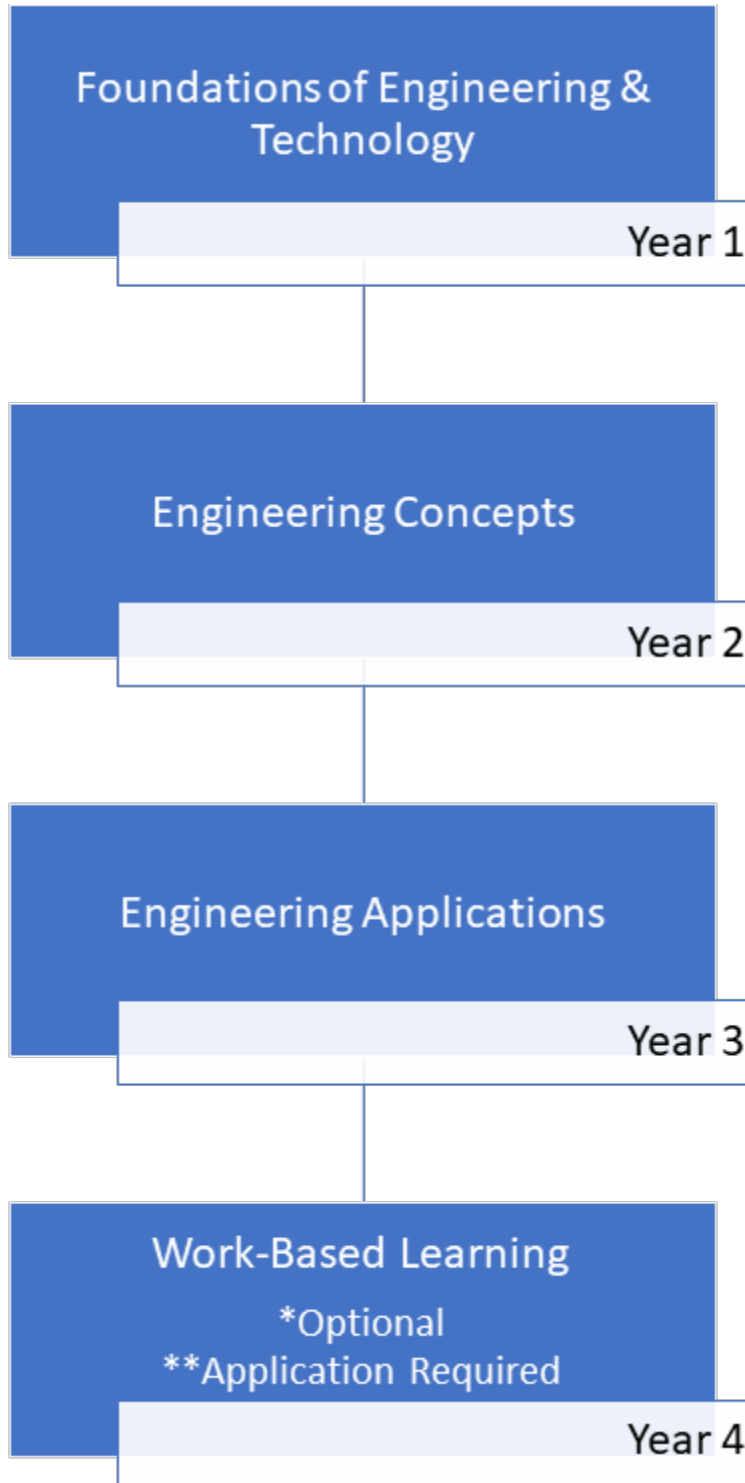
Students have one path available for Engineering and must take the courses in sequence.

Foundations of Engineering & Technology

Year 1

Engineering Concepts

Year 2

Engineering Applications

Year 3

Work-Based Learning

*Optional
**Application Required

Year 4

Engineering Pathway Course Descriptions

Course Title: Foundations of Engineering Technology Course Number (s): 21.4250001-fall / 21.4250002-spring Term: Y Eligible Grade(s): 9-12	Prerequisite(s): None - This is the prerequisite for all Engineering courses. Safety and Hand Tool Identification, Machine Safety and Usage, Intro to Amatrol Online Training, Intro to CAD Fundamentals (Onshape), Intro to Adobe Illustrator, Adobe Express and CC, Intro to vexcode VR Robotics, VEX Cortex and V5 Robotics, Engineering and Design Thinking Processes. Practical applications of wood machining and tool use for those who qualify.
Course Title: Engineering Concepts Course Number (s): 21.4710001-fall / 21.4710002-spring Term: Y Eligible Grade(s): 10-12	Prerequisite(s): Foundations of Engineering Technology Safety and higher-level machine and power tool use, Advanced CAD (SolidWorks), Design Thinking Processes, and Introduction to Master Projects for 2nd Semester.
Course Title: Engineering Applications Course Number (s): 21.4720001-fall / 21.4720002-spring Term: Y Eligible Grade(s): 11-12	Prerequisite(s): Foundations of Engineering Technology & Engineering Concepts Safety and high-level machine and power tool use, SolidWorks CAD CSWA Certification, High-Level Master Projects, brand new SwitchLab Electric Vehicle curriculum implementation, and complete the Engineering End of Pathway Exam. ***Welding/Plasma is only taught to students participating in TSA Competitions.