

Year 1



Intro to Engineering Design
Students dig deep into the engineering design process, 3D modeling & hands-on projects.

Year 2



Principles of Engineering
Students explore a broad range of topics including mechanisms, strength of structure/materials, & automation.

Course Options after IED completion



Civil Engineering & Architecture
Students learn important aspects of building & site development in residential & commercial.



Aerospace Engineering
Students explore the physics of flight & design a glider, create a program for an autonomous space rover, and a rocket.



Computer Science Principles AP
Using Python® as a primary tool, students explore, tackle challenges & simulations.



Digital Electronics
Students explore the foundations of computing through circuit design, creating combinational logic & sequential logic like an electrical engineer.



Environmental Sustainability
Students investigate & design solutions for real-world challenges to clean water, food supply & renewable energy.

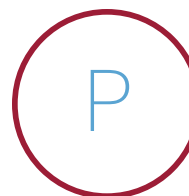


Cybersecurity
Students explore the tools & concepts of cybersecurity and create solutions for privacy.

Upon completion of AE



Aerospace Engineering 2
Students research & development flight plans for a Transonic flight with support from NASA & SystemsGo.



Practicum in STEM
Students participate in a combination of both on-campus course work & off-campus instructional internship.

Optional Senior Internship

Year 4



Engineering Design & Development
Students identify a real-world challenge & then research, design & test a solution, ultimately presenting their unique solution to a panel of engineers.