

Engineering Academy: Model Curriculum Framework

Subject Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English 9	English 10	English 11	English 12
Mathematics	Algebra I or Geometry	Geometry or Algebra II	Algebra II or Pre-calculus	Pre-calculus/Trigonometry, Calculus, or Statistics & Probability
Science	Conceptual Physics	Biology	Chemistry	AP Physics, AP Chemistry, or AP Biology
History/ Social Studies		World History, Culture, and Geography	U.S. History and Geography	U.S. Government and Economics
Electives ¹	Physical Education, Foreign Language, Health Education, Visual & Performing Arts, or Computer Technology	Physical Education, Foreign Language, Health Education, Visual & Performing Arts, or Computer Technology	Physical Education, Foreign Language, Health Education, Visual & Performing Arts, or Computer Technology	Physical Education, Foreign Language, Health Education, Visual & Performing Arts, or Computer Technology
Engineering Academy Core Career-Technical Courses	Introduction to Engineering Design	Principles of Engineering	<ul style="list-style-type: none"> Digital Electronics, Civil Engineering and Architecture, Aerospace Engineering, or Computer Integrated Manufacturing 	Engineering Design and Development
Work-based Learning/ Extracurricular Activities Integrated into Courses	<ul style="list-style-type: none"> Tours (grades 9–12) Guest speakers (grades 9–12) 	<ul style="list-style-type: none"> Job shadowing Community service or service learning projects (grades 10–12) 	<ul style="list-style-type: none"> Work with business mentor Paid summer internships (for rising 12th-graders) 	<ul style="list-style-type: none"> Internship (paid/unpaid) Community service or service learning project Volunteer activity

¹ Choice of two electives, or other required courses (appropriate electives may depend on student choice of pathway).