

This program of study offers a wide range of courses that provide the background and foundation skills needed to succeed in future careers in manufacturing, technology or engineering. Centered on hands-on activities, problem solving and creative projects, this program of study is application based. Through Project Lead The Way (PLTW) courses students will discover how things work and develop ideas from inception to completion. This program of study connects interests and skills from construction trades and information technology. Advanced PLTW- pre engineering courses are available at BLHS.



Post-secondary Partners

- Bates Technical College
- Clover Park Technical College
- Green River Community College
- Highline Community College
- Pierce College District
- Pierce County Careers Connection
- Renton Technical College
- South King County Tech Prep
- Tacoma Community College



Sumner School District

...a great place to learn!

Career and College Readiness
 1202 Wood Avenue
 Sumner, WA 98390
 (253) 891-6062

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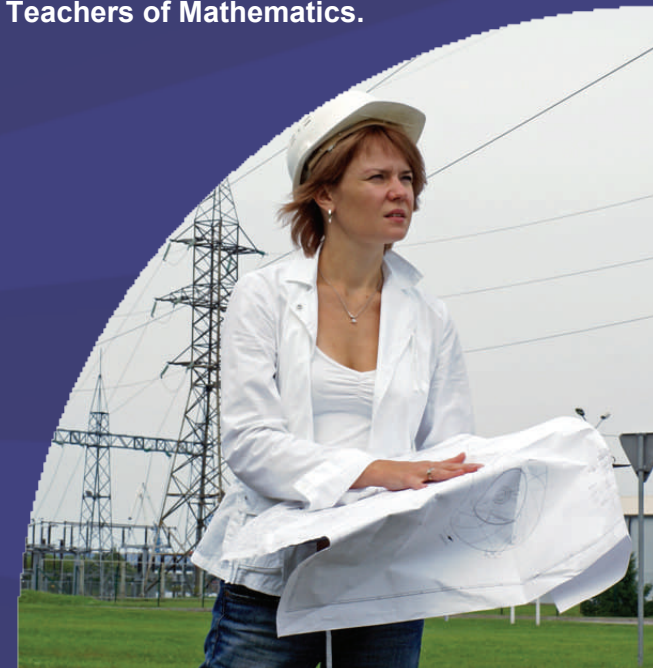
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Engineering

For a future in the Engineering and Technology pathway, students should study and apply principles from advanced mathematics, life sciences, physical science, earth and space science, and technology. In addition, future engineers and technologists should learn certain processes in mathematics, science and technology.

In grades 9-12, all future engineers and technologists should study mathematics each year, learning important mathematical concepts and processes defined by the National Council of Teachers of Mathematics.





PROGRAM OF STUDY: Sumner School District

Cluster: Science, Technology, Engineering & Mathematics

Pathway: Engineering and Technology

This Program of Study, along with other career planning materials, can serve as a guide as learners continue on a career path. Courses listed are only recommended and plans should be individualized to meet each learner's educational and career goals. Students should recognize that these are guidelines only and post-secondary requirements may change.

	Year	English	Math	Science	Other Required Courses	Career Focus Area Courses	Sample Occupations Relating To This Pathway
SECONDARY	9	9 th Grade English	Algebra	Physical Lab Science	Career & Tech (Occupational Ed) Health & Fitness	AP Calculus or IB Math Computer Animation	Requiring Less than a Baccalaureate degree <ul style="list-style-type: none"> Electrician Machinist Carpenter CAD Technician Computer Programmer Electronics Technician Manufacturing Technician Surveyor Agricultural Technician Medical Technician
	10	10 th Grade English	Geometry	Lab Science Biology Chemistry or Physics	US History or Social Studies Elective Fine, Visual or Performing Arts	Computer Integrated Manufacturing (Robotics I) Fundamentals of IT Introduction to Engineering Design	
	11	11 th Grade English	Advanced Algebra	Biology II Chemistry II or AP/IB Science	Social Studies Elective or US History Fitness Elective	Principals of Engineering Robotics II & III	
	12	12 th Grade English	Financial Math or Pre-Calculus	AP/ IB Science	Contemporary World	Technology Foundations World Language (year I and II)	
Washington State History & Tech Competency. Include in high school plan if requirement not met in middle school							Requiring Baccalaureate Degree or greater <ul style="list-style-type: none"> Engineering Specialties: Aeronautical, Aerospace, Agricultural, Application, Architectural, Automotive, Biomedical, Biotechnology, Chemical, Civil, Communications, Computer, Construction, Electrical, Geothermal, Industrial, Manufacturing, Marine, Mechanical, Metallurgist, Mining, Nuclear, Petroleum
Secondary Leadership and Employability Standards are included.							
Contact postsecondary institutions directly for complete program options and requirements.							
POST-SECONDARY	Year 13/14	Bates: Electrical Engineering Technician, Civil Engineering Technology, Land Surveying, Mechanical Engineering Clover Park: Architectural Engineering Design Green River: Machining and Manufacturing Technology, Engineering, Design Drafting Technology, Highline: Engineering Renton: Engineering Design Technology, Industrial Engineering TCC: Engineering					
	Year 15/16	EWU: Engineering WWU: Engineering Technology CWU: Industrial and Engineering Technology WSU: Engineering UW: Engineering * ABET Certified Programs are highly recommended.					

Sumner School District graduation requirements, dual credit courses, required for 4-year colleges