

# Career Pathway: *Science, Technology, Engineering & Math*



A career in science, technology, engineering, and mathematics requires certain skills and education depending on job requirements. Skills include providing, planning, and managing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

## Exposure Pathways

### High School Courses

Algebra 1A	General Biology	Animal and Plant Biotechnology	Bioethics
Algebra 1B	Chemistry 1	Agricultural Research & Dev.	AP Environmental Science
Algebra 1	Earth and Space Science	Environmental Sustainability	PLTW Environmental Sustainability
Geometry	Applied Chemistry & Physics	PLTW Engineering Design & Dev.	PLTW Intro to Eng.
Algebra 2A	Mechanical Drawing	Physics	PLTW Principles of Eng.
Algebra 2B	Int. to Agriculture, Food & Natural Res.	AP Chemistry	PLTW Aerospace Eng.
Algebra 2	Aquaculture Science	AP Biology	PLTW Civil Engineering & Architect Design
Pre-Calculus	Principles of Ag. Science-Animal	AP Physics	PLTW Computer Integrated Manufacturing
AP Calculus AB	Principles of Ag. Science-Plant	Anatomy & Physiology	PLTW Digital Electronics
AP Calculus BC	Natural Resources & Ecology	Geology	
AP Statistics	Environmental Science Issues	Astronomy	
Earth Science	Food Science & Safety	Meteorology	

### Job Shadows & Internships

Analytical Chemistry Research	Conservation Biology Research
CAD Design	Organic Chemistry Assistant
Chemistry Lab	Wastewater Plant Operations & Maintenance
Civil & Electrical Engineering	



[Learn more & apply](#)

### High School Clubs & Organizations

Femineers	Science Club
Robotics	Math Club

### Venture Academics

Venture Earth Science (Earth Science, College Reading, Venture)
Venture Life Science (General Biology, Intro to College Writing, Venture)
Venture Environmental Science (AP Environmental Science, Venture)

## Experience Pathways

### College CTE Courses in High School

Math and Society	Human Anatomy I
Nutrition	Human Anatomy II

### Kirkwood Career Academies

<a href="#">Adv.Man.with Robotics &amp; Welding</a>	<a href="#">Computer Programming &amp; Web Development</a>
<a href="#">Architectural &amp; Engineering Design (Pre-Apprenticeship)</a>	<a href="#">Pre-Professional Health Careers</a>

## Pursuit Pathways

### Certificates/Diplomas

Industrial Robotics	Network Security
Database Technologies	Network & System Admin.
Java Programming	PC Technician
Mobile App Development	CAD/Mechanical Eng. Tech.
.NET Programming	Desktop Customer Service
Healthcare IT Technician	Electromechanical Tech.

### Careers & Median Salary Information

Civil Engineering Technicians \$50,000	Food Science Technicians \$46,000
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# Career Pathway: *Science, Technology, Engineering & Math*

## Associate Degrees

Advanced Manufacturing & Robotic Tech.	Exercise Science & Wellness
CAD/Mechanical Engineering Tech.	Industrial Maintenance
Computer Software Development	Network & System Administration
Computer Support Specialist	Water Environmental Tech.
Energy Production & Distribution	

## Careers & Median Salary Information

Chemical Technicians \$41,500	Fuel Cell Technicians \$54,000
Surveying Technicians \$51,000	

## Bachelor Degrees

Bio Chemistry	Applied Physics
Actuarial Science	Civil Engineering
Seed Science	Industrial Technology
Ag Engineering	Software Engineering
Electrical Engineering	Graphic Technology
Microbiology	Bio Medical Engineering
Physics	Computer Engineering
Geo Science	Management and Information Systems,
Ag and Life Sciences Education	Statistics
Environmental Science	Military Science
Nutritional Science	Business Analytics & Information Systems
Bio Chemistry	Construction Engineering
Technology and Engineering Education	Materials Engineering
Animal Science	Technical Communication
Family & Consumer Science Education	Movement and Exercise Science
Physics	Mortuary Science
Communication Sciences & Disorder	Culinary Food Science
Technology Management	Mathematics
Biological Systems Engineering	Biology
Food Science	Science Education
Political Science	Nuclear Medicine Technology
Computer Science	Dairy Science
Technology	Mechanical Engineering
Chemical Engineering	Chemistry
Industrial Engineering	Social Science
Seed Science	Radiation Sciences
Earth Science	

## Careers & Median Salary Information

Chemical Engineers \$88,000	Civil Engineers \$76,000
Chemists \$79,000	Marine Engineers \$64,000
Materials Engineers \$75,400	
Biochemical Engineers \$71,000	

