

## Focusing Education on the Future!

# CAREER PATHWAY SCIENCE AND MATHEMATICS



Those who choose careers in science and mathematics apply essential subject area content and skills to real world context. Science and mathematics occupations include those in physical, environmental and human endeavors. Career possibilities range from teachers of science and mathematics to lab technicians and NASA astronauts.

### Major Courses

Students must take **THREE** pathway concentration courses and **ONE** additional pathway elective course. (This pathway does not fulfill Career Tech course requirements for the Tech/Career or Dual Seal.)

#### Pathway Concentration Courses (3):

- Algebra III or Advanced Algebra/Trigonometry
- AP Environmental Science
- AP or IB Physics
- Biology II (Honors) or AP or IB Biology
- Calculus or AP Calculus
- Chemistry II (Honors) or AP or IB Chemistry
- IB Environmental Systems
- Pre-Calculus (Honors)
- Statistics or AP Statistics

#### Pathway Elective Course (1):

- AP Calculus AB or BC
- Apprenticeship/Internship/Mentorship
- Discrete Mathematics
- Forensic Science
- Other Pathway Concentration Course

### Other Recommended Courses

- Agriscience Principles & Technology
- Anthropology
- Civil Engineering Drawing
- Computer Science
- Engineering Concepts & Drawing
- Examining the Teaching Profession
- Modern Language
- Research & Design

### Post-Secondary Degrees, Diplomas, & Certificates

#### Colleges/Universities

- Anthropology
- Biochemistry
- Biology
- Cellular Biology
- Cognitive Science
- Ecology
- Environmental Science
- Geology
- Hydrogeology
- Marine Biology
- Mathematical Sciences
- Mathematics
- Microbiology
- Molecular Biology
- Physics & Astronomy
- Research, Measurement & Statistics
- Science



Analytical chemist  
Astronomer  
Botanist  
Nuclear Chemist  
Crystallographer  
Environmental scientist  
Geneticist  
Materials analyst

Anthropologist  
Astrophysicist  
CAD operator  
Conservation scientist  
Demographer  
Marine scientist  
Geologist  
Numerical analyst

Applied mathematician  
Atmospheric scientist  
Communication technologist  
Research chemist  
Research technician  
Expert systems scientist  
Geophysicist  
Protein scientist

Archeologist  
Biologist  
Cartographer  
Cryptographer  
Ecologist  
Economist  
Geoscientist  
Cosmologist

Physicist  
Programmer  
Technologist  
Dye chemist  
Teacher  
Statistician  
Zoologist  
Toxicologist

CAREERS

### EMPLOYMENT OUTLOOK

Job opportunities are expected to be best for qualified graduates of science and mathematics training programs or applied science and mathematics programs who are trained on equipment used in industrial/government laboratories and production facilities. As the instrumentation and techniques used in industrial research, development and production become increasingly more complex, employers are seeking well-trained individuals with highly developed technical and communication skills.