

# STEM *Mis*

## STEM Careers by Category

### Environmental Sciences (Sustaining Earth)



- **Agricultural Engineer**- Develops new ways to improve farming and food production
- **Archaeologist**- Studies the origin, development, and behavior of human beings
- **Astronaut**- Explores and conducts experiments in space
- **Chemical Engineer**- Uses chemistry and engineering to solve problems related to pollution, manufacturing, energy, food production and more
- **Ecologist**- Studies and protects ecosystems and the environment
- **Emergency Management Specialist**- Develops disaster response plans and coordinates with various emergency personnel and agencies
- **Environmental Engineer**- Uses the principles of engineering, soil science, biology, and chemistry to develop solutions to environmental problems
- **Forester**- Manages the health of forested lands
- **Geologist**- Studies the physical aspects of the planet Earth
- **High School STEM Teacher**- Prepares students for life after graduation through science instruction
- **Horticulturist**- Researches the best way to grow plants and crops
- **HVACR Technician**- Repairs and installs heating, air conditioning, and refrigeration systems
- **Hydrologist**- Studies properties of water, the water cycle and how water affects the environment
- **Landscape Architect**- Plans and designs land areas for homes, parks, recreational facilities, and other properties
- **Marine Biologist**- Studies organisms that live in the ocean and other bodies of water
- **Meteorologist**- Studies weather, climate, and other aspects of the atmosphere and develops reports and forecasts
- **Oceanographer**- Studies the ocean and marine organisms
- **Paleontologist**- Studies prehistoric life, fossils, evolution, and the relationship between the different life forms and their environment.
- **Park Naturalist**- Provides educational programs to park visitors
- **Solar Technician**- Installs, maintains, and repairs solar energy systems
- **Urban Planner**- Develops plans and programs for the use of land

### Health Sciences (Sustaining People)



- **Biomedical Engineer**- Analyzes and designs engineering solutions to problems in biology and medicine
- **Botanist**- Studies a plant's relationship to the environment and other living organisms
- **Chemist**- Studies the structures, compositions, reactions, and other properties of substances
- **Dental Hygienist**- Cleans teeth and examines patients for oral diseases
- **Diagnostic Medical Sonographer**- Uses special imaging equipment to diagnose various medical conditions
- **Epidemiologist**- Investigates the causes of disease and other public health problems
- **Exercise Physiologist**- Studies anatomy in relation to human movement and how the stress of exercise affects the body
- **Forensic Pathologist**- Examines the bodies of people who died suddenly, unexpectedly, or violently to determine the cause of death
- **Genetic Counselor**- Analyzes genetic data to help individuals and families make decisions
- **High School STEM Teacher**- Prepares students for life after graduation through science instruction
- **Lab Research Technician**- Assists scientists and other researchers in the laboratory
- **Microbiologist**- Studies the growth, development, and other characteristics of microscopic organisms
- **Nutritionist**- Advises people on what to eat in order to lead a healthy lifestyle
- **Orthodontist**- Prevents or corrects misaligned teeth and jaws
- **Paramedic**- Cares for the sick or injured in emergency medical settings
- **Physical Therapist**- Helps people who have injuries or illnesses improve their movement and manage their pain  
Physician Diagnoses and treats injuries and illnesses in patients  
Physician Assistant- Practices medicine under the supervision of physicians and surgeons
- **Radiologic Technician**- Uses and maintains medical imaging equipment to take scans of patients
- **Veterinarian**- Cares for the health of animals  
Veterinary Technologist Performs medical tests in a veterinarian's office to help diagnose and treat animals
- **Zoologist**- Studies animals in their natural habitats and in captivity





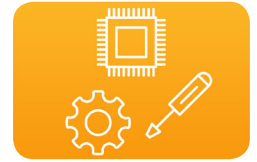
## STEM Careers by Category

### Computer Sciences (Designing Software)



- **3D Animator**- Creates animation and visual effects for television, movies, and video games
- **Artificial Intelligence Specialist**- develop software and computers that “think” like a human brain. Computers are not able to think like humans. AI Specialists work on systems that mimic the brain, to gather information, make decisions and act on that information.
- **Chief Information Officer**- is in charge of all the information technology and computer systems for a company. They create the vision for new innovations and technology for all employees and products.
- **Computer-Aided Design Technician**- Uses software to convert the designs of engineers and architects into technical drawings and plans
- **Computer Graphic Designer**- Uses computer software to create visual designs that communicate ideas and inspire, inform, and captivate consumers
- **Computer Hardware Engineer**- Researches, designs, develops, and tests computer equipment such as chips, circuit boards and routers
- **Computer Software Developer**- Applies computer science, engineering, and math to design, develop and test software
- **Computer Systems Analyst**- Studies an organization’s computer systems and makes recommendations about how to operate the business more effectively
- **Database administrator**- work with database management software and determine ways to store, organize, analyze, use, and present data. They build databases for businesses and organizations to meet their needs.
- **Educational Technologist**- Designs online courses and interactive courseware
- **Geospatial Information Scientists**- research and develop geospatial technologies (GIS or GPS). May specialize in areas such as agriculture, mining, health care, retail trade, urban planning or military intelligence.
- **High School STEM Teacher**- Prepares students for life after graduation through science instruction
- **Human computer interaction specialist**- studies the use of computers by people and designs systems and software that are useful, usable, and enjoyable for the people who need them.
- **Information Security Analyst**- Ensures a firm’s information stays safe from cyber attacks
- **Robotics Technician**- Programs, builds, runs, troubleshoots, and repairs robots
- **Software Quality Assurance**- These engineers oversee the quality of a software over its entire creation, until a finished product, through testing it and making changes.
- **Video Game Designer**- Creates exciting games and fantastic worlds for players to experience

### Engineering Sciences (Designing Objects)



- **Aerospace Engineer**- Designs aircraft, spacecraft, satellites, and missiles
- **Architect**- Plans and designs buildings and other structures
- **Audio Engineer**- Sets up, operates, and maintains the electrical equipment for radio and television broadcasts, concerts, sound recordings, and movies
- **Automotive Designer**- Designs the look and feel of cars and other motor vehicles  
**Automotive Service Technician**- Inspects, maintains, and repairs cars and light trucks
- **Chemical Engineer**- Uses chemistry and engineering to solve problems related to pollution, manufacturing, energy, food production and more
- **Construction and Building Inspector**- Ensures that new construction, changes, or repairs comply with local and national building codes
- **Electrical Engineer**- Designs, develops, tests, and supervises the manufacturing of electrical equipment
- **Electrician**- Installs and maintains electrical systems in homes, businesses and factories
- **General Contractor**- Oversees every component of a building or house construction job
- **High School STEM Teacher**- Prepares students for life after graduation through science instruction
- **Industrial Designer**- Uses design and engineering skills to create new or improved products for everyday use
- **Materials Engineer**- Figures out what types of materials will work best in different products, and develops new or improved materials
- **Mathematician**- Analyzes complex data and works with numbers to answer questions and solve problems
- **Mechanical Engineer**- Researches, designs, develops, builds, and tests mechanical devices, including tools, engines and machines
- **Nanosystems Engineer**- Designs, develops and characterizes materials and devices on the nanoscale
- **Nuclear Engineer**- Researches and develops the technology used in producing nuclear energy
- **Physicist**- Studies the fundamental nature of the universe
- **Production Engineer**- Ensures that manufactured products are made at the proper speed and quality level
- **Safety Engineer**- Develops procedures and designs systems to keep people safe in a working environment
- **Structural Engineer**- Designs and supervises large construction projects
- **Surveyor**- Measures and establishes boundaries for land, air space and water

For information, collaborations, or to bring STEM Mio to your community, please contact Dr. Anna Arici at [anna.arici@asu.edu](mailto:anna.arici@asu.edu).