

STEM Careers are essential to our Health, Happiness, & Safety

Below are 20 STEM careers, and examples of what someone in these roles might do for a job. Read through each, and consider if and how the example listed contributes to our health, happiness, and/or safety. Create a tally for each! If you are interested in learning more about these careers and other examples of jobs, explore on ScienceBuddies.org.

Science

Climate Change Analyst

Help avoid famines by projecting how climate change will affect worldwide farming and food distribution.

Cytotechnologist

Save a child's life by detecting a serious infection in his blood samples and informing the doctors.

Geographer

Create up-to-the-minute fire maps to help firefighters combat a wildfire.

Physical Therapist

Train and encourage an amputee to return to her everyday activities using a prosthetic limb.

Audiologist

Screen newborns for hearing loss and refer affected patients to appropriate services.

Technology

Computer Programmer

Program and test the autopilot for an airplane's flight control system.

Database Administrator

Protect bank accounts from hackers by adding security features to a bank's financial database.

Multimedia Artist/ Animator

Help develop a full-length 3D, animated motion picture, or create the characters for a new Saturday morning cartoon.

Remote Sensing Technologist

Evaluate climate changes by creating annual maps of thawing land using satellite data.

Computer Software Engineer

Write software that allows people to communicate over great distances.

Engineering

Biochemical Engineer

Figure out how to grow large batches of mammalian cells for use in cancer-drug testing.

Geographic Information Systems Technician

Aid law enforcement by creating a mapping database to track criminals on probation wearing GPS anklets.

Nanosystems Engineer

Design a new lightweight, but super-strong, fabric out of nano-materials to make into bulletproof suits that protect our soldiers, civil servants, and governmental leaders.

Microsystems Engineer

Help a child with cerebral palsy walk by creating an internal medication pump for anti-muscle-spasm drugs.

Wind Energy Engineer

Analyze annual wind speed and direction data to determine the best location for a wind farm, a form of clean energy.

Math

Math Teacher

Use examples from nature, like shells, to show students that math is all around them. Inspire the next generation of STEM professionals.

Economist

Evaluate if micro-loans (start-up investments for small international businesses) help combat poverty.

Statistician

Develop metrics to help a baseball team manager evaluate a player.

Actuary

Advise movie studio owners about how much liability insurance they should purchase to cover dangerous sets.

Mathematician

Design and decipher codes to help our military and intelligence agencies securely transmit and retrieve sensitive information.