

STEM Careers Are Essential to Our Health, Happiness, and Safety



Below are examples of what someone in 20 STEM careers might do. Read through each, and consider whether and how the example listed contributes to our health, happiness, and/or safety.

| Science | Technology | Engineering | Math |
|---|--|--|---|
| <p>Audiologist Screen newborns for hearing loss and refer affected patients to appropriate services.</p> | <p>Remote Sensing Technologist Evaluate climate changes by creating annual maps of thawing land using satellite data.</p> | <p>Geographic Information Systems Technician Aid law enforcement by creating a mapping database to track criminals on probation wearing GPS anklets.</p> | <p>Math Teacher Use examples from nature, like shells, to show students that math is all around them. Inspire the next generation of STEM professionals.</p> |
| <p>Cytotechnologist Save a child's life by detecting a serious infection in his blood samples and informing the doctors.</p> | <p>Database Administrator Protect bank accounts from hackers by adding security features to a bank's financial database.</p> | <p>Microsystems Engineer Help a child with cerebral palsy walk by creating an internal medication pump for anti-muscle-spasm drugs.</p> | <p>Economist Evaluate if micro-loans (start-up investments for small international businesses) help combat poverty.</p> |
| <p>Electrician Test the grounding on swimming pool equipment to prevent electrocution.</p> | <p>Computer Programmer Program and test the autopilot for an airplane's flight control system.</p> | <p>Weatherization Installer Help a family save money by installing insulation in the home's attic and crawlspace.</p> | <p>Statistician Develop metrics to help a baseball team manager evaluate a player.</p> |
| <p>Physical Therapist Train and encourage an amputee to return to her everyday activities using a prosthetic limb.</p> | <p>Computer Software Engineer Write software that allows people to communicate over great distances.</p> | <p>Wind Energy Engineer Analyze annual wind speed and direction data to determine the best location for a wind farm, a form of clean energy.</p> | <p>Actuary Advise movie studio owners about how much liability insurance they should purchase to cover dangerous sets.</p> |
| <p>Climate Change Analyst Help avoid famines by projecting how climate change will affect worldwide farming and food distribution.</p> | <p>Multimedia Artist/Animator Help develop a full-length, 3D, animated motion picture, or create the characters for a new Saturday morning cartoon.</p> | <p>Nanosystems Engineer Design a new lightweight, but superstrong, fabric out of nano-materials to make into bulletproof suits that protect our soldiers, civil servants, and governmental leaders.</p> | <p>Mathematician Design and decipher codes to help our military and intelligence agencies securely transmit and retrieve sensitive information.</p> |

Source: ScienceBuddies.org



Funded by a grant from the National Science Foundation, GSE/EXT: STEM Equity Pipeline Project, Grant No. HRD-1203121



Download at www.napequity.org/counselors
© 2014 NAPEEF | Developed by Meagan Pollock