

# Why STEM?

## SCIENCE-TECHNOLOGY-ENGINEERING-MATHEMATICS

- It allows you to work in a challenging, rewarding career with the opportunity to make a difference.
- Those with bachelor's degrees in STEM make an average of \$14,000 more per year than those with a non-STEM degree. Over a lifetime, STEM majors make \$300,000 more than non-STEM majors (Georgetown University).
- In 2013, the top ten college degrees by highest starting salaries were all STEM-related (Industry Market Trends Career Journal).
- The National Science Foundation estimates 80% of jobs in the next decade will require math and science knowledge.

## Educational Opportunities

After earning a **bachelor's** degree in STEM (which takes 4-5 years depending on the program), you may then choose to further your education and strengthen your earning potential by obtaining a **master's** degree (about 2 more years). You might even choose to pursue a **doctorate** degree. However, you may also opt to get an **associate** degree, which only takes 2 years and still provides you with valuable STEM skills.

## STEM Skills

Active Learning	Operations Monitoring
Complex Problem Solving	Operation and Control
Critical Thinking	Programming
Communication	Quality Control Analysis
Equipment Maintenance	Science
Equipment Selection	Systems Analysis/ Evaluation
Mathematics	Technology Design
Operations Analysis	Troubleshooting/ Repairing



## How to Prepare

Some tips for success in a STEM career:

- Take the highest math and science courses available.
- Get involved in STEM-related extracurricular activities.
- Explore the wide variety of career options that STEM disciplines offer: biomedical engineer, software developer, geologist, transportation engineer, CIA agent, information technology specialist, teacher, physicist— this just skims the list of endless opportunities for STEM students!
- Talk to professionals and other students already involved in a STEM career or program.
- Have a plan with clear, concise goals.
- Research STEM, see below.

## Additional Resources

**The West Tennessee STEM Hub**— [www.westtnstem.org/students](http://www.westtnstem.org/students)

**The Tennessee STEM Innovation Network**— [thetsin.org](http://thetsin.org)

**Georgetown University's paper**— [www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/stem-complete.pdf](http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/stem-complete.pdf)

**The Industry Market Trends Career Journal**— [www.thomasnet.com/journals/career/highest-paid-majors-for-new-grads-with-bachelors-degrees](http://www.thomasnet.com/journals/career/highest-paid-majors-for-new-grads-with-bachelors-degrees)

**BROOKINGS, The Hidden STEM Economy**— [www.brookings.edu/research/reports/2013/06/10-stem-economy-rothwell](http://www.brookings.edu/research/reports/2013/06/10-stem-economy-rothwell)