

Missouri's
STEM Occupations
SCIENCE, TECHNOLOGY, ENGINEERING AND MATH



Missouri's STEM Occupations

Science, Technology, Engineering and Mathematics are the defining characteristics of STEM occupations. These occupations are usually technical in nature, and play a key role in creating and developing new products and technological breakthroughs. STEM occupations usually require a bachelor's degree or higher of education and commonly earn significantly more than the average wage. STEM occupations are a vital part of Missouri's economic future, and include a wide range of knowledge and experience.

Science includes not just those in lab coats performing experiments, but a diverse group of occupations in the areas of Natural Science as well. Outdoor field work is an integral part of most life and biological science occupations, and natural science technicians play a key role in assisting scientist's in their experimentation and discovery.

Technology occupations are most commonly found in the areas of computer and information technology, but also include any occupation that requires technical skill. Technology workers may create new software, develop databases or assist users in maintaining their computers performance.

Engineering occupations develop and test new products found in most every part of our daily lives. They incorporate elements of science, technology and math in their work, and include Civil, Electrical and Mechanical engineers among others. Engineering occupations also include drafters and technicians who provide assistance throughout the process.

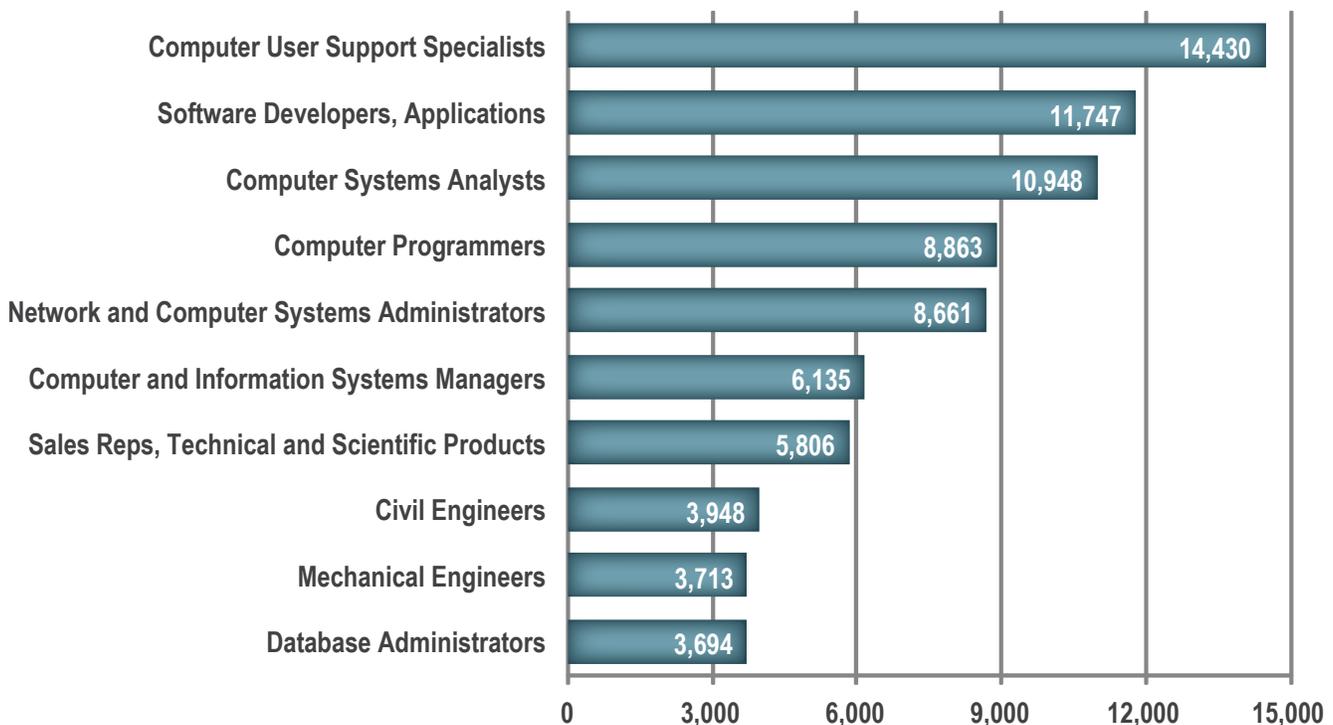
Math is a part of many occupations, but for some, mathematics is at the heart of what they do. Actuaries, Statisticians and Research Analysts use mathematics for risk assessment, problem solving and various types of data analysis.

STEM Occupations Span All Industries in Missouri

In Missouri, there are over 100 jobs listed as STEM occupations, and they can be found at every level of employment. Some occupations are industry specific due to the nature of their scientific scope, while other occupations are wide ranging in their industrial usefulness. Because of this, STEM occupations can be found in almost all industries in Missouri.

From entry level technicians to positions requiring advanced degrees and experience, STEM occupations exist throughout Missouri's workforce. Some occupations can be found in more than one STEM classification, however it is those in the field of technology that make up the largest share of Missouri's STEM employment. Consisting mostly of those in computer related occupations, technology accounts for seven of Missouri's top ten most employed STEM occupations.

Largest Employment of STEM Occupations

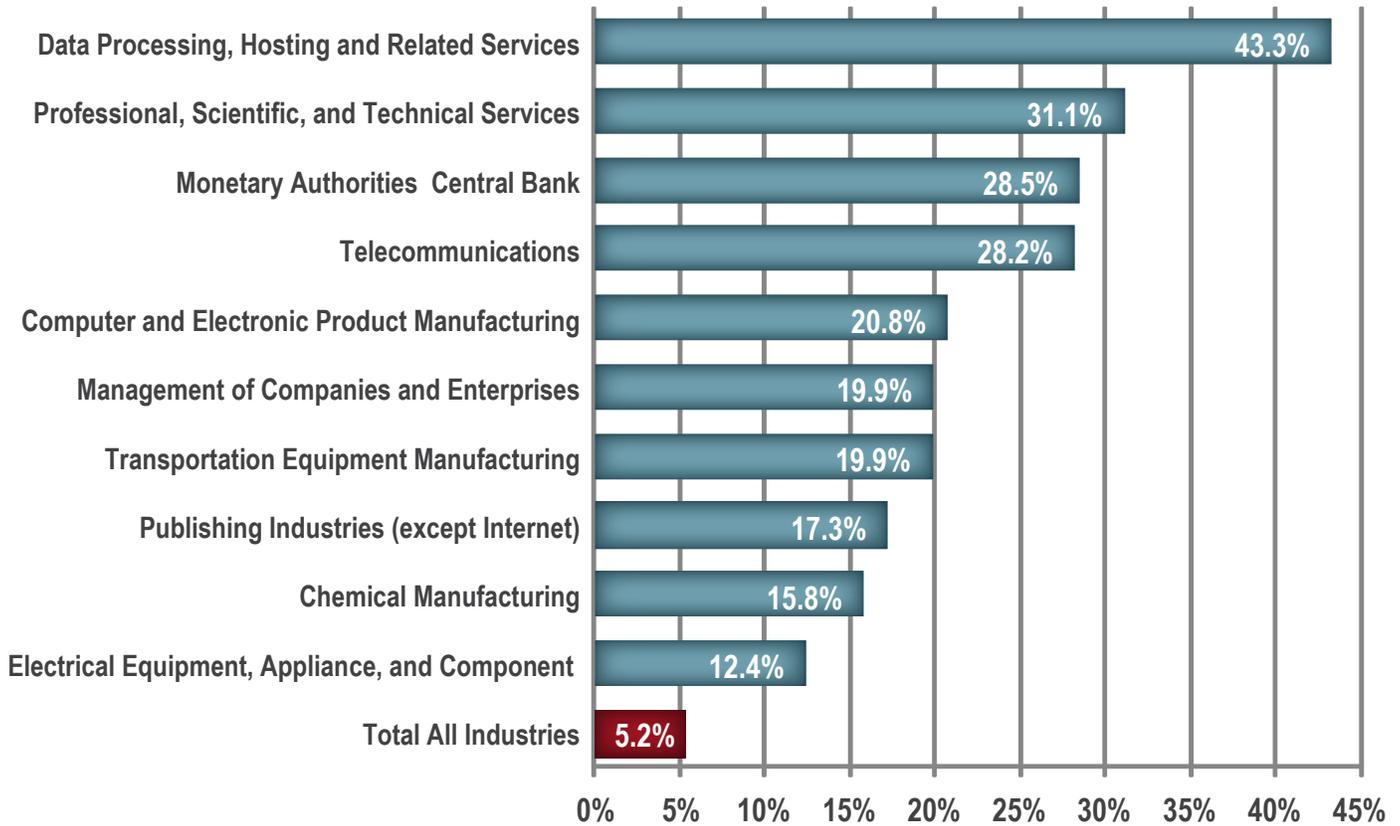


Even though STEM occupations are found in almost every industry in the state, some industries are more suited for the skills and knowledge associated with STEM employment. The most widely employed STEM occupations are those related to computer support and software development as well as those working in computer systems administration and analysis.

STEM Occupations Crucial to Missouri's Economy

Overall, STEM occupations comprise less than six percent of Missouri's total employment, however, in industries such as Information or Professional and Technical Services, STEM occupations make up a large percentage of those employed.

STEM Percent of Industry



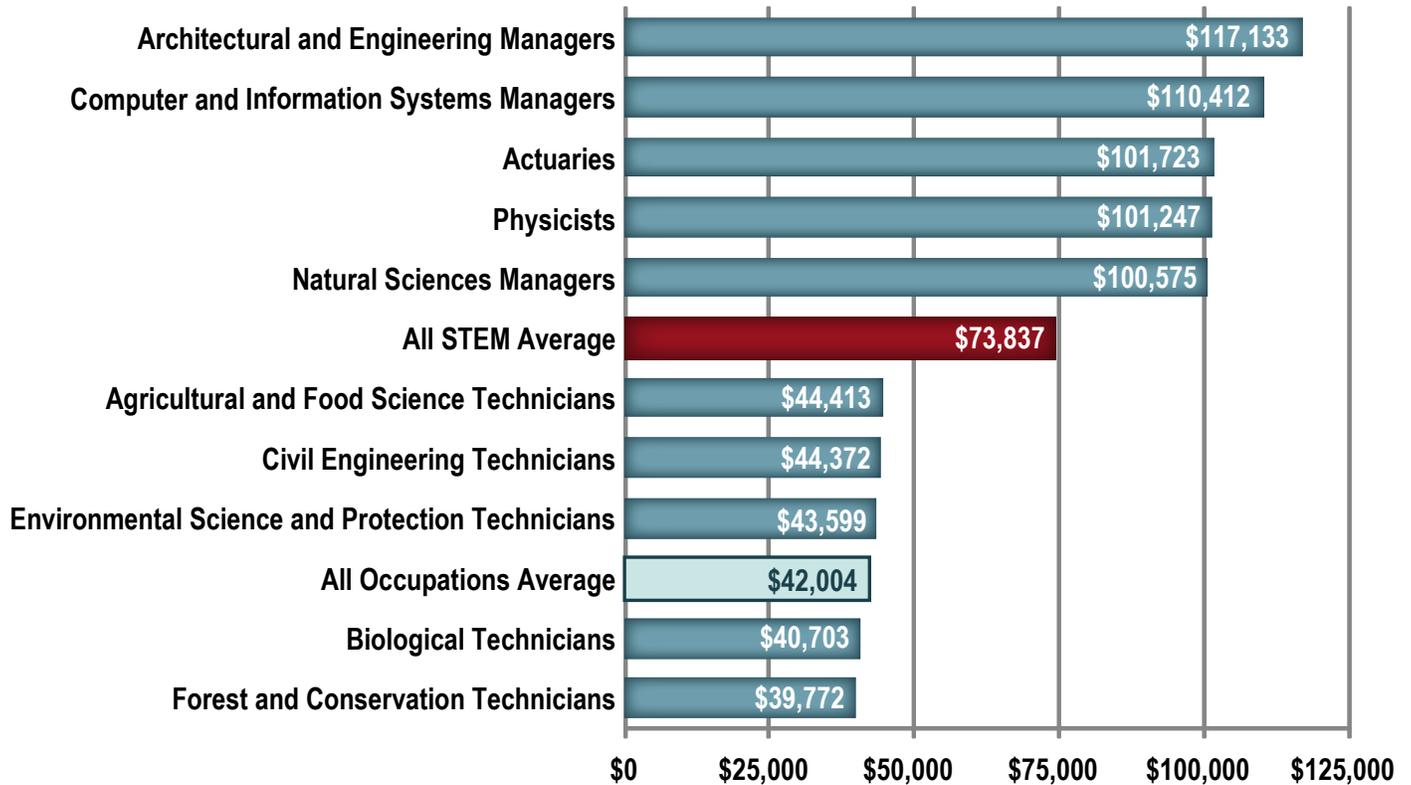
STEM occupations can not only be found in industries throughout the state, but they are also some of the highest paying jobs in the state as well. As a group, STEM occupations earn seventy five percent more than the Missouri average.

Like with other occupational classifications, those STEM occupations requiring a higher level of education usually pay more than those that do not. In fact, all of the top ten highest paid STEM occupations require at least a bachelor's degree level of education, and two of the top ten occupations require a Doctoral or professional degree.

STEM Occupations Earn More than Average in Missouri

Of the more than one hundred STEM occupations in Missouri, only three have a mean wage below the state average.

STEM Highest and Lowest Average Wages

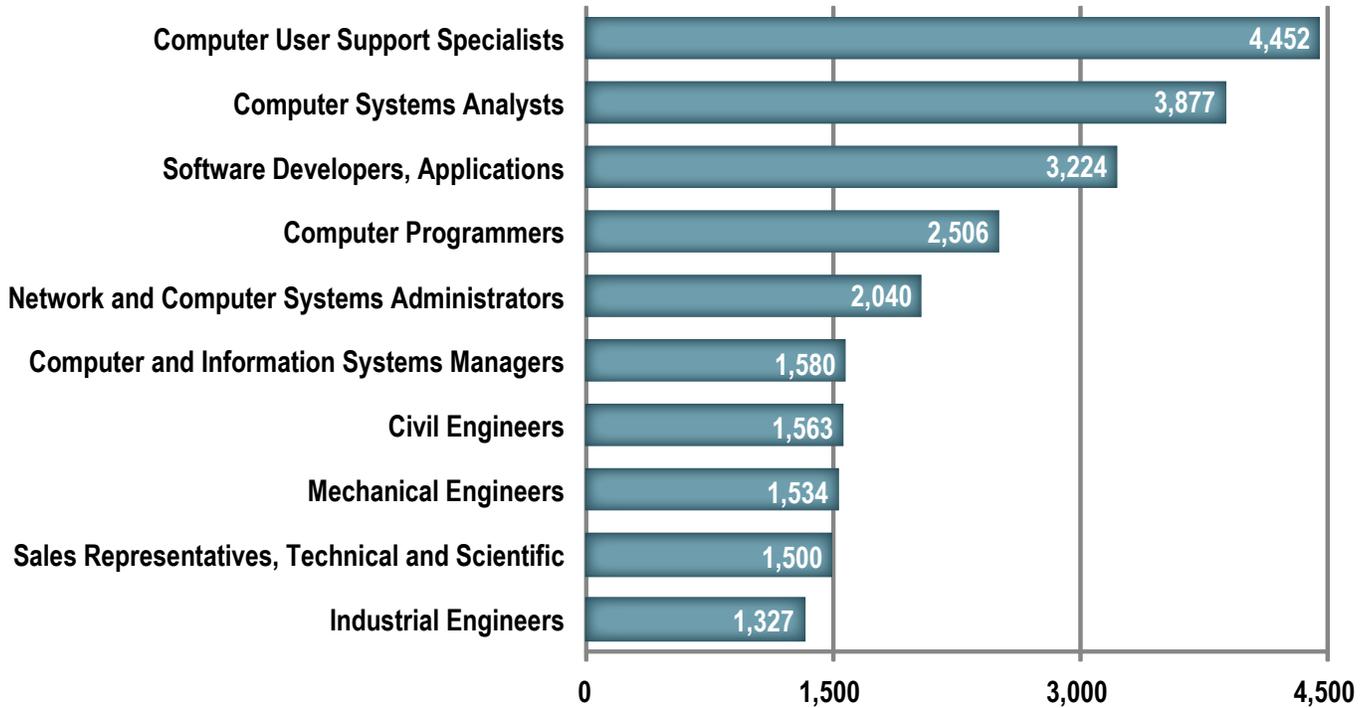


With higher than average wages, and a broad industrial appeal, STEM occupations are a strong part of Missouri's economy. Not only do STEM occupations provide good jobs now, but STEM occupations are also projected to be a valuable part of Missouri's employment future.

In 2012, STEM occupations accounted for 5.2% of Missouri's total workforce, but these same occupations are projected to comprise 6.2% of the statewide 2012-2022 growth. Missouri's projected growth rate for all STEM occupations from 2012 to 2022 is 10.2%. Compare this to the overall projected growth rate for the state of 8.6%, and it's clear that STEM occupations are an important part of the state's economic growth.

Jobs in technology will be at the forefront of this increasing demand for STEM occupations. As computers and other forms of technology become more and more prevalent in our everyday personal and work lives, the demand for those who can create and maintain these new advances will only be on the rise. Although all areas of STEM are projected to see increasing demand over the projected period, six of the top ten occupations with the greatest number of projected openings come from the field of technology.

Top STEM Openings 2012-2022



STEM Occupations in High Demand

As innovations create new demands in the workplace, those with an education and training in the areas of Science, Technology, Engineering and Math will be in high demand. These skills are not only valuable within their own field of expertise, but other areas such as Healthcare and Manufacturing are also increasingly finding a need for STEM employment. With a solid foundation of employment, wages and growth, STEM occupations have established themselves as an important part of Missouri's economy, not just for today and tomorrow, but for years to come.

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Source: Bureau of Labor Statistics (BLS) and the Division of Occupational Employment Statistics (OES). Report compiled by the Missouri Economic Research and Information Center (MERIC). Product funded by the U.S. Employment and Training Administration, Workforce Information Grant



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