

STEM

Occupations in Virginia

- By 2018 the majority of STEM jobs in the U.S. will be in Computing (71%), followed by traditional Engineering (16%), Physical Sciences (7%), Life Sciences (4%) and Mathematics (2%).
- Based on 2014 wages, STEM occupations paid an average of \$85,200 compared with \$45,100 for non-STEM occupations.

Sources: US Bureau of Labor Statistics; <http://ideastations.org/science-matters/hot-shots/hot-jobs/what-are-hot-stem-jobs-virginia>

Virginia ranks 5th in the U.S. for number of projected STEM jobs-

404,000
by 2018



Science

Atmospheric Scientist; Biochemist; Chemist; Conservation Scientist; Geneticist; Hydrologist; Life Scientist; Microbiologist; Physicist



Technology

Business Intelligence Developer; Cyber Security Analyst; Computer Game Designer; Network Administrator; User Interface Developer



Engineering

Aerospace Engineer; Architectural Engineer; Chemical Engineer; Electrical Engineer; Industrial Engineer; Nanosystems Engineers; Robotics Engineer



Mathematics

Biostatistician; Cartographer; Economist; Mathematician; Statistician; Survey Researcher; Transportation Planner

Top 5 High Growth STEM Occupations in Virginia to 2024

by Major Occupational Group

Architecture and Engineering (Total Projected Job Growth - 3,210)

Occupation	2024 Projected Job Growth	2015 Annual Median Wage	Minimum Education
Civil Engineers	751	\$82,072	Bachelor's degree
Mechanical Engineers	578	\$83,590	Bachelor's degree
Electrical Engineers	382	\$93,648	Bachelor's degree
Environmental Engineers	317	\$87,845	Bachelor's degree
Electrical and Electronic Engineering Technicians	197	\$64,948	Associates degree

Computer and Mathematical (Total Projected Job Growth - 34,925)

Occupation	2024 Projected Job Growth	2015 Annual Median Wage	Minimum Education
Software Developers, Applications	8,019	\$104,990	Bachelor's degree
Computer Systems Analysts	7,090	\$85,800	Bachelor's degree
Software Developers, Systems Software	5,393	\$100,690	Bachelor's degree
Computer User Support Specialists	3,339	\$53,494	Post Secondary
Network and Computer Systems Administrators	2,770	\$91,355	Post Secondary Certificate

Healthcare Practitioners and Technical (Total Projected Job Growth - 37,296)

Occupation	2024 Projected Job Growth	2015 Annual Median Wage	Minimum Education
Registered Nurses	8,949	\$64,562	Associates degree
Licensed Practical and Licensed Vocational Nurses	4,546	\$40,823	Post Secondary Certificate
Physical Therapists	1,768	\$85,522	Doctoral/Professional degree
Physicians and Surgeons, All Other	1,548	\$92,806 (entry level)	Doctoral/Professional degree
Nurse Practitioners	1,523	\$95,707	Master's degree

Life, Physical, and Social Science (Total Projected Job Growth - 3,261)

Occupation	2024 Projected Job Growth	2015 Annual Median Wage	Minimum Education
Clinical, Counseling, and School Psychologists	770	\$69,828	Doctoral/Professional degree
Environmental Scientists and Specialists, Including Health	320	\$71,319	Bachelor's degree
Medical Scientists, Except Epidemiologists	295	\$86,272	Doctoral/Professional degree
Biological Technicians	253	\$40,671	Bachelor's degree
Forensic Science Technicians	229	\$66,277	Bachelor's degree

High Growth STEM-Related Occupations in Virginia to 2024

by Major Occupational Group

Management (Total Projected Job Growth -14,640)

Occupation	2024 Projected Job Growth	2015 Annual Median Wage	Minimum Education
Computer and Information Systems Managers	2,892	\$155,396	Bachelor's degree
Medical and Health Services Managers	1,260	\$97,812	Bachelor's degree
Architectural and Engineering Managers	205	\$143,883	Bachelor's degree
Natural Sciences Managers	37	\$129,167	Bachelor's degree

Education, Training, and Library (Total Projected Job Growth - 29,856)

Occupation	2024 Projected Job Growth	2015 Annual Median Wage	Minimum Education
Health Specialties Teachers, Postsecondary	1,272	\$64,613	Master's/Doctoral degree
Mathematical Science Teachers, Postsecondary	452	\$51,283	Master's/Doctoral degree
Nursing Instructors and Teachers, Postsecondary	446	\$61,509	Master's/Doctoral degree
Biological Science Teachers, Postsecondary	344	\$60,748	Master's/Doctoral degree
Psychology Teachers, Postsecondary	238	\$69,199	Master's/Doctoral degree

Sources: Virginia Employment Commission, Occupational Employment Projections, 2014-2024;
Virginia Employment Commission, Occupational Employment Statistics (OES) Survey;
O*NET™ - The Occupational Information Network. O*NET is a registered trademark of the US Department of Labor/
Employment and Training Administration.

For More Information on STEM Occupations:

- **Article** - <https://www.bls.gov/spotlight/2017/science-technology-engineering-and-mathematics-stem-occupations-past-present-and-future/home.htm>
- **Article** - <http://ideastations.org/science-matters/hot-shots/hot-jobs/what-are-hot-stem-jobs-virginia>
- **Data** - <https://www.bls.gov/oes/2015/may/stem.htm>
- **Data** - <https://data.virginialmi.com> (Labor Market Data/Occupations)