# STEM EDUCATION

Learn more about **free STEM education resources offered by the Federal agencies**, including: STEM learning tools, activities, and opportunities for students; resources for formal and informal STEM educators, including lesson plans, professional development opportunities, and teacher recognition awards; and grant funding opportunities!



## National Aeronautics and Space Administration (NASA)

Browse NASA's STEM engagement opportunities for students, educators, and families at **stem.nasa.gov**. To stay up-todate on the latest NASA STEM engagement opportunities, join NASA's EXPRESS newsletter at **nasa.gov/learning-resources/express.** 



# National Institutes of Health (NIH)

NIH is the nation's medical research agency, supporting scientific studies that turn discovery into health. Browse K-12 student and teacher resources created by NIH's institutes and centers and its grantees. Topics range from the brain and mental health, scientific tools and methods, molecules and cells, and much more at **science.education.nih.gov/**.



#### National Institute of Standards and Technology (NIST)

Science and technology standards keep us safe, enable technology to advance, and help businesses succeed. Visit **nist.gov/education** to enrich your educational experiences through standards and measurement, and learn more about the educational opportunities NIST provides for students, teachers, and lifelong learners.



### National Oceanic and Atmospheric Administration (NOAA)

NOAA's reach spans from the surface of the sun to the depths of the ocean floor, studying weather, climate, ocean, coasts, and Great Lakes. Explore hundreds of educational resources, as well as student opportunities, educator professional development, grant funding, and more at noaa.gov/education.



## National Science Foundation (NSF)

NSF's Directorate for STEM Education (EDU) aims to develop a diverse and well-prepared U.S. STEM workforce and STEM-literate public by supporting excellent research and development in STEM education. Scan the QR code to find NSF classroom resources (nsf.gov/news/classroom/index.jsp), and learn more about EDU's programs at beta.nsf.gov/edu.



### Smithsonian Science Education Center (SSEC)

The Smithsonian Science Education Center has developed free STEM resources for formal and informal learning experiences for both students and educators (https://s.si.edu/SmithsonianNSTA), including community research guides, professional development, events, activities and games.



### United States Patent and Trademark Office (USPTO)

The USPTO's education initiatives are vital to connecting STEM and innovation. Learn how to bring invention education to impact at www.uspto.gov/education. Using the QR code or from the education homepage, visit EquIP HQ, a new online education hub developed by the USPTO to build intellectual property awareness and broaden participation in the innovation ecosystem.













This document was developed by the Federal STEM Education Communications Community of Practice, a community formed under the National Science and Technology Council's Committee on STEM Education (CoSTEM).



#### **USDA Forest Service**

Forest Service Conservation Education provides a variety of STEM resources that allow individuals to explore environmental issues, engage in problem solving, and take action to improve the environment through hands-on, interactive learning opportunities. Find out more at www.fs.usda.gov/conservationeducation.



#### USDA National Institute of Food and Agriculture (NIFA)

NIFA supports research, education and Extension efforts in a wide range of scientific fields related to agricultural and behavioral sciences. Learn more about grant funding opportunities and other ways NIFA supports STEM education, and sign-up for the NIFA Update newsletter, at **nifa.usda.gov**.



### U.S. Department of Defense (DOD)

DoD STEM education experts have developed many resources for STEM-focused projects that include detailed lesson plans, video tutorials, online-learning activities, and much more. Search DOD's STEM resources at **dodstem.us/participate/resources/**.



#### U.S. Department of Education (ED)

Learn more about grant funding opportunities and other ways the U.S. Department of Education supports STEM education at **ed.gov/stem**, and sign-up for the Department's STEM newsletter at **ed.gov/subscriptions**.



#### U.S. Department of Energy (DOE)

The Department of Energy is building pathways for a diverse workforce to pursue science, technology, engineering, and mathematics (STEM) careers that will solve some of the most complex challenges of our time. Learn more about DOE's work and browse DOE's STEM opportunities and resources at **www.energy.gov/doe-stem**.



#### U.S. Department of Labor (DOL)

DOL's workforce development programs such as Registered Apprenticeships train individuals for STEM occupations in fields such as IT (including Cybersecurity), Advanced Manufacturing, Engineering and Healthcare. For more information visit **apprenticeship.gov**. DOL also funds many training programs for middle- to high-skilled occupations that include STEM occupations found at **dol.gov/agencies/eta/skills-training-grants**.



#### U.S. Department of Veterans Affairs (VA)

VA provides additional GI Bill benefits toward qualifying STEM degrees through the Edith Nourse Rogers STEM Scholarship Program www.va.gov/education/other-va-education-benefits/stem-scholarship/, and tuition and housing assistance to help Veterans advance an IT career through Veteran Employment through Technology education Courses www.va.gov/education/about-gi-bill-benefits/how-to-use-benefits/vettec-high-tech-program/.



### U.S. Environmental Protection Agency (EPA)

The U.S. EPA protects human health and the environment. Learn more about EPA's resources for STEAM and environmental education at www.epa.gov/education, and a curated list for educators with whom we engage at conferences: www.epa.gov/research/epa-conferences-and-meetings-stem-and-environmental-educators.





## U.S. Geological Survey (USGS)

USGS provides science about natural hazards, natural resources, the health of our ecosystems and environment, and the impacts of climate and land-use change. Learn more about USGS's student opportunities and teaching resources at www.usgs.gov/yes.









