Our Commitment to STEM Education
Northrop Grumman is a leading global security company providing innovative systems, products and solutions that range from undersea to outer space and into cyberspace. To continue to innovate, it is important for us to support programming that encourages students globally to pursue STEM careers.

“We are dedicated to inspiring young people to explore STEM fields. And, we are committed to supporting teachers, especially those in middle school, by providing tools and resources for the classroom. Making engineering and technology interesting and applicable for students – especially young girls and people of color – is critical to the future of our nation and our planet.”

Kathy Warden, President and Chief Executive Officer, Northrop Grumman
Northrop Grumman and the Northrop Grumman Foundation are committed to expanding and enhancing the pipeline of diverse and talented science, technology, engineering and mathematics (STEM) students globally. The Northrop Grumman Corporate Citizenship team works to leverage charitable contributions, mentoring opportunities, internships and programs that connect our employees to students and teachers to help achieve these goals.

Our education strategy focuses on engineering- and technology-based programs and initiatives that excite, engage, and educate a diverse group of students and provides professional engineering-development resources for teachers. By successfully executing in these areas, we contribute to the following outcomes:

- Relevant STEM educational experiences for students and teachers
- Increase in students’ understanding of how classroom learning connects to STEM careers
- Global gender parity in STEM careers
- A robust and diverse pipeline for tomorrow’s workforce

Engineering autonomous vehicles, exploring space, defending cyber networks and examining environmental issues are just a few examples of the skills students and teachers develop as they experience the excitement of STEM through programs we support.
Robotics Education & Competition Foundation (REC)—VEX Robotics
VEX robotics gives students the opportunity to develop a passion for robotics in a fun, hands-on way. In addition, VEX encourages teamwork, problem solving, and leadership. The Northrop Grumman Foundation is the presenting sponsor of the Annual VEX Robotics World Championships, which includes teams from all over the world.

U.S. Space and Rocket Center®—Space Camp®
Space Camp® helps inspire a greater appreciation and love of science. Throughout our history supporting this program, we’ve provided scholarships to send approximately 650 students and 300 teachers from the United States, the United Kingdom, Australia and Japan, to Space Camp. In addition, we support Space Camp for Interested Visually Impaired Students, which inspires and excites students with disabilities.
**Global Cyber Education Programs**

CyberPatriot, the Air Force Association’s National Youth Cyber Education Program, is designed to excite, educate and inspire the next generation of cyber professionals and it offers cyber education to students in grades Pre-K through 12. The National Youth Cyber Defense Competition, offered to middle and high school students, exceeds national averages for attracting student diversity and encouraging students to pursue STEM careers. Through partnerships, we support similar programs globally such as CyberCenturion in the United Kingdom, CyberArabia in Saudi Arabia and CyberTaipan in Australia.

**Into the Unknown**

The Northrop Grumman Foundation, in conjunction with filmmaker Nathaniel Kahn, and the Space Telescope Science Institute, produced the documentary Into the Unknown. Designed as a resource for teachers and students, the film provides an in-depth look at one of the most daring scientific missions ever attempted: the building of NASA’s James Webb Space Telescope.
EarthEcho International—EarthEcho Expeditions

Led by explorer and environmental advocate Philippe Cousteau, Jr., this program provides professional development for teachers to learn new ways to excite and educate students about real-world science. Each year, up to 25 middle school teacher participants examine local and global environmental concerns and learn how technology and engineering is used to help address these issues.

Northrop Grumman Foundation Teachers Academy

Designed specifically for middle school teachers, the Northrop Grumman Foundation Teachers Academy builds teacher confidence and classroom excellence in science, engineering and technology, and helps teachers to understand the skills needed for a scientifically literate workforce. Northrop Grumman engineers and technologists are integral to the design and implementation of the program and provide industry perspectives to teachers. In turn, the teachers receive a yearlong immersion in a host of science, technology and engineering learning opportunities.
United Nations Sustainable Development Goal (UNSDG) #4

Ensure inclusive and quality education for all and promote lifelong learning

In alignment with the UNSDG #4, our goal is to provide workforce-relevant professional development programming to middle school educators to increase their math and science knowledge and their confidence and competence in teaching STEM subjects. Our goal* is to help increase math and science proficiency in 350,000 students by 2030.

*Our goal is based on an average of 81 teachers per year, who stay in the field for 3 years after program involvement, and have an average of 100 students per year.
Employee Volunteerism

Employees are a key component of our company’s Corporate Citizenship initiatives. Volunteers engage in a number of ways including board service, school visits, mentoring, hosting on-site facility tours and supporting events such as Engineers Week and Manufacturing Day.

Our employee resource groups comprise many active volunteers with a passion for STEM outreach to diverse populations. This includes supporting programming with partner organizations such as Great Minds in STEM’s Viva Technology and the National Society of Black Engineers’ Summer Engineering Experience for Kids (SEEK).

High School Involvement Partnership

Our High School Involvement Partnership program pairs high school students with employees to provide mentoring, business-environment exposure and hands-on experience in real-world STEM applications.
Partners in Education
Northrop Grumman provides volunteer, financial and educational resources to help meet local schools’ education needs in communities where we work and live.
Aid to Higher Education

Northrop Grumman provides grants to educational institutions to support curriculum, projects and programs that enhance education and drive the advancement of research and technology.

Our goal is to increase awareness of STEM fields by investing in opportunities that encourage and nurture student interest in STEM as they advance and complete their education, leading to rewarding careers.

We believe it is critical to maximize the participation of girls, people of color, and all exceptional students globally and expose these students to STEM career opportunities. To that end, our initiatives include support to those attending Historically Black Colleges and Universities as well as Hispanic Serving Institutions, among many others.
**Diversity Organizations**
Northrop Grumman supports national and regional diversity organizations. The mission of these groups is to educate, motivate and enable students to pursue STEM careers.

Our partners include:
- American Indian Science and Engineering Society (AISES)
- Great Minds in STEM
- National Society of Black Engineers (NSBE)
- Society of Hispanic Professional Engineers (SHPE)
- Society of Women Engineers (SWE)

Our membership assists these organizations in expanding the engineering and business pipelines through pre-college outreach, assistance to undergraduate and graduate students in excelling academically, and support for future leaders.

**University Relations and Recruiting**
The Northrop Grumman University Relations and Recruiting organization, in partnership with Corporate Citizenship, establishes strategic relationships that help Northrop Grumman to be an employer of choice, and attract and capture top talent.