

DEPARTMENT OF DEFENSE
SCIENCE, TECHNOLOGY, ENGINEERING, MATHEMATICS

DoD STEM



Department of Defense
DoDSTEM
Science · Technology · Engineering · Mathematics

DoD STEM Vision

A diverse and sustainable STEM talent pool ready to serve our Nation and extend the DoD's competitive edge

DoD STEM Mission

Inspire, cultivate, and develop exceptional STEM talent through a continuum of opportunities to enrich our current and future DoD workforce poised to tackle evolving defense technological challenges.



What encompasses DoD STEM?

DoD STEM is inclusive of Departmentwide efforts that aim to **inspire, cultivate, and develop a diverse and exceptional STEM talent** through a continuum of meaningful STEM learning opportunities across the Pre-K-Postdoc continuum.

The National Defense Education Program (NDEP) is one of the largest STEM efforts in the Department.

DoD STEM reaches about **944K students** & **31K educators** annually



Who Engages with DoD STEM

The Department of Defense has long supported STEM education and outreach activities throughout the nation.



Army Educational Outreach Program (AEOP)



Naval STEM



Air & Space STEM Outreach



Wright-Patterson Air Force Base STEM Outreach (WPAFB)



Defense Civilian Personnel Advisory Service (DCPAS)



Defense Threat Reduction Agency (DTRA)



Department of Defense Education Activity (DoDEA)



Department of Defense STARBASE



Manpower and Reserve Affairs (M&RA)



Manufacturing Technology (ManTech)



Missile Defense Agency (MDA)



National Security Agency (NSA)



National Geospatial-Intelligence Agency (NGA)



Test Resource Management Center (TRMC)

National Defense Education Program (NDEP)

NDEP is part of the broader Department-wide effort under DoD STEM, which works collectively with partners from academia, industry, not-for-profit organizations, and leverages DoD components, defense laboratory enterprise and other government entities to:



Build strong foundations in STEM literacy



Increase diversity, equity, and inclusion in STEM



Prepare the STEM workforce of the future

NDEP programs include:

SMART

SCIENCE, MATHEMATICS,
AND RESEARCH FOR
TRANSFORMATION

PART OF THE NATIONAL
DEFENSE EDUCATION PROGRAM

SMART
Scholarship-for-
Service Program

DSEC | DEFENSE STEM
EDUCATION
CONSORTIUM

Pre K-16 STEM
Education &
Outreach; Defense
STEM Education
Consortium
(DSEC)



NDEP grants
(intramural and
extramural)

SMART

SCIENCE, MATHEMATICS,
AND RESEARCH FOR
TRANSFORMATION

PART OF THE NATIONAL
DEFENSE EDUCATION PROGRAM

SMART Program Overview

- SMART funds scholarships across 24 STEM disciplines critical to national security and serves as a workforce development program for the DoD
 - Increases the flow of new, highly skilled technical labor into the DoD
 - Enhances the technical skills of the current civilian workforce
- Awards can be made to students pursuing a BS, MS, or PhD in a STEM discipline
- Scholars serve a 1-for-1 Civilian employment commitment at a DoD lab or facility upon graduation

Participate in DoD STEM



[dodstem.us/
participate/
opportunities](https://dodstem.us/participate/opportunities)

A screenshot of the DoD STEM website interface. The top navigation bar includes the DoDSTEM logo and a menu with 'PARTICIPATE' circled in green. Below the navigation, the page title is 'DoD STEM Opportunities' with a sub-header 'Build robots, solve real world problems, and work at the cutting edge of technology.' A descriptive paragraph follows: 'DoD STEM has opportunities for students of all ages, educators, and professionals. Check out these STEM programs, internships, scholarships, and more!' The main content area is divided into a search and filter sidebar on the left and a map of the United States on the right. The map shows the number of opportunities in each state, with a legend indicating '# = Number of opportunities in each state'. The sidebar includes a search bar, filters for STATE, APPLICATION PERIOD, and AUDIENCE (with 'Early-career professionals' selected).



NDSEG overview

Established in 1989 by the direction of Congress, under the direction of Office of Secretary of Defense (OSD), the Air Force Research Laboratory (AFRL)/United States Space Force (USSF), Army Research Office (ARO), and Office of Naval Research (ONR) award three-year fellowships to US citizens receiving doctorates in research discipline areas of DoD relevance at US institutions.

- **NDSEG Program:**

- Maintains U.S. leadership in S&T relevant to the DoD
- Builds the DoD and DIB S&E future pipeline
- Champions grad student ideas in “high risk, high reward” research
- Develops & sustains partnerships with top US scientific labs

- **Three-Year Fellowship provides:**

- Full tuition/fees, \$3,600 monthly stipends, up to \$1,600 health insurance
- \$5,000 professional development travel and up to \$1,500 non travel budgets
- NDSEG Fellows conference
- DoD mentor to familiarize fellows with DoD S&T ecosystem
- No service commitment required

Over 4,700 fellowships have been awarded from over 70,000 applications



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