

# YOUR FUTURE IS AMERICA'S FUTURE



U.S. ARMY

## Army Educational Outreach Program

**W**elcome to the Army Educational Outreach Program (AEOP). The United States Army has long recognized that a scientifically and technologically literate citizenry is our nation's best hope for a secure, rewarding and successful future. For over 50 years, the Army has supported a wide range of educational opportunities in science, technology, engineering and mathematics (STEM) for our youth and their teachers.

Our nation's economy has greatly benefited from the technological achievements of the last century and is destined for greater achievements throughout the 21<sup>st</sup> century. STEM will continue to play a dominant role in all aspects of everyday life in the 21<sup>st</sup> century. For this reason, the Army has created the AEOP, which greatly expands and integrates an array of Army educational opportunities for the future generations of America's workforce and their teachers.

The AEOP is comprised of Army-sponsored research, education, competitions, internships and practical experiences designed to engage and guide students as well as teachers in STEM. From elementary school through graduate school, students of all proficiency levels, interests, ethnic, economic and academic backgrounds are encouraged to participate in real world experiences involving these important disciplines. Programs involve interactive activities, inquiry based learning and knowledgeable mentors to introduce students to these areas. Scientist, technology experts, engineers and mathematicians, who act as mentors and guides, introduce students to various levels of research and engineering and provide advice for technical skill development and career opportunities.

In AEOP, students can choose from a wide range of educational challenges such as the Junior Solar Sprint or Junior Science & Humanities Symposium. For those who prefer web-based challenges, eCYBERMISSION is a science, technology, and mathematics competition with significant monetary awards for small teams of students who are interested in challenges that are relevant and linked to their community while the Bridge Design Contest allows students to build their engineering skills through inquiry based learning and competition. Teachers and student can explore unique hands-on laboratory experiences by participating in Army internships such as Gains in Education of Mathematics & Science, Science & Engineering Apprentice Program, High School Apprentice Program, Research & Engineering Apprentice Program or Unite. AEOP programs are also available for college, undergraduate and graduate students that include extensive scholarship opportunities.

The Army invites parents, students and teachers in communities across America to become familiar with AEOP. Taking advantage of its numerous educational opportunities available in STEM will ensure that America will continue to maintain its technological leadership in a globally competitive world. For additional information, applications and deadlines, visit [www.usaeop.com](http://www.usaeop.com).

**Detailed descriptions on the AEOPs can be found on the back of this page.**

[WWW.USAEOP.COM](http://WWW.USAEOP.COM)

## Army Educational Outreach Program

### Kindergarten - Middle School Programs

- **Mobile Discovery Center**  
Housed in 18-wheelers, the mobile centers travel across the country, presenting programs designed to show young people that studying science and math is fun as well as essential to their future.
- **Junior Solar Sprint (JSS)**  
A design engineering challenge where 4<sup>th</sup>-8<sup>th</sup> grade students design, build, and race model solar electric cars. Students gain skills in teamwork and problem solving and get hands-on engineering experience by using principals of science and math to get the fastest, most interesting, and best crafted vehicle possible.
- **eCYBERMISSION**  
Web-based science, mathematics and technology competition for student's 6<sup>th</sup> to 9<sup>th</sup> grade that promotes self-discovery and helps students recognize real-life applications of science, math and technology. Teams propose solutions to real problems in their communities and compete for regional and national awards.

### High School Programs

- **Gains in the Education of Mathematics & Science (GEMS)**  
6<sup>th</sup> to 12<sup>th</sup> graders participate in an internship for 1 to 4 weeks in an Army laboratory and learn technical skills. Advanced courses in subsequent years build upon prior experience.
- **UNITE**  
Promotes majors and careers in engineering and technology by providing high school students with the opportunity to participate in a college-structured academic enrichment program during the summer.
- **Science & Engineering Apprentice Program (SEAP)**  
A work/study program for high school students looking at possible careers in science and engineering. Offers hands-on experience and mentoring in Army research and development activities in an Army laboratory.
- **Research & Engineering Apprentice Program (REAP)**  
High school juniors/seniors participate in a hands-on summer research experience and mentoring in university laboratories.

- **High School Apprenticeship Program (HSAP)**  
High school juniors/seniors conduct research with Army-funded principal investigators as mentors in university laboratories.
- **Army Awards Program (AAP)**  
Army special awards are given to high school students at regional, state, and International Science and Engineering Fairs (Intel-ISEF).
- **Junior Science & Humanities Symposium (JSHS)**  
Annual high school competition that develops students' oral presentation skills and emphasizes the ethical conduct of original research, by providing students opportunities to present original research and compete for scholarships.
- **West Point Bridge Design Contest**  
Provides middle school and high school students with a realistic, engaging introduction to engineering by having them design a bridge.

### College & Career Development Programs

- **College Qualified Leaders (CQL)**  
Paid internships for undergraduates seeking experience in Army research.
- **Science, Mathematics and Research for Transformation Defense Scholarship for Service Program (SMART)**  
Scholarships for undergraduate, masters, and doctoral students who have interest in Science, Technology, Engineering, and Mathematics (STEM) fields.
- **Undergraduate Research Apprenticeship Program (URAP)**  
Undergraduate college students conduct research with Army-funded principal investigators in university laboratories.
- **National Defense Science and Engineering Graduate Fellowship (NDSEG)**  
A highly competitive, portable fellowship that is awarded to U.S. citizens and nationals who intend to pursue a doctoral degree in one of 15 supported disciplines. NDSEG confers high honors upon its recipients, and allows them to attend whichever U.S. institution they choose.

For additional information, applications and deadlines, visit

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