## ATE PROGRAM Advanced Technological Education



The National Science Foundation's Advanced Technological Education (ATE) program focuses on the education of highly-qualified science and engineering technicians for advanced technology fields that drive our nation's economy. It promotes the improvement of STEM education of science and engineering technicians at the undergraduate and secondary school levels, and in the workforce.

Because two-year public community and technical colleges provide most of the technician education in the US, two-year college educators have leadership roles in ATE initiatives. It is expected that projects will be faculty-driven and that courses and programs will be credit-bearing, although materials developed may also be used to educate incumbent technicians.

The partnerships that ATE grantees build with industry, business, government agencies, and between secondary schools, two-year, and four-year institutions are integral to the program's outcomes.

From 1993 to 2018 NSF has invested \$1.11 billion in the ATE program, funding 1,294 projects and 61 centers.

To learn more about the ATE program and read the ATE grant proposal solicitation, please visit http://nsf.gov/ate



ATE covers a wide range of fields, from agriculture to advanced manufacturing to cybersecurity and beyond. During its twenty-five-year history there have been ATE projects in every state of the US. The map at left showcases projects and centers funded by the program in 2018.

For an interactive version of this map, please visit **http://atecentral.net/map** 



**ATE projects** focus on a wide array of state- and region-wide initiatives to test and develop innovative approaches to particular technician education challenges.

ATE projects that focus on *Program Development and Improvement, Curriculum and Educational Materials Development, Professional Development for Educators, Leadership Capacity Building for Faculty, Teacher Preparation, Business and Entrepreneurial Skills Development for Students,* or *ATE Coordination Networks* may receive funding up to **\$600,000** for up to **3 years**.

ATE projects for *Instrumentation Acquisition* may receive up to **\$500,000** for **2-3 years** to support existing programs which, in partnership with industry, have identified new instrumentation needs and look to make curricular modifications related to the changing technical workplace.

ATE projects that support *Adaptation and Implementation* may receive up to **\$400,000** for **2-3 years**.

Small Grants for Institutions New to ATE may receive up to **\$300,000** for up to **3 years**.

*Targeted Research in Technician Education* may receive up to **\$150,000** for up to **2 years**, and up to **\$800,000** for up to **3 years**.

ATE Centers that lead nationwide initiatives to improve technician education in a particular field or technology may receive up to **\$7.5 million** for **5 years**, with the potential for one renewal.

ATE Resource Centers that continue important work started by ATE Centers may receive up to **\$1.65 million** for **3 years**, with the potential for one renewal.

To learn more about the ATE program and read the ATE grant proposal solicitation, visit NSF's Advanced Technological Education program pages at **http://nsf.gov/ate** 

ATE grant proposals are due in early October—here are the dates for the next three years:October 15, 2018October 3, 2019October 1, 2020

To learn more about the grantee community and to explore materials developed by ATE projects and centers, please visit **http://atecentral.net** 



The *ATE Impacts 2018-2019* book offers a more in-depth overview of the innovative work done by the ATE community. An electronic (PDF) version is available at **http://ateimpacts.net/book** 

Or free print copies can be requested at http://ateimpacts.net/contact

For more information about ATE student successes, program improvements, and other outcomes please read the ATE Impacts blog at http://ateimpacts.net

Data supplied by NSF, EvaluATE, and ATE Central. Publication prepared by the Internet Scout Research Group with support from the National Science Foundation under grant DUE-1723674 (ATE Collaborative Outreach and Engagement Project). Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the principal investigator, co-principal investigators, or editor, and do not necessarily reflect the views of the National Science Foundation.

In 2017, ATE grantees: Educated 99,900 students

Engaged in 9,700 collaborations

Developed 1,980 curriculum materials

Offered 1,560 professional development opportunities

Source: ATE Annual Survey 2018 http://www.evalu-ate.org/annual\_survey

