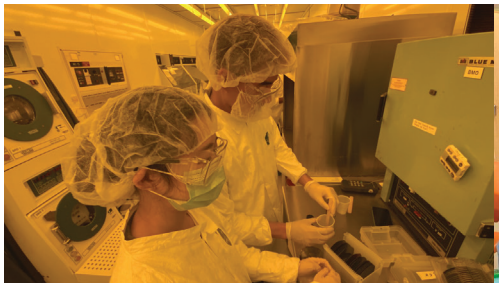
NATIONAL SCIENCE FOUNDATION (NSF) ADVANCED TECHNOLOGICAL EDUCATION PROGRAM

Building the skilled technical workforce that powers innovation, strengthens industries, and advances our nation—30+ years of industry-engaged technician education.



A LEGACY OF IMPACT

The ATE program has partnered with industry and community and technical colleges across the nation to develop the skilled technical workforce needed for high-demand, high-technology industries. By supporting innovative education and workforce development programs, ATE equips students for rewarding, high-paying careers across a broad range of technology and technical fields, including rapidly emerging areas.

Inspire	Educate	Engage	Employ	Impact
Introduce learners & educators to high-tech careers early	**Deliver high-quality industry-aligned education**	**Connect learning with real-world experience**	**Launch skilled technicians into in-demand careers**	**Strengthen industries, communities, and the nation**
• Career exploration • K-12 engagement • Professional development	• Certificates • Industry validated certificates • Associate degrees	• Internships • Apprenticeships • Upskilling	• High-wage jobs • Career advancement • Work-based Learning	• Economic growth • Innovation • National security

ATE creates pathways from education to employment — fueling the workforce that drives U.S. innovation, competitiveness, resilience, and security.

POWERING AMERICA'S STRATEGIC TECHNOLOGIES

- Semiconductors & Microelectronics
- Artificial Intelligence & Data Systems
- Advanced Manufacturing
- Cybersecurity
- Agriculture
- Energy & Natural Resources
- Biotechnology & Bioproduction
- Quantum & Emerging Technologies
- Defense & National Security
- Automotive & Welding

Data reflects NSF ATE reporting and ATE Central.

INVESTING TODAY, STRENGTHENING TOMORROW.

LOCAL IMPACT, NATIONAL REACH.

National Science Foundation's Advanced Technological Education program empowers community and technical colleges, industry, educators, and students to meet the nation's most critical workforce needs.

1,905
PROJECTS & CENTERS FUNDED

$1.7 BILLION
GRANTED SINCE 1994

ALL 50
STATES & US TERRITORIES IMPACTED

1,000+
COMMUNITY & TECHNICAL COLLEGES ENGAGED

20,000+
COMMUNITY COLLEGE STUDENTS PLACED INTO TECHNICIAN JOBS

70,000+
EDUCATIONAL MATERIALS DEVELOPED

MILLIONS
OF LEARNERS IMPACTED

PROVEN STRATEGIES, POWERFUL NETWORKS.

NSF ATE investments are strategically structured to meet the nation's evolving workforce needs through a coordinated portfolio of Projects, Consortia, and Centers.

PROJECTS
Local Impact, Real Results.

Provide targeted support that strengthens local programs, expands opportunities, and improves outcomes for learners and employers.

- Address local workforce needs
- Improve teaching, learning, and equipment
- Deliver immediate, practical impact in communities

TARGETED SUPPORT FOR LOCAL SUCCESS

CONSORTIA
Regional Strength, Shared Solutions.

Bring together institutions and partners to address regional or sector-specific needs and drive innovation in technician education.

- Focus on regional or technology-specific priorities
- Leverage collective expertise and resources
- Scale solutions that meet industry and community needs

FOCUS ON REGIONAL OR SPECIFIC TECHNOLOGY NEEDS

CENTERS
National Leadership, Broad impact.

Lead collaborative networks that support the work of multiple federal agencies to advance the nation's workforce priorities.

- Address national challenges across key technology areas
- Develop and disseminate cutting-edge curriculum and resources
- Build capacity and partnerships across the country

ADDRESS NATIONAL WORKFORE NEEDS

ONE NATION, UNITED PRIORITIES.

ATE connects community colleges with federal programs, industry, and education partners to leverage investments, expand opportunities, and strengthen America's technical workforce.

CROSS-AGENCY COLLABORATION

DOE | DOW | DOC | DOL | NSA | NSF | NIST | NASA

Together, federal agencies, community colleges, and industry partners can build the skilled technician workforce that drives innovation, strengthens the economy, and keeps America competitive.

ATE CENTRAL
ADVANCED TECHNOLOGICAL EDUCATION

ATE is a national investment in people, partnerships, and the future of America.

Learn more about the NSF ATE Program and access resources at ATEcentral.net

Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.