The National Science Foundation’s Advanced Technological Education (ATE) program improves the education of technicians who work in advanced technology industries that are important to the nation’s economy and security. Most often, these technicians are prepared for their jobs through associate degree programs in community colleges and related technology programs in secondary schools.

ATE grants support a variety of activities to strengthen science, technology, engineering, and mathematics (STEM) education for undergraduates and secondary school students in technical programs. These include developing and testing innovative materials, courses, curricula, and teaching methods; building the knowledge and skills of college faculty and secondary school teachers to teach in rapidly evolving areas of technology; analyzing the educational needs of the workforce in different technical fields; and designing educational programs and pathways for students to meet those needs.

ATE proposals are accepted in three major tracks: centers, projects, and targeted research in technician education.

**Centers:**
- **National centers** lead nationwide, industry-specific reforms.
- **Regional centers** focus on a particular industry within a specific geographic area.
- **Support centers** provide products and services that assist a range of ATE educators in one or more areas of technology.

**Projects** focus more narrowly on an activity such as curriculum development, program improvement, or faculty development.

**Targeted research** focuses on understanding aspects of technician education and the technician workforce, so that ATE centers and projects can more effectively address the needs of industry and students.

For more information about the ATE program, visit [nsf.gov/ate](http://nsf.gov/ate) | For more information about ATE projects & centers, visit [atecentral.net](http://atecentral.net)
ATE centers and projects incubate innovative STEM technician education programs.

They test new ways of teaching about established and emerging technologies at their host colleges and partner institutions. The results of these structured studies are instructional modules, new courses, and entire certificate and degree programs.

In tandem with producing resources that improve students’ learning, many ATE centers and projects offer professional development for faculty. Through these programs, community college instructors and secondary school teachers learn about new technologies and teaching techniques, which enable them to educate their students to meet an array of current workforce needs in industry.