

U Teach Expansion Program

Preparing Excellent STEM Teachers

A workforce skilled in science, technology, engineering and math is critical to United States innovation, economic prosperity and national security. **Experts estimate that our country will need 100,000 more math and science teachers to ensure that today's students are prepared to thrive in the 21st century and to solve our toughest challenges.**

To address this need, the National Math and Science Initiative partnered with the UTeach Institute at The University of Texas at Austin to expand the innovative UTeach STEM teacher preparation program to universities across the country. The program enables undergraduate students majoring in STEM fields to earn teaching certification without adding cost or time to their degrees.



Results + Impact

U Teach Graduates Increase Student Learning

An independent research study of six Texas UTeach programs found that UTeach teachers are more effective at increasing student learning in secondary math and science than non-UTeach teachers, as measured by their ability to raise student test scores.

UTeach Austin graduates boosted student learning by an equivalent of four to six months of additional classroom education:



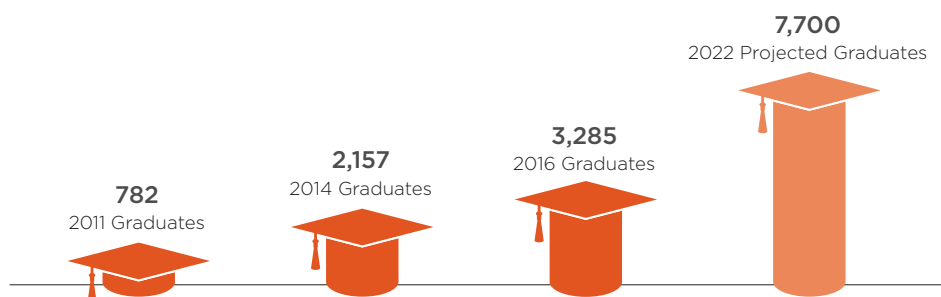
Additional learning
in **MATH**



Additional learning
in **SCIENCE**

Building the STEM Teacher Pipeline

The UTeach Institute projects that more than 7,000 graduates will be produced by 2022 and that these teachers will reach more than 4 million students.



Elements of Success

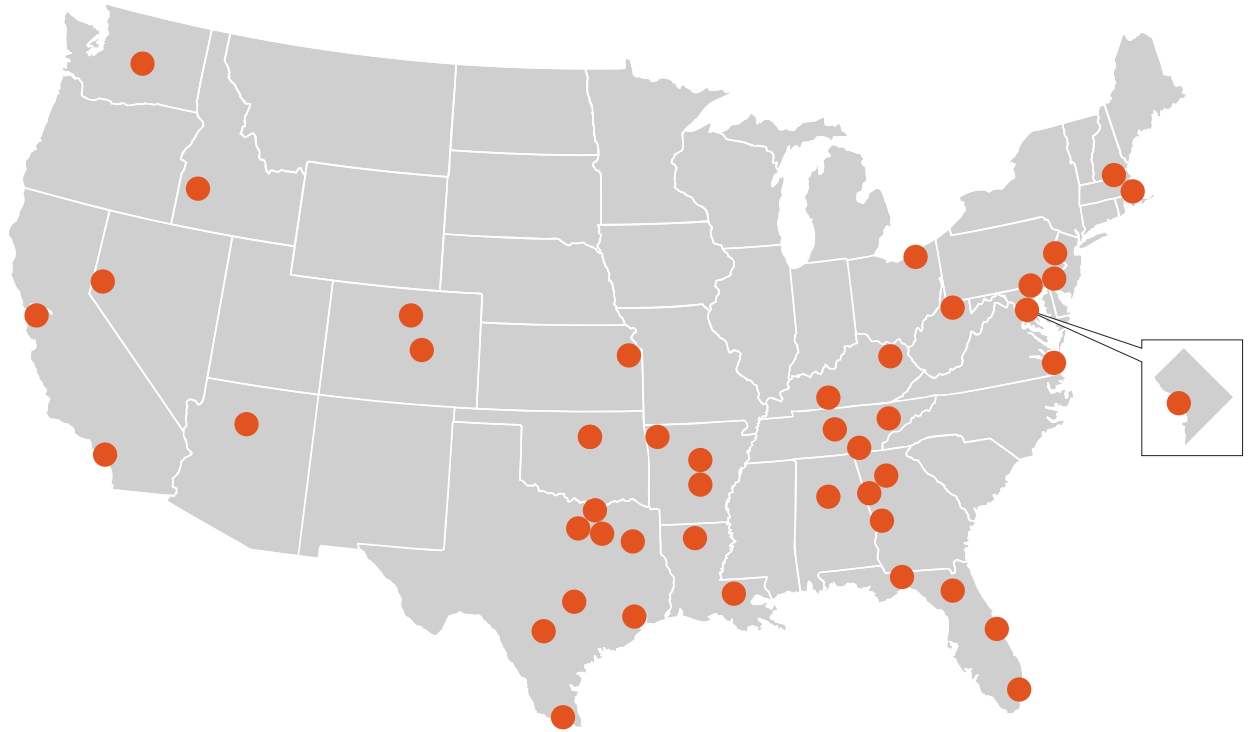
The UTeach model is a unique collaborative partnership between colleges of science and education that equips teachers with deep content knowledge in their STEM discipline and pedagogical strategies to promote student mastery of core concepts and principles.

The program's key elements include:

- A compact and flexible degree program that allows students to graduate in four years with both a STEM degree and teaching certification.
- Research-based strategies focused on building connections between STEM content and educational theory and practice.
- Early and intensive teaching experience beginning in UTeach students' first semester.
- Comprehensive induction support, including participation in NMSI's nationally recognized Laying the Foundation Program, to help graduates transition to their teaching positions.
- Ongoing mentoring and guidance from highly experienced master teachers.

National UTeach Network

Since 2007, UTeach has expanded to 44 universities across 22 states and the District of Columbia.



Boise State University
 Central Washington University
 Cleveland State University
 Columbus State University
 Drexel University
 Florida Institute of Technology
 Florida International University
 Florida State University
 George Washington University
 Louisiana State University
 Louisiana Tech University
 Middle Tennessee State University
 Morehead State University
 Northern Arizona University

Oklahoma State University
 Old Dominion University
 Temple University
 Towson University
 The University of Alabama at Birmingham
 University of Arkansas, Fayetteville
 University of California, Berkeley
 University of California, Irvine
 University of Central Arkansas
 University of Colorado, Boulder
 University of Colorado, Colorado Springs
 University of Florida
 University of Houston
 University of Kansas
 University of Maryland, College Park

University of Massachusetts, Boston
 University of Massachusetts, Lowell
 University of Nevada, Reno
 University of North Texas
 The University of Tennessee, Chattanooga
 The University of Tennessee, Knoxville
 The University of Texas at Arlington
 The University of Texas at Austin
 The University of Texas at Dallas
 The University of Texas Rio Grande Valley
 The University of Texas at San Antonio
 The University of Texas at Tyler
 University of West Georgia
 Western Kentucky University
 West Virginia University

*Backes, B., Goldhaber, D., Cade, W., Sullivan, K., and Dodson, M. (2016) *Can UTeach? Assessing the relative effectiveness of STEM teachers* (CALDER Working Paper No. 173). Retrieved from <http://www.caldercenter.org/publications/can-uteach-assessing-relative-effectiveness-stem-teachers>