

UTEACH: ACCESS TO HIGH-QUALITY STEM EDUCATION STARTS WITH HIGH-QUALITY STEM TEACHERS

UTeach is the unique secondary teacher preparation program for STEM majors that answers the critical need for qualified STEM teachers in Texas and across the nation. UTeach allows students to graduate from the College of Natural Sciences with a degree in their major and a secondary STEM teaching certification with no added time or cost. UTeach teachers are both experts in their chosen field and in STEM pedagogy. With a program scalable for universities across the nation, UTeach is producing a growing number of teachers to educate tomorrow's scientists and engineers who, in turn, will play a vital role in America's economic growth.

Having a teacher with a bachelor's degree in the relevant field of study is a predictor of student achievement in K-12 mathematics and science. However, about 20% of students in mathematics and more than 60% of students in chemistry and physics have teachers with no expertise in those fields. UTeach helps solve this problem by graduating high-quality and deeply committed teachers with demonstrated improved student outcomes.

UTeach Austin

The UTeach program at The University of Texas at Austin places STEM majors in local Austin classrooms starting in their first semester, where they work with mentor teachers to develop and teach lessons. This early field experience and sustained guidance and support from faculty in the College of Natural Sciences and College of Education, as well as from Master Teachers who have taught STEM subjects in local schools, help UTeach students make informed decisions about their futures as teachers.



“When I arrived at UT, I was a biology pre-med student, but towards the end of my second year, I realized that it wasn't my passion. I made the decision to switch my major to math and undertake a minor in UTeach, and I must say that it was the best decision I could've possibly made.”

Ariel Hazeur
UTeach Austin student

UTeach Austin's Impact

1,245 Number of total graduates as of spring 2021

272 Number of students enrolled

129 Number of internships at 35 schools and STEM-focused nonprofit organizations

85% Number of graduates going into teaching

79% Number of graduates teaching 5+ years

24% Graduates from underrepresented populations in STEM

59% Graduates teaching in schools with majority economically disadvantaged population



"I hope in the future to get my master's degree in Educational Policy and Leadership and pursue a doctorate degree. My hope is to be able to lead and teach students the way I have been taught in the UTeach program, by incorporating empathy and ethics into my math classroom for all students."

Juliet Goodfellow, Math Teacher
Manor New Technology High School,
Manor, Texas

Other UTeach Austin Initiatives

In addition to UTeach Austin's core programs, we have continued to expand and pilot new initiatives with innovative practices in STEM teaching and learning that increase the number and diversity of teachers entering the workforce.

UTeach Maker is a micro-credentialing program that supports passionate UTeach students interested in bringing innovative practices and skills into their STEM classroom.

UTeach Computer Science Pathway prepares non-CS majors for certification in Computer Science in addition to their primary STEM certification.

Race, Science, Ethics, and Justice in the Classroom is a UTeach course that explores the intersectionality of race, ethics, and justice in science and mathematics classrooms.

UTeach Accelerate prepares candidates for secondary STEM teaching in as little as one year of coursework, followed by student teaching experience. Accelerate is for degree holders, students soon to graduate, and professionals seeking a second career.

UTeach Access is an initiative to increase the number and diversity of students entering STEM teaching. UTeach Access will be piloted in the fall of 2022 and is designed to increase and diversify the STEM teaching pipeline by partnering with Austin Community College to create an equitable pathway for students in two-year institutions to become secondary STEM teachers.

UTeach Outreach is a service-learning course open to all UT Austin students. They learn to present engaging lessons that inspire students in grades 2 through 8 to explore important technology, mathematics, or science principles.

UT PREP Summer STEM Pathway Summer Camps are a series of rigorous, five-week academic enrichment courses focusing on mathematics, research, engineering, physics, and computer science. They are designed to take place over four consecutive summers for students beginning in grades 6 or 7 and leading to advanced high school coursework in STEM subjects, college, and STEM careers.

Virtual STEM Academy camps were originally designed during early 2020 to help with remote teaching and learning over the summer. They have since become an option for our partner universities to conduct remote camps designed to supplement traditional, in-school STEM curriculum.



“The thing I am most passionate about when it comes to teaching is changing the way minorities are regarded in public education and creating equity. As a minority in a leadership position, I hope I can encourage my students to pursue careers in STEM or STEM education.”

Trey Fisher, Math Teacher
Mendez Middle School
Austin, Texas

UTeach Institute

The UTeach Institute provides implementation support to universities across the nation that are establishing successful, sustainable UTeach programs. We provide all instructional and program resources, guide new programs through program planning, and offer intensive support for operational and instructional implementation.

We are undertaking the **HBCUTEach** initiative with UNCF and the National Math and Science Initiative to establish UTeach programs at 10 Historically Black Colleges and Universities (HBCUs). Once the programs are in place, they will produce 200+ new Black STEM teachers each year.

- 49** Universities in 23 states and the District of Columbia implementing UTeach programs

- 11** UTeach programs in Texas

- 6,870** Graduates nationwide as of spring 2021

- 88%** National graduates enter teaching

- 87%** National graduates teach for at least 4 years

- 23%** Graduates identified as underrepresented minorities

- 68%** National graduates teach in K–12 schools with a majority economically disadvantaged population



Other UTeach Institute Initiatives

In addition to the UTeach Institute's program expansion work, we are developing more pathways to STEM teacher certification and professional development for in-service teachers.

UTeach Community College Pathways is designed to transform and expand certification pathways for future STEM teachers by creating pathways between community colleges and universities in Texas. This new approach to STEM teacher preparation will improve student access to high-quality math and computer science programs—especially in under-resourced middle and high schools.

UTeach Professional Development offers high-quality, research-based learning experiences for K–12 teachers facilitated by expert educators.

UTeach Computer Science offers College Board–endorsed curriculum and professional development for AP CS Principles and AP CS A.



“Bringing the UTeach program to the University of Alabama Birmingham has transformed STEM teacher preparation in an amazing way! Enrollment has soared, and excitement about UABTeach has spread across the campus.”

Dr. Lee Meadows, Executive Director, Alabama STEM Council, launched the UABTeach program in 2014