

CalTeach/MAST can help you prepare for your career as a K-12 STEM teacher!

Most teaching credential programs require preparation prior to post-graduate work. Careful planning as an undergraduate will satisfy these requirements:

- Choose courses that satisfy the requirements for your UC Davis General Education degree AND a credential program. Most credential prerequisites can be met using required General Education courses.
- Investigate your interest in teaching with experience in K-12 and UC Davis classrooms.
- Consider adding a minor in Education.

What students say about CalTeach/MAST:

- “Through the CalTeach/MAST program, I experienced the creative, inquisitive, and joyous nature of mathematics.”
– Jana Heath, B.S. Alumna, Mathematics, 2016
- “CalTeach/MAST paired me with amazing, passionate teachers in science who reaffirmed my goal of being a teacher.”
– Amy Wang, B.S. Alumna, Biology, 2017
- “I have CalTeach/MAST to thank for all the success I’ve had at UC Davis and getting me to where I am today. Through their nurturing and support, I was able to pursue my dream of being a high school chemistry teacher.”
– Theresa Huang, B.S. Alumna, Chemistry, 2018;
UC Davis credential student, 2018/19 cohort



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CALTEACH/MAST
Mathematics and Science Teaching Program

CalTeach/MAST is a program for UC Davis students interested in exploring a career in math or science education. Our courses include an exploration of effective teaching practices and methods and include an active internship in local K-12 and UC Davis classrooms.



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Fern fractal leaf pattern
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UCDAVIS
CALTEACH/MAST
Mathematics and Science Teaching Program

California needs math and science teachers!

Prepare to become a K-12 STEM teacher!

mast.ucdavis.edu



Why go into K-12 STEM teaching?

To lead, inspire, and innovate!



Mathematics and science teachers are in high demand due to a severe national shortage of qualified teachers within these fields.

Good teachers are desperately needed and opportunities for rewarding careers are abundant nationwide. The UC Davis CalTech/Mathematics and Science Teaching Program (CalTech/MAST) helps students explore mathematics and science teaching careers while working toward their undergraduate degree.

Could you be the teacher

who inspires the next generation of math and science students?

Part of the statewide University of California Science and Mathematics Initiative, CalTech/MAST is designed to address the critical need for quality mathematics and science teachers. Our goals are to:

- Increase the number, quality and diversity of mathematics and science teachers,
- Increase opportunities for under-represented and first-generation students,
- Maintain outreach to community colleges and recruit qualified students to the CalTech/MAST program at UC Davis

The CalTech/MAST program offers:

- Advising support for academic success,
- Individualized academic and pre-professional mentoring,
- Information about multiple pathways towards a teaching credential,
- Seminars that explore effective mathematics and science teaching practices while interning in local K-12 and college classrooms,
- Opportunities to meet and network with other students considering careers in math or science teaching,
- Information about scholarships and financial aid for prospective teachers.

Is a career in STEM teaching right for you?

CalTech/MAST can help you decide!



K-12 Classroom Teaching Experience

CalTech/MAST offers several seminar/internship courses that will introduce you to teaching methods and practices in classrooms. These courses will give you the opportunity to acquire required internship hours to enter a teaching credential program at either a UC campus or a California State University campus.

Internship course components:

- Seminar-style lecture taught by a math/science education master teacher.
- Internship under the guidance of a mentor teacher in a local K-12 or UC Davis classroom.

UC DAVIS

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CalTech/MAST courses:

GEL/EDU 081. The CalTech/MAST I seminar is designed for college freshmen and sophomores and focuses on how individual students learn science and math in elementary classrooms.

GEL/EDU 181. The CalTech/MAST II seminar is aimed primarily at college sophomores and juniors. Participants identify the learning needs of middle school students and create lesson plans to meet those needs.

GEL/EDU 183. The CalTech/MAST III seminar for college juniors and seniors concentrates on teaching STEM topics in a high school classroom. This seminar focuses on how to best meet the educational and social needs of students.

GEL 186. Learning Assistant course. Advanced seminar course for continuing CalTech/MAST students. Please contact mast@ucdavis.edu for more information.

Gel 185 A & B is designed for undergraduate non-STEM majors who are considering obtaining a multiple subject credential. This course focuses on teaching science in K-6 classrooms following the Next Generation Science Standards.

