

# UC DAVIS

## CALTEACH/MAST

### Mathematics and Science Teaching Program

California needs math and science teachers!

Prepare to become a K-12 STEM teacher!

[mast.ucdavis.edu](http://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 CalTeach/Mathematics and Science Teaching Program (CalTeach/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, CalTeach/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 CalTeach/MAST program at UC Davis.

The CalTeach/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?  
*CalTeach/MAST can help you decide!*



**K-12 Classroom Teaching Experience**

CalTeach/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.



**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 degree AND a credential program. Most credential prerequisites can be met using required UC Davis 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 investigating 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  
courtesy [www.freeimages.co.uk](http://www.freeimages.co.uk)

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**CalTeach/MAST courses:**

**GEL/EDU 081.** The CalTeach/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 CalTeach/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 CalTeach/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 CalTeach/MAST students. Please contact [mast@ucdavis.edu](mailto: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.

