

# Mathematics, M.S.

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Graduate courses are designed to meet the needs of students doing graduate work in mathematics and in those disciplines that require graduate-level mathematics for their study. Among the fields covered are analysis, algebra, applied and computational mathematics, mathematical biology, geometry and topology, probability, ordinary and partial differential equations, and mathematical logic.

To earn the Master of Science degree, the student must satisfy course and residency requirements, and achieve two passes at the M.S. level among three exams in Real Analysis, Complex Analysis, and Algebra prior to the beginning of the second year.

## Requirements

The total number of required courses for the M.S. is 12, completed with satisfactory performance, that is, with a grade of B or better. Students are required to complete at least one series of the following courses:

MATH 210A- 210B- 210C	Real Analysis and Real Analysis and Real Analysis
or	
MATH 220A- 220B- 220C	Analytic Function Theory and Analytic Function Theory and Analytic Function Theory
or	
MATH 230A- 230B- 230C	Algebra and Algebra and Algebra

At most one undergraduate course may count as an elective course, provided it is sponsored by rank faculty and approved by the Graduate Advisor. At most one elective course (at least three units) is allowed outside the Department.

To satisfy exam requirements, students may take the Comprehensive Exam (offered in the spring of every year) or the Qualifying Exams (offered before the start of each fall quarter) in Real Analysis, Complex Analysis, Algebra and Applied Mathematics. Students may not attempt to pass an exam in any particular area more than three times. Some students may require additional background before entering MATH 210. This will be determined by assessment prior to the start of the students' first year by the Vice Chair of Graduate Studies, upon consultation with the Graduate Studies Committee. Such students will be directed into MATH 205 during their first year. They may pass the Comprehensive Exam in Analysis in lieu of achieving an M.S. pass in one of Qualifying Exams that must be obtained prior to the start of their second year.

Students who fail to pass the required examinations satisfactorily within the period specified will be recommended for academic disqualification by the Graduate Dean.

MATH 199, MATH 297, MATH 298, and MATH 299 may not be used to fulfill course requirements.

The residency requirement ordinarily is satisfied by full-time enrollment for three quarters immediately preceding the award of the M.S. When appropriate, a leave of absence may be granted between matriculation and the final quarters of study.

If the candidate is not advanced before the beginning of the quarter in which all requirements are completed, the degree will not be conferred until the end of the following quarter. Deadlines for submission of the Application for Advancement to Candidacy are published on the Graduate Division website (<https://www.grad.uci.edu/academics/advancement-to-candidacy.php>) under filing fees and deadlines.

## Advancement to M.S. Candidacy

All Master's students must be advanced to candidacy for the degree prior to the beginning of their final quarter of enrollment. An application for Advancement to Candidacy must be completed by the student and submitted for approval to the Department. The approved application must be submitted to the Graduate Division by the deadline published on the Graduate Division website (<http://www.grad.uci.edu/>). Advancement to M.S. Candidacy must occur one quarter prior to the degree conferral quarter.

Filing fee information can be located on the Graduate Division website (<http://www.grad.uci.edu/>).

## Master of Science in Mathematics with a Teaching Credential

In cooperation with the UCI School of Education, the Department of Mathematics sponsors a coordinated program for the M.S. degree in Mathematics and the California Single Subject Teaching Credential. The requirements for this option are the same as the Master of Science in Mathematics requirements listed above.

The student will complete the requirements for the Master's degree with the Mathematics Department (generally a two-year commitment) and then will petition with the UCI School of Education to take the School of Education's credential courses (generally a one-year commitment). The student must

meet the requirements of the School of Education for the CBEST, CSET, TB test, and Certificate of Clearance. Prospective graduate students interested in this program should so indicate on their applications. A detailed description of the program can be requested from the School of Education.