

# Degree Requirements, Computational Science, Engineering, and Mathematics

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Graduate handbook information is updated and maintained by each program. Graduate handbooks are available within each program's office and online at <https://utexas.box.com/v/UTAustinGraduateHandbooks>. Please contact the program with concerns or questions.

Each student develops a program of study that includes a substantial component in each of three areas of concentration: applicable mathematics, numerical analysis and scientific computation, and mathematical modeling for applications in a science or engineering discipline. The program must be reviewed and approved by the Graduate Studies Committee. Lists of courses in the three concentrations are available from the graduate advisor.

## Master of Science in Computational Science, Engineering, and Mathematics

This program requires completion of 30 semester hours of approved coursework, including a thesis; 33 semester hours of approved coursework, including a report; or 36 hours of approved coursework. At least 24 hours must be chosen from courses in the three concentration areas, with at least six hours from each area. These 24 hours of approved coursework must be taken on the letter-grade basis.

## Integrated Program with Computer Science (BSCS/MSCSEM):

Admission to the integrated Bachelor of Science in Computer Science and Master of Science in Computational Science, Engineering, and Mathematics (BSCS/MSCSEM) program is open only to undergraduate students within the Department of Computer Science at The University of Texas at Austin. It results in the simultaneous awarding of a BSCS degree and an MSCSEM degree. The integrated program requires completion of a total of 150 credit hours which is eight hours fewer than is required to complete the BSCS and MSCSEM degree programs individually. For the MSCSEM program of work, students in the integrated program must complete 30 semester hours of approved coursework, including a three hour master's report. At least 24 hours must be chosen from courses in the three concentration areas (applicable mathematics, numerical analysis/computational science, and mathematical modeling/applications), with at least six hours from each area.

## Doctor of Philosophy

Before admission to candidacy for the degree, each student develops a program of study that draws courses from each of the three areas of concentration; the program must be approved by the Graduate Studies Subcommittee. The student must also pass an examination in each area. In addition to meeting the area requirements, the student must prepare a written dissertation proposal. Oral presentation of the proposal and an oral examination are required.

A dissertation is required of every candidate, followed by a final oral examination covering the dissertation and the general field of the dissertation.