Degree Requirements, Computational Science, Engineering, and Mathematics

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 Bachelor of Science in Computational Engineering/Master of Science in Computational Science, Engineering, and Math Program:

The integrated degree program leads to sequential awarding of a Bachelor of Science in Computational Engineering (BSCompE) degree followed by a Master of Science in Computational Science, Engineering, and Math (MSCSEM) degree. The Integrated BSCompE/MSCSEM program is designed to prepare students to become leaders in Computational Science, Engineering, and Math in academia and in industry. The program requires completion of a total of 152 credit hours: 122 SCH for the BSCompE degree and 30 SCH for the MSCSEM degree. Students can complete the integrated program in five academic years of full-time study.

Information regarding the integrated program requirements and policies may be obtained from the Computational Science, Engineering and Math Academic Advising Office in POB 4.102.

Integrated Bachelor of Science in Computer Science/Master of Science in Computational Science, Engineering, and Math Program:

Admission to the integrated Bachelor of Science in Computer Science and Master of Science in Computational Science, Engineering, and Mathematics (BSCompSci/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 BSCompSci 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 BSCompSci 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.