COMPUTER SCIENCE AND ENGINEERING (MS)

UConn's M.S. in Computer Science and Engineering offers two pathways: a thesis track (Plan A) for intensive research training and a coursework track (Plan B) for advanced professional preparation. Across both tracks, graduates strengthen their ability to design and analyze complex computing systems, evaluate tradeoffs, and implement effective solutions—preparing them for research-focused roles, technical leadership in industry or academia, or further doctoral study.

Location

- Storrs Campus

Modality

- In Person

Requirements

The M.S. program in Computer Science and Engineering is offered in two varieties: Plan A, requiring a master's thesis, and Plan B, based entirely on coursework. Each of these programs requires a total of 30 credits, with the thesis counting for nine credits in the Plan A program. Thus the Plan A program allows a student to combine individual study with general coursework. We strongly encourage the Plan A degree for students aspiring to pursue doctoral studies.

M.S. Plan A Requirements

At least 21 credits of graduate level courses, excluding thesis research credits, reflecting a GPA of at least 3.0; at least nine credits of CSE graduate courses other than CSE 5097 Seminar and CSE 5099 Independent Study in Computer Science and Engineering; at most six credits, in total, of CSE 5097 Seminar and CSE 5099 Independent Study in Computer Science and Engineering; at most three credits of CSE 5097 Seminar; successful completion, with a grade of B- or better, of CSE 5050 Algorithms and Complexity or CSE 5500 Algorithms; at least nine credits of GRAD 5950 Master's Thesis Research; an oral presentation of a thesis research proposal; completion of a master's thesis and oral presentation of thesis work.

M.S. Plan B Requirements

At least 30 credits of graduate level courses; at least 18 credits of CSE graduate courses other than CSE 5097 Seminar or CSE 5099 Independent Study in Computer Science and Engineering; at most six credits, in total, of CSE 5097 Seminar or CSE 5099 Independent Study in Computer Science and Engineering; at most three credits of CSE 5097 Seminar; successful completion, with a grade of B- or better, of CSE 5050 Algorithms and Complexity or CSE 5500 Algorithms.

Learning Objectives

1. Knowledge: Demonstrate appropriate breadth and depth of disciplinary knowledge and comprehension of the major topics, theories, and issues of the discipline, including demonstration of specialized knowledge of a sub-field sufficient to carry out substantive independent research.
2. Research/applied skills: Use, disaggregate, reformulate and/or adapt principal ideas, techniques or methods of the discipline.
3. Communication: Communicate proficiently and effectively to a specialist and non-specialist audience, verbally and in writing, a coherent argument or explanation summarizing aspects of the discipline.
4. Ethics/Professional behavior: Conduct themselves in accordance with the highest ethical and responsible standards, values, and, where these are defined, the best practices of the discipline.