COMPUTER SCIENCE M.S.

All students must meet the Requirements for the Master's Degree (http://catalogue.uvm.edu/graduate/dreerequirements/requirementsforthethemastersdegree/)

OVERVIEW

The M.S. program in Computer Science offers thesis, project, and course work only options. Acceptance into thesis or project options is conditional upon the student finding an eligible advisor who agrees to supervise the thesis or project. Please see the Department of Computer Science website for current research interests of the department's faculty.

SPECIFIC REQUIREMENTS

Requirements for Admission to Graduate Studies for the Degree of Master of Science

A bachelor's degree in computer science or a related discipline, and satisfactory scores on the Graduate Record Examination general (aptitude) section are required for admission. Students should also demonstrate that they have taken the following courses or have equivalent knowledge:

- 2 courses that treat systematic program development in a high-level language, for example:
  - CS 021 QR: Computer Programming I 3
  - CS 110 QR: Intermediate Programming 4

- 1 course in computer system organization, for example:
  - CS 121 QR: Computer Organization 3

- 1 course in data structures, for example:
  - CS 124 QR: Data Struc & Algorithms 3

- 1 course in computability and complexity, for example:
  - CS 125 QR: Computability& Complexity 3

- 2 courses in differential and integral calculus, for example:
  - MATH 021 QR: Calculus I 4
  - MATH 022 QR: Calculus II 4

- 1 course in linear algebra:
  - MATH 122 QR: Applied Linear Algebra 3

- Coursework in probability and statistics, for example:
  - STAT 143 QR: Statistics for Engineering 3
  - STAT 151 QR: Applied Probability 3

Applicants who have strong academic records but lack 1 or more of these prerequisites may be accepted provisionally. Provisionally accepted students will be required to complete an approved program of remedial work within their first year of study.

Applicants whose native language is not English or whose formal education has been conducted in a language other than English must have a Test of English as a Second Language (TOEFL) score of 90 (Internet-based test) or above or an International English Language Testing System (IELTS) score of 6.5 or above. To be considered for financial assistance from the university, applicants must have an iBT TOEFL score of 100 or an IELTS score of 7.0 or above.

Minimum Degree Requirements

Option A (Thesis)

- 30 credits, including a minimum of 21 credits of approved course work, and a minimum of 6 credits of thesis research (CS 391) 30

Option B (Project)

- 30 credits, including a minimum of 24 credits of approved course work, and a minimum of 3 credits of project research (CS 392) 30

Option C (Non-Thesis)

- 30 credits of approved course work 30

All Options

Students in all options must take, or have completed the equivalent of, CS 224 Algorithm Design & Analysis (students who took CS 224 at UVM for undergraduate credit with a grade of B+ or higher may substitute this core course with an appropriate alternative course) and 3 other core Computer Science Courses, to be determined in consultation with and approval of the student's graduate advisor and the CS graduate coordinator, depending on a student's background and interests.

Pass comprehensive exams covering material from the 4 approved core courses.

Fulfill the credit requirement with approved graduate-level course work in computer science or related areas. (Only courses with grades of B- or above are counted towards course work requirements and students with 2 grades below B are eligible for dismissal.)

Comprehensive Examination

Receiving a grade of A- or better in all courses constitutes successfully completing the comprehensive examination in that area.

Students who receive a grade of B+ or lower in any of their courses, or students who took CS 224 at UVM (whether for undergraduate or graduate credit) and received a grade of B+ or lower, must pass an oral comprehensive exam in that area. In this event, the Graduate Coordinator will form an exam committee for the oral exam(s). Each student who needs to take 1 or more comprehensive oral exam(s) should arrange a single date for all required oral exam(s) with the examiner(s) and then inform the Graduate Coordinator of the exam date. It is strongly recommended that the examination is completed...
during the academic year, unless all examiners voluntarily agree to give the exam on a date during the break.

Requirements for Advancement to Candidacy for the Degree of Master of Science
Passing of the comprehensive examination.