## COMPUTER SCIENCE M.S.

All students must meet the Requirements for the Master's Degree

### **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 is required for admission. Students should also demonstrate that they have taken the following courses or have equivalent knowledge:

Requirement Description		Credits
2 courses that treat systematic program development in a high-level language, for example:		
CS 1210	Computer Programming I	3
CS 2100	Intermediate Programming	4
1 course in computer system organization, for example:		
CS 2210	Computer Organization	3
1 course in data structures, for example:		
CS 2240	Data Struc & Algorithms	3
1 course in computa		
CS 2250	Computability& Complexity	3
2 courses in differential and integral calculus, for example:		
MATH 1234	Calculus I	4
MATH 1248	Calculus II	4
1 course in linear algebra:		
MATH 2522	Applied Linear Algebra	3
Coursework in probability and statistics, for example:		
STAT 2430	Statistics for Engineering	3
STAT 2510	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 assistantship from the university, applicants must have an iBT TOEFL score of 100 or an IELTS score of 7.0 or above.

#### **Minimum Degree Requirements**

Requirement Description	Credits
Option A (Thesis)	
30 credits, including a minimum of 21 credits of approved course work, at least 6 of which must be at the 6000-level, and a minimum of 6 credits of thesis research (CS 6391)	30
Option B (Project)	
30 credits, including a minimum of 24 credits of approved course work, at least 6 of which must be at the 6000-level, and a minimum of 3 credits of project research (CS 6392)	30
Option C (Non-Thesis)	
30 credits of approved course work, at least 6 of which must be at the 6000-level	30
All Options	
Students in all options must take 4 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**

For the course-based Master's, receiving a grade of A- or better in all courses constitutes successfully completing the comprehensive examination. Students who receive a grade of B+ or lower in any of their courses must pass a written and/or oral comprehensive exam.

Thesis or project students must demonstrate mastery of the material by one of three possible routes: an oral exam, a paper, or a code portfolio. The exact format will be decided upon by the Student's Studies Committee (their Project/Thesis advisor and the CS Graduate Program Director) in consultation with the student. For Thesis students, the written Thesis and oral defense can serve as the required paper or oral exam. For Project students, final project code and any associated public presentation can serve as the required code portfolio or oral exam.

# Requirements for Advancement to Candidacy for the Degree of Master of Science

Passing of the comprehensive examination.