COMPUTER SCIENCE AMP

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

OVERVIEW

The Accelerated Master's Entry Pathway (AMP) in computer science allows students with strong ability and motivation to complete a bachelor's degree at UVM and a master's degree at UVM in computer science within 5 years.

SPECIFIC REQUIREMENTS

Requirements for Admission to Graduate Studies for the Degree of Master of Science for Accelerated Master's Students

Students enrolled in any undergraduate bachelor's degree program at UVM are eligible to apply for the computer science AMP. Following formal admission by the Graduate College to the Accelerated Master's Pathway, students may count up to 6 graduate level course work credits toward both the bachelor's and master's degrees. Another 3 graduate credits can be counted towards the master's degree while an undergraduate but cannot count towards the bachelor's degree.

Although the bachelor's degree need not be in computer science, applicants must have at least a 3.2 GPA and demonstrate that they have taken the following prerequisite 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 computability and complexity, for example:		
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

Undergraduates interested in the AMP should discuss this option with the College of Engineering & Mathematical Sciences Graduate Coordinator prior to any semester in which they wish to take courses that will apply to the master's degree.

There is no GRE requirement for AMP students.

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 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 exam.