

COMPUTER SCIENCE, MS

Roosevelt's Department of Computer Science and Information Technology offers a 30 credit Master of Science in Computer Science. This program is designed for individuals who want to upgrade their knowledge in the field of computer science or for those who desire a career change.

Requirements

To earn the MS in computer science, students must complete at least 30 credit hours of course work, including five required courses, three 400-level CST electives, and two courses for thesis or project work as a capstone requirement. Courses must be chosen in consultation with an advisor.

Any courses that were taken as part of the undergraduate program may not be repeated for graduate credit. Because of the rapidly changing nature of this field of study, computing courses taken more than four years ago cannot be counted towards degree requirements unless the student has been continuously registered during the time-frame in question (excluding summers).

An overall grade point average of B (3.0) or higher must be maintained in graduate-level courses with no more than two grades of C. A graduate course can only be repeated once; no more than two courses can be repeated.

BRIDGE Courses

Students from a non-computer science major or otherwise missing the following courses can be admitted on the condition that they complete the list of bridge courses as part of their program. Students from Computer Science, Information Technology, Computer Engineering, or related majors may need up to two bridge courses. Students from other majors may need up to three bridge courses.

Students admitted with bridge course conditions must complete bridge courses with P in their first year. A bridge course can be waived by a placement test in the first semester. Bridge courses are not counted towards the masters degree.

Code	Title	Credit Hours
CST 280	INTRODUCTION TO ALGORITHMS	3
CST 354	INTRODUCTION TO PROGRAMMING	3
CST 317	OPERATING SYSTEMS	3

Requirements

Code	Title	Credit Hours
Core Courses:		
CST 408	ADVANCED ALGORITHMS	3
CST 411	INTELLIGENCE SYSTEMS	3
CST 421	DATA MINING	3
CST 457	SYSTEMS PROGRAMMING	3
CST 449	ADVANCED COMPUTER ARCHITECTURE (Advanced Computer Architecture)	3

Select three 400 level Computer Science graduate courses as electives. 9

Project/Thesis/Course Options	6
Total Credit Hours	30

A student must choose one of the following three options as part of the degree requirements.

1. **Thesis option.** A student must select a willing faculty mentor from the CS division and register for CST 485 THESIS/PROJECT RESEARCH in their second-to-last semester. During the last semester, they must register for CST 490 MASTERS THESIS.
2. **Project option.** A student must select a willing faculty mentor from the CS division and register for CST 485 THESIS/PROJECT RESEARCH in their second-to-last semester. During the last semester, they must register for CST 499 MASTERS PROJECT.
3. **Course option.** A student must select a minimum of 6 semester hours (in addition to the 9 semester hours electives already described) of 400 level Computer Science graduate courses as electives.

Note(s):

- Students must get consent to register for CST 494, CST 495, CST 485, CST 499 from a faculty member from the CS division. At the end of each of these courses, a committee consisting of minimum 3 members (where the majority of the members must be from the CS division AND at most two of the members can be from outside the division) will review the work performed and approve for successful completion of these courses.
- For students choosing the all courses option at most 9 semester hours may be counted towards the degree from among CS 494 Internship, 495 Independent Study and 480 Special Topics. Students choosing the thesis or project capstone may have at most 6 semester hours counted towards the degree from among CS 494 Internship, 495 Independent Study, and 480 Special Topics.
- A student who has chosen the thesis or a project options, but who has not yet completed it, must maintain continuous registration during fall and spring semesters until completion of the project by registering for the appropriate zero-credit course (course number followed by "Y"). Students who have not maintained continuous registration for thesis or other final projects will be required to register for all intervening fall and spring semesters prior to graduation.

Your degree map is a general guide suggesting courses to complete each term on the academic pathway to your degree. It is based on the most current scheduling information from your academic program. Your program's degree map is reviewed annually and updated as schedules change (although you retain the same course requirements as long as you are continuously enrolled in your degree program).

Year 1			
Fall	Credit Hours	Spring	Credit Hours
CST 411	3	CST 408	3
CST 421	3	CST 457	3
		CST 449	3
	6		9
Year 2			
Fall	Credit Hours	Spring	Credit Hours
CST 485 ¹	3	CST 4XX	3
CST 4XX	3	CST 490 or 499 ¹	3

CST 4XX	3	
	9	6

Total Credit Hours 30

¹ Or 400 level CST elective if course option selected.