Joint BS in Computer Science/MS in Computer Science

Degree Requirements

To earn a joint Bachelor of Science in Computer Science/Master of Science in Computer Science degree from UIC, students need to complete university, college, and department degree requirements. The Department of Computer Science degree requirements are outlined below. Students should consult the *College of Engineering* (http://catalog.uic.edu/ucat/colleges-depts/engineering) section for additional degree requirements and college academic policies.

The Joint Bachelor of Science in Computer Science (BSCS) and Master of Science in Computer Science (MSCS) is designed for undergraduate students with outstanding academic performance who desire to pursue graduate studies in Computer Science, or who wish to prepare themselves for advanced placement in the workplace. Students will earn both a BSCS and an MSCS degree upon completion, with 8 hours of course work shared between the two degrees.

The requirements for completion of the combined BSCS/MSCS degree are identical to the completion of these two separate degrees; however, there are 8 hours of shared course work used for both degrees. Completion of 120 hours at the undergraduate level; plus 8 shared hours counting toward both the BSCS and MSCS degrees; plus 28 hours of course work at the graduate level will result in joint BSCS/MSCS degrees. Students in the BSCS who have only two semesters of course work left and who have at least a 3.60/4.00 grade point average may register for two graduate-level courses (one at the 400 level, and one at the 500 level) and receive 4 hours, instead of 3 hours, for each. The graduate-level courses taken in the senior year will be used at the undergraduate level to fulfill 8 hours of BS selective requirements. At the graduate level these courses will count as required courses. An advisor must approve these courses.

Students should apply to the program during their third year, after having completed at least 27 credit hours of CS courses (excluding CS 398). An overall GPA of 3.60 or higher is required for application.

Sample Course Schedule

Course	Title	Hours
First Year		
Fall Semester		
MATH 180	Calculus I	4
CS 111	Program Design I	3
ENGL 160	Academic Writing I: Writing in Academic and Public Contexts	3
Science Elective		5
ENGR 100	Engineering Orientation [a]	1
	Hours	15
Spring Semester		
MATH 181	Calculus II	4
ENGL 161	Academic Writing II: Writing for Inquiry and Research	3
CS 141	Program Design II	3
CS 151	Mathematical Foundations of Computing	3
General Education Requirement course		3
	Hours	16
Second Year		
Fall Semester		
MATH 210	Calculus III	3
CS 211	Programming Practicum	2
CS 251	Data Structures	4
Science Elective		5
General Education Requirement course		3
	Hours	17
Spring Semester		
CS 261	Machine Organization	3
CS 301	Languages and Automata	3
Required math course		3
General Education Requirement course		3
Humanities/Social Sciences/Art Elective		3
	Hours	15
Third Year		
Fall Semester		
CS 361	Systems Programming	3
CS 362	Computer Design	3
CS 342	Software Design	3
Required math course		3
General Education Requirement course		3
Free Elective		3
	Hours	18
Spring Semester		
CS 341	Programming Language Design and Implementation	3
Technical Elective		3
Required math course		3
Humanities/Social Science Elective		3
Free Elective		5
	Hours	17
Fourth Year		
Fall Semester		
CS 377	Communication and Ethical Issues in Computing	3
CS 401	Computer Algorithms I	3
Technical Elective		3
General Education Requirement course		3
Technical Elective		3
	Hours	15
Spring Semester		
CS 499	Professional Development Seminar	0
Technical Elective		4
Technical Elective		4
CS 461	Operating Systems Design and Implementation	3

Free Elective		4
	Hours	15
Fifth Year		
Fall Semester		
MS Course Work		16
	Hours	16
Spring Semester		
MS Course Work		4
MS Course Work or		4
CS 598	M.S. Thesis Research (thesis option)	
MS Course Work or one of the following:		4
CS 597	Project Research (project option)	
CS 598	M.S. Thesis Research (thesis option)	
	Hours	12
	Total Hours	156