COMPUTER SCIENCE, BS-MCS

for the joint degree of Bachelor of Science in Computer Science and Master of Computer Science in Computer Science

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The five-year B.S.-M.C.S. program in Computer Science combines two degrees: a B.S. in Computer Science with an M.C.S. in Computer Science. Current undergraduate Computer Science majors enrolled in The Grainger College of Engineering who maintain superior academic performance are eligible to apply for this program.   Students admitted to the program will receive both degrees once all requirements for the 5-year B.S.-M.C.S. degree program have been successfully completed.

Admission

Current Computer Science majors enrolled in The Grainger College of Engineering with two to four semesters (including Summer terms) left of their undergraduate study, after the application term , who maintain an excellent academic performance are eligible to apply for this program. Students admitted to this program will receive both degrees once all requirements for both degrees have been successfully completed. Transfer students entering the CS undergraduate program their junior year are also eligible to apply to this program.

Students provisionally admitted to the program:

- are assigned a graduate academic advisor.
- must maintain an overall GPA of 3.0 through completion of the B.S. component of the program to remain in the program.
- may register for graduate courses and earn graduate credit hours, with approval from their graduate academic advisor, if they have 12 hours or less to complete in their FINAL semester of their undergraduate studies. Please note that students cannot transfer more than 12 credit hours of coursework over to their M.C.S. degree, which includes the shared coursework.
- must earn at least 120 hours of undergraduate credit, 9 hours of graduate credit (this is the "Breadth Requirement (http://cs.illinois.edu/prospective-students/graduate-students/professional-masters-mcs/professional-masters-mcs-degree-requ/)"), and satisfy all B.S. requirements to be officially recommended for admission to the Graduate College.

Upon successful completion of the B.S. component (including grades of B- or better in the "Breadth Requirement (http://cs.illinois.edu/prospective-students/graduate-students/professional-masters-mcs/professional-masters-mcs-degree-requ/)"), and an overall GPA of at least 3.0 GPA, students:

- will be officially admitted into the Graduate College.
- will be issued letters of admission from the Graduate College Office of Admissions and the Siebel School of Computing and Data Science, at which time they will be considered graduate students and assessed graduate tuition the following semester. International students may be required to submit additional documentation at this time.
- must continue to maintain a graduate GPA of 3.0 or better in order to remain in the combined program.
- must complete the M.C.S. degree requirements remaining beyond the three shared Breadth Requirement courses within two consecutive semesters beginning with the semester they are admitted to the Graduate College (fall-spring, spring-summer, or spring-fall). Please

note that if you finish your B.S. requirements in less than four years, you will not be given extra time to complete the M.C.S. degree requirements. You will just finish this joint program in less than 5 years.

Withdrawal

Students who do not complete all 5-Year B.S.- M.C.S. degree program requirements may request by petition to have graduate hours earned, including the Breadth Requirement coursework, converted to undergraduate hours and applied toward a traditional B.S. in Computer Science degree. Students reverted back to the B.S. degree program must earn the minimum number of hours and satisfy all degree requirements of whichever version of the B.S. curriculum appropriate. Graduate credit not used to fulfill the B.S. degree requirements will remain on the transcript and may, at some future point, be considered for transfer to another degree program.

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Requirements

B.S. Component: 120 hours plus 3 "Breadth Requirement" courses for 9-12 graduate hours

- Same required courses as the traditional B.S. degree with the minimum hours required reduced to 120 hours.
- Must complete 3 out of the 4 "Breadth Requirement" courses: four different courses, each from a different area, from the following eight core areas with a grade of B- or higher.
- University undergraduate minimum residence requirement satisfied.
- Overall GPA of 3.0 or higher maintained through the completion of the B.S. component of the program.

M.C.S. Component: Minimum 20-23 additional coursework hours

- Program is identical to the traditional M.C.S. program with the 3 out 4 "Breadth Requirement (http://cs.illinois.edu/prospective-students/graduate-students/professional-masters-mcs/professional-masters-mcs-degree-requ/)" courses satisfied while still classified as an undergraduate.
- Students who take the "Breadth Requirement (http://cs.illinois.edu/prospective-students/graduate-students/professional-masters-mcs/professional-masters-mcs-degree-requ/)" courses for 3 credit hours instead of 4 will need to complete a minimum of 23 additional graduate level coursework hours.
- Students must satisfy the university's graduate student minimum residence requirement.
- Students must complete remaining M.C.S. degree requirements in two semesters (fall-spring, spring-summer, or spring-fall).
- Students must maintain an overall GPA of 3.0 through completion of the M.C.S. component of the program.

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Sample Sequence

This sample sequence is intended to be used only as a guide for degree completion. All students should work individually with their academic

advisors to decide the actual course selection and sequence that works best for them based on their academic preparation and goals. Enrichment programming such as study abroad, minors, internships, and so on may impact the structure of this four-year plan. Course availability is not guaranteed during the semester indicated in the sample sequence.

Students must fulfill their Language Other Than English requirement by successfully completing a third level of a language other than English. See the corresponding section on the Degree and General Education Requirements *(http://catalog.illinois.edu/general-information/degree-general-education-requirements/).*

Students use 3 x (400-level) CS courses, taken as undergraduates and completing undergraduate requirements, to satisfy "Breadth Requirements" for the MCS. These three "shared" courses may be taken for 3 or 4 hours. To ensure that students have the minimum 120 undergraduate hours remaining when the "shared" courses are moved to the MCS, students should take an extra free elective hour for every 4-hour "shared" course. In this example, the student is using the minimum of three 3-credit hours Breadth area courses (9 total) as shared between the BS and MCS degrees.

Total Undergraduate Hours: 120 hours + 3 x (3 or 4 hours), counting toward both undergraduate requirements and graduate "Breadth Requirements."

*Total Graduate Hours: 23+ 9 (9 shared BS-MCS hours), must **equal** degree total minimum hours requirement listed on the degree's requirements page in the catalog.*

First Year

First Semester	Hours	Second Semester	Hours
CS 100 (Optional or Free elective)	1	CS 128	3
CS 124	3	CS 173	3
MATH 221 (MATH 220 may be substituted)	4	MATH 231	3
ENG 100	1	General Education course	3
CS Science elective course	3	General Education course or Comp I	3
Comp I or General Education course	4		
	16		**15**

Second Year

First Semester	Hours	Second Semester	Hours
CS 222	1	CS 233	4
CS 225	4	CS 361	3
MATH 241	4	MATH 257	3
PHYS 211	4	PHYS 212	4
General Education course	3	Free elective course	3
	16		**17**

Third Year

First Semester	Hours	Second Semester	Hours
CS 210 or 211	2	CS 374	4
CS 341	4	CS Technical elective course	3
CS 357	3	CS Technical elective course	3
CS Technical elective course	3	General Education course	3
Language Other Than English (3rd level)	4	Free elective course	3
	16		**16**

Fourth Year

First Semester	Hours	Second Semester	Hours
CS 421	3	CS Advanced elective course	3
CS Technical elective/ MCS Breadth requirement (shared) course	3	CS Technical elective/ MCS Breadth requirement (shared) course	3
CS Technical elective/ MCS Breadth requirement (shared) course	3	Free elective course	4
Free elective course	4	Free elective course	4
Free elective course	3	Free elective course	3
	16		**17**

Fifth Year

First Semester	Hours	Second Semester	Hours
CS 400-level (4th Breadth) course	4	CS 500-level(2nd Advanced) course	4
CS 400 or 500-level (additional elective) course	4	CS 500-level (3rd Advanced) course	4
CS 500-level (1st Advanced) course	4	CS 400-level (Additional elective) course	3
	12		**11**

Total Hours 152

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Siebel School of Computing and Data Science website (https://siebelschool.illinois.edu)

Siebel School of Computing and Data Science faculty (https://siebelschool.illinois.edu/people/faculty/)

The Grainger College of Engineering (https://grainger.illinois.edu/)