2022-2023 IE Major / CS Minor Guidelines

Important Notes

- Declaration of a CS major or minor is necessary for students to enroll in many upper-level COMP_SCI courses. To declare the McCormick CS minor, students should submit the minor declaration form in McCormick Advising System (MAS) by the end of their junior year.
- Students pursuing a CS major or minor should visit the [Computer Science Undergraduate website](#).
- All courses used towards the CS minor must be taken for a letter grade (not P/N).
- This information is intended only as a guide and does not replace any official communications from the CS department. Questions about the CS minor should be directed to [advising@cs.northwestern.edu](#).
- At least four minor courses must not be applied to any major requirements.

Course	Minor in Computer Science	BS in Industrial Engineering
☐ Math 220-1, 220-2, 228-1	Prerequisite	Math requirement
☐ Gen_Eng 205-1,2, 3 (EA 1, 2, 3)	Prerequisite	Engineering Analysis requirement
☐ COMP_SCI 111	Core	IE Major Computing Requirement
☐ COMP_SCI 150	Core	IE Major Computing Requirement
☐ COMP_SCI 211	Core	Unrestricted Elective #1
☐ COMP_SCI 212	Core	Unrestricted Elective #2
☐ COMP_SCI 213	Core	Unrestricted Elective #3
☐ COMP_SCI 214	Core	Unrestricted Elective #4
☐ COMP_SCI 339	Breadth Requirement (Systems)	Major Requirement (replaces CS 217 by petition)
☐ COMP_SCI 3XX	Breadth Requirement (see below)	General Tech Elective #1
☐ COMP_SCI 3XX	Breadth Requirement (see below)	General Tech Elective #2

Additional Curricular Notes:

- Students unable to register for COMP_SCI 339 will be required to take COMP_SCI 217 to fulfill requirements for the BS in Industrial Engineering. This requirement will not be waived. Computer Science makes no guarantees about any student's ability to register for COMP_SCI 339.
- Courses taken to fulfill breadth requirements must come from three different areas (Theory, Systems, Artificial Intelligence, Interfaces, and Software Development/Programming Languages).
- Completing a CS minor will fill 2 of 4 general technical electives, the 3 computing courses, and 4 of 5 unrestricted electives in the 48 units needed for the IE degree. Inability to take COMP_SCI 339 to replace COMP_SCI 217 will fill an additional unrestricted elective upon completing the CS minor.