

Systems Engineering and Design Curriculum Map

Students should use this curriculum map as a guide to have a more informed discussion with the departmental academic advisor when selecting courses.

Students not taking courses as advised may result in a delayed graduation date.

| <i>First Year</i> | | <i>Second Year</i> | | <i>Third Year</i> | | <i>Fourth Year</i> | |
|-----------------------------|-------------------------|--|-------------------------------|------------------------------|-------------------------------|--------------------------------|------------------------------|
| 14-15 hrs | 16-17 hrs | 16 hrs | 17 hrs | 15 hrs | 17 hrs | 15-17 hrs | 15-17 hrs |
| SE 100 (1) | CS 101 (3) ⁵ | SE 261 (2) | IE 300 (3) | SE 310 (3) | SE 311 (3) | SE 494 (3) ^{6,8} | Sec Fld Opt (3) ⁷ |
| MATH 221 (4) ¹ | MATH 231 (3) | MATH 241 (4) | MATH 285 (3) | MATH 257 (3) | SE 312 (1) | SE 495(2) ^{6,8} | Sec Fld Opt (3) ⁷ |
| CHEM 102 (3) | PHYS 211 (4) | PHYS 212 (4) | PHYS 213 (2) | SE 320 (4) | SE 424 (3) | Eng Sci Elect (3) ⁹ | Free Elect (3) ⁴ |
| CHEM 103 (1) | ECE 110 (3) | TAM 211 (3) | TAM 212 (3) | ECE 211 (2) | TAM 335 (4) | Design Elect (3) ¹⁰ | Free Elect (3) ⁴ |
| RHET 105 (4) ^{2,6} | SE 101 (3) ² | ECON 102 or ECON 103 (3) ⁶ | TAM 251 (3) | Sec Fld Opt (3) ⁷ | IE 310 (3) | Sec Fld Opt (3) ⁷ | Free Elect (3) ⁴ |
| ENG 100 (1) ³ | | | SE 290 (0) | | Gen Ed Elect (3) ⁶ | Gen Ed Elect (3) ⁶ | |
| Free Elect (1) ⁴ | | | Gen Ed Elect (3) ⁶ | | | | |

¹MATH 220 may be substituted. MATH 220 is appropriate for students with no background in calculus. 4 of 5 credit hours count towards degree.

²RHET 105 (or an alternative Composition I sequence) is taken either in the first or second semester of the first year, according to the student's UIN (Spring if UIN is Odd). SE 101 is taken the other semester. Composition I guidelines can be found at <http://catalog.illinois.edu/general-information/degree-general-education-requirements/> under Written Communication Requirement.

³External transfer students take ENG 300.

⁴Additional coursework, subject to the Grainger College of Engineering restrictions to Free Electives, so that there are at least 128 credit hours earned toward the degree (go.grainger.illinois.edu/FreeElectives).

⁵CS 124 may be substituted.

⁶General education: Students must complete the Campus General Education requirements including the campus general education language requirement. One of the SBS courses must be an introductory economics course (ECON 102 or ECON 103). SE 494 and SE 495 will satisfy a core course requirement and the Campus General Education Advanced Composition requirement.

⁷Students must select one Secondary Field Option (SFO) or they may petition to create their own SFO totaling 12 hours approved by the department. Preapproved SFOs can be found: <http://catalog.illinois.edu/undergraduate/engineering/systems-engineering-design-bs/#degreerequirementstext>. Courses on these elective lists may only be used to fulfill one curricular requirement.

⁸SE 494 and SE 495 are to be taken based on the student's UIN (Odd UIN is Spring; Even UIN is Fall). These courses also complete the Advanced Composition requirement. All courses in the freshman, sophomore, and junior year should be complete prior to enrollment. Specific prerequisites are: SE 261, SE 290, SE 311, IE 300, IE 310, and TAM 335; or credit or concurrent registration in a SE Design Elective. Must enroll concurrently in SE 495.

⁹Students must select one Engineering Science Elective course totaling 3 hours from a departmentally approved list found: <http://catalog.illinois.edu/undergraduate/engineering/systems-engineering-design-bs/#degreerequirementstext>

¹⁰Students must select a Design Elective totaling 3 hours from a departmentally approved list found: <http://catalog.illinois.edu/undergraduate/engineering/systems-engineering-design-bs/#degreerequirementstext>