

## Four Year Road Map: Structural Systems Specialization

This Road Map is a tool to assist you and your advisor in planning your academic career. Use it along with the Curriculum Sheet for your major, your DARS report, the appropriate checklist in the back of this document, and the Timetable. Your specific program of study could, and probably will, look different. You need to customize the Road Map to fit your situation, and consult with your advisor about the best path for you.

Year 1 – Fall Semester Course	Credits
Math 221 – Calculus and Analytic Geometry	5
Social Science (See I.E.4)	3
Chemistry 109 – Advanced General Chemistry*	5
EPD 155 - Basic Communication (see I.C.)	2
	15

Year 2 – Fall Semester Courses	Credits
Math 234 – Calculus - - Functions of Several Variables	3
Computer Science 310 - Problem Solving Using Computers	3
BSE 249 - Engineering Principles for Biological Systems	3
Statistics 224– Introductory Statistics for Engineers	3
EMA 202 – Dynamics	3
BSE 201 - Surveying	1
	16

Year 3– Fall Semester Courses	Credits
BSE 364 – Engineering Properties of Food and Biological Materials	3
CEE 340 – Structural Analysis I	3
CEE 310 - Fluid Mechanics	3
ISYE 313 – Engineering Economic Analysis	3
BSE 351 - Structural Design for Agricultural Facilities	3
	15
	17

Year 4– Fall Semester Courses	Credits
BSE 509 – Biological Systems Engineering Senior Design	3
Technical Elective (See VI.D.)	3
Breadth Requirement (See VI.D.)	3
Ethnic Studies/International. (See I.E.2 & I.H.)	3
BSE 409 Career Management for Engineers	1
Technical Elective (See VI.D.)	3
	16

Year 1 – Spring Semester Courses	Credits
Math 222 – Calculus and Analytic Geometry	5
Biological Science (See I.F.)	3
EMA 201 - Statics	3
M E 170 – Civil Engineering Graphics	2
Economic Course	4
	17

Year 2 – Spring Semester Courses	Credits
BSE 375 – Biological Concepts for Engineers	3
BSE 356 - Sustainable Residential Construction	3
EMA 303 – Mechanics of Mat.	3
Physics 202 - General Physics	5
Ag& Life Sciences (See VI.D.)	3
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Year 3 – Spring Semester Courses	Credits
EPD 397 - Technical Communications (see I.C.)	3
BSE 365 – Measurements and Inst. for Biological Systems	3
M E 361-Thermodynamics	3
Technical Elective (See VI.D.)	3
Technical Elective (See VI.D.)	3
Technical Elective (See VI.D.)	3
	18

Year 4 – Spring Semester Courses	Credits
Technical Elective (See VI.D.)	3
Humanities (See I.E.3)	3
Technical Elective (See VI.D.)	3
Technical Elective (See VI.D.)	2
Humanities (See I.E.3.)	3
	14

**Notes:** Need 128 credits to complete degree. If Chemistry 103 & 104 is taken in place of Chemistry 109, it is suggested to take Chemistry 103 in Fall semester and Chemistry 104 in Spring semester of year 1.