

## Four Year Road Map: Food and Bioprocess Engineering 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
Chemistry 109 - Advanced General Chemistry	5
Social Science (See I.E.4)	3
EPD 155 – Basic Communication (See I.C.)	2
	15

Year 2 – Fall Semester Courses	Credits
Math 234 – Calculus -- Functions of Several Variables	3
Chemistry 341 – Introductory Organic Chemistry	3
Technical Elective (See VI.D)	5
Computer Science 310 - Problem Solving Using Computers	3
CBE 250 – Process Synthesis	3
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Year 3– Fall Semester Courses	Credits
BSE 364– Engineering Properties of Food and Biological Materials	3
ISYE 313- Engineering Economics Analysis	3
CBE 320- Introductory Transport Phenomena	4
Bacteriology 325 – Food Bacteriology	3
Food Science 410-Food Chemistry 1	3
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Year 4– Fall Semester Courses	Credits
BSE 509 – Biological Systems Engineering Senior Design	3
BSE 409 - Career Management for Engineers	1
Breadth Requirement (See VI.D.)	3
Food Sci 532 – Integrated Food Manufacturing	4
EPD 397 - Technical Communications (See I.C.)	3
Technical Elective (See VI.D.)	3
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Year 1 – Spring Semester Courses	Credits
Biological Sciences (See I.F.)	3
Math 222 - Calculus and Analytic Geometry	5
EMA 201 - Statics	3
Economics Course	4
M E 231 – Introduction to Engineering Graphics	2
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Year 2 – Spring Semester Courses	Credits
CBE 211– Thermodynamics of Mixtures	3
Ethnic Studies/International (See I.E.2 & I.H.)	3
Physics 202 General Physics	5
BSE 375 – Biological Concepts for Engineers	3
Statistics 224 – Introductory Statistics for Engineers	3
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Year 3 – Spring Semester Courses	Credits
Humanities (See I.E.3)	3
Biochemistry 501 - Introduction to Biochemistry	3
Food Science 432 – Principles of Food Preservation	3
CBE 326 – Momentum & Heat Transfer Operations	3
BSE 365 – Measurements and Inst. for Biological Systems	3
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Year 4 – Spring Semester Courses	Credits
BSE 542 - Food Engineering Operations	4
BSE 441-Rheology	2
Humanities (See VI.D)	3
Technical Elective (see VI.D.)	3
Technical Elective (See VI.D.)	2
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**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.