

# BIOLOGICAL SYSTEMS ENGINEERING: FOOD AND BIOPROCESS ENGINEERING

## FOUR-YEAR PLAN

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Students must complete at least 125 total credits to be eligible for graduation.

#### SAMPLE BIOLOGICAL SYSTEMS ENGINEERING FOUR-YEAR PLAN—FOOD AND BIOPROCESS ENGINEERING SPECIALIZATION—BIOPROCESS ENGINEERING TRACK

First Year		
Fall	Credits Spring	Credits
MATH 221 <sup>1</sup>	5 MATH 222	4
CHEM 109 <sup>2</sup>	5 BSE 170 or INTEREGR 170	2-3
LSC 100 (or other COMM A)	3 BSE 310	3
Ethnic Studies	3 MICROBIO 101 & MICROBIO 102	5
<b>16</b>		<b>14-15</b>

Second Year		
Fall	Credits Spring	Credits
BSE 249 or CBE 250	3 BSE 308	1
BSE 270	3 BSE 349	3
MATH 234	4 MATH 320	3
CHEM 341	3 INTEREGR 397 (or other COMM B)	3
E M A 201	3 PHYSICS 202	5
<b>16</b>		<b>15</b>

Third Year		
Fall	Credits Spring	Credits
M E 361	3 BSE 364	3
BSE/ENVIR ST 367	3 BSE 365	3
BIOCHEM 501	3 BSE 508	2
STAT 324	3 M E 363 or CBE 320	3-4
Humanities	3 Technical Electives	3
	CALS International Studies	3
<b>15</b>		<b>17-18</b>

Fourth Year		
Fall	Credits Spring	Credits
BSE 380	3 BSE 460	3
BSE 461	3 BSE 464	3

BSE 509	3 BSE Breadth Requirement	3
Technical Electives	2-3 Elective Courses	9
Humanities	3	
<b>14-15</b>		<b>18</b>

**Total Credits 125-128**

<sup>1</sup> MATH course dependent on placement score and transfer credit evaluation.

<sup>2</sup> If CHEM 103 & CHEM 104 are taken in place of CHEM 109, it is suggested to take CHEM 103 in the fall semester and CHEM 104 in the spring semester of the first year and move MICROBIO 101 & MICROBIO 102 to the first semester of the second year.

#### SAMPLE BIOLOGICAL SYSTEMS ENGINEERING FOUR-YEAR PLAN—FOOD AND BIOPROCESS ENGINEERING SPECIALIZATION—FOOD ENGINEERING TRACK

First Year		
Fall	Credits Spring	Credits
MATH 221 <sup>1</sup>	5 MICROBIO 101	3
CHEM 109 <sup>2</sup>	5 BSE 170 or INTEREGR 170	2-3
LSC 100 (or other COMM A)	3 BSE 310	3
Humanities	3 MATH 222	4
	Ethnic Studies	3
<b>16</b>		<b>15-16</b>

Second Year		
Fall	Credits Spring	Credits
BSE 249 or CBE 250	3 BSE 308	1
BSE 270	3 BSE 349	3
MATH 234	4 MATH 320	3
CHEM 341	3 PHYSICS 202	5
E M A 201	3 CALS International Studies	3
<b>16</b>		<b>15</b>

Third Year		
Fall	Credits Spring	Credits
FOOD SCI 301	3 BSE 364	3
FOOD SCI/ MICROBIO 325	3 BSE 365	3
BSE 380	3 BSE 508	2
M E 361 or CBE 310	3 M E 363 or CBE 320	3-4
STAT 324	3 Technical Electives	3
<b>15</b>		<b>14-15</b>

Fourth Year		
Fall	Credits Spring	Credits
FOOD SCI 532	4 BSE 464	3
BSE 461	3 Humanities	3
BSE 509	3 BSE Breadth Requirement	3

INTEREGR 397 (or other COMM B)	3 Technical Elective	3
Technical Electives	3-4 Elective Courses	6
<b>16-17</b>		<b>18</b>

**Total Credits 125-128**

<sup>1</sup> MATH course dependent on placement score and transfer credit evaluation.

<sup>2</sup> If CHEM 103 & CHEM 104 are taken in place of CHEM 109, it is suggested to take CHEM 103 in the fall semester and CHEM 104 in the spring semester of the first year, and move BSE 310 to the second year.