

**Transfer Plan: SFCC to UI**  
**B.S. DEGREE PROGRAM IN BIOLOGICAL ENGINEERING – Catalog Year 2022/23**  
*This plan assumes a student completes the Associate of Science degree at SFCC before transferring to UI.*

	Course Title/Requirement at SFCC	COMMENTS	Credits
<b>First Quarter @ SFCC</b>			
CHEM& 161	General Chemistry I/Lab I	UI Chem 101/101 Lab	5
ENGL& 101	English Composition I	UI Engl 101	5
MATH& 151	Calculus I		5
			<b>15</b>
<b>Second Quarter @ SFCC</b>			
CHEM& 162	General Chemistry II/Lab II	UI Chem 111/111 Lab	5
MATH& 152	Calculus II	UI Math 170	5
Elective: choose 5 cr from	ENGR 110 (3) or ENGR 111 (2) or ENGR 240 (5)	110=Engr 102 sub for BE 142	5
			<b>15</b>
<b>Third Quarter @ SFCC</b>			
CHEM& 163	General Chemistry III/Lab III	UI Chem 112/112 Lab	5
MATH& 153	Calculus III	UI Math 175	5
Choose 1 course from	ANTH& 100 (5) or SOC% 201 (5)	UI Anth 250, Soc 230	5
			<b>18</b>
<b>Summer @ SFCC</b>			
Choose 1 course from	CMST 226 Gender Communication		5
	CMST 227 Intercultural Communication	UI Comm 335, Soc. Sci.	5
	MUSC& 105 Music Appreciation	UI MUSI 100, Humanities	5
	PHIL 110 Intro to Ethics	UI PHIL 103, Humanities	5
	PHIL& 115 Critical Thinking	UI PHIL 201, Humanities	5
			<b>5</b>
<b>Fourth Quarter @ SFCC</b>			
CHEM& 241	Organic Chemistry I		3
CHEM& 242	Organic Chemistry I Lab		2
MATH 220	Elementary Linear Algebra	UI MATH 330	5
PHYS 201	Engineering Physics I	UI PHYS 211/211 Lab	5
			<b>15</b>
<b>Fifth Quarter @ SFCC</b>			
CHEM& 242	Organic Chemistry II	CHEM 277	3
CHEM& 252	Organic Chemistry II Lab	CHEM 278	2
MATH& 254	Calculus IV	Math 275	5
PHYS 202	Engineering Physics II	PHYS 212/212 Lab	5
			<b>15</b>
<b>Sixth Quarter @ SFCC</b>			
ECON& 202	Macro Economics	ECON 201	5
MATH 274	Elementary Differential Equations	MATH 310	5
PHYS 203	Engineering Physics III	PHYS 213/213 Lab	5
			<b>15</b>
<b>YEAR 3 FALL @ UI</b>			
BE 242	Engineering Analysis & Design		3
BIOL 115	Cells & Evolution of Life		3
BIOL 115 Lab	Cells & Evolution of Life Lab		1
ENGR 210	Engineering Statics		3
ENGR 240	Intro to Electrical Circuits	PHYS 211/Math 175	3
STAT 301	Probability & Statistics		3
			<b>16</b>
<b>YEAR 3 SPRING @ UI</b>			
BE 361	Biotransport Processes		3
BE 462	Electric Power & Controls		3
ENGR 320	Thermo & Heat Transfer		3
ENGR 335	Fluid Mechanics		3
ENGR 350	Mechanics of Materials		3
			<b>15</b>
<b>YEAR 4 FALL @ UI</b>			
BIOL 250	General Microbiology		3
BIOL 255	General Microbiology Lab		2
BE 441	Instrumentation & Measurements	ENGR 240; co-req STAT 301	3
BE 478	Engineering Design I	BE 242, ENGR 320, ENGR 335, ENGR 350	3
Elective	Biological Engineering		3
			<b>14</b>

<b>YEAR 4 SPRING @ UI</b>			
BE 461	Bioprocess Engineering	Permission	3
BE 479	Engineering Design II	BE 478	3
Elective	Tech Elective		3
Elective	Biological Engineering		3
			<b>12</b>
<b>YEAR 5 FALL @ UI</b>			
BIOL 380	Biochemistry	CHEM 112/112L, CHEM 277	4
BE 491	Senior Seminar	Senior standing	1
Elective	Tech Elective		6
Elective	Biological Engineering		3
			<b>14</b>

Please note: if a student at SFCC could take BIOL&222 the second summer (after the 6<sup>th</sup> quarter) or before, courses could be rearranged to finish in only 4 semesters at UI.