Transfer Plan: CWI 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 CWI before transferring to UI.

	Course Title/Requirement at CWI	COMMENTS	Credits
YEAR 1 FALL @ CWI			
COMM 101	Fundamentals of Oral Communication	COMM 100 is listed in Engr AS Program of Study at CWI	2
CWI 101	Connecting with Ideas	Required course in Engr AS Program of Study at CWI	3
MATH 170	Calculus I		5
PHYS 211	Engineering Physics I		4
PHYS 211L	Engineering Physics I Lab		1
			15
YEAR 1 SPRING @ CWI			
CHEM 111	Principles of Chemistry I		3
CHEM 111L	Principles of Chemistry I Lab		1
ENGL 101	Writing and Rhetoric I		3
ENGR 120	Introduction to Engineering	Sub for ENGR 123	3
ENGR 210	Engineering Mechanics - Statics		3
MATH 175	Calculus II		4
			17
YEAR 2 FALL @ CWI			
ENGL 102	Writing and Rhetoric II		3
MATH 275	Calculus III	Engineering Technical Elective at CWI	4
SCIE 102	Ethics in Science	Meets SBOE SS	3
GEM 5	Humanistic & Artistic Ways of Knowing course	Humanities	3
ENGR 240	Introduction to Electrical Circuits	Engineering Technical Elective at CWI	3
			16
YEAR 2 SPRING @ CWI			
ENGR 290	Engineering Capstone		2
GEM 5	Humanistic & Artistic Ways of Knowing course		3
GEM 6	Social and Behavioral Ways of Knowing course	Recommend ECON 201 or ECON 202	3
Global Perspectives	Global Perspectives course	***INT***	3
CHEM 112	Principles of Chemistry II	Engineering Technical Elective at CWI	3
CHEM 112 Lab	Principles of Chemistry II Lab		2
			16
	Course Title/Requirement at UI	**Prerequisites**	**Credits**
YEAR 3 FALL @ UI			
BE 242	Engineering Analysis & Design	MATH 170; co-req MATH 175	3
Phys 212	Engineering Physics II	PHYS 211/211L, MATH 175	**3**
MATH 310	Ordinary Differential Equations		3
BIOL 115	Cells & Evolution of Life	CHEM 111/111L	**3**
BIOL 115 Lab	Cells & Evolution of Life Lab		1
			13
YEAR 3 SPRING @ UI			
BE 142	Introduction to Biological Engineering		2
CHEM 277	Organic Chemistry I	CHEM 112/112L	3
CHEM 278	Organic Chemistry I Lab		1
ENGR 320	Eng. Thermodynamics & Heat Transfer	ENGR 210, MATH 275	3
STAT 301	Probability and Statistics	MATH 175	3
			12
YEAR 4 FALL @ UI			
BIOL 250	General Microbiology	BIOL 115/115L, CHEM 111/111L	3
BIOL 255	General Microbiology Lab		2
ENGR 335	Engineering Fluid Mechanics	MATH 275 and ENGR 210	3
Elective	Biological Engineering	**BE 1/3**	3
Elective	Technical Elective	**TE 1/3**	3
			14
YEAR 4 SPRING @ UI			
BE 361	Biotransport Processes	ENGR 320, ENGR 335	3
BE 462	Electric Power & Controls	ENGR 210; co-req MATH 310	3
ENGR 350	Mechanics of Materials	ENGR 210, MATH 175, MATH 310 as co-requisite	3

Elective	Technical Elective	**TE 2/3**	3
Elective	Biological Engineering	BE 2/3	**3**
			15
YEAR 5 FALL @ UI			
BIOL 380	Biochemistry	CHEM 112/112L, CHEM 277	4
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
BE 491	Senior Seminar	Senior standing	1
ENGR 360	Engineering Economy	Junior standing	2
			13
YEAR 5 SPRING @ UI			
BE 461	Bioprocess Engineering	Permission	3
BE 479	Engineering Design II	BE 478	3
Elective	Technical Elective	*TE 3/3*	3
Elective	Biological Engineering	*BE 3/3*	3
			12