BIOTECHNOLOGY LABORATORY ASSISTANT - ACADEMIC CERTIFICATE (AC)

Certificate Plan

First Year

Fall		Credit Hours
BIOL 111	Biology I	3
BIOL 111L	Biology I Lab	1
CHEM 101	Introduction to Chemistry	3
CHEM 101L	Introduction to Chemistry Lab	1
MATH 143 or MATH 147	Precalculus I: Algebra or Precalculus	3-5
	Total Semester Credit Hours	**11**

Spring		
BIOL 112	Biology II	3
BIOL 112L	Biology II Lab	1
CHEM 111	General Chemistry I	3
CHEM 111L	General Chemistry I Lab	1
	Total Semester Credit Hours	**8**

Second Year

Fall		
SCIE 102	Ethics in Science	3
CHEM 112	General Chemistry II	3
CHEM 112L	General Chemistry II Lab	2
Select one of the following MMBS course sequences: [1]		4
MMBS 260 & 260L	Introduction to Cell Biology and Introduction to Cell Biology Lab	
MMBS 280 & 280L	Genetics and Genetics Lab	
	Total Semester Credit Hours	**12**

Spring		
CHEM 298	Organic Chemistry I	3
CHEM 298L	Organic Chemistry I Lab	2
Complete three (3) credits from the following internship courses:		3
BIOL 293	Biology Internship	
BTEC 293	Biotechnology Internship	
CHEM 293	Chemistry Internship	
SCIE 200	Vertically Integrated Projects (VIP) [2]	
	Total Semester Credit Hours	**8**
	Minimum Credit Hours Required	**39**

[1] MMBS 260 and MMBS 260L are only offered in the Fall semester. MMBS 280 and MMBS 280L are only offered in the Spring semester. Students should adjust their course sequence based on whether they want to take MMBS 260 or MMBS 280.

[2] SCIE 200 Vertically Integrated Projects (VIP) can only be taken for 1 credit per semester. If students would like to complete SCIE 200 to fulfill their internship requirement, they should adjust their course plan as needed. SCIE 200 may be repeated four times for a maximum of 4 credits.

Additional Advising Note:

The requirements for the Academic Certificate in Biotechnology Laboratory Assistant can be completed in whatever order works best for you, as long as the prerequisites for your selected courses have been met. This certificate is intended to be completed as part of an associate-level program, ideally in either Biology or Chemistry. Please speak with your advisor if you need assistance with academic planning.