

# BIOCHEMISTRY & MOLECULAR BIOLOGY (B.S.) - RESIDENT

**Important:** This degree plan is effective for those starting this degree program in fall 2022 through summer 2023. This degree plan will remain in effect for students who do not break enrollment or who do not change degree programs, concentrations, or cognates.

## General Education/Foundational Skills Requirements

Code	Title	Hours
<b>Communication &amp; Information Literacy</b> <sup>1</sup>		
ENGL 101	Composition and Rhetoric	3
INQR 101	Inquiry	1
	Communications Elective	3
	Information Literacy Elective	3
	Information Literacy Elective	3
<b>Technological Solutions &amp; Quantitative Reasoning</b> <sup>1</sup>		
UNIV 101	Foundational Skills	1
	Math Elective MATH 114 or higher	3
	Technology Competency <sup>2</sup>	0-3
<b>Critical Thinking</b> <sup>1</sup>		
RLGN 105	Introduction to Biblical Worldview <sup>3</sup>	2
RSCH 201	Research	3
	Critical Thinking Elective	3
<b>Civic &amp; Global Engagement</b> <sup>1</sup>		
EVAN 101	Evangelism and the Christian Life <sup>3</sup>	2
	Cultural Studies Elective	3
<b>Social &amp; Scientific Inquiry</b> <sup>1</sup>		
	Natural Science Elective	3
	Social Science Elective	3
<b>Christianity &amp; Contexts</b> <sup>1</sup>		
BIBL 105	Old Testament Survey	2
BIBL 110	New Testament Survey	2
THEO 201	Theology Survey I <sup>3</sup>	2
THEO 202	Theology Survey II <sup>3</sup>	2
<b>Total Hours</b>		<b>44-47</b>

<sup>1</sup> Refer to the list of approved general education electives before enrolling in foundational skill requirements

<sup>2</sup> All students must pass the Computer Assessment OR complete applicable INFT course

<sup>3</sup> Students transferring in 45 or more UG credit hours will have the requirements of RLGN 105 Introduction to Biblical Worldview (2 c.h.) and EVAN 101 Evangelism and the Christian Life (2 c.h.) waived; Students transferring in 60 or more UG credit hours will also have the requirements of THEO 201 Theology Survey I (2 c.h.) and THEO 202 Theology Survey II (2 c.h.) waived

## Major Requirements

Code	Title	Hours
<b>Major Foundational Courses</b>		
BIOL 224	General Biology I <sup>1,2</sup>	4
CHEM 121	General Chemistry I <sup>1,2</sup>	4
	or CHEM 131 & CHEM 135 Advanced General Chemistry I and Advanced General Chemistry Lab	
CHEM 122	General Chemistry II <sup>1,2</sup>	4
	or CHEM 132 & CHEM 136 Advanced General Chemistry II and Advanced General Chemistry II Lab	
MATH 126	Elementary Calculus for Business and Science <sup>1,2</sup>	3-4
	or MATH 131 Calculus and Analytic Geometry I	
MATH 201	Introduction to Probability and Statistics <sup>1,2</sup>	3
	or MATH 211 Introduction to Statistical Analysis	
PHYS 201	General Physics I <sup>1,2</sup>	4
	or PHYS 231 University Physics I	
PHYS 202	General Physics II <sup>1,2</sup>	4
	or PHYS 232 University Physics II	
<b>Total Hours</b>		<b>26-27</b>

<sup>1</sup> Course may fulfill select general education requirements.

<sup>2</sup> MATH 131 Calculus and Analytic Geometry I (4 c.h.), MATH 211 Introduction to Statistical Analysis (3 c.h.), PHYS 231 University Physics I (4 c.h.) and PHYS 232 University Physics II (4 c.h.) are strongly recommended

Code	Title	Hours
<b>Major Core</b>		
BCHM 451	Biochemistry I	4
BCHM 452	Biochemistry II	4
BIOL 225	General Biology II	4
	or BIOL 317 Botany	
BIOL 301	Genetics	4
BIOL 303	Microbiology	4
BIOL 400	Biology Seminar	1
BIOL 415	Cell Biology	4
BIOL 455	Molecular Techniques	3
CHEM 301	Organic Chemistry I	4
CHEM 302	Organic Chemistry II	4
CHEM 321	Analytical Chemistry	4
CHEM 461	Physical Chemistry I	3
CHEM 465	Physical Chemistry I Lab	1
CRST 290	History of Life	3
	or CRST 390 Origins	
MATH 132	Calculus and Analytic Geometry II	4
	BIOL or CHEM Elective <sup>1</sup>	3-4
<b>Total Hours</b>		<b>54-55</b>

<sup>1</sup> Any 300-400 level BIOL or CHEM course not already applying to the degree

Code	Title	Hours
<b>Free Electives</b>		
Choose 0-3 credit hours of Free Electives		0-3
<b>Total Hours</b>		<b>0-3</b>

*All applicable prerequisites must be met*

## Graduation Requirements

- **120** Total hours
- **2.0** Overall grade point average
- **30** Hours must be upper-level courses (300-400 level)
- **Grade of 'C'** Minimum required for all upper-level courses in the major
- **25%** Of major taken through Liberty University
- **30** Hours must be completed through Liberty University
- **Grad App** Submission of Degree Completion Application must be completed within the last semester of a student's anticipated graduation date
- **CSER** All requirements must be satisfied before a degree will be awarded