

# BACHELOR OF SCIENCE IN BIOCHEMISTRY/BACHELOR OF SCIENCE IN PSYCHOLOGICAL SCIENCE

## Required Courses

Code	Title	Credit Hours
<b>Biology Requirements</b>		<b>(29)</b>
BIOL 107	General Biology Lectures	3
BIOL 109	General Biology Laboratory	1
BIOL 115	Human Biology	3
BIOL 117	Human Biology Laboratory	1
BIOL 210	Microbiology	3
BIOL 214	Genetics	3
BIOL 401	Introductory Biochemistry	3
BIOL 402	Metabolic Biochemistry	3
BIOL 404	Biochemistry Laboratory	3
BIOL 445	Cell Biology	3
BIOL 451	Biological Literature	2
BIOL 495	Biology Colloquium	1
or CHEM 485	Chemistry Colloquium	
<b>Dual Degree Elective</b>		<b>(3)</b>
Select three credit hours from the following:		3
BIOL 420	Population and Ecological Genetics	3
BIOL 430	Human Physiology	3
BIOL 475	Health and Disease in Modern Society	3
FDSN 401	Nutrition, Metabolism, and Health	3
<b>Biochemistry Elective</b>		<b>(2-3)</b>
Select two to three credit hours		2-3
<b>Chemistry Requirements</b>		<b>(26)</b>
CHEM 124	Principles of Chemistry I with Laboratory	4
CHEM 125	Principles of Chemistry II with Laboratory	4
CHEM 237	Organic Chemistry I	4
CHEM 239	Organic Chemistry II	3
CHEM 240	Organic Chemistry Laboratory	2
CHEM 247	Analytical Chemistry	3
CHEM 343	Physical Chemistry I	3
CHEM 438	Physical Biochemistry	3
or CHEM 344	Physical Chemistry II	
<b>Physics Requirements</b>		<b>(8)</b>
PHYS 123	General Physics I: Mechanics	4
PHYS 221	General Physics II: Electricity and Magnetism	4
<b>Mathematics Requirements</b>		<b>(17-18)</b>
MATH 151	Calculus I	5
MATH 152	Calculus II	5
MATH 251	Multivariate and Vector Calculus	4
MATH 425	Statistical Methods	3-4
or PSYC 203	Undergraduate Statistics for the Behavioral Sciences	
<b>Psychological Science Requirements</b>		<b>(28)</b>
PSYC 204	Research Methods in Behavioral Science	4
PSYC 221	Introduction to Psychological Science	3
PSYC 301	Industrial Psychology	3

or PSYC 303	Introduction to Psychopathology	
PSYC 310	Social Psychology	3
PSYC 312	Human Motivation and Emotion	3
or PSYC 423	Learning Theory	
or PSYC 435	Child Development	
or PSYC 436	Adult Development	
PSYC 320	Applied Correlation and Regression	3
or PSYC 409	Psychological Testing	
PSYC 414	Neural and Biological Bases of Behavior	3
PSYC 426	Cognitive Science	3
PSYC 485	Senior Capstone Project I	3
or PSYC 312	Human Motivation and Emotion	
or PSYC 423	Learning Theory	
or PSYC 435	Child Development	
or PSYC 436	Adult Development	
<b>Psychological Science Electives</b>		<b>(9)</b>
Select nine credit hours <sup>1</sup>		9
<b>Introduction to the Profession</b>		<b>(2-3)</b>
BIOL 100	Introduction to the Profession	2-3
or PSYC 100	Introduction to the Profession	
<b>Computer Science Requirement</b>		<b>(2)</b>
CS 105	Introduction to Computer Programming	2
or CS 110	Computing Principles	
<b>Interprofessional Projects (IPRO)</b>		<b>(6)</b>
See Illinois Tech Core Curriculum, section E		6
<b>Humanities and Social Sciences Requirements</b>		<b>(12-21)</b>
See Illinois Tech Core Curriculum, sections B and C <sup>1</sup>		12-21

**Minimum degree credits required: 144**

<sup>1</sup> B.S. Biochemistry/B.S. Psychological Science students may apply a maximum of three psychology courses to both the social sciences requirements and the psychology electives specified for the psychological science degree requirements (psychology electives must be 300-level and above). At least one of the social science "S" courses must be a non-psychology course.

## Bachelor of Science in Biochemistry/Bachelor of Science in Psychological Science Curriculum - Eight Semester Plan

		Year 1	
Semester 1	Credit Hours	Semester 2	Credit Hours
BIOL 100	2	BIOL 115	3
BIOL 107	3	BIOL 117	1
BIOL 109	1	CHEM 125	4
CHEM 124	4	PHYS 123	4
MATH 151	5	PSYC 301	3
PSYC 221	3	Humanities 200-level Course	3
<b>18</b>		<b>18</b>	
		Year 2	
Semester 1	Credit Hours	Semester 2	Credit Hours
BIOL 214	3	BIOL 210	3
CHEM 237	4	MATH 251	4
MATH 152	5	PHYS 221	4
PSYC 310	3	PSYC 204	4
Humanities Elective (300+)	3	Social Sciences Elective <sup>1</sup>	3
<b>18</b>		<b>18</b>	
		Year 3	
Semester 1	Credit Hours	Semester 2	Credit Hours
BIOL 445	3	CHEM 239	3
CHEM 247	3	CHEM 240	2
PSYC 320	3	CS 105	2
PSYC 414	3	MATH 425	3
IPEL Elective I	3	PSYC 435	3
Social Sciences Elective (300+) <sup>1</sup>	3	Biochemistry Elective	2
		IPEL Elective II	3
<b>18</b>		<b>18</b>	
		Year 4	
Semester 1	Credit Hours	Semester 2	Credit Hours
BIOL 401	3	BIOL 402	3
BIOL 404	3	BIOL 451	2
CHEM 343	3	BIOL 495	1
PSYC 426	3	CHEM 438	3
Humanities Elective (300+)	3	PSYC 485	3
Social Sciences Elective (300+) <sup>1</sup>	3	Dual Degree Elective <sup>2</sup>	3
		Humanities or Social Sciences Elective <sup>1</sup>	3
<b>18</b>		<b>18</b>	

**Total Credit Hours: 144**

<sup>1</sup> B.S. Biochemistry/B.S. Psychological Science students may apply a maximum of three psychology courses to both the social sciences requirements and the psychology electives specified for the psychological science degree requirements (psychology electives must be 300-level and above). At least one of the social science "S" courses must be a non-psychology course.

<sup>2</sup> Select one course from the following: BIOL 420, BIOL 430, BIOL 475, or FDSN 401.

## Bachelor of Science in Biochemistry/Bachelor of Science in Psychological Science Curriculum - Nine Semester Plan

Semester 1		Semester 2		Year 1
	Credit Hours		Credit Hours	Credit Hours
BIOL 100	2	BIOL 115	3	3
BIOL 107	3	BIOL 117	1	1
CHEM 124	4	CHEM 125	4	4
MATH 151	5	PHYS 123	4	4
PSYC 221	3	PSYC 303	3	3
		<b>17</b>		<b>15</b>

Semester 1		Semester 2		Year 2
	Credit Hours		Credit Hours	Credit Hours
BIOL 109	1	BIOL 210	3	3
BIOL 214	3	PHYS 221	4	4
MATH 152	5	PSYC 204	4	4
PSYC 203	4	Humanities/Social Sciences Elective <sup>1</sup>	3	3
Humanities 200-level Course	3			
		<b>16</b>		<b>14</b>

Semester 1		Semester 2		Year 3
	Credit Hours		Credit Hours	Credit Hours
CHEM 237	4	CHEM 239	3	3
MATH 251	4	CHEM 240	2	2
PSYC 320	3	PSYC 310	3	3
PSYC 414	3	PSYC 435	3	3
I PRO Elective I	3	Biochemistry Elective	2	2
		Dual Degree Elective <sup>2</sup>	3	3
		<b>17</b>		<b>16</b>

Semester 1		Semester 2		Year 4
	Credit Hours		Credit Hours	Credit Hours
BIOL 401	3	BIOL 402	3	3
CHEM 247	3	BIOL 451	2	2
CHEM 343	3	CHEM 438	3	3
CS 105	2	Social Sciences Elective (300+) <sup>1</sup>	3	3
PSYC 426	3	Humanities Elective (300+)	3	3
Social Sciences Elective <sup>1</sup>	3	I PRO Elective II	3	3
		<b>17</b>		<b>17</b>

Semester 1		Semester 2		Year 5
	Credit Hours		Credit Hours	Credit Hours
BIOL 404	3			
BIOL 445	3			
BIOL 495	1			
PSYC 485	3			
Humanities Elective (300+)	3			

Social Sciences Elective (300+) <sup>1</sup>	3
	<b>16</b>

---

**Total Credit Hours: 145**

- <sup>1</sup> B.S. Biochemistry/B.S. Psychological Science students may apply a maximum of three psychology courses to both the social sciences requirements and the psychology electives specified for the psychological science degree requirements (psychology electives must be 300-level and above). At least one of the social science "S" courses must be a non-psychology course.
- <sup>2</sup> Select one course from the following: BIOL 420, BIOL 430, BIOL 475, or FDSN 401.