

Pathway - Biochemistry

Southwestern Illinois College

Associate in Science

Fall Year 1

| SWIC Course | | Hours |
|--------------|------------------------------|-----------|
| ENG 101 | Rhetoric and Comp I | 3 |
| BIOL 101 | Principles of Biology I | 4 |
| CHEM 105 | General Chemistry I | 5 |
| MATH 203 | Analytical Geometry and Calc | 5 |
| Total | | 17 |

Spring Year 1

| SWIC Course | | Hours |
|--------------|------------------------------|-----------|
| ENG 102 | Rhetoric and Comp II | 3 |
| BIOL 102 | Principles of Biology II | 4 |
| CHEM 106 | General Chemistry II | 5 |
| MATH 107 | General Education Statistics | 4 |
| Total | | 16 |

Fall Year 2

| SWIC Course | | Hours |
|----------------------------|---------------------|-----------|
| IAI Fine Arts ¹ | IAI Fine Arts | 3 |
| CHEM 201 | Organic Chemistry I | 5 |
| COMM 151 | Public Speaking | 3 |
| BIOL 270 | Genetics | 4 |
| HES 1XX | Human Well Being | 2 |
| Total | | 17 |

Spring Year 2

| SWIC Course | | Hours |
|---------------------------------|------------------------|-----------|
| CHEM 202 | Organic Chemistry II | 5 |
| IAI Humanities ¹ | IAI Humanities | 3 |
| IAI Social Science ¹ | IAI Social Science | 3 |
| IAI Behavioral ¹ | IAI Behavioral Science | 3 |
| Total | | 14 |

Completion of Associate in Science degree **64**

¹Students will need to complete one Human Relations course and one Non-Western course for AS degree.

*Students must complete 50% or more of SIUE degree requirements at SIUE.

Southern Illinois University Edwardsville

Bachelor of Science

Fall Year 3

| SIUE Course | | Hours |
|---------------|------------------------------|-----------|
| CHEM 300 | Professionalism in Science | 1 |
| CHEM 331 | Quantitative Analytical Chem | 3 |
| CHEM 335 | Quantitative Analytical Lab | 1 |
| BIOL 319 | Cell and Molecular Biology | 4 |
| CHEM 451A | Biochemistry | 3 |
| PHYS 131/131L | College Physics I | 5 |
| Total | | 17 |

Spring Year 3

| SIUE Course | | Hours |
|---------------|----------------------------|-----------|
| BIOL 319 | Cell and Molecular Biology | 4 |
| CHEM 451B | Biochemistry | 3 |
| CHEM 455 | Biochemistry Lab | 2 |
| CHEM XXX | Chemistry elective | 2 |
| PHYS 132/132L | College Physics II | 5 |
| Total | | 16 |

Fall Year 4

| SIUE Course | | Hours |
|--------------|---------------------------|-----------|
| CHEM 410 | Bio-Inorganic Chemistry | 3 |
| CHEM 451C | Biochemistry | 3 |
| CHEM 461A | BioPhysical Chemistry I | 3 |
| CHEM 465 | BioPhysical Chemistry Lab | 2 |
| STAT 244 | Statistics | 4 |
| Total | | 15 |

Spring Year 4

| SIUE Course | | Hours |
|--------------|---------------------------|-----------|
| CHEM 461B | BioPhysical Chemistry II | 3 |
| CHEM 431 | Instrumental Analysis | 3 |
| CHEM 435 | Instrumental Analysis Lab | 1 |
| CHEM 499 | Senior Assignment | 0 |
| CHEM XXX | CHEM elective | 2 |
| IS XXX | Interdisciplinary Studies | 3 |
| Total | | 12 |

Completion of Bachelor of Science degree **124**