

**Southwestern Illinois College  
Pathway - Mathematics - Actuarial Science**

**Southwestern Illinois College  
Associate in Arts Degree  
Fall Year 1**

| SWIC Course           |                                | Hours     |
|-----------------------|--------------------------------|-----------|
| ENG 101               | Rhetoric and Composition I     | 3         |
| MATH 203 <sup>2</sup> | Analytic Geometry & Calculus I | 5         |
| IAI HUM <sup>1</sup>  | IAI Humanities                 | 3         |
| ECON 201              | Principles of Macroeconomics   | 3         |
| COMM 151              | Fund. Of Public Speaking       | 3         |
| <b>Total</b>          |                                | <b>17</b> |

**Spring Year 1**

| SWIC Course           |                                 | Hours     |
|-----------------------|---------------------------------|-----------|
| ENG 102               | Rhetoric and Composition II     | 3         |
| MATH 204 <sup>2</sup> | Analytic Geometry & Calculus II | 5         |
| ECON 202              | Principles of Microeconomics    | 3         |
| PHYS 204 <sup>2</sup> | Physics- Mechanics              | 4         |
| <b>Total</b>          |                                 | <b>15</b> |

**Fall Year 2**

| SWIC Course             |                                  | Hours     |
|-------------------------|----------------------------------|-----------|
| HES XXX                 | Human Well Being                 | 2         |
| MATH 205 <sup>2</sup>   | Analytic Geometry & Calculus III | 4         |
| IAI LS <sup>2</sup>     | IAI Life Science w/Lab           | 4         |
| ACCT 110                | Financial Accounting             | 4         |
| IAI Hum/FA <sup>1</sup> | Humanities or Fine Arts          | 3         |
| <b>Total</b>            |                                  | <b>17</b> |

**Spring Year 2**

| SWIC Course            |                        | Hours     |
|------------------------|------------------------|-----------|
| MATH 290 <sup>2</sup>  | Differential Equations | 3         |
| C/H/SS/BS <sup>1</sup> | IAI COM/ HUM/SS/BS     | 3         |
| IAI BS <sup>1</sup>    | IAI Behavioral Science | 3         |
| ELE                    | Elective               | 3         |
| IAI FA <sup>1</sup>    | IAI Fine Arts          | 3         |
| <b>Total</b>           |                        | <b>15</b> |

**Associate in Arts Degree Total**

**64**

**Southern Illinois University Edwardsville  
Bachelor of Science Degree  
Fall Year 3**

| SIUE Course  |                                  | Hours     |
|--------------|----------------------------------|-----------|
| MATH 223     | Logic and Mathematical Reasoning | 4         |
| MATH 340     | Theory of Interest               | 3         |
| STAT 480a    | Intro to Mathematical Stats      | 3         |
| MATH 321     | Linear Algebra I                 | 3         |
| ACCT 210     | Managerial Accounting            | 3         |
| <b>Total</b> |                                  | <b>16</b> |

**Spring Year 3**

| SIUE Course  |                                | Hours     |
|--------------|--------------------------------|-----------|
| MATH 350     | Introduction to Analysis       | 4         |
| STAT 480b    | Intro to Mathematical Stats    | 3         |
| STAT 486a    | Actuarial Mathematics          | 3         |
| CS 145       | Intro to Computing I           | 3         |
| FIN 320      | Financial Mgmt&Decision Making | 3         |
| <b>Total</b> |                                | <b>16</b> |

**Fall Year 4**

| SIUE Course  |                                 | Hours     |
|--------------|---------------------------------|-----------|
| MATH 498     | Senior Seminar                  | 2         |
| FIN 420      | Problems in Corporate Finance   | 3         |
| MATH XXX     | Math,Statistics, or OR Elective | 3         |
| MATH 465     | Numerical Analysis              | 3         |
| IS XXX       | Interdisciplinary Course        | 3         |
| <b>Total</b> |                                 | <b>14</b> |

**Spring Year 4**

| SIUE Course  |                                  | Hours     |
|--------------|----------------------------------|-----------|
| MATH 499     | Senior Project                   | 2         |
| STAT 482     | Regression Analysis              | 3         |
| MATH XXX     | Math, Statistics, or OR Elective | 3         |
| OR 441       | Operations Research: Stochastic  | 3         |
| FIN XXX      | Finance Elective                 | 3         |
| <b>Total</b> |                                  | <b>14</b> |

**Bachelor of Science Degree Total**

**124**

<sup>1</sup>Students need to complete one Human Relations and one Non-Western course. Please see advisor.

<sup>2</sup>All Math/Science courses require a grade of "C" or better.

**Students who receive an Actuarial Science Degree will automatically be awarded a Business Administration minor.**

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

\*A course that satisfies both the ERGU and EREG requirement will only be counted as one and not both.