

**SOUTHERN ILLINOIS UNIVERSITY  
EDWARDSVILLE**

**Pathway - Mathematics- Applied**

**Southwestern Illinois College  
Associate in Science 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         |
| IAI SS <sup>1</sup>   | IAI Social Science             | 3         |
| HES XXX               | Human Well Being               | 2         |
| <b>Total</b>          |                                | <b>16</b> |

**Spring Year 1**

| SWIC Course           |                                 | Hours     |
|-----------------------|---------------------------------|-----------|
| ENG 102               | Rhetoric and Composition II     | 3         |
| MATH 204 <sup>2</sup> | Analytic Geometry & Calculus II | 5         |
| IAI Beh <sup>1</sup>  | IAI Behavioral Science          | 3         |
| PHYS 204 <sup>2</sup> | Physics- Mechanics              | 4         |
| <b>Total</b>          |                                 | <b>15</b> |

**Fall Year 2**

| SWIC Course           |                                  | Hours     |
|-----------------------|----------------------------------|-----------|
| COMM 151              | Fund. Of Public Speaking         | 3         |
| MATH 205 <sup>2</sup> | Analytic Geometry & Calculus III | 4         |
| EILE XXX              | Elective                         | 3         |
| ELE XXX               | Elective                         | 3         |
| PHYS 205 <sup>2</sup> | Physics- Heat, Elec & Magnetism  | 4         |
| <b>Total</b>          |                                  | <b>17</b> |

**Spring Year 2**

| SWIC Course           |                        | Hours     |
|-----------------------|------------------------|-----------|
| MATH 290 <sup>2</sup> | Differential Equations | 3         |
| IAI LS <sup>2</sup>   | IAI Life Science w/Lab | 4         |
| ELE XXX <sup>3</sup>  | Elective(s)            | 3         |
| IAI FA <sup>1</sup>   | IAI Fine Arts          | 3         |
| <b>Total</b>          |                        | <b>13</b> |

**Summer Year 2**

| SWIC Course             |                              | Hours    |
|-------------------------|------------------------------|----------|
| MATH 210 <sup>2,3</sup> | Computer Prog. For Engineers | 3        |
| <b>Total</b>            |                              | <b>3</b> |

**Associate in Science Degree Total 64**

<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.

<sup>3</sup>MATH 210 offered summer term only.

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

**Southern Illinois University Edwardsville  
Bachelor of Science Degree**

**Fall Year 3**

| SIUE Course  |                                  | Hours     |
|--------------|----------------------------------|-----------|
| MATH 223     | Logic and Mathematical Reasoning | 4         |
| ELE XXX      | Elective                         | 3         |
| MATH 321     | Linear Algebra I                 | 3         |
| ELE XXX      | Science or Engineering Elective  | 3         |
| ELE XXX      | Elective                         | 3         |
| <b>Total</b> |                                  | <b>16</b> |

**Spring Year 3**

| SIUE Course  |                                  | Hours     |
|--------------|----------------------------------|-----------|
| MATH 350     | Introduction to Analysis         | 4         |
| MATH 464     | Partial Differential Equations   | 3         |
| ELE XXX      | Science Elective                 | 3         |
| MATH XXX     | Math, Statistics, or OR Elective | 3         |
| IS XXX       | Interdisciplinary Course         | 3         |
| <b>Total</b> |                                  | <b>16</b> |

**Fall Year 4**

| SIUE Course  |                                  | Hours     |
|--------------|----------------------------------|-----------|
| MATH 498     | Senior Seminar                   | 2         |
| MATH 465     | Numerical Analysis               | 3         |
| MATH XXX     | Math, Statistics, or OR Elective | 3         |
| ELE XXX      | Electives                        | 6         |
| <b>Total</b> |                                  | <b>14</b> |

**Spring Year 4**

| SIUE Course  |                                  | Hours     |
|--------------|----------------------------------|-----------|
| MATH 499     | Senior Project                   | 2         |
| MATH 451     | Intro to Complex Analysis        | 3         |
| MATH 466     | Numer Linear w/Applications      | 3         |
| ELE XXX      | Science or Engineering Elective  | 3         |
| MATH XXX     | Math, Statistics, or OR Elective | 3         |
| <b>Total</b> |                                  | <b>14</b> |

**Bachelor of Science Degree Total 124**

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