

**SOUTHERN ILLINOIS UNIVERSITY
EDWARDSVILLE**

Pathway - Industrial Engineering

**Southwestern Illinois College
Associate in Engineering Degree**

Fall Year 1

| SWIC Course | | Hours |
|--------------|----------------------------|-----------|
| ENG 101 | Rhetoric and Composition I | 3 |
| CHEM 105 | General Chemistry I | 5 |
| ENGR 103 | Engineering Graphics | 4 |
| MATH 203 | Analytical Geom & Calc I | 5 |
| Total | | 17 |

Spring Year 1

| SWIC Course | | Hours |
|--------------------|-----------------------------|-----------|
| IAI Fine Arts | ART 103 or MUS 110 | 3 |
| MATH 204 | Analytical Geom & Calc II | 5 |
| PHYS 204 | Physics- Mechanics | 4 |
| IAI Social Science | Human Relations S.S. (ERGU) | 3 |
| ENG 102 | Rhetoric and Composition II | 3 |
| Total | | 18 |

Summer Year 1

| SWIC Course | | Hours |
|-----------------------|------------------------------|----------|
| MATH 210 ² | Computer Prog. For Engineers | 3 |
| Total | | 3 |

Fall Year 2

| SWIC Course | | Hours |
|----------------------|------------------------------|-----------|
| PHYS 205 | Physics-Heat/EL/Mag | 4 |
| MATH 205 | Analytical Geom & Calc III | 4 |
| ENGR 263 | Analytical Mech-Statics | 3 |
| ECON 201 | Prin. Of Economics I (Macro) | 3 |
| HES 151 ³ | Personal Health and Wellness | 2 |
| Total | | 16 |

Spring Year 2

| SWIC Course | | Hours |
|--------------|-----------------------------------|-----------|
| MATH 290 | Differential Equations | 3 |
| BIOL 100/101 | General Biology/Prin. Of Biol I | 4 |
| ENGR 271 | Electrical Circuits | 3 |
| ENGR 264 | Analytical Mech - Dynamics | 3 |
| COMM 155 | Interpersonal Comm (ERGU or EREG) | 3 |
| Total | | 16 |

Associate in Engineering Science Total 70

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

Summer Year 2

| SIUE Course | | Hours |
|---------------------|---------------------|----------|
| ² CE 242 | Mechanics of Solids | 3 |
| Total | | 3 |

Fall Year 3

| SIUE Course | | Hours |
|--------------|--------------------------------|-----------|
| IE 335 | Intro to Infor. Proc. Systems | 3 |
| IE 345 | Engineering Economic Analysis | 3 |
| STAT 380 | Statistics for Application | 3 |
| IE 370 | Manufacturing Processes | 3 |
| IE 375 | 3-D Modeling Product Design | 3 |
| ERGU | EXP- US Race Gender and Equity | 3 |
| Total | | 18 |

Spring Year 3

| SIUE Course | | Hours |
|--------------|---------------------------------|-----------|
| IE 415 | Oper.Deterministic Models | 3 |
| IE 451 | Methods Design & Work Areas | 3 |
| IE 465 | Design & Control of Quality Sys | 3 |
| IE 470 | Manufacturing Systems | 3 |
| Total | | 12 |

Fall Year 4

| SIUE Course | | Hours |
|--------------|-------------------------------|-----------|
| IE 468 | Operations Research | 3 |
| IE 476 | Plant Wide Process Control | 3 |
| IE 483 | Production Planning & Control | 3 |
| IE 484 | Facilities Planning | 3 |
| IE XXX | Elective I | 3 |
| EH | Health Experience | 1 |
| Total | | 16 |

Spring Year 4

| SIUE Course | | Hours |
|--------------|--------------------------------|-----------|
| IE 490 | Integrated Engineering Design | 3 |
| IE XXX | Elective II | 3 |
| IE XXX | Elective III | 3 |
| PHIL 323 | Engr. Ethics & Professionalism | 3 |
| IS/EREG | IS/EREG | 3 |
| Total | | 15 |

Bachelor of Science Total 128

²Students can substitute MATH 171 for 210.

³Students may also take HES 152 or HES 130 and 131.

*Students should follow the AES specialty curriculum at SWIC.

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

Pathway - Industrial Engineering

NOTE: Students must apply for admission to upper-division classes before starting the junior year at SIUE. The form for 'APPLICATION FOR ADMISSION TO UPPER-DIVISION' must be submitted by the deadline to the academic advisor in the School of Engineering at SIUE.

Students must earn 60 hours from a senior institution for graduation requirements. If students take all SIUE junior and senior level courses, stated above, at SIUE, they will meet this requirement. Please note: deviating from the planned schedule above may jeopardize this requirement.

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

School of Engineering Transfer Credit Advisory Note: *The University may accept transfer "D" grades; however, in the School of Engineering, a grade of C or better is required in all chemistry, computer science, mathematics, physics, and engineering courses applied to major or minor requirements. A course that transfers in as 1xx, 2xx, 3xx or TRF 1xx; TRF 2xx; TRF 3xx may require a course description and/or syllabus for further evaluation.*