

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 SS ⁴	IAI Human Relations Social Science	3
ENG 102	Rhetoric and Composition II	3
Total		18

Summer Year 1

SWIC Course		Hours
MATH 210 ³	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 ¹	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 ²	Interpersonal Communication	3
Total		16

Associate in Engineering Science Total **70**

¹Students may also take HES 152 or HES 130 and 131.

²Students may substitute with COMM 151.

³Students can substitute MATH 171 for 210.

⁴Students should follow Industrial Engineering specialty curriculum at SWIC. Hum/SS are within the AES at SWIC but not the BS at SIUE.

⁵IE 106 may no longer be required if AES is earned. More details coming.

Southern Illinois University Edwardsville Bachelor of Science Degree Summer Year 2

SIUE Course		Hours
CE 242	Mechanics of Solids	3
Total		3

Fall Year 3

SIUE Course		Hours
IE 335	Intro to Information Process	3
IE 345	Engineering Economic Analysis	3
STAT 380	Statistics for Application	3
IE 370	Manufacturing Processes	3
CS 145	Info Comp for Engineers	3
IE 375	3-D Modeling in Design	3
Total		18

Spring Year 3

SIUE Course		Hours
IE 415	OR- Deterministic Models	3
IE 451	Methods Design & Work Areas	3
IE 465	Design & Control of Quality Sys	3
IE 470	Manufacturing Systems	3
IE 106 ⁵	Engineering Problem Solving	3
Total		15

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	3
Total		15

Spring Year 4

SIUE Course		Hours
IE 490	Integrated Engineering Design	3
IE XXX	Elective	3
IE XXX	Elective	3
PHIL 323	Engr. Ethics & Professionalism	3
IS	Interdisciplinary Course	3
Total		15

Bachelor of Science Total **138**

*Students must complete 50% or more of SIUE degree requirements at SIUE (120 hours required for graduation).

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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.

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.*