

**SOUTHERN ILLINOIS UNIVERSITY  
EDWARDSVILLE**

**Pathway - Industrial Engineering**

**Southwestern Illinois College  
Associate in Engineering Science Degree**

**Fall Year 1**

SWIC Course		Hours
ENG 101	Rhetoric and Composition I	3
MATH 203	Analytic Geometry & Calculus I	5
CHEM 105	General Chemistry I	5
ENGR 103	Engineering Graphics	4
<b>Total</b>		<b>17</b>

**Spring Year 1**

SWIC Course		Hours
ENG 102	Rhetoric and Composition II	3
MATH 204	Analytic Geometry & Calculus II	5
PHYS 204	Physics- Mechanics	4
COMM 155	Interpersonal Comm (ERGU or EREG)*	3
<b>Total</b>		<b>15</b>

**Fall Year 2**

SWIC Course		Hours
MATH 205	Analytic Geometry & Calculus III	4
MATH 171	Computer Science I - JAVA	4
PHYS 205	Physics-Heat, Elec, & Magnetism	4
ENGR 263	Analytical Mechanics-Statics	3
IAI Social Science	SOC 230 recommended (ERGU)	3
<b>Total</b>		<b>18</b>

**Spring Year 2**

SWIC Course		Hours
MATH 290	Differential Equations	3
ENGR 264	Analytical Mechanics - Dynamics	3
ENGR 271	Electrical Circuits	3
ENGR 275	Mechanics of Solids	3
ECON 201	Principles of Macroeconomics	3
<b>Total</b>		<b>15</b>

**Associate in Engineering Science Degree Total 65**

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

**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
<b>Total</b>		<b>15</b>

**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
PHIL 323	Engineering, Ethics & Professionalism	3
EH	Health Experience	0-2
<b>Total</b>		<b>15</b>

**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
<b>Total</b>		<b>15</b>

**Spring Year 4**

SIUE Course		Hours
IE 490	Integrated Engineering Design	3
IE XXX	Elective II	3
IE XXX	Elective III	3
IS <sup>1</sup>	IS (EREG/ERGU - if needed)	3
BFPA <sup>1</sup>	Breadth Fine & Performing Arts	3
BLS	Breath Life Science	3
<b>Total</b>		<b>18</b>

**Bachelor of Science Degree Total 128**

<sup>1</sup>IS 370 and IS 380 satisfy both BFPA and IS. Confirm availability with SIUE Academic Advisor.

\*Students should follow AES subplan. Consult SWIC Advisor or Program Coordinator

## **Pathway - Industrial Engineering**

School of Engineering Transfer Credit Advisory Notes:

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

SIUE 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 as 1XX, 2XX, 3XX or TRF 1XX, TRF 2XX, TRF 3XX may require a course description and/or syllabus for further evaluation.

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

Interdisciplinary Studies (IS) Courses must be taken at the junior/senior level class standing. This requirement is not waived with completion of transfer associate degree or IAI-GECC. It is recommended that students choose a course to meet this general education requirement AND Global Cultures, Race, and Equity Education Experience (EREG) or US Race, Gender, and Equity Experience (ERGU). Please see the SIUE advisor for a current list of course options.