

**SOUTHERN ILLINOIS UNIVERSITY  
EDWARDSVILLE**

**Pathway - Electrical 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
IAI Social Science	SOC 230 recommended (ERGU)	3
<b>Total</b>		<b>16</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/Electrical/Magnetism	4
ECON 201	Principles of Macroeconomics	3
<b>Total</b>		<b>15</b>

**Spring Year 2**

SWIC Course		Hours
MATH 290	Differential Equations	3
IAI Fine Arts	ART 103 or MUS 110	3
BIOL 100/101	General Biology/Principles of Biology I	4
ENGR 271	Electrical Circuits	3
HES XXX	Human Wellbeing	2
<b>Total</b>		<b>15</b>

**Associate in Engineering Science Degree Total 61**

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

SIUE Course		Hours
ECE 211	Circuit Analysis II	4
<b>Total</b>		<b>4</b>

**Fall Year 3**

SIUE Course		Hours
ECE 326	Electronic Circuits I	4
ECE 351	Signals and Systems	3
ECE 352	Engineering Probability & Statistics	3
MATH 355	Engineering Math	5
<b>Total</b>		<b>15</b>

**Spring Year 3**

SIUE Course		Hours
NON-ECE Tech	NON-ECE Tech Elective	3
ECE 282	Digital Systems Designs	4
ECE 340	Engineering Electromagnetics	3
ECE 365	Control Systems	3
ECE 375	Intro to Communications	3
<b>Total</b>		<b>16</b>

**Fall Year 4**

SIUE Course		Hours
ECE 341	Electromechanical Energy Conv.	4
ECE 404	ECE Senior Design I	3
ECE XXX	Elective I	3
ECE XXX	Elective II	3
PHIL 323	Engineering, Ethics & Professionalism	3
<b>Total</b>		<b>16</b>

**Spring Year 4**

SIUE Course		Hours
ECE 405	ECE Senior Design II	3
ECE XXX	Elective III	3
ECE XXX	Elective IV	3
IE 345	Engineering Economics Analysis	3
IS	IS (EREG/ERGU - if needed)	3
<b>Total</b>		<b>15</b>

**Bachelor of Science Degree Total 127**

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

## **Pathway - Electrical 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.