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SIU CARBONDALE

TRANSFER GUIDE

AES Electrical Engineering transferring into BS Electrical Engineering

John A Logan College Courses			
AES Electrical Engineering – 70 hours			
ORI/SCI 100-1	College 101/STEM Fundamentals	Elective-3	IAI Fine Arts
ENG 101-3	English Composition I	Elective-3	IAI Elective
ENG 102-3	English Composition II	CPS 206-4	Computer Science I
COM 115-3	Speech	1 Course-3	EGR 101 or Elective
MAT 131-5	Calculus I	MAT 201-5	Calculus II
Elective-3	IAI Social Science	MAT 202-3	Calculus III
Elective-3	IAI Social Science	MAT 205-3	Differential Equations
Elective-3	IAI Humanities	PHY 205-5	University Physics I
CHM 151-5	Chemical Principles	PHY 206-5	University Physics II
Elective-3	IAI Life Science	PHY 224-4	Intro to Circuit Analysis w/Lab
Southern Illinois University Carbondale Courses Capstone Option			
BS Electrical Engineering (EE) – 59 hours			
BIOL 202-2	Human Genetics & Human Health	ECE 355,355L-4	Signals & Systems w/Lab
ECE 296,296L-4	Intro Microcont & Robotics w/Lab	ECE 375-3	Intro to Electromagnetic Fields
ECE 315-4	Mathematical Methods in ECE	ECE 495E-3	EE Senior Design I
ECE 327,327L-4	Digital Circuit Design w/HDL w/Lab	ECE 495D-3	ECE Senior Design II
ECE 336-3	Electric Circuits II	ECE Tech Elec-25	Select from list of approved courses
ECE 345,345L-4	Electronics w/Lab		
Total Hours to Bachelor Degree: 129 Hours			

Salary Range: $60,000-$150,000

Possible Careers:
Aerospace Engineer
Automotive Engineer
Biomedical Engineer
Controls Systems Engineer
Cyber Systems Engineer
Defense Systems Engineer
Electronics Engineer
Electromagnetics Engineer
Power Systems Engineer
Research & Development Engineer
Robotics Engineer
Semiconductor/VLSI Engineer
Signal Processing Engineer
Telecommunications Engineer

Questions? Contact Us!

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Baccalaureate Degree Requirements

Each candidate for a bachelor's degree must complete the requirements listed:

Hour Requirements. Student must complete at least 120 semester hrs of credit. Each student must have at least 42 hrs in courses that number 300 or above from a four-year institution.

Residence Requirements. Student must complete the residency requirement by taking a total of 42 semester hrs at SIU Carbondale.

Grade Point Average Requirements. Student must have a C average for all work taken at SIU Carbondale. Some academic programs may require a higher graduating major GPA.

Compact Agreement

SIU Carbondale has recognized Illinois regionally accredited community college transferable baccalaureate-oriented Associate of Arts or Associate of Science degrees under the Compact Agreement since 1970. SIUC will continue to recognize the baccalaureate oriented associate degree (A.A. or A.S. degree) under the Illinois Articulation Initiative as satisfying SIU University Core Curriculum (UCC) requirements. The Associate of Applied Science (A.A.S.), Associate in Engineering Science (A.E.S.), the Associate in General Studies (A.G.S.), and the Associate in Fine Arts (A.F.A.) are not covered under the Compact Agreement and do not carry the same benefits as the A.A. and A.S. degrees.

Saluki Transfer Pathways

Saluki Transfer Pathways is the university's dual admission program that allows baccalaureate-oriented students at eligible community colleges intending to transfer to SIU Carbondale to benefit from early admission and pre-advisement for a baccalaureate program at SIUC. Saluki Transfer Pathways allows students to be conditionally admitted to SIU Carbondale up to two years in advance of their intended transfer term so they have access to transfer credit evaluation and the university's degree audit system. This allows students to address major specific requirements that may not be automatically fulfilled with the completion of an associate degree. Students apply to Saluki Transfer Pathways by completing the Application for Undergraduate Admission and indicating an interest in the program. To participate, students must have at least two semesters remaining at their community college, must attend an eligible community college, and must select a participating SIU major. Direct questions about the Saluki Transfer Pathways program to transfer@siu.edu.

DegreeWorks

DegreeWorks is an easy-to-use, online degree audit tool specifically designed for students. Once admitted to SIU Carbondale, you can use it monitor your progress toward your degree in Salukinet.

Saluki Transfer Estimator Portal (STEP)

The Saluki Transfer Estimator Portal (STEP) is a web-based tool that integrates institutional course equivalency and degree audit data to provide an unofficial credit estimation and a more seamless transfer process. STEP gives transfer students a clear roadmap for timely degree completion by providing key information about how transfer credits apply to your intended program at SIU.

PROGRAM ARTICULATION DEGREE PLAN					
John A. Logan College	***2024-2025***		***Southern Illinois University Carbondale***		
AES Engineering Science: Electrical Engineering - 70 hrs			BS Electrical Engineering (EE) - 126 hrs		
			University Core Curriculum (UCC) Capstone Option - 30 hrs		
		Hrs			**Hrs**
			UNIV 101	Saluki Success	NA
COM 115	Speech	3	CMST 101	Intro to Oral Communication	T
ENG 101	English Composition I	3	ENGL 101	English Composition I	T
ENG 102	English Composition II	3	ENGL 102	English Composition II	T
MAT 131	Calculus I	5	MATH 150	Calculus I	T
	IAI Social Science	3	SOCIAL SCIENCE	*See SIUC Transfer Equivalency Guide*	T
	IAI Social Science	3	SOCIAL SCIENCE	*See SIUC Transfer Equivalency Guide*	T
	IAI Humanities	3	HUMANITIES	*See SIUC Transfer Equivalency Guide*	T
			HUMANITIES		NA
CHM 151	Chemical Principles	5	CHEM 200 -and- 201	Intro to Chemical Principles w/Lab	T
	IAI Life Science	3	LIFE SCIENCE	*See SIUC Transfer Equivalency Guide*	T
	IAI Fine Arts	3	FINE ARTS	*See SIUC Transfer Equivalency Guide*	T
			BIOL 202	Human Genetics & Human Health	2
	IAI Elective	3	MULTICULTURAL	*See SIUC Transfer Equivalency Guide*	T
		37			**2**
Program Requirements			**Program Requirements**		
ORI 100 -or- SCI 100	College 101 -or- STEM Fundamentals	1	**The AES from John A Logan College fulfills the general electives required for the BS in Electrical Engineering**		
CPS 206	Computer Science I	4	ECE 222	Intro to Digital Computation	T
EGR 101-or- Elective	Engineering Graphics -or- Elective	3	ME 102 -or- GENL 1XX (elective)	Computer-Aided Engineering Drawing -or- General Elective Credit	T
MAT 201	Calculus II	5	MATH 250	Calculus II	T
MAT 202	Calculus III	3	MATH 251	Calculus III	T
MAT 205	Differential Equations	3	MATH 305	Intro to Differential Equations	T
PHY 205	University Physics I	5	PHYS 205A -and- 255A	University Physics w/Lab	T
PHY 206	University Physics II	5	PHYS 205B -or- 255B	University Physics w/Lab	T
PHY 224	Intro to Circuit Analysis w/Lab	4	ECE 235 -and- 235L	Electric Circuits I w/Lab	T
		33			
			ECE 296 -and- 296L	Intro to Microcontrollers & Robotics w/Lab	4
			ECE 315	Mathematical Methods in ECE	4
			ECE 327 -and- 327L	Digital Circuit Design with HDL w/Lab	4
			ECE 336	Electric Circuits II	3
			ECE 345 -and- 345L	Electronics w/Lab	4
			ECE 355 -and- 355L	Signals & Systems w/Lab	4
			ECE 375	Intro to Electromagnetic Fields	3
			ECE 495E	EE Senior Design I	3
			ECE 495D	ECE Senior Design II	3
			ECE Technical Electives	Two out of the following: ECE 356 & ECE 356L, ECE 385 & ECE 385L, ECE 478. Other approved ECE technical electives by the School: ECE 3XX or 4XX level (except ECE 392, ECE 492 & ECE 493). At least 10 ECE hours not from ECE 412-435.	25
					57
Total semester hrs completed w/AES degree:		**70**	**Total semester hrs completed w/BS degree:**		**59**
			Total hrs to BS Degree:		**129**
Degree Plan updated on 7/24/24 by SG					