

TRANSFER GUIDE

AES Computer Engineering transferring into BS Computer Engineering

John A Logan College Courses			
AES Computer Engineering – 68 hours			
ORI 100/SCI 100-1	College 101/STEM Fundamentals	CPS 206-4	Computer Science I
ENG 101-3	English Composition I	CPS 215-4	Computer Science II
ENG 102-3	English Composition II	EGR 101-3	Engineering Graphics
MAT 131-5	Calculus I	MAT 201-5	Calculus II
Elective-3	IAI Social Science	MAT 202-3	Calculus III
Elective-3	IAI Humanities	MAT 205-3	Differential Equations
CHM 151-5	Chemical Principles	PHY 205-5	University Physics I
Elective-3	IAI Life Science	PHY 206-5	University Physics II
Elective-3	IAI Fine Arts	PHY 224-4	Intro to Circuit Analysis w/Lab
BIO 225-3	Genetics		
Southern Illinois University Carbondale Courses Capstone Option			
BS Computer Engineering (CEGR) – 66 hours			
CMST 101-3	Intro Oral Communication	ECE 329,329L-4	Computer Organization & Design w/Lab
Elective-3	Social Science	ECE 345,345L-4	Electronics w/Lab
Elective-3	Multicultural	ECE 355,355L-4	Signals & Systems w/Lab
ECE 296,296L-4	Intro Microcntrl & Robotics w/Lab	ECE 495C-3	CEGR Sr Design I
ECE 315-4	Mathematical Methods in ECE	ECE 495D-3	ECE Sr Design II
ECE 321,321L-4	Intro Software Engineering w/Lab	Tech Elect-23	Select from list of approved courses
ECE 327,327L-4	Digital Circuit Design w/HDL w/Lab		
Total Hours to Bachelor Degree: 134 Hours			

Questions? Contact Us!

Salary Range: \$60,000-\$180,000

Possible Careers: Aerospace Engineer
Biomedical Engineer
Cyber/Defense Systems Engineer
Cybersecurity Consultant
Flight Systems Engineer
Satellite Systems Engineer
Semiconductor Engineer
Software Systems Developer
Power Distribution Engineer

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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	
Associate in Engineering Science in Computer Engineering - 68 hrs			BS Computer Engineering (CEGR) - 126 hrs	
			University Core Curriculum (UCC) Capstone Option - 30 hrs	
		Hrs		Hrs
			UNIV 101	Saluki Success
			CMST 101	Intro to Oral Communication
ENG 101	English Composition I	3	ENGL 101	English Composition I
ENG 102	English Composition II	3	ENGL 102	English Composition II
MAT 131	Calculus I	5	MATH 150	Calculus I
			SOCIAL SCIENCE	
	IAI Social Science	3	SOCIAL SCIENCE	See SIUC Transfer Equivalency Guide
	IAI Humanities	3	HUMANITIES	See SIUC Transfer Equivalency Guide
			HUMANITIES	NA
CHM 151	Chemical Principles	5	CHEM 200 -and- 201	Intro to Chemical Principles w/Lab
	IAI Life Science	3	LIFE SCIENCE	See SIUC Transfer Equivalency Guide
	IAI Fine Arts	3	FINE ARTS	See SIUC Transfer Equivalency Guide
BIO 225	Genetics	3	BIOL 202	Human Genetics & Human Health
			MULTICULTURAL	
		31		9
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 Computer Engineering	
CPS 206	Computer Science I	4	ECE 222	Intro to Digital Computation
CPS 215	Computer Science II	4	CS 220 (elective)	Programming w/Data Structures
EGR 101	Engineering Graphics	3	ME 102 (elective)	Computer-Aided Engineering Drawing
MAT 201	Calculus II	5	MATH 250	Calculus II
MAT 202	Calculus III	3	MATH 251	Calculus III
MAT 205	Differential Equations	3	MATH 305	Intro to Differential Equations
PHY 205	University Physics I	5	PHYS 205A -and- 255A	University Physics w/Lab
PHY 206	University Physics II	5	PHYS 205B -and- 255B	University Physics w/Lab
PHY 224	Intro to Circuit Analysis w/Lab	4	ECE 235 -and- 235L	Electric Circuits I w/Lab
		37		
			ECE 296 -and- 296L	Intro to Microcontrollers & Robotics w/Lab
			ECE 315	Mathematical Methods in ECE
			ECE 321 -and- 321L	Intro to Software Engineering w/Lab
			ECE 327 -and- 327L	Digital Circuit Design with HDL w/Lab
			ECE 329 -and- 329L	Computer Organization & Design w/Lab
			ECE 345 -and- 345L	Electronics w/Lab
			ECE 355 -and- 355L	Signals & Systems w/Lab
			ECE 495C	CEGR Senior Design I
			ECE 495D	ECE Senior Design II
			Technical Electives	23 hours of ECE electives. At least 20 hours from: ECE 412, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432. 3 hours can be approved CS courses
				57
Total semester hrs completed w/AES degree:		68	Total semester hrs completed w/BS degree:	
			Total hrs to BS Degree:	
			134	
<i>Degree Plan updated on 7/31/24 by SG</i>				