

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
COM 115	Speech	3	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
	IAI Social Science	3	SOCIAL SCIENCE	See SIUC Transfer Equivalency Guide
	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
			BIOL 202	Human Genetics & Human Health
	IAI Elective	3	MULTICULTURAL	See SIUC Transfer Equivalency Guide
		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
EGR 101-or- Elective	Engineering Graphics -or- Elective	3	ME 102 -or- GENL 1XX (elective)	Computer-Aided Engineering Drawing -or- General Elective Credit
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 -or- 255B	University Physics w/Lab
PHY 224	Intro to Circuit Analysis w/Lab	4	ECE 235 -and- 235L	Electric Circuits I w/Lab
		33		
			ECE 296 -and- 296L	Intro to Microcontrollers & Robotics w/Lab
			ECE 315	Mathematical Methods in ECE
			ECE 327 -and- 327L	Digital Circuit Design with HDL w/Lab
			ECE 336	Electric Circuits II
			ECE 345 -and- 345L	Electronics w/Lab
			ECE 355 -and- 355L	Signals & Systems w/Lab
			ECE 375	Intro to Electromagnetic Fields
			ECE 495E	EE Senior Design I
			ECE 495D	ECE Senior Design II
			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
<i>Degree Plan updated on 7/24/24 by SG</i>				