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	NA
			CMST 101	Intro to Oral Communication	3
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
			SOCIAL SCIENCE		3
	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
BIO 225	Genetics	3	BIOL 202	Human Genetics & Human Health	T
			MULTICULTURAL		3
		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	T
CPS 215	Computer Science II	4	CS 220 (elective)	Programming w/Data Structures	T
EGR 101	Engineering Graphics	3	ME 102 (elective)	Computer-Aided Engineering Drawing	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 -and- 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
		37			
			ECE 296 -and- 296L	Intro to Microcontrollers & Robotics w/Lab	4
			ECE 315	Mathematical Methods in ECE	4
			ECE 321 -and- 321L	Intro to Software Engineering w/Lab	4
			ECE 327 -and- 327L	Digital Circuit Design with HDL w/Lab	4
			ECE 329 -and- 329L	Computer Organization & Design w/Lab	4
			ECE 345 -and- 345L	Electronics w/Lab	4
			ECE 355 -and- 355L	Signals & Systems w/Lab	4
			ECE 495C	CEGR Senior Design I	3
			ECE 495D	ECE Senior Design II	3
			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	23
					57
Total semester hrs completed w/AES degree:		68	**Total semester hrs completed w/BS degree:**		66
			Total hrs to BS Degree:		134
Degree Plan updated on 7/31/24 by SG					