PROGRAM ARTICULATION DEGREE PLAN						
Harper College 2022-2023			**Southern Illinois University Carbondale**			
Associate in Engineering Science - 62 hrs			BS Computer Engineering (CEGR) - 126 hrs			
			University Core Curriculum (UCC) CAPSTONE OPTION - 30 hrs			
		Hrs				**Hrs**
			UNIV 101	Saluki Success		NA
ENG 101	Composition	3	ENGL 101	English Composition I		T
ENG 102	Composition	3	ENGL 102	English Composition II		T
			CMST 101	Intro:Oral Communication		3
MTH 200	Calculus I	5	MATH 150 (required for BS degree)	Calculus I		T
	IAI Social Science*	3	SOCIAL SCIENCE	*(See SIUC Transfer Equivalency Guide)*		T
			SOCIAL SCIENCE			3
	IAI Humanities/Fine Arts*	3	HUMANITIES	*(See SIUC Transfer Equivalency Guide)*		T
			HUMANITIES			NA
CHM 121	General Chemistry I	5	CHEM 200/201 (Required for BS degree)	Intro to Chemical Principles/Lab		T
PHY 201	General Physics I: Mechanics	5	PHYS 205A/255A (Required for BS degree)	University Physics/Lab		T
			FINE ARTS			3
			BIOL 202 (Required for BS degree)	Human Genetics and Human Health		2
*One course must satisfy a World Cultures and Diversity requirement			MULTICULTURAL			3
		27				**14**
Program Requirements			**Program Requirements**			
			The AES from Harper College fulfills the general electives required for the BS in Electrical Engineering			
CHM 122	General Chemistry II	5	CHEM 210/211/212 (Required for BS degree)	General and Inorganic Chemistry/Lab/Workshop		T
CSC 122	Computer Science I	4	CS 220	Programming w/Data Structures		T
CSC 214	Intro to Java Programming	4	ECE 222	Intro to Digital Computation		T
MTH 201	Calculus II	5	MATH 250 (Required for BS degree)	Calculus II		T
MTH 202	Calculus III	5	MATH 251 (Required for BS degree)	Calculus III		T
MTH 212	Differential Equations	3	MATH 305 (Required for BS degree)	Introduction Differential Equations		T
PHY 202	General Physics II: Electricity & Magnetism	5	PHYS 205B/255B (Required for BS degree)	University Physics/Lab		T
EGR 265	Circuit Analysis	4	ECE 235/L	Electric Circuits I		T
		35	ECE 296/L	Intro Software Tools Robotics		4
			ECE 315	Math Methods ECE		4
			ECE 321/L	Intro Software Engineering		4
			ECE 327/L	Digital Circuit Design w/HDL		4
			ECE 329/L	Computer Organization & Design		4
			ECE 345/L	Electronics		4
			ECE 355/L	Signals and Systems		4
			ECE 495C	CEGR Senior Design I		3
			ECE 495D	ECE Senior Design II		3
			ECE Electives	At least 20 hours from the following list: ECE 412-432, two approved CS courses from CS 3XX or 4XX level (except CS 300, 393, or 493)		23
						57
Total semester hrs completed w/ AES degree:		**62**	**Total semester hrs completed w/ BS degree:**			**71**
			Total to BS Degree:			**133**