PROGRAM ARTICULATION DEGREE PLAN					
Harper College	***2024-2025***		***Southern Illinois University Carbondale***		
AES 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
			CMST 101	Intro to Oral Communication	3
ENG 101	Composition	3	ENGL 101	English Composition I	T
ENG 102	Composition	3	ENGL 102	English Composition II	T
MTH 200	Calculus & Analytic Geometry I	5	MATH 150	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 -and- 201	Intro to Chemical Principles w/Lab	T
			LIFE SCIENCE		3
			FINE ARTS		3
			BIOL 202	Human Genetics & Human Health	2
*One course must satisfy a World Cultures and Diversity requirement			MULTICULTURAL		3
		22			**17**
Program Requirements			**Program Requirements**		
Engineering Specialty Courses	Select from list of approved courses	5	**Any unarticulated courses will be used to satisfy general elective credit**		
CSC 121	Computer Science I	4	CS 202 (elective)	Intro to Computer Science	T
CSC 214	Java Programming	4	ECE 222	Intro to Digital Computation	T
EGR 265	Circuit Analysis	4	ECE 235 -and- 235L	Electric Circuits I w/Lab	T
MTH 201	Calculus & Analytic Geometry II	5	MATH 250	Calculus II	T
MTH 202	Calculus & Analytic Geometry III	5	MATH 251	Calculus III	T
MTH 212	Differential Equations	3	MATH 305	Intro to Differential Equations	T
PHY 201	General Physics I: Mechanics	5	PHYS 205A -and- 255A	University Physics w/Lab	T
PHY 202	General Physics II:	5	PHYS 205B -and- 255B	University Physics w/Lab	T
		40			
			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 412-435. 3 hours can be approved CS courses.	29
					63
Total semester hrs completed w/AES degree:		**62**	**Total semester hrs completed w/BS degree:**		**80**
			Total to BS Degree:		**142**
Degree Plan updated on 7/17/24 by SG					