PROGRAM ARTICULATION DEGREE PLAN					
Harper College	***2024-2025***		***Southern Illinois University Carbondale***		
Associate in Engineering Science - 64 hrs			BS Mechanical Engineering (ME) - 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
ECO 211	Microeconomics	3	ECON 240	Intro to Microeconomics	T
			SOCIAL SCIENCE		3
	IAI Humanities*	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
*Must satisfy a World Cultures & Diversity requirement			MULTICULTURAL		3
		22			**17**
Program Requirements			**Program Requirements**		
CHM 122	General Chemistry II	5	CHEM 210 -and- 211	General & Inorganic Chemistry w/Lab	T
CSC 121	Computer Science I	4	CS 202 (elective)	Intro to Computer Science	T
EGR 120	Engineering Graphics I (CAD)	4	ME 102	Computer-Aided Engineering Drawing	T
EGR 210	Analytical Mechanics: Statics	3	ENGR 250	Statics	T
EGR 211	Engineering Dynamics	3	ENGR 261	Dynamics	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
		42			
			Select 1 Course:	ENGR 222 -or- 296 -or- ME 222	2
			ENGR 335	Electric Circuits I	3
			ENGR 350A	Mechanics of Materials	3
			ENGR 351	Numerical Methods in Engineering	3
			ENGR 370A	Fluid Mechanics	3
			ME 300	Engineering Thermodynamics I	3
			ME 302	Engineering Heat Transfer	3
			ME 309	Mechanical Analysis & Design	3
			ME 312	Materials Science Fundamentals	3
			ME 336	System Dynamics & Control	3
			ME 401	Thermal Measurements Lab	1
			ME 407	Measurements & Instrumentation	2
			ME 411	Manufacturing Methods for Engineering Materials	3
			ME 475	Machine Design I	3
			ME 495A	Mechanical Engineering Design	3
			ME 495B	Mechanical Engineering Design	3
			Mechanical Engineering Electives	At least 12 credit hours must be from 400-level ME courses and 3 credit hours may be from IMAE	15
					59
Total semester hrs completed w/AES degree:		**64**	**Total semester hrs completed with BS degree:**		**76**
Degree Plan updated on 7/9/24 by SG			**Total semester hrs to BS degree:**		**140**