PROGRAM ARTICULATION DEGREE PLAN					
Elgin Community College	***2023-2024***		***Southern Illinois University Carbondale***		
Associate in Science - 60 hours			BS Mechanical Engineering (ME) - 126 hrs		
			University Core Curriculum (UCC)*		
					Hrs
			UNIV 101	Saluki Success	NA
ENG 101	English Composition I	3	ENGL 101	English Composition I	T
ENG 102	English Composition II	3	ENGL 102	English Composition II	NA
CMS 101	Fundamentals of Speech	3	CMST 101	Intro to Oral Communication	T
MTH 190	Calculus with Analytic Geometry	5	MATH 150 (Required for BS degree)	Calculus I	T
ECN 201	Principles of Microeconomics	3	ECON 240 (Required for BS degree)	Intro to Microeconomics	T
	IAI Behavioral Science	3	SOCIAL SCIENCE	*See SIUC Equivalency Guide*	T
	IAI Humanities	3	HUMANITIES	*See SIUC Equivalency Guide*	T
			HUMANITIES		NA
			LIFE SCIENCE	Students take 2 physics courses	NA
PHY 211	Engineering Physics	5	PHYS 205A/255A (Required for BS degree)	University Physics/Lab	T
	IAI Fine Arts	3	FINE ARTS	*See SIUC Equivalency Guide*	T
BIO 113	Molecular & Cellular Biology	4	BIOL 202 (Required for BS degree)	Human Genetics and Human Health	T
			MULTICULTURAL		NA
		35			**0**
			*Any AS degree from an accredited Illinois institution satisfies UCC requirements		
Program Requirements			**Program Requirements**		
CHM 142	General Chemistry I	5	CHEM 200/201/202 (Required for BS degree)	Intro to Chemical Principles/Lab/Workshop	T
CHM 143	General Chemistry II	5	CHEM 210/211 (Required for BS degree)	General and Inorganic Chemistry	T
MTH 210	Calculus with Analytic Geometry II	5	MATH 250 (Required for BS degree)	Calculus II	T
MTH 230	Calculus with Analytic Geometry II	5	MATH 251 (Required for BS degree)	Calculus III	T
MTH 250	Differential Equations	4	MATH 305 (Required for BS degree)	Introduction to Ordinary Differential Equations I	T
EGR 152	Statics	3	ENGR 250 (Required for BS degree)	Statics	T
EGR 252	Dynamics	3	ENGR 261 (Required for BS degree)	Dynamics	T
EGR 172	Mechanics of Materials	3	ENGR 350A (Required for BS degree)	Mechanics of Materials	T
PHY 212	Engineering Physics II	5	PHYS 205B/255B (Required for BS degree)	University Physics/Lab	T
		38			
			ME 102 (Required for BS degree)	Computer-Aided Engineering Drawing	2
			ENGR 222	Computational Methods for Engineers and Technologists	2
			ENGR 335	Electric Circuits	3
			ENGR 350B	Mechanics of Materials Lab	1
			ENGR 351	Numerical Methods	3
			ENGR 370A	Fluid Mechanics	3
			ME 300	Engineering Thermodynamics II	3
			ME 302	Engineering Heat Transfer	3
			ME 309	Mechanical Analysis & Design	3
			ME 312	Materials Science Fundamentals	3
			ME 336	System Dynamics and 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
			ME Electives	Choose from 400 level ME courses	15
					59
Total semester hrs completed w/ AS degree:		**73**	**Total semester hrs completed w/ BS degree:**		**59**
			Total hrs to BS Degree:		**132**