

PROGRAM ARTICULATION DEGREE PLAN					
Elgin Community College 2024-2025				Southern Illinois University Carbondale	
Associate in Engineering Science (AES) - 71 hours				BS Mechanical Engineering (ME) - 126 hrs	
				University Core Curriculum (UCC) Capstone Option - 30 hrs	
					Hrs
				UNIV 101	Saluki Success
				CMST 101	Intro to Oral Communication
ENG 101	English Composition I	3	ENGL 101	English Composition I	T
ENG 102	English Composition II	3	ENGL 102	English Composition II	T
MTH 190	Calculus with Analytic Geometry I	5	MATH 150	Calculus I	T
ECN 201	Principles of Microeconomics	3	ECON 240	Intro to Microeconomics	T
IAI Behavioral Science		3	SOCIAL SCIENCE	See SIUC Transfer Equivalency Guide	T
IAI Humanities		3	HUMANITIES	See SIUC Transfer Equivalency Guide	T
				HUMANITIES	NA
CHM 142	General Chemistry I	5	CHEM 200 -and- 201	Intro to Chemical Principles w/Lab	T
				LIFE SCIENCE	3
IAI Fine Arts		3	FINE ARTS	See SIUC Equivalency Guide	T
				BIOL 202	Human Genetics & Human Health
				MULTICULTURAL	3
		28			11
				Program Requirements	
CHM 143	General Chemistry II	5	CHEM 210 -and- 211	General & Inorganic Chemistry w/Lab	T
EGR 101	Engineering Design Graphics/CAD	4	ME 102	Computer-Aided Engineering Drawing	T
EGR 152	Statics	3	ENGR 250	Statics	T
EGR 252	Dynamics	3	ENGR 261	Dynamics	T
MTH 123	Computer Science for Engineers	4	CS 202 (elective)	Intro to Computer Science	T
MTH 210	Calculus with Analytic Geometry II	5	MATH 250	Calculus II	T
MTH 230	Calculus with Analytic Geometry III	5	MATH 251	Calculus III	T
MTH 250	Differential Equations	4	MATH 305	Intro to Differential Equations	T
PHY 211	Engineering Physics I	5	PHYS 205A -and- 255A	University Physics w/Lab	T
PHY 212	Engineering Physics II	5	PHYS 205B -and- 255B	University Physics w/Lab	T
		43			
				Select 1 Course:	ENGR 222 -or- 296 -or- ME 222
				ENGR 335	Electric Circuits I
				ENGR 350A	Mechanics of Materials
				ENGR 351	Numerical Methods in Engineering
				ENGR 370A	Fluid Mechanics
				ME 300	Engineering Thermodynamics I
				ME 302	Engineering Heat Transfer
				ME 309	Mechanical Analysis & Design
				ME 312	Materials Science Fundamentals
				ME 336	System Dynamics & Control
				ME 401	Thermal Measurements Lab
				ME 407	Measurements & Instrumentation
				ME 411	Manufacturing Methods for Engineering Materials
				ME 475	Machine Design I
				ME 495A	Mechanical Engineering Design
				ME 495B	Mechanical Engineering Design
				Mechanical Engineering Electives	At least 12 credit hours must be from 400-level ME courses and 3 credit hours may be from IMAE 470A or a 400-level course used for a Math minor.
					15
					59
Total semester hrs completed w/AES degree:		71	Total semester hrs completed w/BS degree:		70
				Total hrs to BS Degree:	
					141
<i>Degree Plan updated on 7/17/24 by SG</i>					