

PROGRAM ARTICULATION DEGREE PLAN			
Southwestern Illinois College	2024-2025	Southern Illinois University Carbondale	
Associate in Engineering Science Mechanical Engineering Specialty - 79 hrs		BS Mechanical Engineering (ME) - 126 hrs	
		University Core Curriculum (UCC) Capstone Option - 30 hrs	
		Hrs	Hrs
		UNIV 101	Saluki Success
COMM 151	Fundamentals of Public Speaking	3	CMST 101
ENG 101	Rhetoric & Composition I	3	ENGL 101
ENG 102	Rhetoric & Composition II	3	ENGL 102
MATH 203	Calculus I	5	MATH 150
ECON 202	Prin of Economics II Micro	3	ECON 240
	Social & Behavioral Sciences	3	SOCIAL SCIENCE
	Humanities	3	HUMANITIES
			HUMANITIES
CHEM 105	General Chemistry I	5	CHEM 200 -and- 201
			LIFE SCIENCE
	Fine Arts	3	FINE ARTS
HES 151	Personal Health & Wellness	2	PH 101
			MULTICULTURAL
		33	6
Program Requirements		Program Requirements	
Electives	Select from list of approved courses	5	The AES from Southwestern Illinois College fulfills the general electives required for the BS in Mechanical Engineering
CHEM 106 (elective)	General Chemistry II	5	CHEM 210 -and- 211
ENGR 103	Engineering Graphics	4	EET 1XX (elective)
ENGR 263	Analytical Mechanics-Statics	3	ENGR 250
ENGR 264	Analytical Mechanics-Dynamics	3	ENGR 261
ENGR 271	Electrical Circuits	3	ENGR 335
ENGR 275	Mechanics of Solids	3	ENGR 350C (elective)
MATH 204	Calculus II	5	MATH 250
MATH 205	Calculus III	4	MATH 251
MATH 290	Differential Equations	3	MATH 305
PHYS 204	Physics Mechanics	4	PHYS 205A -and- 255A
PHYS 205	Physics Heat Electricity Magnetism	4	PHYS 205B -and- 255B
		46	
		BIOL 202	Human Genetics & Human Health
		Select 1 Course:	ENGR 222 -or- 296 -or- ME 222
		ENGR 350A	Mechanics of Materials
		ENGR 351	Numerical Methods in Engineering
		ENGR 370A	Fluid Mechanics
		ME 102	Computer-Aided Engineering Drawing
		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.
			60
Total semester hrs completed w/AES degree:		79	Total semester hrs completed w/BS degree:
			66
			Total hrs to BS Degree:
			145

Degree Plan updated on 6/25/24 by SG