

PROGRAM ARTICULATION DEGREE PLAN			
<b>McHenry County College</b>	<b>2022-2023</b>	<b>Southern Illinois University Carbondale</b>	
Associate in Engineering Science (AES) - 64 hrs		BS Mechanical Engineering (ME) - 126 hrs	
<b>University Core Curriculum (UCC) Capstone Option</b>			
		<b>Hrs</b>	<b>Hrs</b>
		UNIV 101	Foundations of Inquiry
		CMST 101	Intro to Oral Communication
ENG 151	Composition I	ENGL 101	English Composition I
ENG 152	Composition II	ENGL 102	English Composition II
MAT 175	Calculus & Analytical Geometry I	MATH 150 (Required for BS degree)	Calculus I
ECO 251	Microeconomics	ECON 240 (Required for BS degree)	Intro to Microeconomics
	IAI SOCIAL SCIENCE*	SOCIAL SCIENCE	
	IAI HUMANITIES*	HUMANITIES	
		HUMANITIES	
CHM 165	General Chemistry I	CHEM 200/201 (Required for BS degree)	Intro to Chemical Principles/LAB
		LIFE SCIENCE	Students take 2 physics courses
	IAI FINE ARTS*	FINE ARTS	(SIUC Equivalency Guide)
		BIOL 202 (Required for BS degree)	Human Genetics and Human Health
		MULTICULTURAL	
		<b>25</b>	<b>11</b>
<i>*One course must also satisfy Non-Western/Minority requirement</i>			
<b>Program Requirements</b>		<b>Program Requirements</b>	
CSC 121	Computer Science I	<b>Any course not articulated will be used to satisfy general elective credit</b>	
CHM 166*	General Chemistry II	CHEM 210 (Required for BS degree)	General and Inorganic Chemistry
EGR 260	Circuit Analysis	ENGR 335 (Required for BS degree)	Electric Circuits
EGR 151*	Engineering Graphics	ME 102 (Required for BS degree)	Computer-Aided Engineering Drawing
EGR 251*	Statics	ENGR 250 (Required for BS degree)	Statics
EGR 252*	Dynamics	ENGR 261 (Required for BS degree)	Dynamics
MAT 245	Calculus & Analytical Geometry II	MATH 250 (Required for BS degree)	Calculus II
MAT 255	Calculus & Analytical Geometry III	MATH 251 (Required for BS degree)	Calculus III
MAT 260	Differential Equations	MATH 305 (Required for BS degree)	Intro to Ord Diff Equations I
PHY 291	Principles of Physics I	PHYS 205/255A (Required for BS degree)	University Physics/Lab
PHY 292	Principles of Physics II	PHYS 205/255B (Required for BS degree)	University Physics/Lab
		<b>43</b>	
<i>*Recommended to fulfill BS requirements</i>			
		ENGR 350B	Mechanics of Materials (LAB only)
		ENGR 351	Numerical Methods
		ENGR 370A	Fluid Mechanics
		ME 222	Matlab Programming for Mechanical Engineers
		ME 300	Engineering Thermodynamics
		ME 302	Engineering Heat Transfer
		ME 309	Mechanical Analysis & Design
		ME 312	Materials Science Fundamentals
		ME 336	System Dynamics and Control
		ME 401	Thermal Measurements Lab
		ME 407	Measurements & Controls
		ME 411	Manufacturing Methods: Engineering Materials
		ME 475	Machine Design I
		ME 495A	Mechanical Engineering Design
		ME 495B	Mechanical Engineering Design
		Mechanical Engineering Elective	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.
			<b>54</b>
		<b>Total semester hrs completed with BS degree:</b>	
			<b>65</b>
<b>Total semester hrs completed with AES degree:</b>		<b>68</b>	
		<b>Total semester hrs to BS degree:</b>	
			<b>133</b>
<i>Degree Plan updated on 12/6/2022 lb</i>			