PROGRAM ARTICULATION DEGREE PLAN

Black Hawk College 2022-2023			*Southern Illinois University Carbondale*		
Associate of Science - 60+ hrs			BS Mechanical Engineering - 126 hrs		
			University Core Curriculum (UCC) - Capstone Option 30 hrs		
		Hrs			**Hrs**
			UNIV 101	Foundations of Inquiry	NA
ENG 101	Composition I	3	ENGL 101	English Composition I	T
ENG 102	Composition II	3	ENGL 102	English Composition II	T
SPEC 101	Principles of Speech Communication	3	CMST 101	Intro:Oral Communication	T
MATH 124	Calculus I w/ Analytic Geometry	4	MATH 150 (Required for BS degree)	Calculus I	T
ECON 222	Principles of Microeconomics	3	ECON 240 (Required for BS degree)	Introduction to Microeconomics	T
	IAI SOCIAL SCIENCE*	3	SOCIAL SCIENCE	*(See SIUC Transfer Equivalency Guide)*	T
	IAI HUMANITIES*	3	HUMANITIES	*(See SIUC Transfer Equivalency Guide)*	T
			HUMANITIES		NA
CHEM 101	General Chemistry I	4	CHEM 200/201 (Required for BS degree)	Introduction to Chemical Principles/Lab	T
PHYS 201	Mechanical & Thermal Physics	5	PHYS 205/255A (Required for BS degree)	University Physics/Lab	T
	IAI FINE ARTS*	3	FINE ARTS	*(See SIUC Transfer Equivalency Guide)*	T
BIOL 250	Genetics (no lab)	3	BIOL 202 (Required for BS degree)	Human Genetics and Human Health	T
	Non-Western Studies. See Advisor for course options		MULTICULTURAL		NA
		37			0
			Program Requirements		
Program Requirements			The Associate in Science degree as articulated fulfills the following course requirements for the B. S. degree		
			in Mechanical Engineering:		
CHEM 102	General Chemistry II	4	CHEM 210/211	General and Inorganic Chemistry/Lab	T
GE 101	Engineering Graphics and Geometry	3	ME 102	Computer-Aided Engineering Drawing	T
GE 201	Analytic Mechanics-Statics	3	ENGR 250	Statics	T
GE 202	Analytic Mechanics-Dynamics	3	ENGR 261	Dynamics	T
GE 205	Stength of Materials	3	ENGR 350A	Mechanics of Materials	T
MATH 225	Calculus II w/ Analytic Geometry	4	MATH 250	Calculus II	T
MATH 226	Calculus III w/ Analytic Geometry	5	MATH 251	Calculus III	T
MATH 235	Differential Equations	3	MATH 305	Introduction to Ordinary Differential Equations I	T
PHYS 202	Electricity & Magnetism	5	PHYS 205/255B	University Physics/Lab	T
		33			
			ENGR 296 -or- ME 222	Software Tools for Engineers -or- MATLAB for ME	2
			ENGR 335	Electric Circuits	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 and Design	3
			ME 312	Materials Science Fundamentals	3
			ME 336	System Dynamics & Control	3
			ME 400	Engineering Thermodynamics II	3
			ME 401	Thermal Measurements Laboratory	1
			ME 407	Measurements andInstrumentation	2
			ME 411	Manufacturing Methods for Engineering Materials	3
			ME 472	Materials Selection for Design	3
			ME 475	Machine Design I	3
			ME 495A	Mechanical Engineering Design	3
			ME 495B	Mechanical Engineering Design	3
			ME ELECTIVES	At least 3 hrs must be at 300/400 level	9
					56
Total semester hrs completed w/ AS degree:		70	**Total semester hrs completed w/ BS degree:**		56
			Total semester hrs to BS degree		126
Degree plan updated by SW 4/7/22					