

PROGRAM ARTICULATION DEGREE PLAN			
Southeastern Illinois College 2022-2023		Southern Illinois University Carbondale	
Associate in Engineering Science (AES) - 71 hrs (62 minimum)		BS Computer Engineering (CEGR) - 126 hrs	
		University Core Curriculum (UCC) Capstone Option - 30 hrs	
		Hrs	Hrs
		UNIV 101	Saluki Success
COM 121	Principles of Speaking	3	CMST 101
ENG 121	Rhetoric & Composition I	3	ENGL 101
ENG 122	Rhetoric & Composition II	3	ENGL 102
MATH 162	Calculus & Analytical Geometry I	5	MATH 150 (Required for BS degree)
SOCIAL SCIENCE	(See SIUC Equivalency Guide)	3	SOCIAL SCIENCE
			SOCIAL SCIENCE
HUMANITIES	(See SIUC Equivalency Guide)	3	HUMANITIES
			HUMANITIES
PHYS 221	General Physics I	5	PHYS 205/255A (Required for BS degree)
			BIOL 202 (Required for BS degree)*
FINE ARTS	(See SIUC Equivalency Guide)	3	FINE ARTS
			HUMAN HEALTH
HIST 161* (Area 1)	Black American History	3	AFR 215
		<b>31</b>	
*Social & Behavioral Courses 1 course must be from Area 1		*BIOL 202 or approved Life Science course required to fulfill BS degree requirements	
<b>Program Requirements</b>		<b>Program Requirements</b>	
CHEM 121	General Chemistry I	5	CHEM 200/201/202 (Required for BS degree)
CHEM 122	General Chemistry and Qualitative Analysis II	5	CHEM 210/211/212
GRAP 121	Engineering Graphics I	3	ME 102
MATH 165	Scientific Programming	3	ECE 222 (Required for BS degree)
MATH 221	Calculus & Analytical Geometry II	5	MATH 250 (Required for BS degree)
MATH 222	Calculus & Analytical Geometry III	5	MATH 251 (Required for BS degree)
MATH 225	Differential Equations	3	MATH 305 (Required for BS degree)
PHYS 222	General Physics II	5	PHYS 205/255B (Required for BS degree)
PHYS 241	Statics	3	ENGR 250
PHYS 242	Dynamics	3	ENGR 261
		<b>40</b>	
		ECE 235/235L	Electric Circuits I/Lab
		ECE 296/296L	Software Tools for Robotics/Lab
		ECE 315	Math Methods in ECE
		ECE 321/321L	Intro Software Engineering/Lab
		ECE 327/327L	Digital Circuit Design with HDL/Lab
		ECE 329/329L	Computer Organization & Design/Lab
		ECE 345/345L	Electronics/Lab
		ECE 355/355L	Signals & Systems/Lab
		ECE 495C	ECE Senior Design I
		ECE 495D	ECE Senior Design II
		ECE Technical Electives	Approved ECE technical electives: ECE 3XX or 4XX level (except ECE 392, 492 & 493).
		General Technical Electives	Approved General technical electives: ECE 3XX or 4XX level (except ECE 493); CHEM 210; MATH 221, 282, 302, 349, 380, or 4XX level (except MATH 411, 412); CS 3XX or 4XX level (except CS 300, 301, 393, or 493); ENGR 2XX, 3XX, 4XX (except ENGR 222, 296, 335), ENGR3XXi (if not already counted toward the student's core requirement); BME 485; IMAE470A.
			<b>67</b>
<b>Total semester hrs completed with AES degree:</b>		<b>71</b>	<b>Total semester hrs completed with BS degree:</b>
			<b>72</b>
		<b>Total to BS degree:</b>	
			<b>143</b>