

PROGRAM ARTICULATION DEGREE PLAN					
<b>Elgin Community College</b>	<b>2022-2023</b>		<b>Southern Illinois University Carbondale</b>		
Associate in Engineering Science - 60 hours			BS Computer Engineering (CEGR) - 126 hrs		
			<b>University Core Curriculum (UCC) Capstone Option - 30 hrs</b>		
					<b>Hrs</b>
			UNIV 101	Saluki Success	NA
ENG 101	English Composition I	3	ENGL 101	English Composition I	T
ENG 102	English Composition II	3	ENGL 102	English Composition II	T
			CMST 101	Intro to Oral Communication	3
MTH 190	Calculus with Analytic Geometry	5	MATH 150 (Required for BS degree)	Calculus I	T
	IAI Behavioral Science	3	SOCIAL SCIENCE	See SIUC Equivalency Guide	T
	IAI Social Science	3	SOCIAL SCIENCE	See SIUC Equivalency Guide	T
	IAI Humanities	3	HUMANITIES	See SIUC Equivalency Guide	T
			HUMANITIES		NA
CHM 142	General Chemistry I	5	CHEM 200/201 (Fulfills BS degree requirement)	Intro to Chemical Principles/Lab	T
			LIFE SCIENCE, GRP II	(Students take 2 Physics courses)	NA
	IAI Fine Arts	3	FINE ARTS		T
			BIOL 202 (Required for BS degree)	Human Genetics and Human Health	3
			MULTICULTURAL		NA
		<b>28</b>			<b>6</b>
			<b>Program Requirements</b>		
CHM 143	General Chemistry II	5	CHEM 210/211 (Fulfills BS degree requirement)	General and Inorganic Chemistry/Lab	T
MTH 210	Calculus with Analytic Geometry II	5	MATH 250 (Required for BS degree)	Calculus II	T
MTH 230	Calculus with Analytic Geometry II	5	MATH 251 (Required for BS degree)	Calculus III	T
MTH 250	Differential Equations	4	MATH 305 (Required for BS degree)	Intro to Differential Equations	T
PHY 211	Engineering Physics	5	PHYS 205/255A (Required for BS degree)	University Physics/Lab	T
PHY 212	Engineering Physics II	5	PHYS 205/255B (Required for BS degree)	University Physics/Lab	T
CIS/MTH 123	Computer Science for Engineers	4	CS 202 (Elective)	Intro to Computer Science	T
		<b>33</b>			
			ECE 222	Intro to Digital Computation	3
			ECE 235/235L	Electric Circuits/Lab	4
			ECE 296/296L	Software Tools for Robotics/Lab	4
			ECE 315	Math Methods in ECE	4
			ECE 321/321L	Intro Software Engineering/Lab	4
			ECE 327/327L	Digital Circuit Design with HDL/Lab	4
			ECE 329/329L	Computer Organization & Design/Lab	4
			ECE 345/345L	Electronics/Lab	4
			ECE 355/355L	Signals & Systems/Lab	4
			ECE 495C	ECE Senior Design I	3
			ECE 495D	ECE Senior Design II	3
			ECE Electives	At least 20 hours from the following list: ECE 412-432, two approved CS courses from CS 3XX or 4XX level (except CS 300, 393, or 493)	23
					<b>64</b>
<b>Total semester hrs completed w/ AS degree:</b>		<b>61</b>	<b>Total semester hrs completed with BS degree:</b>		<b>70</b>
			<b>Total semester hrs to BS degree:</b>		<b>131</b>