

PROGRAM ARTICULATION DEGREE PLAN					
Oakton College	2024-2025		Southern Illinois University Carbondale		
Associate of Science in Engineering (ASE) - 65 hrs			BS Computer Engineering (CEGR) - 126 hrs		
			University Core Curriculum (UCC) CAPSTONE OPTION - 30 hrs		
		Hrs			Hrs
			UNIV 101	SalukiSuccess	NA
			CMST 101	Intro to Oral Communication	3
EGL 101	Composition I	3	ENGL 101	English Composition I	T
EGL 102	Composition II	3	ENGL 102	English Composition II	T
MAT 250	Calculus I	5	MATH 150	Calculus I	T
	IAI SOCIAL/BEHAVIOR SCIENCE*	3	SOCIAL SCIENCE	See SIUC Transfer Equivalency Guide	T
	IAI SOCIAL/BEHAVIOR SCIENCE*	3	SOCIAL SCIENCE	See SIUC Transfer Equivalency Guide	T
	IAI FINE ARTS/HUMANITIES	3	HUMANITIES	See SIUC Transfer Equivalency Guide	T
			HUMANITIES		NA
CHM 121	General College Chemistry I	4	CHEM 200 -and- 201	Intro to Chemical Principles w/Lab	T
PHY 221	General Physics I	5	PHYS 205A -and- 255A	University Physics w/Lab	T
			LIFE SCIENCE		3
			FINE ARTS		3
			BIOL 202	Human Genetics & Human Health	2
			MULTICULTURAL		3
		29			14
*Student must choose courses that fulfill both the Global Studies and U.S. Diversity Studies requirements					
Program Requirements			Program Requirements		
CHM 122	General College Chemistry II	4	CHEM 210 -and- 211	General & Inorganic Chemistry w/Lab	T
CSC 170	Intro to Numerical Methods	2	ITEC 1XX -or- IMAE 1XX (elective)	ITEC Tech Elective 100-level -or- IMAE Tech Elective 100-level	T
CSC 171, 173 -or- 174	C++, FORTRAN, Java -or- Python Programming for Engineers	1	ITEC 1XX -or- IMAE 1XX (elective)	ITEC Tech Elective 100-level -or- IMAE Tech Elective 100-level	T
ENG 120	Engineering Graphics	3	ME 102 -or- IMAE 1XX (elective)	Computer-Aided Engineering Drawing -or- IMAE Tech Elective 100-level	T
ENG 211	Analytic Mechanics (Statics)	3	ENGR 250 (elective)*	Statics	T
ENG 212	Analytic Mechanics (Dynamics)	3	ENGR 261 (elective)*	Dynamics	T
ENG 220	Engineer Circuit Analysis	4	ECE 235 -and- 235L	Electric Circuits I w/Lab	T
MAT 251	Calculus II	4	MATH 250	Calculus I	T
MAT 252	Calculus III	4	MATH 251	Calculus III	T
MAT 262	Ordinary Differential Equations	3	MATH 305	Intro to Differential Equations	T
PHY 222	General Physics II	5	PHYS 205B -and- 255B	University Physics w/Lab	T
		36			
			ECE 222	Intro to Digital Computation	3
			ECE 296 -and- 296L	Intro to Microcontrollers & Robotics w/Lab	4
			ECE 315	Mathematical Methods in ECE	4
			ECE 321 -and- 321L	Intro to Software Engineering w/Lab	4
			ECE 327 -and- 327L	Digital Circuit Design with HDL w/Lab	4
			ECE 329 -and- 329L	Computer Organization & Design w/Lab	4
			ECE 345 -and- 345L	Electronics w/Lab	4
			ECE 355 -and- 355L	Signals & Systems w/Lab	4
			ECE 495C	CEGR Senior Design I	3
			ECE 495D	CEGR Senior Design II	3
			Technical Electives	23 hours of ECE electives. At least 20 hours from: ECE 412, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432. 3 hours can be approved CS courses	23
					60
Total semester hrs completed with ASE degree:		65	Total semester hrs completed with BS degree:		74
			Total semester hrs to BS degree:		139
Degree Plan updated on 6/24/24 by SG			*Count as general technical electives		