

PROGRAM ARTICULATION DEGREE PLAN				
College of Lake County   2024-2025		Southern Illinois University Carbondale		
AAS Automation, Robotics & Mechatronics - 65-67 hrs		BS Industrial Management & Applied Engineering (IMAE) - 120 hrs		
		University Core Curriculum (UCC) Capstone Option - 30 hrs		
		Hrs	Hrs	
		UNIV 101	Saluki Success	
CMM 121	Fundamentals of Speech	3	CMST 101	Intro to Oral Communication
ENG 121	English Composition I	3	ENGL 101	English Composition I
			ENGL 102	English Composition II
MTH 144	Precalculus	5	MATH 111	Precalculus
	IAI Social & Behavioral Sciences	3	SOCIAL SCIENCE	See SIUC Transfer Equivalency Guide
			SOCIAL SCIENCE	
	IAI Humanities/Fine Arts	3	HUMANITIES	See SIUC Transfer Equivalency Guide
			HUMANITIES	
			PHYS 203A -and- 253A	College Physics w/Lab
			LIFE SCIENCE	
			FINE ARTS	
			HUMAN HEALTH	
			MULTICULTURAL	
		17		16
<b>Program Requirements</b>		<b>Program Requirements</b>		
ARM 111, 112 -and- 113	Fundamentals of High Tech Manufacturing I, II & III	3	The AAS degree in Automation, Robotics & Mechatronics as articulated fulfills the 15 hrs of technical elective course requirements for the BS degree in Industrial Management & Applied Engineering (IMAE).	
ARM 116, 117 -and- 118	Mechatronics Graphics I, II & III	3		
ARM 151, 152 -and- 153	Mechanical Systems I, II & III	3		
ARM 155	STEM Workplace Professional Skills	1		
ARM 156, 157 -and- 158	Electrical Systems I, II & III	3		
ARM 171, 172 -and- 173	Automation I, II & III	3		
ARM 174, 175 -and- 176	Automation IV, V & VI	3		
ARM 181, 182 -and- 183	Industrial Robot Programming & System Integration I, II & III	3		
ARM 191, 192 -and- 193	Pneumatics & Hydraulics I, II & III	3		
ARM 196	Capstone I	1		
ARM 197	Pneumatics & Hydraulic Systems Capstone	1		
ARM 198	Complete Systems Integration	1		
ARM 222	Manufacturing Process Design	3		
ARM 280 -or- 226	Industrial IoT Auto Mfg -or- Programmable Auto Technologies	3-4		
ARM 242	Reverse Engineering of Mechanical Systems	3		
ARM 266	Advanced Motor Control	3		
ARM 286 -or- 295	Automation Pyramid -or- Mechatronics Troubleshooting	2-3		
ARM 288	Process Control Technologies	3		
ARM 299	Special Topics: ARM	1		
CLC 120	College Success Seminar	2		
		48-50		
		PHYS 203B -and- 253B	College Physics w/Lab	4
		IMAE 110	Geometric Dimensioning & Tolerancing	3
		IMAE 208	Fundamentals of Manufacturing Processes	3
		IMAE 305	Industrial Safety	3
		IMAE 307	Applied Calc for Tech	3
		IMAE 340	Intro to Supervision	3
		IMAE 375	Production & Inventory Management	3
		IMAE 390	Cost Estimating	3
		IMAE 392	Facilities Planning & Workplace Design	3
		IMAE 442	Fundamentals of Leadership	3
		IMAE 445	Computer Integrated Manufacturing	3
		IMAE 450	Project Management	3
		IMAE 465	Lean Manufacturing	3
		IMAE 470A	Six Sigma Green Belt I	3
		IMAE 470B	Six Sigma Green Belt II	3
		IMAE 476	Supply Chain Management	3
		IMAE Elective	300/400 level	3
				52
<b>Total semester hrs completed w/AAS degree:</b>		<b>65-67</b>	<b>Total semester hrs completed w/BS degree:</b>	<b>68</b>
			<b>Total hours to BS degree:</b>	<b>133-135</b>
Degree plan updated on 6/6/24 by SG				