

PROGRAM ARTICULATION DEGREE PLAN				
Oakton Community College 2019-2020			Southern Illinois University Carbondale	
AAS Mechatronics Technology - 64 hours			BS Industrial Management and Applied Engineering (IMAE) - 120 hrs	
			University Core Curriculum (UCC) Capstone Option - 30 hrs	
		Hrs		Hrs
EGL 101	Composition I	3	UNIV 101 ENGL 101	Saluki Success English Composition I
			ENGL 102	English Composition II
SPE 103	Effective Speech	3	CMST 101	Intro to Oral Communication
MAT 140	College Algebra	3	MATH 108 (Required for BS degree)	College Algebra
SOCIAL/BEHAVIORAL SCIENCE*	(See SIUC Equivalency Guide)	3	SOCIAL SCIENCE	T
			SOCIAL SCIENCE	3
HUMANITIES/FINE ARTS*	(See SIUC Equivalency Guide)	3	HUMANITIES	T
			HUMANITIES	NA
PHY 101 -or- PHY 131	Applied Physics -or- College Physics I	4	PHYS 203/253A (Required for BS degree)	College Physics/Lab
			LIFE SCIENCE, GRP II	3
			FINE ARTS	3
			HUMAN HEALTH	NA
			MULTICULTURAL	3
		19		12
*Student must choose courses that fulfill both the Global Studies and U.S. Diversity Studies requirements				
Program Requirements			Program Requirements	
ELT 101	Introduction to Electronics	5	The AAS degree in Mechatronics Technology as articulated fulfills the 22 hrs of technical elective course requirements for the BS degree in Industrial Management & Applied Engineering.	
ELT 106	Semiconductor Theory	3		
ELT 221	Digital Circuit Fundamentals	3		
ELT 223	Integrated Circuits	3		
ELT 231	Fundamentals of Microprocessors	3		
MFG 102	Industrial Drafting and Design	3		
MFG 111	Intro to Computer Integrated Manufacturing	3		
MFG 135	Hydraulics, Pneumatics and Controls	3		
MFG 140	Introduction to Robotics & Vision Systems	4		
MFG 220	Automation Vision Systems	3		
MFG 240	Programmable Controllers (PLC)	4		
MFG 250	Advanced PLC/Automation Applications	4		
PROGRAM ELECTIVE	Choose from CAD 210, 230; ELT 110; MFG 245	4		
		45		
			PHYS 203B/253B	College Physics/Lab
			IMAE 110	Geometric Dimensioning and Tolerancing
			IMAE 208	Manufacturing Processes
			IMAE 305	Industrial Safety
			IMAE 307 -or- MATH 140	Applied Calculus for Technology -or- Short Course in Calculus
			IMAE 340 -or- PSYC 323*	Intro to Supervision -or- Organizational Psychology
			IMAE 376	Supply Chain Operations & Logistics
			IMAE 390	Cost Estimating
			IMAE 392	Facilities Planning & Workplace Design
			IMAE 442	Fundamentals of Leadership
			IMAE 445	Computer Integrated Manufacturing
			IMAE 450	Project Management
			IMAE 465	Lean Manufacturing
			IMAE 470A	Six Sigma Green Belt I
			IMAE 470B	Six Sigma Green Belt II
			IMAE 476	Supply Chain Design & Strategy
			IMAE Electives	(Must be at 300/400 level)
				3
				52
Total semester hrs completed w/ AAS degree		64	Total semester hrs completed w/ BS degree	64
			Total hours to BS degree:	128
*PSYC 323 is an option for on-campus students only & requires PSYC 102 as a prerequisite				