

## TRANSFER GUIDE

### AAS Mechatronics Engineering Technology transferring to BS Industrial Management & Applied Engineering

John A Logan College Courses			
AAS Mechatronics Engineering Technology – 68 hours			
ORI 100-1	College 101	ELT 112-3	Digital Electronics II
COM 115-3	Speech	ELT 150-3	Applied Solid State Electronics
ENG 101/113-3	English Comp I/Prof Tech Writing	ELT 151-3	Applied Solid State Circuits
MAT 111-5	Precalculus	ELT 210-3	Supporting Computer Oper Systems
PHY 155-5	College Physics I	ELT 214-3	Fundamentals Computing Hardware
MAT 131-5	Calculus I	ELT 218-3	Intro to Network Technologies
EGR 101-3	Engineering Graphics	ELT 224-3	Power Distribution & Motors
ELT 102-4	Basic Electricity & Wiring	IDM 210-3	Hydraulics & Pneumatics
ELT 103-4	Applied DC/AC Circuits	MFT 103-3	Industrial Robots & PLCs
ELT 104-2	Intro to VFDs	MFT 201-3	PLC Manufacturing Systems
ELT 111-3	Digital Electronics I		
Southern Illinois University Carbondale Courses Capstone Option			
BS Industrial Management & Applied Engineering (IMAE) – 66 hours			
Elective-3	Social Science	IMAE 390-3	Cost Estimating
Elective-3	Social Science	IMAE 392-3	Facilities Plan & Workplace Design
Elective-3	Humanities	IMAE 442-3	Fundamentals of Leadership
Elective-3	Life Science	IMAE 445-3	Computer Integrated Manufacturing
Elective-3	Fine Arts	IMAE 450-3	Project Management
Elective-3	Multicultural	IMAE 465-3	Lean Manufacturing
IMAE 110-3	Geometric Dimension Tolerancing	IMAE 470A-3	Six Sigma Green Belt I
IMAE 208-3	Fund of Manufacturing Processes	IMAE 470B-3	Six Sigma Green Belt II
IMAE 305-3	Industrial Safety	IMAE 476-3	Supply Chain Management
IMAE 340-3	Intro to Supervision	IMAE Electives-6	300/400 level
IMAE 375-3	Production & Inventory Mgmt		
Total Hours to Bachelor Degree: 134 hours			

**Salary Range:** \$50,000-\$70,000

**Possible Careers:** Production Manager  
Manufacturing Engineer  
Quality Engineer  
Plant Manager  
Project Engineer

### Questions? Contact Us!

John A Logan College

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## Baccalaureate Degree Requirements

Each candidate for a bachelor's degree must complete the requirements listed:

**Hour Requirements.** Student must complete at least 120 semester hrs of credit. Each student must have at least 42 hrs in courses that number 300 or above from a four-year institution.

**Residence Requirements.** Student must complete the residency requirement by taking a total of 42 semester hrs at SIU Carbondale.

**Grade Point Average Requirements.** Student must have a C average for all work taken at SIU Carbondale. Some academic programs may require a higher graduating major GPA.

## Compact Agreement

SIU Carbondale has recognized Illinois regionally accredited community college transferable baccalaureate-oriented Associate of Arts or Associate of Science degrees under the Compact Agreement since 1970. SIUC will continue to recognize the baccalaureate oriented associate degree (A.A. or A.S. degree) under the Illinois Articulation Initiative as satisfying SIU University Core Curriculum (UCC) requirements. The Associate of Applied Science (A.A.S.), Associate in Engineering Science (A.E.S.), the Associate in General Studies (A.G.S.), and the Associate in Fine Arts (A.F.A.) are not covered under the Compact Agreement and do not carry the same benefits as the A.A. and A.S. degrees.

## Saluki Transfer Pathways

[Saluki Transfer Pathways](#) is the university's dual admission program that allows baccalaureate-oriented students at eligible community colleges intending to transfer to SIU Carbondale to benefit from early admission and pre-advisement for a baccalaureate program at SIUC. Saluki Transfer Pathways allows students to be conditionally admitted to SIU Carbondale up to two years in advance of their intended transfer term so they have access to transfer credit evaluation and the university's degree audit system. This allows students to address major specific requirements that may not be automatically fulfilled with the completion of an associate degree. Students apply to Saluki Transfer Pathways by completing the Application for Undergraduate Admission and indicating an interest in the program. To participate, students must have at least two semesters remaining at OkaYtheir community college. Direct questions about the Saluki Transfer Pathways program to [transfer@siu.edu](mailto:transfer@siu.edu).

## DegreeWorks

DegreeWorks is an easy-to-use, online degree audit tool specifically designed for students. Once admitted to SIU Carbondale, you can use it monitor your progress toward your degree in [Salukinet](#).

## Saluki Transfer Estimator Portal (STEP)

The [Saluki Transfer Estimator Portal](#) (STEP) is a web-based tool that integrates institutional course equivalency and degree audit data to provide an unofficial credit estimation and a more seamless transfer process. STEP gives transfer students a clear roadmap for timely degree completion by providing key information about how transfer credits apply to your intended program at SIU.

PROGRAM ARTICULATION DEGREE PLAN				
<b>John A. Logan College</b>		<b>2024-2025</b>	<b>Southern Illinois University Carbondale</b>	
AAS Mechatronics Engineering Technology - 68 hrs			BS Industrial Management & Applied Engineering (IMAE) - 120 hrs	
			<b>University Core Curriculum (UCC) Capstone Option - 30 hrs</b>	
		<b>Hrs</b>		<b>Hrs</b>
			UNIV 101	Saluki Success
COM 115	Speech	3	CMST 101	Intro to Oral Communication
ENG 101 -or- 113	English Composition I -or- Prof Technical Writing	3	ENGL 101	English Composition I
			ENGL 102	English Composition II
MAT 111	Precalculus	5	MATH 111	Precalculus
			SOCIAL SCIENCE	3
			SOCIAL SCIENCE	3
			HUMANITIES	3
			HUMANITIES	NA
PHY 155	College Physics I	5	PHYS 203A -and- 253A	College Physics w/Lab
			LIFE SCIENCE	3
			FINE ARTS	3
			HUMAN HEALTH	NA
			MULTICULTURAL	3
		<b>16</b>		<b>18</b>
<b>Program Requirements</b>			<b>Program Requirements</b>	
ORI 100	College 101	1	<b>The AAS degree in Mechatronics Engineering Technology as articulated fulfills the 15 hours of technical elective course requirements for the BS degree in Industrial Management &amp; Applied Engineering (IMAE).</b>	
ELT 102	Basic Electricity & Wiring	4		
ELT 104	Intro to VFDs	2		
ELT 111	Digital Electronics I	3		
ELT 112	Digital Electronics II	3		
ELT 151	Applied Solid State Circuits	3		
ELT 224	Power Distribution & Motors	3		
IDM 210	Hydraulics & Pneumatics	3		
MFT 103	Industrial Robots & PLCs	3		
MFT 201	PLC Manufacturing Systems	3		
MAT 131	Calculus I	5	IMAE 307	Applied Calculus for Technology
EGR 101	Engineering Graphics	3	ME 102 (elective)	Computer-Aided Engineering Drawing
ELT 103	Applied DC/AC Circuits	4	EET 245 (elective)	Intro Circuit Theory & Applications
ELT 150	Applied Solid State Electronics	3	EET 150 (elective)	Intro to Electrical Engineering Technology
ELT 210	Supporting Computer Operating Systems	3	ITEC 2XX (elective)	ITEC Elective 200-level
ELT 214	Fundamentals of Computing Hardware	3	ITEC 2XX (elective)	ITEC Elective 200-level
ELT 218	Intro to Network Technologies	3	ITEC 224 (elective)	Network Fundamentals
		<b>52</b>		
			IMAE 110	Geometric Dimensioning & Tolerancing
			IMAE 208	Fundamentals of Manufacturing Processes
			IMAE 305	Industrial Safety
			IMAE 340	Intro to Supervision
			IMAE 375	Production & Inventory Management
			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 Management
			IMAE Electives	300/400 level
				<b>48</b>
<b>Total semester hrs completed w/AAS degree:</b>		<b>68</b>	<b>Total semester hrs completed w/BS degree:</b>	
			<b>Total hours to BS degree:</b>	
				<b>134</b>
Degree Plan updated on 9/13/24 by SG				