



AAS Electrical/Electronic Automated Systems Technology to BS Industrial Mgmt & Applied Engineering

Courses taken at JJC

Year One, First Semester

EEAS 101	Basic Wiring and Circuit Design
EEAS 111	Industrial Control I
IMT 101	Industrial Maintenance Fundamentals (major core elective)**
MATH 138***	Pre-Calculus 1***

Year One, Second Semester

EEAS 113	Industrial Controls II
EEAS 115	Electrical/Electronics Troubleshooting
IMT 121	Industrial Fluid Power (major core elective)**
MFG 101	Precision Machine Tool I (major core elective)**

Summer Semester

ENG 101 or ENG 130	Rhetoric or Technical Writing and Communication**
GEN ED	Take courses from Group III: Social & Behavioral Science Elective**

Year Two, Third Semester

EEAS 215	Process Control and Instrumentation
EEAS 221	Industrial Circuits Basic Programmable Logic Controllers
EEAS 240	Motors and Drives
GEN ED	Take courses from Groups I-V: General Education**

Year Two, Fourth Semester

EEAS 223	Industrial Circuits - Advanced Programmable Controllers
EEAS 225	Automated Systems
CIS 126	Microsoft Office - Or advisor approved elective**
GEN ED	Rhetoric or Technical Writing and Communication**

Total JJC Credits: 65*

JJC Faculty Advisor: Cheryl Upshaw
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SIU Advisor: Dr. Julie Dunston
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Courses taken at SIU

Elective	Social Science**
Elective	Life Science**
Elective	Fine Arts**
Elective	Multicultural **
PHYS 203/253A	College Physics/Lab
PHYS 203/253B	College Physics/Lab
IMAE 110	Geom Dimensioning & Tolerancing
IMAE 208	Fundamentals of Mfg Processes
IMAE 305	Industrial Safety
IMAE 307	Applied Calculus for Technology
IMAE 340	Introduction to Supervision
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 Elective	300/400 level IMAE course**

Total SIU Credits: 68*

Total Degree Credits: 133*

Hour Requirements: Each student must complete at least 120 semester hours of credit. Each student must have at least 42 hours in courses that number 300 or above from a four-year institution. Residence Requirements: Each student must complete the residence requirement by taking the last year, which is defined as 30 uninterrupted semester hours, or a total of 90 semester hours at SIU Carbondale. Grade Point Average Requirements: Each student must have a C average for all work taken at SIU Carbondale. Some academic programs may require a higher graduating major GPA.



*This transfer guide is a sample curriculum. Additional courses may be required based on placement test scores. Please work with your faculty advisor or success coach prior to course registration.

**Courses are to be chosen in consultation with an academic advisor.

*** For students seeking only an AAS degree, only Algebra (MATH 098 or higher) is required - Take one course from GEN ED Grp. IV: MATH . Students desiring to transfer should select a pre-calculus math class sequence. See program advisor for details.

About SIU's Program:

The Industrial Management and Applied Engineering major has as its objective the training of qualified personnel who can develop and direct the production and distribution of products and services. The major is designed to prepare management-oriented technical professionals in the economic-enterprise system. The Industrial Management and Applied Engineering curriculum is flexible enough to provide the means whereby graduates of two-year occupational programs may obtain a Bachelor of Science degree. A graduate of a two-year industrially-oriented occupational program, such as aviation, construction, drafting, data processing, electronics, machine tool, mechanical, and mining may have an appropriate preparation to pursue a Bachelor of Science degree with a major in Industrial Management and Applied Engineering.

About JJC's Program:

Automated manufacturing can be complex because it uses mechanical, electrical and computer technologies, and JJC's program will prepare students to troubleshoot, repair and complete preventative maintenance on these complex automated systems. Students in JJC's EEAS program learn how to operate automation equipment using minimal human contact. Warehousing, utilities, petrochemical refineries, manufacturing and food processing all require highly skilled technicians who know how to run robotic machines efficiently. JJC's EEAS program is well respected by industry professionals in our local community. Many local employers call on JJC instructors when jobs open. JJC alumni work as production technicians or electrical maintenance technicians.

Questions:

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Student Advising Center
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