



## AAS Mechanical Production Tech to BS Industrial Mgmt & Applied Engineering

### Courses taken at JJC

#### Year One, First Semester

MFG 115	Blueprint Reading for Manufacturing and Welding
CADD 101	2D Computer Aided Design and Drafting I
MATH 138***	Pre-Calculus 1***
MFG 101	Precision Machine Tool Technology I
MFG 107	Dimensional Metrology

#### Year One, Second Semester

ENG 101	Rhetoric
MFG 111	Numerical Control
MFG 120	Physical Metallurgy
MFG 102	Precision Machine Tool Technology II
GEN ED	Select one course course from Groups 1-V: General Education**

#### Year Two, Third Semester

Elective	Select one course from Group II: Social and Behavioral Sciences**
MFG 103	Precision Machine Tool Technology III
MFG 112	Advanced Numerical Control
PHYS 103	Technical Physics

#### Year Two, Fourth Semester

ENG 102 or ENG 230	Rhetoric or Advanced Technical Writing and Communication
MFG 104	Manufacturing Processes
Tech Elective	Choose 3 hours from Technical Department courses**
WLDG	Choose 3 hours from any WLDG course**
MFG 200	Advanced Blueprint Reading/Geometric Dimensioning and Tolerancing

**Total JJC Credits: 65\***

JJC Faculty Advisor: Cameron Martin  
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### Courses taken at SIU

Elective	Social Science**
Elective	Humanities**
Elective	Life Science**
Elective	Fine Arts**
Elective	Multicultural**
PHYS 203/253I	College Physics/Lab
IMAE 208	Fundamentals fo Mfg Processes
IMAE 305	Industrial Safety
IMAE 307 or MATH 140	Applied Calculus for Technology or Short course in Calculus
IMAE 340 or PSYC 323	Introduction to Supervision or Organizational Psychology
IMAE 376	Supply Chain Operations & Logistics
IMAE 390	Cost Estimating
IMAE 392	Facilities Planning & Workplace Design
IMAE 442	
IMAE 445	Fundamentals of Leadership
IMAE 450	Computer Integrated Manufacturing
IMAE 465	Project Management
IMAE 470A	Lean Manufacturing
IMAE 470B	Six Sigma Green Belt I
IMAE 476	Six Sigma Green Belt II
IMAE Elective	Supply Chain Design & Strategy 300/400 level IMAE course

**Total SIU Credits: 64\***

**Total Degree Credits: 129\***

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.

SIU Advisor: Dr. Julie Dunston  
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\*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 MATH 119, Algebra, is required. Students desiring to transfer should select a pre-calculus math class sequence. See program

#### **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:**

The Mechanical Production Technology program provides students with an understanding of the fundamentals of manufacturing through both hands-on experience and study of theory. Whether pursuing an AAS degree or certificate, our students study a range of manufacturing-related disciplines which will prepare them for employment in manufacturing. Areas of study in this program include precision machining practices, maintenance machining, CNC/CAM/EDM, stamping dies, plastic injection mold making and CADD.

#### **Questions:**

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