

Southern Illinois University



AAS Precision Machine Technology 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
 MFG 101 Precision Machine Tool Technology I
 MFG 107 Dimensional Metrology
 Social Science Select one course from Group II: Social and Behavioral Sciences**

Year One, Second Semester

ENG 101 Rhetoric
 CADD 120 3D Computer Aided Design and Drafting I
 MFG 111 Numerical Control
 MFG 102 Precision Machine Tool Technology II
 MATH 138*** Pre-Calculus 1: Algebra***

Year Two, Third Semester

CADD 250 or OREO Parametric 3D Solid Modeling or
 CADD 270 SW Parametric 3D Solid Modeling
 MFG 103 Precision Machine Tool Technology III
 MFG 112 Advanced Numerical Control
 WLDG Elective Select a course from any WLDG prefix**
 ENG 230 Technical Writing and Communication
 MFG 109 Metric Measurement

Year Two, Fourth Semester

MFG 200 Advanced Blueprint Reading/Geometric Dimensioning and Tolerancing
 MFG 120 Physical Metallurgy
 MFG 113 CNC Machine Set-up and Operation
 MFG 104 Manufacturing Processes
 GEN ED Select one course from Groups I-V: General Education**

Total JJC Credits: 68*

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Courses taken at SIU

Elective Social Science**
 Elective Humanities**
 Elective Life Science**
 Elective Fine Arts**
 Elective Multicultural**
 PHYS 203/253A College Physics/Lab
 PHYS 203/253B College Physics/Lab
 IMAE 208 Fundamentals of Mfg Processes
 IMAE 305 Industrial Safety
 IMAE 307 or Applied Calculus for Technology or
 MATH 140 Short Course in Calculus
 IMAE 340 or Introduction to Supervision or
 PSYC 323 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 Elective 300/400 level IMAE course**

Total SIU Credits: 68*

Total Degree Credits: 136*

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, only Algebra, MATH 119 is required. 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:

The Associate in Applied Science degree in precision machine technology (machine tool metalworking head start program) is a two-year curriculum designed for individuals seeking a solid background of manufacturing core experience and the opportunity to study a wide range of skills and related disciplines necessary for positions in the current and future manufacturing industries. TE550 includes both theoretical and hands-on laboratory experiences designed to complement a four-year machinist or tool and die makers' apprenticeship program. Areas of study include precision machining practices, maintenance machining, CNC/CAM/EDM, stamping dies, plastic injection mold making, and CAD. Graduates will be qualified to fill thousands of unfilled, high-paying, secure positions in the current high-tech manufacturing job market. It is possible for students to obtain desirable positions before graduation. TE550 also contains the option of transferring to a four-year manufacturing degree program. TE550 is designed to accommodate both full- or part-time students. TE550 offers both day and evening classes in all areas of study.

Questions:

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