

2+2

AAS Computer Aided Design and Drafting to BS Industrial Management & Applied Engineering

## Courses taken at JJC

#### Year One. First Semester

CIS 126 Microsoft Office
EGR 101 Engineering Graphical Communications
CADD 101 2D Computer Aided Design and Drafting I
MATH 119 or Mathematics for Technical Students or

MATH 139 Pre-Calculus: Trigonometry

ENG 101 or Rhetoric or

ENG130 Technical Writing and Communication

# Year One, Second Semester

CADD 110 2D Computer Aided Design and Drafting I

ENG 102 or ENG Rhetoric or

130 Technical Writing and Communication

EGR 102 Engineering Graphics PHYS 100 Basic Physics

MFG 101 Precision Machine Tool Technology

# Year Two, Third Semester

CADD 250 CREO Parametric 3D Solid Modeling
AEC 207 Structural Planning and Analysis

MFG 115 or Blueprint Reading for Manufacturing and Welding MFG 200

CADD 120 3D Computer Aided Design & Drafting I

Social Science Select one course from Group II, Social & Behavioral Sciences\*\*

# Year Two, Fourth Semester

CADD 270 Solidworks - Parametric 3D Solid Modeling
Core Program

Electives Any CADD course elective\*\* (6 credit hours)

EEAS 101 Basic Writing and Circuit Design

DEPT. Elective Choose from AEC, CADD, CIS, MFG courses or as approved by program

coordinator\*\*

# Total JJC Credits: 67\*

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#### Courses taken at SIU

CMST 101

GEN ED Social Science\* GEN ED Humanities\*\* GEN ED Life Science Grp II\*\* GEN ED Fine Arts\*\* Multicultural\*\* GEN ED **IMAE 208 Fundamentals of Manufacturing Processes** PHYS 203/253B College Physics/Lab **IMAE 305** Industrial Safety Applied Calculus for Technology **IMAE 307** 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 Aided 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

300/400 level \*\*

Intro to Oral Communication\*\*

Total SIU Credts: 67\*

IMAE Electives

Total Degree Credits: 134\*

NOTE: Students will be required to complete a minimum of 42 senior institution hours at the 300-400 course level, with the last 30 such senior institution hours being at SIU Carbondale for residency purposes. All students will be required to complete at least 120 hours with an overall GPA of 2.0 on a 4.0 scale to received a Bachelor of Science degree in Industrial Management and Applied Engineering (IMAE). Coursework may include Univerity Core Curriculum as well as Industrial Management and Applied Engineering major courses.



# UNIVERSITY PARTNERSHIPS

2+2

\*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.

## 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:

JJC's CADD program provides courses in the mechanical, architectural and related design and engineering disciplines. The core curriculum focuses on 2D and 3D design skills using the Auto CAD software application from beginning to advanced level applications. The program also includes 3D Solid Modeling coursework using Creo Parametric, SolidWorks, Autodesk Inventor Pro and Autodesk Architecture. Electives include 3D Studio Max Design work for animation tools and Bentley's Microstation V8i design tools. Students will have the computer aided design and drafting skill set needed to work in an engineering office environment. The advantage of having JJC's AAS degree in CADD is exposure and experience gained while working with the large variety of industry software applications. The skills learned range from basic two-dimensional design drafting to advanced three dimensional parameter part modeling. The workstations and plotting hardware used in JJC's CADD program are the most common found in today's engineering offices.

# Questions:

JJC Faculty Advisor: Scott Boudreau Office: T-1067 sboudrea@jjc.edu

Student Advising Center 815-280-2673 academic advising@jjc.edu

