

## Joliet Junior College to NIU course requirements for an AAS in Computer Aided Design and Drafting plus courses required for the NIU Industrial Technology BS Degree

### JJC Courses to complete the AAS in Computer Aided Design and Drafting

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| ___ CIS 126 – Microsoft Office                     | ___ EGR 101 (NIU Tech 302)  |
| ___ ECON 103 (Social Science elective)             | ___ EGR 102 (NIU Tech 211)  |
| ___ ENG 101 – Rhetoric I (NIU Engl 103)            | ___ EEAS 101 – Basic Wiring & Circuit Design  |
| ___ ENG 102 – Rhetoric II (NIU Engl 104)           | ___ MFG 101 – Precision Machine Tool Tech. I  |
| ___ MATH 135 – Plane Trigonometry                  | ___ MFG 115 – Blueprint Reading for Mfg. & Welding or MFG 200 – Adv. Blueprint Reading & Geometric Dimensioning & Tolerancing |
| ___ PHYS 100 (NIU Phys 150A)                       | ___ Electives (6 credits) approved by advisor   |
| ___ AEC 205 – Technical Statics                    | ___ Department Electives (3 credits) see catalog  |
| ___ AEC 206 – Applied Strengths of Materials       |   |
| ___ CAD 101 – Computer Aided Drafting I            |   |
| ___ CAD 102 – Computer Aided Drafting II           |   |
| ___ CAD 250 – Parametric 3-D Solid Modeling I      |   |
| ___ CAD 252 - Parametric Detailing of Solid Models |   |

### JJC Courses needed in completion of NIU IT degree

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| ___ SPCH 101 (NIU Coms 100)                        | ___ MATH 141 (NIU Math 155 - Trigonometry) |
| ___ Humanities Elective (per NIU requirements)     | ___ CHEM 100 (NIU Chem 110 & 111)          |
| ___ Humanities Elective (per NIU requirements)     | ___ MATH 128 (NIU Stat 208)                |
| ___ Humanities Elective (per NIU requirements)     | ___ ENG 130 (NIU Tech Writing)             |
| ___ Social Science Elect (per NIU requirements)    | ___ ACCY 101 (NIU Accy 206)                |
| ___ Interdisciplinary Elect (per NIU requirements) | ___ Tech 175 & 175A                        |

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## NIU Course work – Taken at NIU – DeKalb, Hoffman Estates, Naperville, or Rockford

### Required NIU courses

- \_\_\_ Tech 175 & 175A – Electricity and Electronics Fundamentals and Lab
- \_\_\_ Tech 265 – Basic Manufacturing Processes
- \_\_\_ Tech 395 – Industrial Data Processing
- \_\_\_ Tech 404 – Supervision in Industry
- \_\_\_ Tech 429 - Plant location, Layout and Materials Handling
- \_\_\_ Tech 434 – Human Factors in Industrial Accident Prevention
- \_\_\_ Tech 391 – Industrial Quality Control
- \_\_\_ Tech 496 - Industrial Project Management

### Technology Electives - Choose 4

- \_\_\_ Tech 402 - Industrial Training and Evaluation
- \_\_\_ Tech 442 - Work Simplification
- \_\_\_ Tech 443 - Engineering Economy
- \_\_\_ Tech 444 - Production Control systems
- \_\_\_ Tech 484 - Energy Management
- \_\_\_ Tech 492 – Manufacturing Distribution Applications

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NIU Requirements for graduation – See [www.ceet.niu.edu/tech](http://www.ceet.niu.edu/tech) for more information

- A minimum of 120 hours for graduation
- A minimum of 30 hours in NIU course work
- A minimum of 40 Hours in NIU 300/400 level courses
- Completion of the NIU General Education Core