

Tech WORKS

Pre-Engineering



Steps to complete a Tech WORKS Certification in Pre-Engineering:

Student must complete the following course work in Science/Math with a "C" or above:

- Algebra I & II
- Calculus/Trigonometry
- Chemistry
- Physics

Complete at least four total classes in Career Technology Education Department with a "C" or above

Required courses:

- Computer Aided Drafting & Design (CADD)*
- Customer Service Strategies**
- Pre-Engineering

Select one or more from the following:

- Electricity DC
- Computer Technical Drafting
- Auto Chassis
- Welding
- Basic Gas Metal Arc Welding: INT366*
- Advanced Placement Computer Science
- Electricity AC
- Construction I*
- Small Engines
- Architectural CAD*
- Metals
- Manufacturing



Engineer Society Chapters

- Complete two activities with local Engineer Society chapters
- 50 word summary about your involvement and contributions to the activity

Attend three career fairs

- Teacher sign off when tasks are completed
- 50 word summary about what the student observed and learned

Attend two plant tours

- Teacher sign off when tasks are completed
- 50 word summary about what the student observed and learned

Complete one informational interview and a mock interview

- Completed by end of junior year
- Teacher sign off when tasks are completed

National Career Readiness Certificate (taken in the Customer Service Strategies class)

Go on at least one community college/college/university/apprenticeship program tour

- Admissions representative to sign off on "college tour" form
- 50 word summary about what the student observed and learned

Students cannot have more than one unexcused absence, be in class on time and demonstrate cell phone etiquette during classes

Community service that is career related

All students will successfully fulfill all DCSD requirements for graduation to be considered for a Certification



Funded in part by the City of Dubuque, Mystique Casino, and the Dubuque County Board of Supervisors.



Prosperity [eastern iowa]



* Articulated classes - Allows high school students to earn college credit through agreements between their high schools and Northeast Iowa Community College. Area school districts and NICC agree on core competencies and performance levels to ensure credits are transferable to the College.

** Concurrent classes - These classes enable high school students who have met the eligibility requirements of the College and high school to take college coursework.