



Wayne County Community College District

COURSE SYLLABUS

CAD 203 CAD APPLICATIONS

CREDIT HOURS: 4.00

CONTACT HOURS: 60.00

COURSE DESCRIPTION:

This NX class introduces the student to the use of reference features and expressions to create and constrain sketch geometry in NX.

PREREQUISITE: CAD 222 (Lab Fee)

EXPECTED COMPETENCIES:

Upon successful completion of this course, the student will be able to:

1. Parametric modeling

- Parametric Modeling Fundamentals
- Constructive Solid Geometry Concepts
- Parametric Constraints Fundamentals
- Geometric Construction Tools
- Parent/Child Relationships
- Part Drawings and Associative Functionality
- Datum Features and Auxiliary Views
- Symmetrical Features in Designs
- Advanced 3D Construction Tools
- Contour and Lofted Flanges

2. NX Sheet Metal

NX Sheet Metal Course Introduction and Overview

- **Preferences and Defaults**
- **Tabs** (as the Base Feature and as Secondary Feature)
- **Flanges** : Flange Options: Full Width ,Centered, At End, From Both Ends, From End, Flange Offset and Flange with a Unique Profile
- **Contour and Lofted Flanges** Contour and Lofted Flanges options Contour Flange as a Base Feature and secondary feature Lofted Flange and Hem Flange
- **Corners** Break Corner, Closed Corner, Three Bend Corner
- **NX Sheet Metal Features** Jogs, Bend, Unbend, Dimple, Louver, Normal Cutout, Drawn Cutout, Form-Unbend-Rebend, Bend Taper, Bead, Gusset, Solid Punch, Edge Rip, Sheet Metal from Solid Body, Convert to Sheet Metal, Flat Solid, Sheet Metal Flat Pattern, Hard Drive Mount
- **Advanced Sheet Metal Features** Advanced Flange, Bridge Bend Uniform, Reform, Metaform

ASSESSMENT METHODS:

Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

GRADING SCALE:

90%-100% = A
80%-89.9%= B
70%-79.9%= C
60%-69.9%= D
<60% = E