

ME 340-2: Computer Integrated Manufacturing

Lab #1 – NX CAM Review

Assignment 1: Form Teams

First item to be accomplished in your lab session is to establish a team of **3-4 people**. Once formed, break up into your team, introduce yourselves & exchange contact information, and familiarize yourself with the specialties/talents of each team member with regards to the project.

Your TA will guide the team formation process.

Assignment 2: Choose Your Project

Share your ideas from lecture 1 with your newly formed team. Your project for the course **MUST** combine features from **TWO different drawings**, at minimum (no maximum). Once decided, refer to lab #2 deliverables for what must be completed. Recall, your project must follow the basic rules below:

- Include two or more parts
- Must fit in a 4"x4" mold (length and width)
- Each part may not be more than 1.25" in height

Assignment 3: NX CAM Walkthrough

Posted on the Blackboard website, under course documents, are the assignments for lab #1. You are required to complete two manufacturing walkthroughs:

1. Setup, Cavity, and Area Milling
2. Planar & Surface Milling, Drilling

Your TA will be available to answer questions throughout the walkthrough – take note that some written instructions may have changed with new versions of NX.

Due @ end of Lab:

At end of the lab session, and you must show the TA your completed manufacturing file to receive a completion for this lab class.

Deliverables: Due Lab #2

Part Sketches: By the beginning of next week's lab, your team must develop your chosen idea into a hand-drawn sketch of all required parts. Note that you should have two drawings, at minimum – one for each part. Each individual sketch should meet the following criteria:

- Large, hand drawn sketch of each individual part
- Rough dimensions of the overall size of the part. (Detailed dimensions not needed)
- Labeled features of each major design feature.