



# STARK STATE COLLEGE

## GENERAL SYLLABUS

### Course Information

**Course Name:** CAD/CAM  
**Course Number:** AIT137

### Required Materials

**Textbook(s):** Mastercam 2022 Mill Essentials Training Tutorial, ISBN 978-1-77146-943-2  
 Mastercam 2022 HLE, Mastercam 2022 Video (Free download with Book)

**Required Readings:** None

**Additional Materials:** USB Storage Device

### Course Outline/Calendar

The date of coverage and order of coverage may be modified based on the faculty member and events beyond the control of faculty members that interfere with class times and teaching.

Week	Chapter/Topic/Lab
1	Review Syllabus, Introduction to CNC and Mastercam, Getting Started, Review exercises, Start Tutorial 1: Part A
2	Facing, Circle Mill, Contour, Spot Drill, Drill, Chamfer, Toolpaths, Complete Tutorial 1: Part A and Part B
3	Setups, Slot Mill, 2D HS Dynamic Mill, 2D HS Dynamic Contour Toolpaths, Tutorial 3: Part A
4	Setups, Slot Mill, 2D HS Dynamic Mill, 2D HS Dynamic Contour Toolpaths, Tutorial 3: Part B
5	2D HS Mill, 2D HS Dynamic Mill, Transform Toolpaths, Tutorial 2: Part A
6	2D HS Mill, 2D HS Dynamic Mill, Transform Toolpaths, Tutorial 2: Part B
7	Issue Midterm Exam Project drawings, <b>Midterm Exam Due</b>
8	2D HS Area Mill, 2D HS Dynamic Mill, Pocket, Pocket Re-machine Toolpaths, Tutorial 4: Part A
9	2D HS Area Mill, 2D HS Dynamic Mill, Pocket, Pocket Re-machine Toolpaths, Tutorial 4: Part B
10	Multiple Setups, 2D HS Area Mill, 2D HS Area (Rest Material) Toolpaths, Tutorial 5: Part A
11	Multiple Setups, 2D HS Area Mill, 2D HS Area (Rest Material) Toolpaths, Tutorial 5: Part B
12	2D HS Dynamic, 2D HS Area Mill, HS Blend, 2D HS Peel Mill Toolpaths, Tutorial 6: Part A
13	2D HS Dynamic, 2D HS Area Mill, HS Blend, 2D HS Peel Mill Toolpaths, Tutorial 6: Part B
14	2D HS Area, Feature Based Drilling (FBM), 2D HS Dynamic Toolpaths, Tutorial 7: Part A
15	Issue Final Exam Project drawings, <b>Final Exam Project due</b>
16	<b>Final Exam Week</b>