DET2248 - CNC Applications

Credits:	3 (1/2/0)
Description:	The objective of this course is to develop students' knowledge of computer numerical control system components, programming codes for linear and circular interpolation and basic CAD/CAM integration.
Prerequisites:	• CADD1000 • CADD2200 • CADD2210 • DET1114
Corequisites:	
Pre/Corequisites*:	
Competencies:	1. Interpret machine axis movements in the XYZ planes. 2. Analyze and apply point-to-point programming to generate linear interpolation toolpaths. 3. Analyze and apply continuous path programming to generate circular and linear interpolation toolpaths. 4. Utilize incremental programming modes to generate code sequences for toolpaths. 5. Utilize absolute programming modes to generate codes sequences for toolpaths. 6. Write comprehensive linear interpolation programs for part toolpathing. 7. Write comprehensive circular interpolation programs for part toolpathing. 8. Utilize a virtual computer numerical control environment to analyze programs for functionality. 9. Utilize CAD/CAM software to generate part toolpathing.
MnTC goal areas:	None

**Can be taking as a Prerequisite or Corequisite.*