MFG 259 : CNC LATHE PROGRAMMING

Transcript title
CNC Lathe Programming

Credits
4

Grading mode
Standard letter grades

Total contact hours
40

Lecture hours
40

Prerequisites
MFG 100 and MFG 110.

Recommended preparation
MFG 260.

Course Description
Introduces basic programming skills used on the CNC lathe.

Course learning outcomes
1. Analyze and apply machine shop safety concepts and practices.
2. Interpret fundamental CNC Lathe concepts and formatting.
3. Create and demonstrate the use of programs for CNC Lathe machining centers.
4. Demonstrate the basic machining practices and tooling as it applies to CNC Lathe.

Content outline
- Machine and shop safety
- CNC Lathe – set up, order of operations, and coordinate systems to program CNC Lathe machines
- Lathe machining/turning centers including machine configurations, general flow of the programming process, determining program zero assignment values and three ways to assign program zero and programming words used in machining
- Types of formatting
- Lathe language/operations
- Programming CNC Lathe including programming computer numerical control turning center identifying G and M codes, manual programming and programming canned cycles

Required materials
Text book and tools (as required for second term students).