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 M codes, manual programming and programming canned cycles

Required materials

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