

MFG 214 : LATHE OPERATOR I

Transcript title

Lathe Operator I

Credits

2

Grading mode

Standard letter grades

Total contact hours

60

Lab hours

60

Prerequisites

instructor approval.

Recommended preparation

MFG 100.

Course Description

Introductory manual lathe operations training. Includes safety, machine maintenance, quick-change tooling, chuck set-ups, compound taper cutting, general turning and drilling operations.

Course learning outcomes

1. Perform quick change tooling setups utilizing several tool holding blocks to decrease work piece machining time.
2. Setup and perform a grooving operation cognitive of feed and speed issues to within five thousandth accuracy.
3. Safely remove and install different chucks on the engine lathe.
4. Determine the appropriate feed and RPM information based on the material being cut.
5. Cut a taper to within four thousandth accuracy utilizing the compound rest.
6. Use a one-inch dial indicator to monitor longitudinal cut to within one thousandth.
7. Accurately and consistently perform facing, shoulder, and part off operations to within five thousandth of size.
8. Student will mount and dismount taper shank tooling into the tailstock to perform various cutting operations.