

MFG 214 : LATHE OPERATOR I

Transcript title

Lathe Operator I

Credits

2

Grade mode

Standard letter grades

Contact hours total

60

Lab hours

60

Prerequisites

instructor approval.

Recommended preparation

MFG 100.

Description

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

Learning outcomes

1. Student will perform quick change tooling setups utilizing several tool holding blocks to decrease work piece machining time.
2. Student will setup and perform a grooving operation cognitive of feed and speed issues to within .005" accuracy.
3. Student will safely remove and install different chucks on the engine lathe.
4. Student will determine the appropriate feed and RPM information based on the material being cut.
5. Student will cut a taper to within .004" accuracy utilizing the compound rest.
6. Student will use a one-inch dial indicator to monitor longitudinal cut to within .001".
7. Student will accurately and consistently perform facing, shoulder, and part off operations to within .005" of size.
8. Student will mount and dismount taper shank tooling into the tailstock to perform various cutting operations.