



EGR 111: Fundamentals of Manual Machining

This course covers the fundamentals of manual machine tool utilization. Topics include milling, turning, knurling, threading, surfacing grinding, tooling, feeds and speeds, blueprint reading, layout, proper tolerancing, metrology, and manufacturing processes. Three lecture hours and three laboratory hours per week. Instructional Support Fee applies.

Course Student Learning Outcomes

1. Mill, turn, and grind common materials to create features specified by a mechanical drawing.
2. Read mechanical drawings and verify drawing dimensions on their machined project utilizing various metrology tools and procedures.
3. Select correct hand and machine tools and calculate feeds and speeds for various machining processes.
4. Demonstrate safe machine shop practices per OSHA and Industrial standards.

Credits: 4

Program: Engineering