



## EGR 112: Automated Machining

This course is a continuation of EGR 111 and covers modern, advanced machining processes using Computerized Numerical Control (CNC) for both milling and turning. It also discusses best practices for safety, tooling, setup and process sheets. Students use industrial software simulations and feeds and speeds databases. Prerequisite: EGR 111 is recommended. Two class hours and three laboratory hours per week. Instructional Support Fee applies. NOTE: Utilizes Windows based software only.

### Course Student Learning Outcomes

1. Write standard Fanuc CNC (Computer Numeric Code) for milling and turning common materials to create features specified by a mechanical drawing. 2. Setup and operate vertical machining and turning centers that are common to the local industry. 3. Demonstrate proper set-up, download of computer numerical code and first piece prove out procedures for the in Fanuc Vertical Milling and Turning machine centers. 4. Generate manufacturing documentations consisting of tool list, operation sheets and drawings. 5. Demonstrate safe machine shop practices per OSHA and Industrial standards.

**Credits:** 3

**Program:** Engineering