

Course Title: EGT-150

Course Leader: Kevin E. Stoops

Expected Learning Outcomes for Course:

Upon completion of this course, students will be able to:

- Identify, apply, and discuss the principles and elements of computer-numerical-controls.
- Create basic CNC programs, using G and M codes.
- Edit and modify existing CNC programs.
- Utilize the Haas controller to verify trigonometry calculations.
- Plot CNC program on the Haas controller.
- Be familiar with speed and feed calculations for cutting tools.
- Be familiar all the characters in word address programming.

Assessment:

(How do students demonstrate achievement of these outcomes?)

Writing programs, lab assignments, final exam, and homework assignments.

Validation:

(What methods are used to validate your assessment?)

Performance on final exam and final lab.

Results:

(What does the data show?)

Students have acquired enough skill to continue on to the next CNC course: EGT-250

Follow-up:

(How have you used the data to improve student learning?)

Additional emphasis and assignments in radius or arc programming.

(Test and lab results)

Budget Justification:

(What resources are necessary to improve student learning?)

Procurement of a CNC lathe.