Computer Numerical Control (CNC) Programming Course 80 hrs.

Course Description:
This course focuses on programming for CNC machines and how it is applied to modern manufacturing. Participants in this course will learn CNC Programming including G-code/M-code, cutter selection, speeds and feeds for materials and other relevant techniques and processes. Topics Include:

- Understanding Cartesian Coordinates and how they relate to toolpath programming
- Knowledge of Workholding
- Learning Back-plotting Software for writing and verifying tool paths ***(Vericut)***.
- Simple point-to-point and Complex toolpath programming – usage of G & M codes in creating a program
  - G-codes for Axis Movement
  - G-codes for Machine Setup
  - G-codes/Canned Cycles for Hole Making and Milling
  - M-codes for Machine Functions
  - More complex G-code programming
  - Common speed and feed for materials
  - Axis Position Addresses
  - Additional Addresses

Click on the link below for the Demonstration Video utilizing Vericut software:
https://canyonsonline.zoom.us/rec/share/EQXOZMcjhsXDke9tlIlsPkpO7FmeaRLuzOaYrpfNa_yb_rajN1uCUpGDnGNSECTx.o93NiFwY-PgUrQI1

Prerequisites:
If the course is online, each participant must have access to a Windows computer, either a desktop or laptop, (no shared computer with other participants) and a reliable internet connection. Familiarity with computers is assumed (creating, downloading, and saving files, etc.). The participant should be able to read Blueprints and to use common measuring tools such as micrometers, calipers, etc. Prior machining experience helpful.

ETI Instructor Paul Montgomery has more than 30 years' experience in manufacturing, specializing in CNC mill and lathe programming, set-up and operation, CAM programming, CAD design with SolidWorks and CATIA, manual machining in a prototype/tool making capacity with expert level on all manual engine lathes and other related machining equipment and tools. In addition, Paul is an experienced instructor and has been manager of training and development for a major aerospace manufacturing company. Paul continues to create and deliver engaging and effective training programs in most machining topics.

Employment Training Panel – State-Funded Training Cost: *$350.00
Non-ETP Cost: $2,430.00

WHEN:
Wednesdays
March 15, 2023 – July 26, 2023
5:00 pm to 9:00 pm

WHERE:
In-Person
Location TBD

For more information or to register, please contact Jocey Hogan at 661.362.5657 or jocey.hogan@canyons.edu

*For employees of eligible employers. Employees are not considered registered until all paperwork is received, and participant fee for each trainee has been paid to the Santa Clarita Community College District, and the Employment Training Panel has determined eligibility. State subsidy is contingent upon the trainee completing all the Employment Training panel requirements. Please contact the Employee Training Institute, 661.362.5657, for details on eligibility requirements.

COLLEGE OF THE CANYONS