# CNC Training Classes

Automation Consultants provides onsite training for your programming and maintenance staff. Each of our instructors has an extensive background providing national service and support. They are still actively involved in programming and service. This hands-on experience means you get realistic training that can be implemented immediately.

All classes are structured to your specific needs. Each is tailored to the skill levels of the students.

## Basic Machine Troubleshooting

This is an introductory course. Students should be new to CNC machining and have an electrical background. The objective is to have the student understand the principals of operation and know where to start looking for a problem. Upon completion of the course, students will be able to intelligently discuss a machine problem with other engineers using standard industry terminology.

## CNC Troubleshooting –Fanuc Controls

This course is designed for technicians who will be troubleshooting CNC equipment with Fanuc controls. We will emphasis the importance for the technicians to fully understand how the electronics and mechanics interact in order to troubleshoot a problem. The course will cover the three primary areas of CNC troubleshooting: Environmental, Mechanical and Electrical.

## Fanuc Advanced Troubleshooting

This course provides the advanced training needed by CNC service technicians to fully understand the workings of a Fanuc controlled CNC machine. The students will use a hands on approach to create ladder logic programs, install and remove scale feedback systems and modify parameter settings. The students will be using a simulator equipped with a Fanuc i-series control. This is a fully functional machine using alpha series drives, motors and scale feedback.

## Fanuc G-Code (Tool Path) Programming

This class will teach students the fundamentals of basic programming. Students learn Cartesian Coordinate Systems, G codes, basic M codes, word address, canned cycles, cutter radius compensation, and sub programs. Participants will be given many different examples, as well as write many programs. Safety lines and technique will also be taught.

## Fanuc Macro & Option Training

This class will teach the students how to use various Fanuc options and macro programming. This style of programming is the most powerful form available for the Fanuc controls.