



Curriculum Highlights and Product Codes



Highlights:

- FANUC Certified Education CNC Training materials are available to academia and industry & individuals, with discounts for academia.
- There are two curriculums one for machining centers (mills) and the other for turning centers (lathes).
 - o Content covers manual programming (G code), getting a machine ready to run production (setup), and completing a production run (operation).
- For each curriculum, ten main modules called *Key Concepts* are further divided into lessons, 24 and 28 lessons for the machining and turning center curriculums respectively.
 - Curriculums provide two ways for students to study, three ways for them to demonstrate comprehension, and three ways for them to practice:
 - To study: Presentations and reading material (all lessons)
 - To demonstrate understanding: Tests (all lessons), coordinate sheet exercises (some programming-related lessons), and programming activities (other programming-related lessons)
 - To practice: NCGuide labs (first 13 lessons), Certification Cart labs (in lesson plans), and Certification Cart projects (4 for machining centers, 3 for turning centers)
 - Students with average aptitude will require about 30 hours to complete each curriculum.
- There are two delivery options: online content and off-line hard-copy materials.
 - On-line delivery: All content is provided on-line (presentations, reading materials, tests, coordinate sheet exercises, programming activities, and NCGuide lab exercises). Tests are automatically graded and submitted. Exercises can be submitted by email.
 - There are two purchase options for on-line delivery: access code coupons and annual subscription seats.
 - Off-line delivery: Reading materials are included in a hard copy manual. Presentations are included on a presentations CD rom disc. This disc also includes the NCGuide lab exercises. Tests, coordinate sheet exercises, and programming activities are provided in a workbook. An answer book is provided (to the instructor) for grading.
 - We can provide a one-time-purchase off-line delivery option (only) for high schools. See below.

Logic for the two delivery options - Higher education:

Schools vary when it comes to how they expect students to learn. More and more schools are trending toward on-line learning, and this is our preferred delivery option. Some instructors, however, are reluctant to have students study on line, preferring that they use physical materials. This is why we additionally provide the off-line delivery option.

In addition, many instructors already have curriculum in place and may be reluctant to change. Even instructors who have a different (FANUC approved) curriculum will need a textbook. The two FANUC approved textbooks, along with the workbooks that accompany them, will make excellent support materials for any CNC mill or lathe class.

Curriculum product oodes:

On-line delivery option:

- Instructor access to content, including the ability to monitor student progress: Free
- Instructor training (lesson plans, instructions for getting started, answers, etc.): Free
- ACC-FCTMCPO: Machining center access code coupon
- ACC-FCTTCPO: Turning center access code coupon
- ACC-FCTTCM: Custom Macro access code coupon
- ACC-FCTFUM: FANUC usage and maintenance access code coupon
- AS-FCT: Annual subscription seat*

Off-line delivery option (textbooks and workbooks):

- One set of student books and answer book (for the instructor): Free
- Instructor's training disc (lesson plans, instructions for getting started, answer book): Free
- CDR-FCTMCPO-D: Machining center presentations CD**
- CDR-FCTTCPO-D: Turning center presentations CD **
- CDR-FCTCM-D: Custom Macro presentations CD **
- CC-FCTMCPO-A: Additional answer book for machining center curriculum***
- CC-FCTTCPO-A: Additional answer book for turning center curriculum***
- Student requires:
 - CC-FCTMCPO-M: Machining center textbook
 - CC-FCTMCPO-W: Machining center workbook
 - CC-FCTTCPO-M: Turning center textbook
 - CC-FCTTCPO-W: Turning center Workbook
 - CC-FCTCM-M: Custom Macro textbook

Learning to Operate books:

- Learning to Operate a FANUC CNC Using the FANUC Simulator****
- Learning to Operate a FANUC CNC Using NCGuide*****

^{*}Subscription price provides access to any curriculum (one student at a time) - one person (at a time) for one year

^{**}The school purchases Presentations CDs (a one-time purchase). One CD is required per student studying concurrently, and can be used repeatedly from semester to semester. Presentations CD discs must be used on school premises.

^{***}One set answer books is provided to the instructor with initial order.

^{****}Curriculums come with a .pdf file of the FANUC Simulator book that is the same as this manual (for off-line delivery, it is included on the Presentations Disc). This book is only needed if a school purchases the FANUC Simulator without curriculum.

^{******}Curriculums come with a set of NCGuide lab exercises that are the same as those provided in this manual. This book is only needed if a school purchases NCGuide <u>without curriculum</u>.