ControlLogix/Studio 5000

Studio 5000 Logix Designer Level 2:
Basic Ladder Logic Programming

VAN METER · Rockwell Automation · Allen-Bradley by ROCKWELL AUTOMATION

Course Number

CCP151

Course Purpose

After completing this course, you should be able to program basic ladder logic instructions for Logix5000™ controllers. This is a skill-building course that provides you with the resources and hands-on practice required to complete this objective.

You will have an opportunity to use the Studio 5000 Logix Designer® application to perform basic software tasks to meet the requirements of a given functional specification. In addition, you will set up a sequencer to run equipment through a predefined procedure and separate production procedure from equipment control.

COURSE AGENDA

DAY 1

- Starting a Ladder Diagram for a Studio 5000 Logix Designer Project
- Testing a Ladder Diagram in a Studio 5000 Logix Designer Project
- Programming Timer Instructions in a Studio 5000 Logix Designer Project
- Programming Compare Instructions in a Studio 5000 Logix Designer Project
- Programming Move Instructions in a Studio 5000 Logix Designer Project
- Programming Math Instructions in a Studio 5000 Logix Designer Project

DAY 2

- Programming Counter Instructions in a Studio 5000 Logix Designer Project
- Handling Expressions in a Studio 5000 Logix Designer Project
- Documenting and Searching Ladder Logic Using the Studio 5000 Logix Designer Application
- Programming a Procedure in a Studio 5000 Logix Designer Project
- Separating the Procedure from Equipment Control in Studio 5000 Logix Designer Project
- Copying and Filling an Array in a Studio 5000 Logix Designer Project

WHO SHOULD ATTEND

Programmers that have little or no working experience with controllers, are responsible for programming Logix5000 controllers using the Logix Designer application, and need to learn how to draft ladder logic for any application should attend this course.

PREREQUISITES

To successfully complete this course, completion of the Studio 5000 Logix Designer Level 1: ControlLogix System Fundamentals course (Course No. CCP146) or equivalent experience is required.

STUDENT MATERIALS

To enhance and facilitate the students' learning experiences, the following materials are provided as part of the course package:

- Student Manual
  - Includes the key concepts, definitions, examples, and activities presented in this course

- Lab Book
  - Provides learning activities and hands-on practice. Solutions are included after each exercise for immediate feedback.

- Studio 5000 Logix Designer and Logix5000 Procedures Guide
  - Provides the steps required to complete basic software tasks that are common to all Logix5000 hardware platforms

HANDS-ON PRACTICE

Throughout this course, you will have the opportunity to practice the skills you have learned through a variety of hands-on exercises using an ABT-TDCLX3-B workstation. Exercises focus on the skills introduced in each lesson.

NEXT LEARNING LEVEL

Once you have an understanding of the topics and skills covered in this course, you may be want to attend one or more of the following courses:

- Studio 5000 Logix Designer Level 3: Project Development (Course No. CCP143)

- DeviceNet and RSNetWorx Configuration and Troubleshooting (Course No. CCP164)

- ControlNet and RSNetWorx Configuration and Troubleshooting (Course No. CCP173)

COURSE LENGTH

This is a two-day course.

TO REGISTER

Please contact us at VM.Training@vanmeterinc.com or call 1.800.247.1410.

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