About this course
This course utilizes the same courseware that was previously only available with an in-center classroom enrollment. It features a learning platform custom built by ABB University courseware developers, designed expressly to meet the needs of industrial automation users. A virtual machine with ABB controller simulation and system application software is provided for practice and completion of course labs. The in-center class requires a student to attend five days of training, plus travel time. By taking the on-line course, a student can remain on site, at home and save on travel costs.

24-7-365 Availability
Access courseware anytime, from anywhere, when it’s most convenient for you.

Lifetime Access
This course and all your personal notes will remain available to you for life.

2 Weeks Virtual Machine
Access to cloud based virtual machine loaded with ABB controller and system software.

This course is for you if:
You are a system and application engineer, commissioning and maintenance personnel, service engineers and system integrators.

Enroll at:
mylearning-americas.abb.com

The main topics that will be covered in this course:
• System 800xA architecture
• Engineering Workplace / Plant Explorer
• Project and application structures
• AC 800M hardware
• Variables and data types
• Function Block Diagram
• Structured Text
• Task assignment and memory
• Control Modules
• User defined object types
• Sequential Function Charts (SFC)

Or contact us:
Tel: 1 800 HELP 365, option 2, option 4
Email: abbuniversity@us.abb.com
You’ll walk away with

01
An understanding of the System 800xA architecture, component functions, hardware, and libraries.

02
The ability to navigate the system and create new objects and aspects.

03
Experience with project structures, application structures, hardware configuration, and standard libraries.

Prerequisites
Students shall know the fundamentals of working with Control Systems and have basic knowledge of Windows and networking technologies.

Your success team
The learning platform includes a chat feature and user forum that allows you to send questions and comments to a learning facilitator and other students. Connect with fellow students to build a support network and collaborate with others.

Course Objectives
Upon completion of this course you will be able to:
• Explain the System 800xA architecture and the function of the different components
• Navigate in the system and create new objects / aspects
• Create a new control project and plan the structure of application programs based on a P&ID and a Functional Specification
• Configure the AC 800M hardware and corresponding I/O’s
• Handle the standard libraries provided by ABB and develop project specific libraries
• Design and configure application programs by using a variety of IEC 61131-3 languages
• Define tasks and describe the assignment rules
• Analyze the controller diagnostics and optimize the CPU load / memory usage
• Configure user defined object types
• Setup communication using various protocols
• Setup the OPC connectivity to AC800M

The key to maximum knowledge acquisition is hands-on practice.
ABB University on-line courses feature a virtual machine, hosted on ABB cloud servers. This virtual machine is loaded with the appropriate ABB controller simulation and system application software necessary to complete the on-line course labs, running on top of the Microsoft Windows operating system. This virtual machine is a safe way to practice knowledge learned from the on-line course without disruption to a working production system.