Learning paths

The path to higher performance

Learning paths for
- ABB Ability™ System 800xA
- ABB Ability™ Symphony Plus / Harmony
- Quality Control Systems
- Advant Master
- Advant MOD
Automation and training go hand-in-hand. Provide each team member at your site with the proficiency to achieve the highest performance operating, maintaining, programming or engineering your ABB automation equipment, with these value purchasing programs.

**Training Passport**
Ensure that each staff member, including engineering, programming, maintenance and operations, has adequate training for ABB control systems, multidrives, process analyzers and instrumentation. With the ABB University Training Passport program, twelve months of unlimited in-center training is available for one low price, per employee.

**Site Bundle**
Ensure each site’s team has the advanced training allowing them to perform their best when needed most. With the ABB University Site Bundle program, four weeks of training will earn the site one free week of in-center training. Multiple personnel from the site can utilize the five weeks of training within a twelve month period.

[abb.us/abbuniversity](http://abb.us/abbuniversity)
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**Course descriptions**
Find detailed course descriptions for all ABB University control system courses under the Industrial Automation heading here:

abb.us/abbuniversity

Or search the on-line catalog for a specific course:

mylearning-americas.abb.com
ABB Ability™ System 800xA
Engineering learning path

- **COURSE NUMBER: T315F&H**
  800xA with AC800M Engineering with Function Designer
  10 days

- **COURSE NUMBER: T315C&H**
  800xA with AC800M Engineering with Control Builder
  10 days

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Advanced courses
Students are recommended to complete the learning path before taking advanced courses.

- **COURSE NUMBER: T305**
  800xA Installation and Administration
  5 days

- **COURSE NUMBER: T309**
  Safety – AC800M High Integrity
  4 days

- **COURSE NUMBER: T318**
  800xA History
  5 days

- **COURSE NUMBER: US950**
  Virtualization of ABB System
  5 days

- **COURSE NUMBER: T307**
  800xA Batch Engineering and Operation
  5 days

- **COURSE NUMBER: US925**
  Cyber Security Services
  5 days
ABB Ability™ System 800xA
Maintenance learning path

Basic maintenance

Start

COURSE NUMBER: T308
800xA Hardware Maintenance and Troubleshooting
5 days

Advanced maintenance

Start

COURSE NUMBER: T315F&H
800xA with AC800M Engineering with Function Designer
10 days

COURSE NUMBER: T315C&H
800xA with AC800M Engineering with Control Builder
10 days

COURSE NUMBER: T314
800xA Basic Configuration
5 days

COURSE NUMBER: T305
800xA System Installation and Administration
5 days

Advanced courses

Cyber Security Services
5 days

Students are recommended to complete the learning path before taking advanced courses.
ABB Ability™ System 800xA
Administration learning path

Learning path

Start

COURSE NUMBER: T315F&H
800xA with AC800M Engineering with Function Designer
10 days

COURSE NUMBER: T315C&H
800xA with AC800M Engineering with Control Builder
10 days

COURSE NUMBER: T314
800xA Basic Configuration
5 days

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Advanced courses
Students are recommended to complete the learning path before taking advanced courses.

COURSE NUMBER: T318
800xA History
5 days

COURSE NUMBER: US950
Virtualization of ABB Systems
5 days
ABB Ability™ System 800xA
Evolution learning paths

Evolution learning paths

Start

COURSE NUMBER: A331
Advant 400/ABB Master MP200 Configuration and Operation
5 days

Start

COURSE NUMBER: M202
Composer Engineering Software Tools
5 days

Start

COURSE NUMBER: B425
Configuring MOD300 Database with Windows
5 days

COURSE NUMBER: T320
800xA with Advant Master Connect
5 days

COURSE NUMBER: T321
800xA with Harmony Connect
5 days

COURSE NUMBER: T324
800xA with MOD300 Connect
5 days

Advanced courses
Students are recommended to complete the learning path before taking advanced courses.

COURSE NUMBER: T305
800xA Installation and Administration
5 days

COURSE NUMBER: T318
800xA History
5 days

COURSE NUMBER: T307
800xA Batch Engineering and Operation
5 days

COURSE NUMBER: T309
Safety - AC800M High Integrity
4 days
ABB Ability™ Symphony Plus / Harmony Engineering learning path

Learning path

Start

1. **Course Number: M111**
   - Harmony Rack I/O with Composer
   - 5 days

2. **Course Number: M211**
   - S800 I/O for Harmony Controllers
   - 5 days

3. **Course Number: S311**
   - S+ Harmony Basic Engineering (S800 I/O and SD I/O)
   - 5 days

   **If Composer 6.1 or earlier**

   - **Course Number: M202**
     - Composer Engineering Software Tools
     - 5 days

   **If S+ Engineering 1.0 or later**

   - **Course Number: S312**
     - S+ Harmony Advanced Engineering
     - 5 days

   **Advanced courses**
   - **Course Number: M301**
     - Power and Grounding for Distributed Control Systems
     - 5 days
   - **Course Number: M304**
     - Harmony Function Code Configuration Strategies
     - 5 days
   - **Course Number: US925**
     - Cyber Security Services
     - 5 days

   - **Course Number: US950**
     - Virtualization of ABB Systems
     - 5 days

   Students are recommended to complete the learning path before taking advanced courses.
ABB Ability™ Symphony Plus / Harmony
Maintenance learning path

Learning path

Start

COURSE NUMBER: M111
Harmony Rack I/O with Composer
5 days

COURSE NUMBER: M211
S800 I/O Harmony Controllers
5 days

COURSE NUMBER: S311
S+ Harmony Basic Engineering (S800 I/O and SD I/O)
5 days

If Composer 6.1 or earlier
If S+ Engineering 1.0 or later

COURSE NUMBER: M202
Composer Engineering Software Tools
5 days

COURSE NUMBER: S312
S+ Harmony Advanced Engineering
5 days

COURSE NUMBER: S321
S+ Operations Basic Engineering
5 days

Advanced courses
Students are recommended to complete the learning path before taking advanced courses.

COURSE NUMBER: M301
Power and Grounding for Distributed Control Systems
5 days

COURSE NUMBER: US925
Cyber Security Services
5 days
ABB Ability™ Symphony Plus / Harmony Evolution learning path

Learning path

COURSE NUMBER: M111
Harmony Rack I/O with Composer
5 days

COURSE NUMBER: M211
S800 I/O Harmony Controllers
5 days

COURSE NUMBER: S311
S+ Harmony Basic Engineering (S800 I/O and SD I/O)
5 days

Start

If Composer 6.1 or earlier
If S+ Engineering 1.0 or later

COURSE NUMBER: M202
Composer Engineering Software Tools
5 days

COURSE NUMBER: US909
Symphony Plus Harmony S+ Engineering Transition
3 days

COURSE NUMBER: S312
S+ Harmony Advanced Engineering
5 days

Advanced courses
Students are recommended to complete the learning path before taking advanced courses.

COURSE NUMBER: M301
Power and Grounding for Distributed Control Systems
5 days

COURSE NUMBER: S311
S+ Harmony Basic Engineering
5 days

COURSE NUMBER: M304
Harmony Configuration Strategies
5 days

COURSE NUMBER: S321
S+ Operations Basic Engineering
5 days

COURSE NUMBER: S322
S+ Operations Advanced Engineering
5 days

COURSE NUMBER: US924
Symphony Plus History
5 days

COURSE NUMBER: S320
S+ Operations Operator
0.5 days

COURSE NUMBER: S303
Cyber Security for Symphony Plus
5 days
Quality Control Systems
Engineering learning path

Learning path

Start

- COURSE NUMBER: C232
  Smart Platform with QCS LAN
  10 days

- COURSE NUMBER: C235
  Network Platform with QCS LAN
  10 days

- COURSE NUMBER: T314
  800xA Basic Configuration
  5 days

- COURSE NUMBER: C302
  Maintaining 800xA QCS with AC800M Controllers
  5 days

Evolution courses

- COURSE NUMBER: C234
  Smart Platform to Network Platform Upgrade
  4 days

Advanced courses

Students are recommended to complete the learning path before taking advanced courses.

- COURSE NUMBER: C148
  Smart Color Measurement and Control
  5 days

- COURSE NUMBER: C311
  QCS Sensor Correlation Class
  5 days

- COURSE NUMBER: C306
  Advanced QCS 800xA Concepts
  5 days

- COURSE NUMBER: C313
  QCS Advanced Sensor Operation and Troubleshooting
  5 days
Quality Control Systems
Control tuning learning path

Learning path

Start

- COURSE NUMBER: Z200
  Control Loop Tuning Methods
  5 days

- COURSE NUMBER: C103
  QCS Machine Direction Control
  5 days

- COURSE NUMBER: C148
  Smart Color Measurement and Control
  5 days

- COURSE NUMBER: C109
  MCD Control Tuning
  5 days

- COURSE NUMBER: C105
  QCS Machine Direction Transition Control
  5 days

- COURSE NUMBER: C107
  QCS Cross Direction Control
  5 days
Advant Master
Learning paths

Engineering learning path

Start

COURSE NUMBER: A331
Advant 400/ABB Master MP200 Configuration and Operation
5 days

Start

COURSE NUMBER: T320
800xA Advant Master Configuration
5 days

Maintenance learning path

Start

COURSE NUMBER: A240
Advant Controller 400 and Advant Station 500 Operator Maintenance
5 days
Advant MOD
Engineering learning path

1. **COURSE NUMBER: B425**
   Configuring MOD300 Database with Windows
   5 days

2. **COURSE NUMBER: T324**
   System 800xA with MOD300 Configuration
   5 days
Operator training
Navigate, operate, interpret and react

Operators learn to navigate, operate, interpret and react accordingly to system information. Operator training is delivered on-site, so that operators have access to their site specific process and system information.

In this instructor led course, students learn how to operate and navigate in System 800xA. Course will include both interactive class room discussions and hands-on lab, delivered on-site.

**Course objectives**
This course will give operators an overview of the System 800xA architecture and the function of its' different components. Students will learn to:
- Navigate In a standard Operator Workplace by using Aspect Objects technology
- Read and interpret information from different process displays
- Monitor and control standard process objects through faceplates
- Interpret information on interlocks handle alarm and event lists
- Operate trend displays and interpret the information
- Monitor and control sequences based on Sequence Function Charts

In this instructor led course, students will learn the professional handling and operation of a Symphony Plus system and how to interpret messages and react accordingly. Course will include both interactive class room discussions and hands-on lab, delivered on-site.

**Course objectives**
This course will give operators an overview of the Symphony Plus system structure, operator workplace design and layout. Students will learn to:
- Log on to the system and on to an operator workplace
- Understand the contents of an operator workplace
- Call up process graphics
- Control typical monitoring and control functions using faceplates
- Work with trend displays
- Handle alarm and event lists
- Navigate in the process using various display types
- Create and modify standard displays
- Work with trend displays and configure user specific trend displays
- Manage alarm and event lists, including filter actions, acknowledgement and call up of context menus from faceplates
How to enroll
Call: 800 HELP 365 (option 2, option 2)
Email: abbuniversity@us.abb.com
Fax: 919 666 1388
Web: abb.us/abbuniversity

ABB University contacts
Joe Hartman, Operations Manager: 440 585 8091