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

Table of contents

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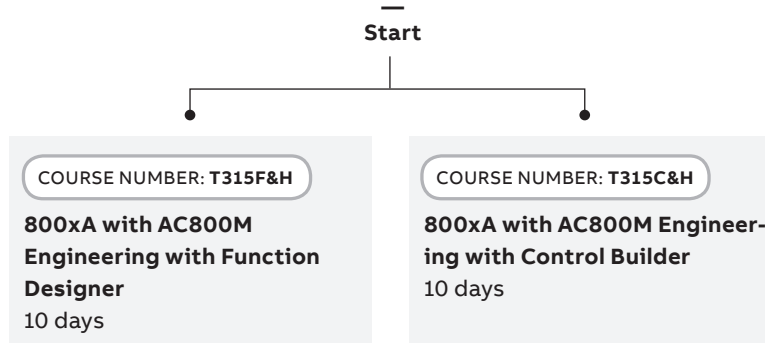
abb.us/abbuniversity

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

mylearning-americas.abb.com

ABB Ability™ System 800xA
Engineering learning path

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

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

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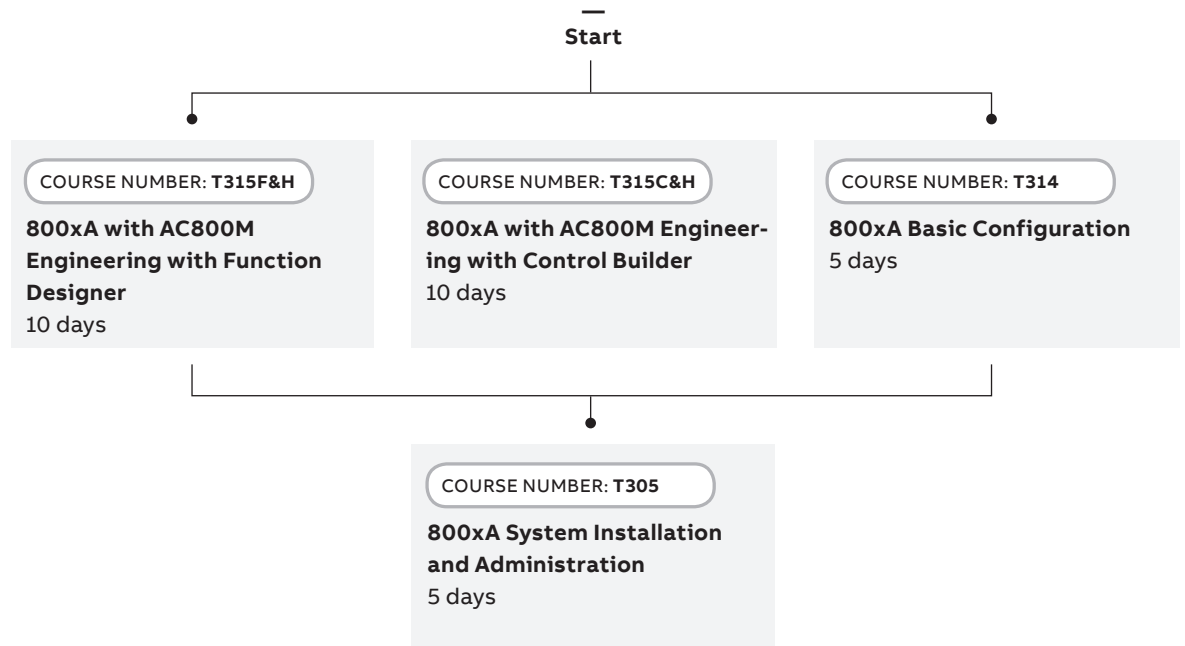5 days

Advanced courses

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

COURSE NUMBER: **US925**
Cyber Security Services
5 days

ABB Ability™ System 800xA
Adminstration learning path

Learning path   —
                                                          Start

COURSE NUMBER: **T315F&H**	COURSE NUMBER: **T315C&H**	COURSE NUMBER: **T314**
800xA with AC800M Engineering with Function Designer 10 days	**800xA with AC800M Engineering with Control Builder** 10 days	**800xA Basic Configuration** 5 days

COURSE NUMBER: **T305**

800xA System Installation and Administration
5 days

Advanced courses

Students are recommended to complete the learning path before taking advanced courses.
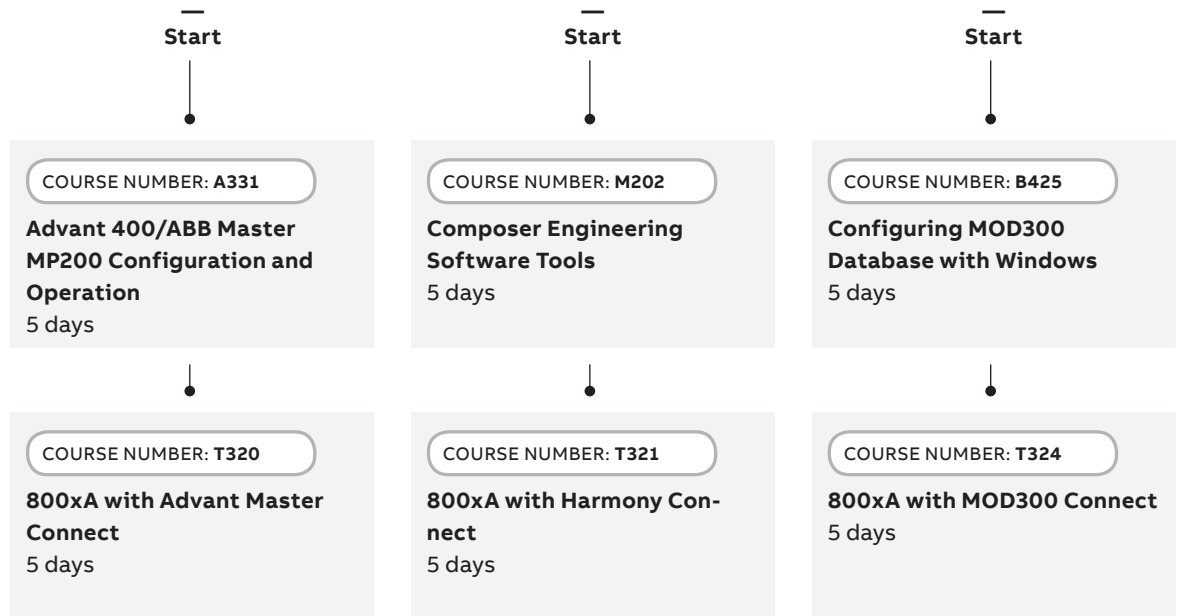
COURSE NUMBER: **T318**
800xA History
5 days

COURSE NUMBER: **US950**
Virtualization of ABB Systems
5 days

ABB Ability™ System 800xA
Evolution learning paths

Evolution learning paths

— Start

— Start

— Start

COURSE NUMBER: **A331**

Advant 400/ABB Master MP200 Configuration and Operation
5 days

COURSE NUMBER: **M202**

Composer Engineering Software Tools
5 days

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**
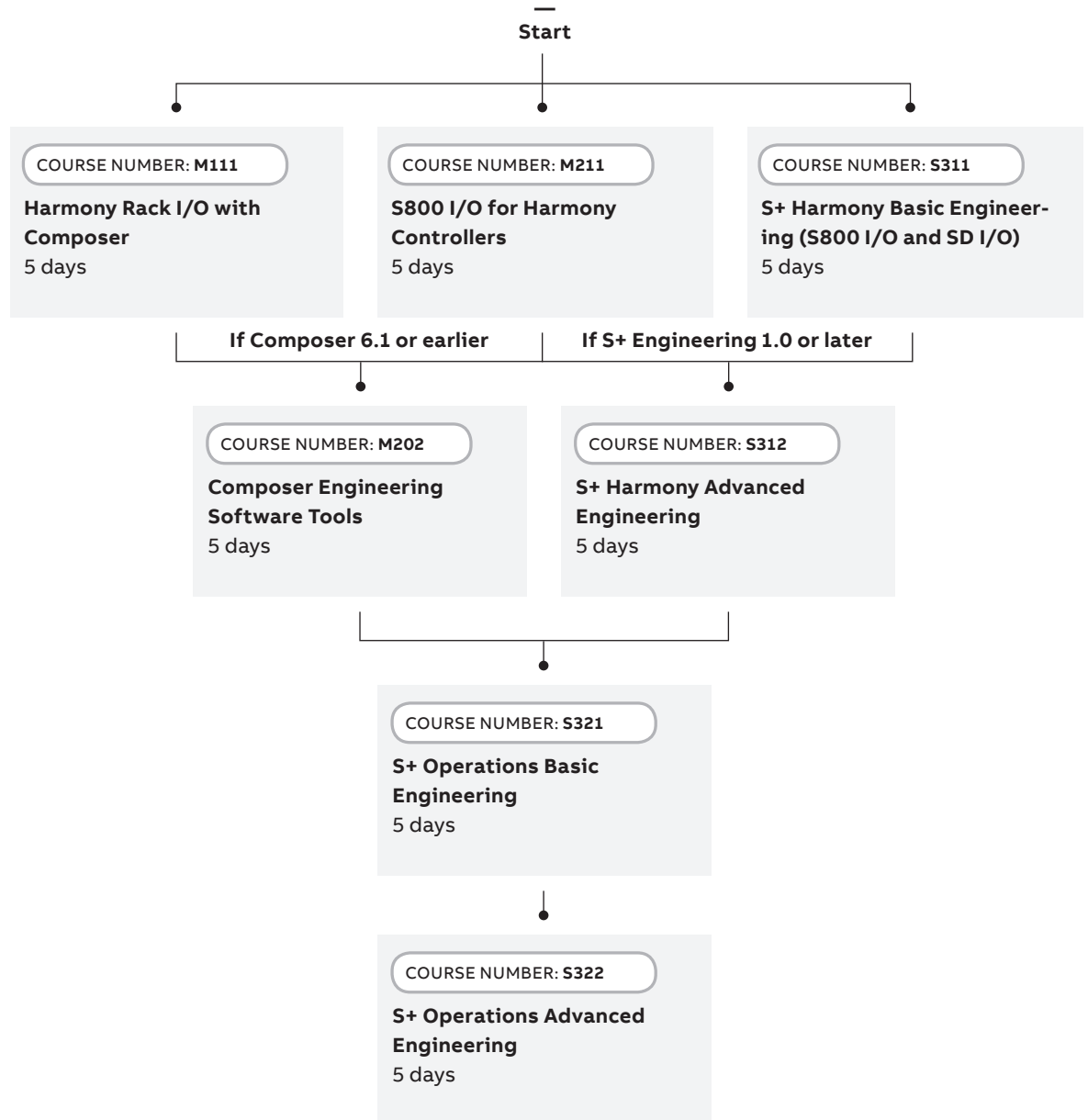**800xA Installation and Administration**
5 days

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**

COURSE NUMBER: **M111**	COURSE NUMBER: **M211**	COURSE NUMBER: **S311**
Harmony Rack I/O with Composer	**S800 I/O for Harmony Controllers**	**S+ Harmony Basic Engineering (S800 I/O and SD I/O)**
5 days	5 days	5 days

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

COURSE NUMBER: **M202**	COURSE NUMBER: **S312**
Composer Engineering Software Tools	**S+ Harmony Advanced Engineering**
5 days	5 days

COURSE NUMBER: **S321**

S+ Operations Basic Engineering
5 days

COURSE NUMBER: **S322**

S+ Operations 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: **US950**
Virtualization of ABB Systems
5 days

COURSE NUMBER: **M304**
Harmony Function Code Configuration Strategies
5 days

COURSE NUMBER: **US925**
Cyber Security Services
5 days

—

ABB Ability™ Symphony Plus / Harmony
Maintenance learning path

Learning path
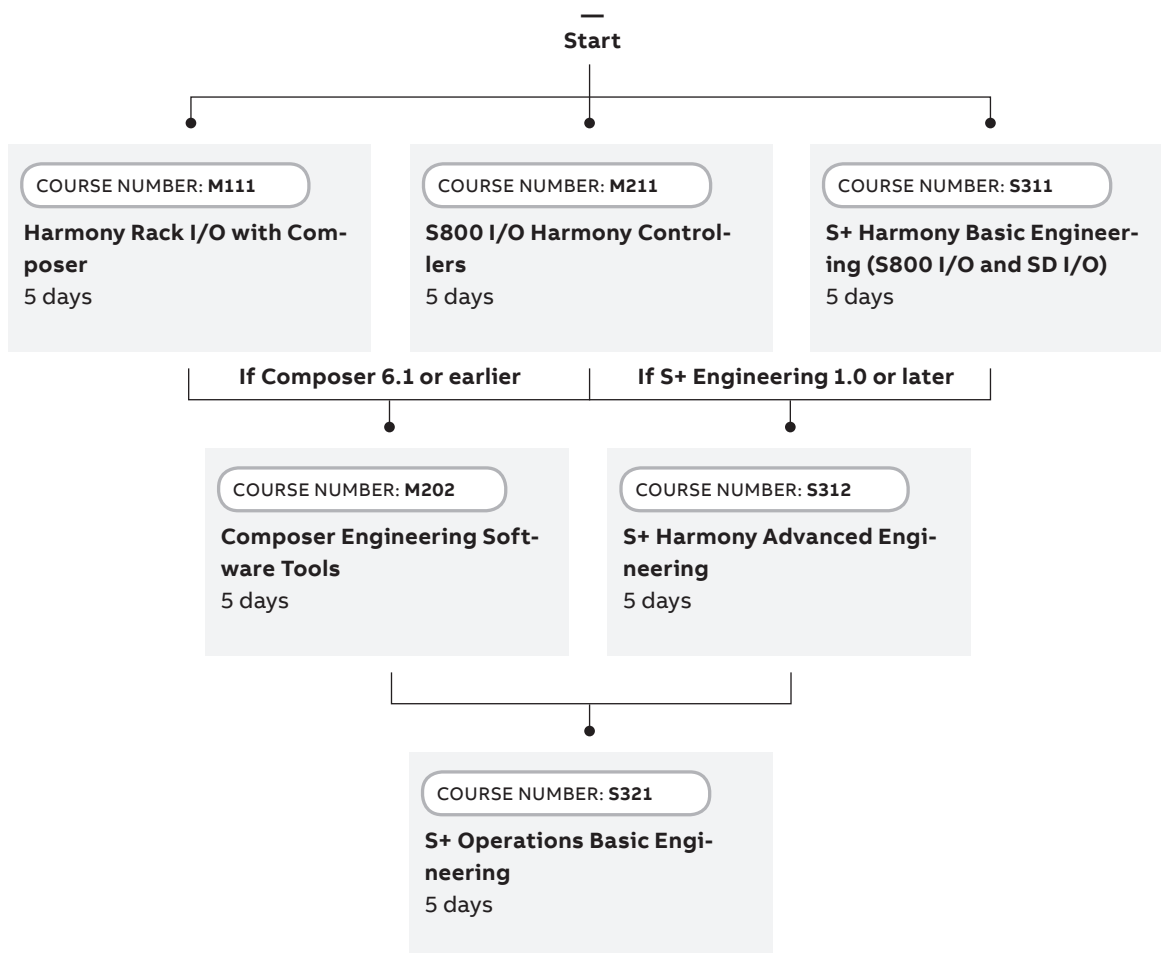
—
Start

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
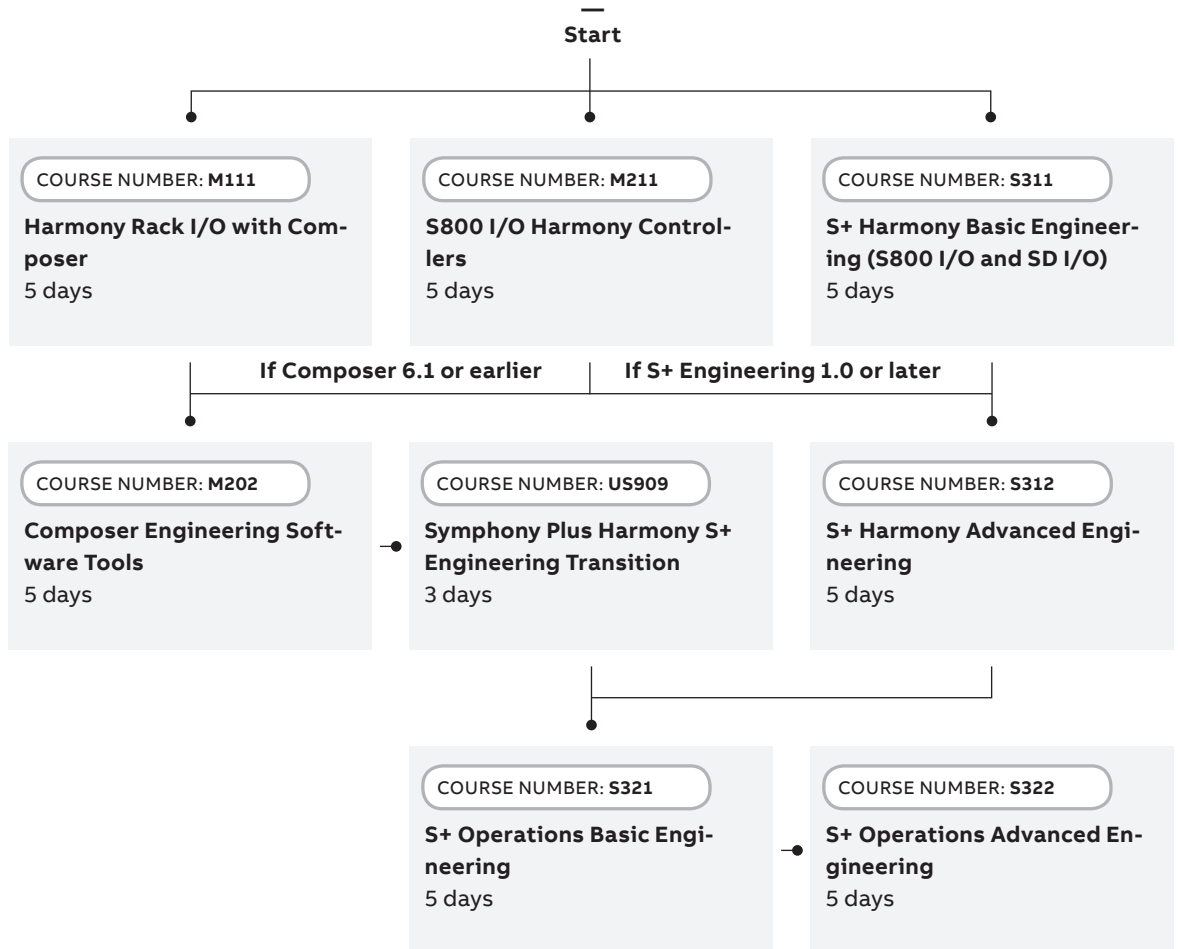5 days

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

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: **US909**
Symphony Plus Harmony S+ Engineering Transition
3 days

COURSE NUMBER: **S312**
S+ Harmony Advanced Engineering
5 days

COURSE NUMBER: **S321**
S+ Operations Basic Engineering
5 days

COURSE NUMBER: **S322**
S+ Operations 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: **M304**
Harmony Configuration Strategies
5 days

COURSE NUMBER: **S320**
S+ Operations Operator
0.5 days

COURSE NUMBER: **S303**
Cyber Security for Symphony Plus
5 days

COURSE NUMBER: **US924**
Symphony Plus History
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
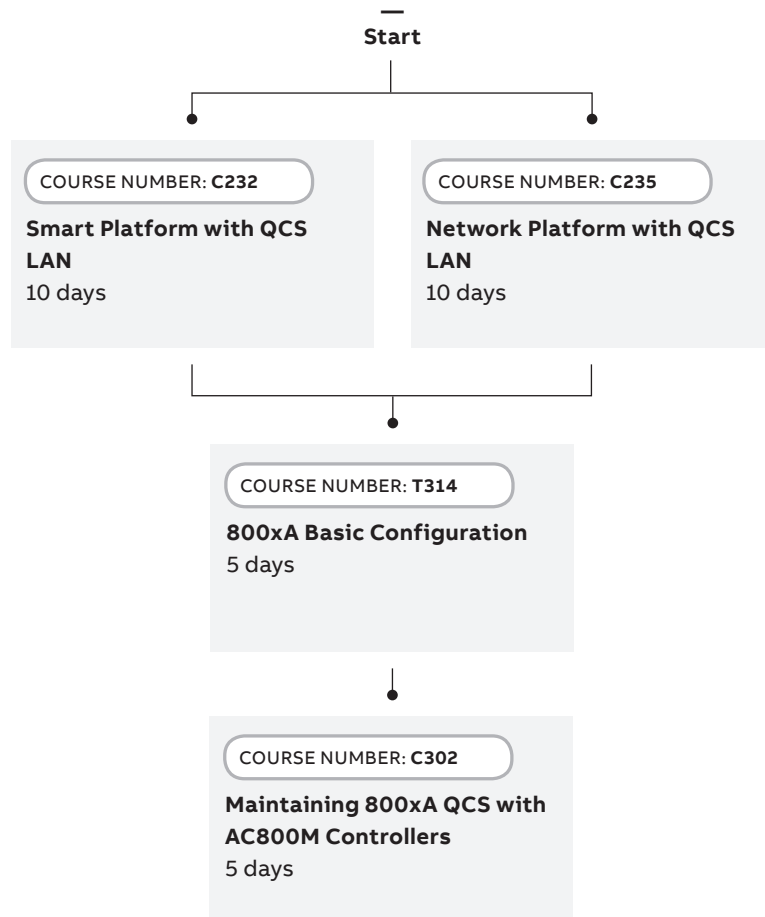
Evolution courses

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: **C313**
QCS Advanced Sensor Operation and Troubleshooting
5 days

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

Quality Control Systems
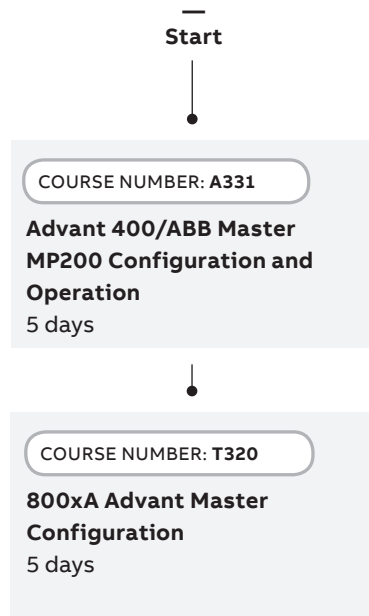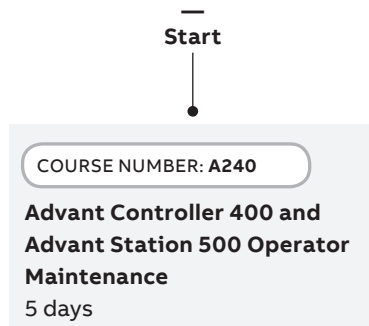## Control tuning learning path

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
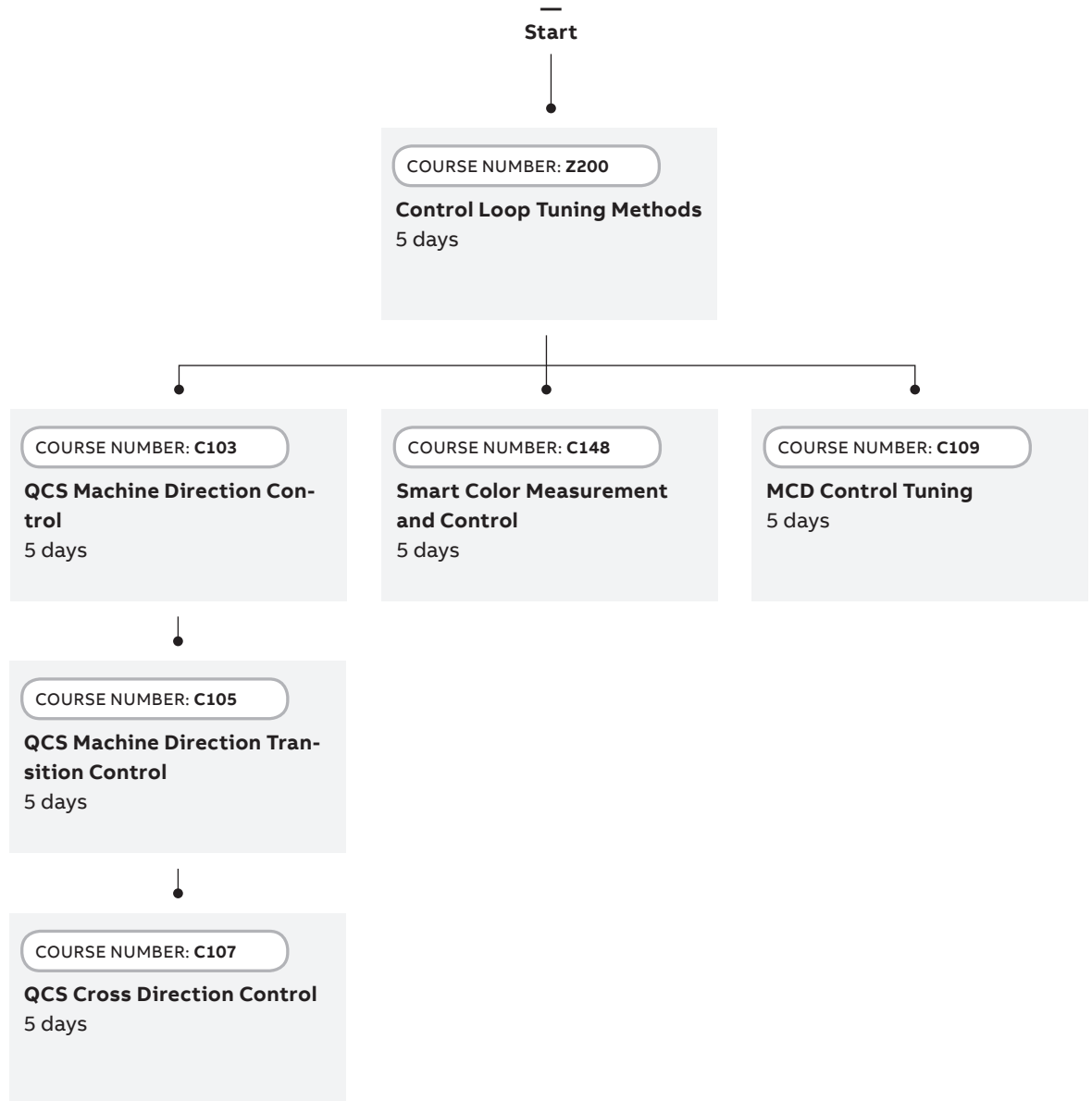
Advant Master
Learning paths

**Engineering
learning path**

— Start

COURSE NUMBER: **A331**

**Advant 400/ABB Master
MP200 Configuration and
Operation**
5 days

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

Learning path   **Start**

COURSE NUMBER: **B425**

**Configuring MOD300
Database with Windows**
5 days

COURSE NUMBER: **T324**

**System 800xA with MOD300
Configuration**
5 days
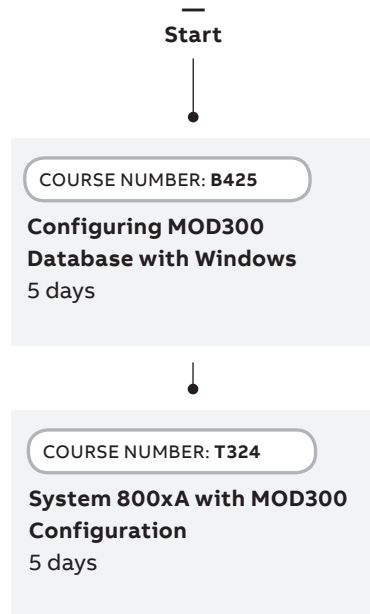
Operator training
Navigate, operate, interpret and react

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.

COURSE NUMBER: **T310**
ABB Ability™ System 800xA Operations - Operator
4-5 hours

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

COURSE NUMBER: **S320**
ABB Ability™ S+ Operations - Operator
4-5 hours

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