# C306
# Advanced Maintenance for 800xA QCS Systems



Learn the advanced concepts of QCS800xA. This includes in depth understanding of Quality Control Solutions software, QCS displays, Custom Grade Code data, OPC Transporter, and advanced troubleshooting techniques.

**Course type and methods**
This is an instructor led workshop with short presentations and demonstrations, extended exercises, and hands-on sessions and discussion.

**Student Profile**
This Course is targeted to QCS service engineers, commissioning and maintenance personnel, and system integrators.

**Prerequisites**
Students should know the fundamentals of working with Quality Control Systems and have basic knowledge of Windows XP and networking technologies. Student should have completed the T314 (or T315) and C302 courses.

**Course objectives**
Upon completion of this course the participants will be able to:
- Understand the architecture of the QCS800xA platform
- Understand the QCS software configuration
- Locate the XML file that defines a given QCS Control ID
- Use the QCS ActiveX controls to create a QCS aspect display
- Create custom Grade Code data

- Create a custom OPC Transporter file
- Create custom XML files that supply data for custom QCS displays
- Add an additional input to suspend and MD Control Loop
- Install QCS License
- Install 800xA License
- Install QCS hotfixes posted to ABB SolutionsBank

**Main Topics**
- QCS800xA architecture
- Custom Grade Code Data
- Understanding OPC Transporter Service
- Understanding MD Level 2 control structure
- QCS ActiveX Controls (OCX)
- QCS Control ID's
- QCS Properties aspect
- OPC Direct IT
- Building QCS aspect displays
- 800xA system customization
- Tools for SQL Database data extraction
- QCS events in Windows Event Viewer
- Customizing MD Control project in the AC800M Controller

**Duration**
The duration is 5 days

**Course Outline**

| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
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| • Course overview | • QCS Video Displays | • Custom Grade Data | • MD Control Project customizations | • Troubleshooting |
| • QCS800xA Architecture | • QCS ActiveX Controls | • Custom OPC Transporter | | |
| • QCS Software | • XML Files (Support files for HIS) | | | |
| • JOCONFIG | | | | |