T309
System 800xA Safety - with AC800M High Integrity Configuration and Maintenance

Learn how to maintain and configure Extended Automation System 800xA. Describe the function and compatibility of the AC800M High Integrity components.

Course type and methods
This is an instructor led workshop with short presentations and demonstrations, extended exercises, hands on sessions and discussion. Approximately 50% of the course is hands-on lab.

Student Profile
This training is targeted to system and application engineers, commissioning and maintenance personnel, service engineers and system integrators.

Prerequisites
Students should have attended the Engineering course T315C&H or have knowledge and experience associated with the content of these courses. Basic knowledge of safety implemented systems is an advantage.

Course objectives
Upon completion of this course the participants will be able to:
• Describe the requirements for a SIL certified application and explain the different SIL levels
• Use the Safety manual as important document
• Describe the function of the AC800M High Integrity components
• Configure the AC800M HI controller with the corresponding I/O’s
• Set up safety relevant controller settings and explain the execution in the controller
• Maintain and troubleshoot an HI controller, incl. firmware online upgrades
• Configure SIL2 / SIL3 applications by using standard libraries and describe the purpose of VMT and CTA applications
• Modify applications taking into account safety relevant topics
• Configure the access management
• Create communications between SIL applications
• Create Fire & Gas application by using the FireGasLib and SupervisionLib (optional)
• Set up and exchange redundant HI controllers
• Configure Partial Stroke testing

Duration
The duration is 5 days
## Course Outline

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Course overview</td>
<td>• Controller settings</td>
<td>• SIL marked applications</td>
<td>• Fire &amp; Gas application (optional)</td>
<td>• Redundancy</td>
</tr>
<tr>
<td>• Safety standards</td>
<td>• SIL marked applications</td>
<td>• Access management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• SIL levels</td>
<td></td>
<td>• Communication between SIL applications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• AC800M HI hardware</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Hardware configuration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Fire & Gas application (optional)
- Maintenance and troubleshooting