The goal of this course is to achieve familiarization with key turbine control topics including market characteristics, application types, and product details. Special emphasis is placed on the technical capabilities included under the ABB S+ Turbine label.

Learning objectives
Upon completion of this course, and depending on the specific training blocks that are selected, students will be able to:
- Understand the challenges faced by turbine control customers today
- Understand the challenges faced by turbine control system providers
- Understand the turbine control market breakdown
- Understand the ABB global capabilities in turbine control
- Identify ABB units based on their specific turbine control capability and experience
- Build a basic understanding of the most common turbine control applications (steam, gas, hydro, etc...)
- Design hardware architectures for turbine control systems
- Set up the basic control logic blocks for turbine control systems
- Understand the turbine control technology portfolio: S+ Turbine
- Understand the Harmony Rack Turbine Modules functionality and capability
- Configure the Harmony Rack Turbine Modules
- Interface the Harmony Rack Turbine Modules into S+ Control and S+ Engineering
- Troubleshoot the Harmony Rack Turbine Modules
- Understand the 800 Series Turbine Modules functionality and capability
- Configure the 800 Series Turbine Modules
- Interface the 800 Series Turbine Modules into the control and engineering environments of Symphony Plus and/or 800xA
- Troubleshoot the 800 Series Turbine Modules
- Understand the SD Turbine Modules functionality and capability
- Configure the SD Turbine Modules
- Interface the SD Turbine Modules into S+ Control and S+ Engineering
- Troubleshoot the SD Turbine Modules
- Develop understanding of ABB’s competitive advantages in the area of turbine control

This training can be customized to deliver specific combinations of the training blocks shown below. As a result the intended audiences can include sales, proposals, application engineers, commissioning and maintenance personnel, service engineers, system integrators, as well as end users (customers).

Prerequisites
Students should have a general understanding of process automation and basic knowledge of control systems. Experience in dealing with and handling of current Microsoft operating system is an advantage.

Topics/Training Blocks
S340
- ABB Group introduction
- Turbine Control industry
- ABB Turbine Control
- Turbine Control applications
- S+ Turbine
- S+ Harmony Rack Turbine Modules
- 800 Series Turbine Modules
- SD Turbine Modules
- S+ Turbine competitive advantages

S340s
- S+ Turbine training for sales
Course type and methods
In this initial rollout, this is an on-line, on-demand, instructor led course. Special arrangements can be made as needed for classroom based face-to-face sessions. In the future, there will be options for hands-on engineering and configuration exercises.

Duration
The duration will vary between 1-3 days, depending on what training blocks are selected.

This course is also offered in a summarized 3 hour version intended for sales audiences (Training Block S340s).

---

Agenda

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABB Group introduction – 1 hour</td>
<td>S+ Turbine – 1 hour</td>
<td>SD Turbine Modules – 5 hours</td>
</tr>
<tr>
<td>Turbine Control industry – 1 hour</td>
<td>S+ Harmony Rack Turbine Modules – 2 hours</td>
<td>S+ Turbine competitive advantages – 2 hours</td>
</tr>
<tr>
<td>ABB Turbine Control – 2 hours</td>
<td>800 Series Turbine Modules – 4 hours</td>
<td></td>
</tr>
<tr>
<td>Turbine Control applications – 3 hours</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>