HGU
Hydrogen Generation Unit
Z243e – Web-based training (External version)

Course duration
1 hour, depending on personnel knowledge

Course type
This is a web-based training course. The course includes self-study material and self-assessment questions. The language of the course is English.

Course goal
The goal of this course is to enable students to develop an understanding of the role of the HGU in the overall refinery configuration, its feed, intermediate and product streams and its key unit operations:

- Feed Pretreating
- Steam-Methane Reforming
- Shift Conversion
- Purification

Student profile
- Sales/Service engineers
- Product engineers and
- All interested employees inside ABB

Course objectives
Upon completion of this course, students will be able to:

- Describe the process flow
- Name the principal items of equipment
- Describe their function
- Understand their principles of operation
- Recognize their internal components

Additionally, students should be able to demonstrate an awareness of:

- Important process variables and how they're controlled
- Major operating constraints
- Typical operating problems

Course Modules
This course has three modules. Module 01 provides an overview of the HGU, and Modules 01 - 03 describe each of the unit operations that make up the HGU:

- Module 01 – Overview & Feed Pretreatment
- Module 02 – Steam-Methane Reforming
- Module 03 – Shift Conversion & Purification