

Education/Academic Support

Siemens Mechatronic Systems Instructor Certification: Level 3

General Information

Course Code: STA-SMSCP3A
Length: 10 Days

Audience

This course is exclusively for educators interested in developing teaching skills on Siemens automation technologies. Teaching staff from public, not for profit schools including Technical High Schools, Community Colleges, Technical Schools, Universities and Trade Schools are welcome to apply and register.

Prerequisites

- Completion of Systems Approach Paradigm Week (SAPW) and Level 1 Instructor Certification courses
- Completion of Level 2 Instructor Certification course is recommended
- Teaching or industry background in Mechatronics, Electrical or Mechanical Engineering, or Project Management
- General project and process management knowledge
- Component selection knowledge

Profile

6.6 CEUs (Continuing Education Credits)

This course covers the application of Systems Approach to the content topics of the two inter-related Level 3 courses: Project and Process management and an Engineering Mechatronic System Project.

In this course you will work with standard project management tools. After successfully completing this course, participants will be certified as a Siemens Mechatronic Systems Certified Instructor for Level 3.

Level 3 focuses on training skilled designers of and experts on complex mechatronic systems, with the application of selected project, product and system engineering practices, such as requirements engineering, project management, process management, quality assurance, and management. These competencies are incorporated and applied to a project, the design of a new system or the improvement of an existing system, to meet a customer's needs. The objective is to train an Engineer as a beneficial project member.

Objectives

After successfully completing this course, participants will be certified as a Siemens Mechatronic Systems Certified Instructor for Level 3.

This Instructor Certification is based on a Train-the-Trainer model: during this course you will apply the didactic teaching methods from the SAPW course to two courses that you can integrate and teach to students at your educational institution or employees at a training center.

Topics

1. System Approach paradigm and course-specific didactic training in Project and Process management and a Mechatronic System Project
2. Overview of job profile for Level 3 (Professional, Engineer)
3. Review course syllabi
4. Development Project, i.e. Conveyor System and Heat Test System
5. Introduction to Project Management (initialize and requirements, planning and design, execution and implementation, monitoring, integration, and testing, closing and improvement)
6. Project workbook content and design
7. Requirements Analysis with user stories and customer wishes
8. Project monitoring and control
9. Customer acceptance test
10. Customer and supplier project step clarification, according to the V-Model
11. Product lifecycle overview
12. Sample question review for Siemens student examination
13. Implementation workshop for implementation of SMSCP locally