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## Siemens Mechatronic Systems Certification Program (SMSCP) Instructor Certification: Level 3

**Title:** SMSCP_L3

**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

**Objective:**

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.

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.
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.

**Course Content:**

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

**Notes:**

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.

**Target Group:**

Teachers
Engineering or Engineering Technology Faculty or Professors
Project Management Faculty or Professors
Engineers
Maintenance and Training Managers
Technical Instructors for non-educational institutions

**Duration:** 10 Days

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