

## Siemens Mechatronic Systems Certification Program (SMSCP) Instructor Certification: Systems Approach Paradigm Week (SAPW) (SMSCP-SAPW)

### Objectives

The Systems Approach Paradigm Week (SAPW) focuses on the collection of teaching and learning methods we call the Systems Approach, and provides an overview of the SMSCP.

This Instructor Certification is based on a Train-the-Trainer model: during this course you will be taught our didactic teaching methods that you can then use to teach students at your educational institution or employees at a training center.

The Systems Approach has been used with a high degree of effectiveness for the training of employees and engineers for Siemens in Germany. Under the Systems Approach, complexities of a system are learned in a holistic fashion. The end result is a student or employee who is flexible, autonomous and professional in his or her dealings with such complex system.

### Target Group

Teachers  
Engineering or Engineering Technology Faculty or Professors  
Engineers  
Maintenance and Training Managers  
Technical Instructors for non-educational institutions  
Administrative Faculty  
College and University Deans

### Content

Deeper understanding of Systems Approach  
Overview of Siemens Mechatronic Systems Certification Program (SMSCP)  
Hands-on exercises with mechatronic systems, modules, and sub-systems  
Block diagrams of system modules  
System function descriptions for energy, mass, and information flow  
Creation of function charts for simulated systems  
Troubleshooting strategies for systems, using the Diagnostic Kit or mechatronic system  
Sample lessons for troubleshooting  
Creation of sample lessons utilizing the Systems Approach  
Development of strategies for knowledge transfer from one system to another  
Role of factory tours in study programs  
Review hardware requirements for suitable mechatronic systems  
Implementation workshop for implementation of SMSCP locally  
Introduction to an online content distribution platform, VCAT

### Prerequisites

Teaching or industry background in Mechatronics or Electrical or Mechanical Engineering.  
This course is a prerequisite for all SMSCP content courses (Level 1, 2, and 3).

### Note

This course is the first half of the SMSCP Level 1 or 2 Instructor Certification process; the second half covers the course-specific content.

### Type

Face-to-face training

### Duration

5 days

### Language

en