Level 1 SMSCP
Pre-requisite: Knowledge of basic arithmetic is highly recommended.

with the corresponding data configuration in STEP 7. PROFIBUS modules are going to be wired with bus cables to a PLC.

Additionally, maintenance and troubleshooting of these bus systems are essential components of the course.

SMS 203 – Automation Systems The Automation Systems course in the Level 2 certification program is divided into two main branches; Manufacturing Technologies, including CNC, CAD and CAM; and Microcontrollers and Programming, which constitute essential tools in modern manufacturing, particularly in mechatronic systems.

When breaking down a system into its constituent modules, it is likely to find a microcontroller as the intelligent core of the entire structure. The microcontroller section

For the process management component, a factory simulation is conducted. Each participant is assigned a role and the rules of the simulation are discussed. After a series of runs of the simulation, a discussion and presentation is made, where participants not only present their performance and progress data but also track what they learned.

For the hands-on design project component, instructors are encouraged and supported in creating a useful design project for students. Students are divided into teams, informed of the rules of the project, given a timeline, budget and a "customer", as well as other parameters. After completing the project, students present their results and learning outcomes.