

# Siemens Mechatronic Systems Certification Program

## Job Profile Level 3

A Siemens Certified Mechatronic Systems Professional will function as a skilled designer of and expert on complex mechatronic systems. A Certified Professional will be responsible for high-level design, management, and improvement of mechatronic systems based upon customer and user needs. Normally a Siemens Certified Mechatronics Systems Professional would carry out most of their work in an engineering office environment; however they may also carry out some of their work at production facilities, workshops, and service sites that use complex mechatronic systems.

He or she will be able to:

- Define the functional requirements of a mechatronic system with 'use cases', interviews with customers and users, and systems modeling techniques;
- Perform high-level design by defining appropriate mechatronic systems to perform specific tasks;
- Utilize knowledge of machine elements, actuators, pneumatics, and electric drives to design particular mechatronic systems;
- Select the correct automation technology based on the mechanical and electronic composition of the system, while taking into account the functional requirements of the system;
- Communicate design ideas using CAD tools;
- Program and troubleshoot PLC networks;
- Establish a routine maintenance schedule;
- Review past system performance and carry out comprehensive system tests, with the aim of locating ways to optimize operations for cost, quality, and efficiency;
- Design and implement system optimization techniques in an existing mechatronic system
- Maintain knowledge of the current state-of-the-art in mechatronic systems, such that upgrades and modifications reflect the most up-to-date and effective methodology.
- Develop specifications for automation system communication integration

Siemens Certified Mechatronic Systems Professionals understand at a high level how mechatronic systems function. In contrast to those certified at Levels 1 and 2 (Siemens Certified Mechatronic Systems Assistant and Associate), they will understand why a mechatronic system is designed the way it is. In addition to designing and managing new systems, they will be able to optimize and improve existing systems.

Want to get certified, or confirm a student/instructor/school certification?

Contact us: [info@siemens-certifications.com](mailto:info@siemens-certifications.com)  
Or visit us at: [www.siemens-certifications.com](http://www.siemens-certifications.com)

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