



Automotive Next Gen: Software Architectures and Hybrid-Electric Systems

- The automotive world is undergoing a turbulent change that is reflected in many aspects of the development cycle. In this seminar, we will address two key areas:
 - Design and management of software architectures
 - Design of the vehicle's hybrid-electric subsystem
- **The first part includes:**
 - The modeling of software architectures, from components to interfaces and functions
 - How to analyze and optimize architectures, and ensure strict traceability with respect to component design and initial requirements
 - The importance of automated testing to ensure software quality and reliability, with a focus on generating tests based on requirements
 - How to ensure compliance with industry standards, including AUTOSAR for software architecture, and safety certifications such as ISO 26262 and ASPICE
- **The second part includes:**
 - Modeling of essential parts of the power unit, e.g., electric motor, using different approaches (first-principle, data-driven)
 - Design techniques for controllers, e.g., legacy-code reuse
 - Examination of notable subsystems, e.g., Electric Vehicle Thermal Management, BMS

The same seminar will be delivered in two locations:

- 20/02/2025, 14:00-17:00, **Vicenza**, Room VM19.
- 21/02/2025, 9:30-12:30, **Padova**, Room Ae.

A certificate of attendance delivered on request.

Use the QR-Code for registration & additional details.

Register by
1 Feb. 2025



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