



UNIVERSITÀ  
DI PAVIA

Ph.D. Program in Electronics, Computer Science and Electrical Engineering

## COURSE

### Systems and control colloquia I: risk analysis and reliability of industrial systems

*Prof. Riccardo Scattolini*

**TOPIC:** This short course aims to enable students to learn and apply the main techniques for analyzing the risks and reliability of industrial systems, such as Preliminary Hazard Analysis (PHA), Failure Mode and Effects Analysis (FMEA), and Fault Tree Analysis (FTA). Simple test cases are presented and discussed to show how these methods can be applied according to top-down or bottom-up approaches.



**BIO:** Riccardo Scattolini was born in Milano, Italy, in 1956. He received the Laurea degree in electronic engineering from the Politecnico di Milano, Italy, in 1979. From 1983 to 1994 he was Assistant Professor and Associate Professor with the Università di Pavia and Politecnico di Milano. Since 1994 he is Full Professor of automatic control with the Politecnico di Milano. From 1984 to 1985, he was a Visiting Researcher at the Department of Engineering Science, Oxford University, U.K. He also spent one year working in industry on the simulation and control of chemical plants. His current research interests include modeling, identification, simulation and control of industrial plants and distribution networks, with emphasis on distributed model predictive control of large-scale systems. Prof. Scattolini received the Heaviside Premium from the Institution of Electrical Engineers, U.K., in 1991. He has been Associate Editor of Automatica.

**LECTURES:** 10h; **EVALUATION:** 3 CFU will be assigned based on attendance and an oral presentation.

**SCHEDULE:** The course will start on Oct. 13<sup>th</sup>, at 2 p.m. Date and time of the next meetings will be notified to participants on a rolling basis. The course will take place in the **MAGENTA** Seminar Room.

**Ph.D. Coordinator**

Prof.ssa Ilaria Cristiani

Course taught in English  
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