



UNIVERSITÀ DI PAVIA

The Semiconductor Journey

From a simple idea to complex manufacturing



Agenda

• May 19, 2025

Introduction to the course
ST Company overview and its Technical Staff Community
Welcome to the future, Welcome to ST
Welcome by the Rector of University of Pavia
ST Technology Research and Development
IC Design: from idea to product

• May 20, 2025

Micro Electro-Mechanical System (MEMS) for motion
MEMS Technology
Silicon Process Technology

• May 21, 2025

GaN IC design
Analog & Mixed Signal Design Implementation Flows
Design Research and Development

• May 22, 2025

Package platform and co-design challenges
p-GaN Power: Trend and Technology development at ST
Reliability

• May 23, 2025

An introduction to ePCM
STM32 Open Development Environment
Failure Analysis
ST's Sustainable Excellence
Conclusions

STMicroelectronics and University of Pavia organize ToM 2025-1, a PhD course on advanced semiconductor product manufacturing that provides a comprehensive overview of the complex processes that, starting from a simple idea, enable the manufacture of complex devices. During the week, important research and development activities and knowledge sharing will be discussed in the framework of ST's corporate social responsibility.



May 19 - 23 2025



University of Pavia
Seminar room of CNR-IMATI
Via Ferrata 5
27100 Pavia
Italy

Deadline May 9 2025

Register at the following [link](#):



Within the framework of the project:



IPCEI Microelectronics and
Communication Technologies

