



Politecnico
di Torino



The Semiconductor Journey

From a simple idea to a complex manufacturing



STMicroelectronics and Politecnico di Torino organize a PhD school on advanced semiconductor product manufacturing, to be held from May 8 to 12, 2023. All the lectures will be given by STMicroelectronics professionals. An optional final on-line test is planned on the school subjects. The access to the school will be limited in number, and registrations will be accepted on a First-Come First-Served basis. Registrations will close by April 30, 2023. Registration fees (125€) will cover the access to lectures and to all the transparencies, lunches and coffee-breaks for the 5 days.

Agenda

8 May morning*	09:00 Welcome by the Rector of Politecnico di Torino 09:15 Introduction 09:30 Company overview and Technical Staff Community 10:30 Welcome to the future, Welcome to ST <i>*the morning session will take place in «Emma Strada» room</i>	G. Saracco M. Sonza Reorda/M. Marchesi S. Bertolli/I. Di Sante A. Cremonesi
8 May afternoon	14:00 Innovation and Challenges in Smart Power design	G. Ricotti
9 May	09:00 Micro Electro-Mechanical System (MEMS) for motion 11:00 MEMS Technology 14:30 Silicon Process Technology	P. Pesenti/R. Modaffari A. Sciutti S.D. Mariani
10 May	09:00 ST Technology Research and Development 11:00 Analog & Mixed Signal Design Implementation Flows 14:30 Design Research and Development	A. Molfese D. Genova P. Rolandi
11 May	09:00 Package platform and co-design challenges 11:00 Testing 14:30 Reliability	G. Graziosi D. Appello A. Mancaleoni
12 May	09:00 p-GaN Power: Trend, technology and performances at ST 10:00 An introduction to ePCM 11:00 Failure Analysis 14:30 ST's Sustainable Excellence 16:30 Conclusions	M.E. Castagna A. Redaelli A. B. M. Garnier/M. Merlotti L. Fracassini M. Marchesi

Abstract

The goal of the PhD school is to give a general overview of the complex process that, starting from a simple idea, leads to the manufacturing of a microelectronic device. The R&D environment of a large company as STMicroelectronics will be presented as well as the fundamentals steps of the manufacturing path. During the week, the importance of research and development activities and the value of knowledge will be discussed in the framework of ST's corporate social responsibility.

8 – 12 maggio 2023
Room L. Ciminiera- DAUIN
Politecnico di Torino
Corso Duca degli Abruzzi, 24

REGISTER

