



PhD Course in Physics and Astronomy
PhD Course in Materials Science and
Nanotechnology

Topics on Microelectronics

ToM2020 - XIV Year

Updated information at the website
www.innotechevents.com
Director: Andrea Baschirotto

IEEE-SSCS
Italian Chapter



2020
Best SCS Chapter Award

Course ToM2020/1

Aula Sironi (U4-08 in Building U4) - Lectures in Italian

"The Semiconductor Journey: from a Simple Idea to a Complex Manufacturing" in collaboration with STMicroelectronics

The course gives a general overview of the complex mechanism that, starting from a simple idea, leads to the manufacturing of a microelectronic device. The environment of a big company as STMicroelectronics is presented as well as the fundamental steps of the manufacturing path. During the course, the importance of the research and development and the value of the knowledge are discussed in the frame of the willingness of a corporate social responsibility.



Monday, May, 11th, 2020

- 9:15 - 9:30 Marco Marchesi, "Introduction to the Course"
- 9:30 - 10:30 Sonia Fulgoni, "ST Company Overview and its Technical Staff Community"
- 11:00 - 13:00 Fabio Marchio', "ST Marketing: IoT and Smart Driving"
- 14:30 - 16:30 Marco Marchesi, "Magnetic Sensors"

Tuesday, May, 12th, 2020

- 9:15 - 11:00 Paolo Pesenti, "Micro Electro-Mechanical System (MEMS) for Motion"
- 11:15 - 13:00 Alessandra Sciutti, "MEMS Technology"
- 14:30 - 16:00 Simone Dario Mariani, "Process Technology"
- 16:15 - 17:15 Giuseppe Fazio, "Manufacturing Science on Semiconductor Industry"

Wednesday, May, 13th, 2020

- 9:15 - 11:00 Giulio Ricotti, "Ultrasound for Health"
- 11:15 - 13:00 Domenico Genova, "Analog & Mixed Signal Design Implementation Flows"
- 14:30 - 16:30 Pierluigi Rolandi, "Design Research and Development"

Thursday, May, 14th, 2020

- 9:15 - 11:00 Giovanni Graziosi, "Package Platform and Co-Design Challenges"
- 11:15 - 13:00 Davide Appello, "Testing"
- 14:30 - 16:30 Alberto Mancaloni, "Reliability"

Friday, May, 15th, 2020

- 9:15 - 11:00 Mauro Merlotti, "Failure Analysis"
- 11:15 - 13:00 Giuseppe Croce, "Technology Research and Development"
- 14:30 - 15:30 Luisa Fracassini, "ST's Sustainable Excellence"
- 15:30 - 16:30 Ernesto Bussola, "Lean Thinking"
- 16:30 - 17:00 Marco Marchesi, "Conclusions"

Course ToM2020/2

Aula Marchetti (U1-01 in Building U1) - Lectures in English

September, 8th, 2020

14.00-17.30 Danilo Gerna (Melexis Technologies), "Advanced Hall Element based Magnetic Sensors Front End Design"

September, 9th, 2020

9.00-12.30 Carlo Samori (Politechnic of Milan), "PLL: from Analog to Digital and Recent Trends"
14.00-17.30 Alex Tranca (Infineon), "Robust Design of Smart Power ICs for Automotive Applications, with Focus on Load Current Sensing"

September, 10th, 2020

9.00-12.30 Alfio Dario Grasso (University of Catania), "Ultra-Low Power Amplifiers for IoT Nodes"
14.00-17.30 Gabriella Ghidini (STMicroelectronics), "Dielectric Reliability in Microelectronics"

The lectures will be held at the University of Milan-Bicocca - Piazza della Scienza, 3 - 20126 Milan (Italy)
AT THE END OF EACH COURSE AN EXAM WILL BE PROPOSED FOR CERTIFYING THE POSITIVE ATTENDANCE

Registration to ToM Courses has to be performed using the online registration form available at:
<http://www.innotechevents.com/index.php?page=ToM/RegistrationForm.html>