1st International Summer School on Micro and Nano-fabrication tools for innovating applied electronics and fundamental research

## MINATO Summer School 2024



Do you wish to develop your knowledge in Micro and Nano-fabrication tools or Nanotechnology, while traveling the world, discovering french "art de vivre", and meeting new people from different cultural backgrounds?



In the south of France, you will study within a high-ranking French engineering institute, INSA TOULOUSE, and have the chance to fabricate your own device in **clean room** and research facilities.

Micro and Nano technologies are nowadays "Key Enabling Technologies" for innovating applied science and fundamental research in numerous experimental field.

Get micro-nano fabrication skills thanks to MINATO, with a unique hands-on interdisciplinary teaching method approach mainly based on Lab Work (> 50% of time) in a clean room.



## Dates:

June 24, to July 5, 2024 or June 24, to July 19, 2024.

Earn **ECTS** credits: 5 for 2 weeks 10 for 4 weeks.













## Design your own summer school program! Pick one track for 2 weeks summer school and two tracks for 4 weeks summer school.



TRACK 1

Microelectronics

MOS (metaloxidesemiconductor)
technology



TRACK 2

Energy

Integrated

energy

harvesting and

storage

technologies





TRACK 4

TRACK 5
Quantum
technology
Ultrasensitive
Sensors and
quantum
cryptography

Only for 4 weeks program.

TRACK 3
Nano chemistry
Chemical sensors
based on nanoobjects

Nan
Rer
proj

Nano physics
Remarkable
properties of
devices
integrating 2D
materials

and a compulsory track: French Culture and Language.



Activities: Guided tour in World heritage sites by UNESCO (Carcassonne, ...) and typical French cities; Visit of **AIRBUS** facilities, CNRS Laboratories; Typical French food; 14th of July celebration...

Who can apply: All Science and Engineering students with undergraduate or graduate level (≥ bachelor of science in mathematics, physics, chemistry, materials, electronics) including PhD students. Preliminary entry-level on-line courses refreshing the required topics provided.

Fees: # full cost - 2950 € for 2 weeks or 4750 € for 4 weeks program, (accommodation, lunch, social events, and visits included).

# discount - 2100 € for 2 weeks or 3100 € for 4 weeks program, for INSA Toulouse partner universities.

Application deadline: 22/04/2024

Educational Manager: Prof. Marc RESPAUD









