

MINATO Summer School 2026

Register now !

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 fields.

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 22, to July 3, 2026

or

June 22, to July 17, 2026.

Get **ECTS** credits:

5 for 2 weeks

10 for 4 weeks.

Toulouse, France



<https://www.aime-toulouse.fr/summer-school-minato/>

Design your own summer school program!

Pick one track for 2 weeks summer school (5 ECTS credits)
two tracks for 4 weeks summer school (10 ECTS credits).



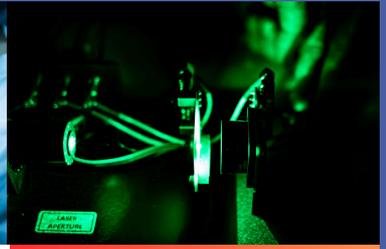
TRACK 1
Microelectronics
MOS (metal-oxide-semiconductor) technology



TRACK 2
Energy
Integrated energy harvesting and storage technologies



TRACK 3
Nano chemistry
Chemical sensors based on nano-objects



TRACK 4
Quantum technology
Ultrasensitive Sensors and quantum cryptography

Only for 4 weeks program.

and a additional track : French Culture and Language.



Activities: guided tour in world heritage sites by UNESCO (Carcassonne city, Canal du midi...), visit of the Pic du Midi and its astronomical observatory; visit of **AIRBUS** facilities, CNRS Laboratories ; typical French food tasting ; 14th of July celebration...

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

Participant Fees:

Free movers: €3,650 for 2 weeks or €5,500 for 4 weeks program.

Partners: €1,950 for 2 weeks or €2,900 for 4 weeks program (tuition fees are waived for participants from INSA Toulouse partner institutions).

All fees include accommodation, lunches, cultural activities, social events, and visits organized by MINATO.

Application deadline: 16th of march 2026

2 weeks program : June 22, to July 3, 2026

4 weeks program : June 22, to July 17, 2026

Educational
Manager: Prof.
Marc RESPAUD



More information: Detailed program, practical information and the registration link : <https://www.aime-toulouse.fr/summer-school-minato/>

AIME
Micro-Nano
Pôle CNFM de Toulouse

INSA
TOULOUSE

U Université
de Toulouse



Sara PUGLIESE is a PhD student at the Catalan Institute of Nanoscience and Nanotechnology (Barcelona). She participated in the Minato 2025 Summer School to deepen her knowledge in microfabrication for her research.

WHY DID YOU CHOOSE TO ENGAGE AT MINATO?

I am currently a PhD student in the DocFam+ fellowship program at the Catalan Institute of Nanoscience and Nanotechnology in Barcelona. I decided to enroll in this summer school to deepen my knowledge in microfabrication and take the first step toward developing a prototype for my research.

HOW DID THE GROUP DYNAMIC AND INTERNATIONAL SETTING INFLUENCE YOUR EXPERIENCE?

I would say the overall experience truly exceeded my expectations. The technical content was of a very high standard, and the organization was excellent. Above all, the pedagogical approach made complex topics clear and engaging, greatly enhancing the learning experience.

HOW WAS THE ORGANIZATION OF MINATO IN TERMS OF SCHEDULE AND SUPPORT?

The organization of MINATO was excellent. The schedule was clear and well-structured from the start, which made it easy to follow the cleanroom procedures and work efficiently.

The support from the staff was consistent and proactive, allowing us to focus fully on the technical tasks. The cultural activities, like the visit to Carcassonne, added a valuable and memorable dimension to the overall experience.

WHAT WAS THE ATMOSPHERE LIKE AMONG PARTICIPANTS FROM DIFFERENT COUNTRIES?

The atmosphere was welcoming from the very beginning. People came from diverse countries and backgrounds, which enriched the experience and sparked meaningful exchanges. It was inspiring to connect with other physicists and engineers and to gain insight into how approaches vary across different research cultures.

WHAT WAS A HIGHLIGHT OF THE PROGRAM FOR YOU?

Definitely the hands-on experience: you get to fabricate your own device yourself—not just watch someone else do it for you. You're the one making the mistakes and learning from them directly.

HOW HAS THIS EXPERIENCE CONTRIBUTED TO YOUR ACADEMIC OR PERSONAL DEVELOPMENT?

This experience has significantly contributed to my academic development by deepening my understanding of microfabrication through practical, hands-on work in the cleanroom. It pushed me to think more critically about design and process planning, while also improving my problem-solving skills in a lab setting. Being part of an international group also encouraged me to step out of my comfort zone and engage more openly with new ideas and working styles.

WOULD YOU RECOMMEND THIS PROGRAM TO OTHER INTERNATIONAL STUDENTS?

Absolutely. MINATO offers a truly hands-on learning experience, guided by highly qualified and supportive instructors. The pedagogical approach is outstanding—clear, adaptable, and designed to suit students from different backgrounds. The team made a real effort to tailor the content to our individual needs, which made the experience not only practical but also personally meaningful.

I would definitely recommend it to any international student looking to gain solid, applied knowledge in this field.

IF YOU HAD TO SUMMARIZE YOUR EXPERIENCE IN THREE WORDS, WHAT WOULD THEY BE?

Hands-on - Inspiring - Enriching.



Toulouse, The Pink City An authentic destination!

- 3d largest city in France
- Best student city in France (*L'Étudiant*, 2025)
- 1st French city in terms of talent retention
- Home to the 2nd oldest university in France (est. 1229)
- 4 hrs from Barcelona by train / 3 hrs from the ocean / 1½ hrs from the Mediterranean Sea / 1½ hrs from skiing resorts
- 130,000 students (including 15,000 international students) & 20,000 researchers
- One of the most dynamic regions in Europe - World capital of aeronautics & European capital of the space industry (AIRBUS, CNES ...)
- 1st French metropolis in term of economic growth, demographic transition, job creation and R&D investment



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REGISTRATION



INSA INSTITUT NATIONAL
DES SCIENCES
APPLIQUÉES
TOULOUSE

INSA Toulouse is the only French Engineering School ranked in the 2025 Shanghai Academic Ranking of World Universities (ARWU), highlighting its growing international recognition.

Notably, it ranks 151st-200th globally in Mathematics and 201st-300th in Biotechnology within the same ranking. This performance places INSA Toulouse among the top 30 French institutions in the ARWU, underscoring its commitment to excellence in research and education.

AIME 
Micro-Nano
Pôle CNFM de Toulouse

The AIME is a training hub within the National Microelectronics Training Network. It offers innovative hands-on experiences in advanced micro/nanotechnologies and nanoscience.

With access to a 400 m² cleanroom, professional software, and equipment shared with industry and research labs, participants can learn to design and fabricate various components and sensors in an integrated circuits.

The applications range from electronics and energy to quantum technologies, opening up new possibilities for innovation in a variety of sectors.