

UPWARDS Summer Intensive Program at NAGOYA University (2025 Program)



名古屋大学
NAGOYA UNIVERSITY



Nagoya University will offer a two-week summer intensive program in Nagoya, Japan, focusing on cutting-edge semiconductor device and process technologies.

Highlights include:

1. **Opportunity to conduct experiments in multiple laboratories and participate in tours of facilities like CIRFE Transformative Electronics Facilities, the Center for Low-temperature Plasma Sciences, and several Clean Rooms.**
2. **Introductory lectures on semiconductors and presentations by both faculty and students about their research.**
3. **Visits to semiconductor-related companies and laboratories in the UPWARDS and/or Chubu industrial cluster district.**

Participants will have the chance to:

- Work together with both undergraduate and graduate students, including NU student tutors, on research related to semiconductor material/process/device technologies.
- Receive a thorough debrief on the experimental experience conducted in research labs.
- Join a campus and semiconductor industrial factory tour and immerse yourself in Japanese culture.

DATE: From Monday, July 28 to Friday, August 8, 2025

LOCATION: Nagoya University, Nagoya, Japan

MAXIMUM ENROLLMENT: 1~3 students per university (up to 18 students in total)

COST: Approximately \$3,500USD per student

ELIGIBILITY: Students currently enrolled in undergraduate and graduate programs at a UPWARDS member university do not require a visa to enter Japan.

NAGOYA University: Nagoya University is among the seven prestigious former Imperial Universities in Japan. With a reputation as the leading research and education institution in Central Japan, Nagoya University is home to 16,000 full-time students, including 2,600 international students, and employs 3,200 faculty members. According to Times Higher Education, Nagoya University was ranked as the sixth top university in Japan in 2024. Six Nobel Prize laureates have been affiliated with Nagoya University.

Contact us: Nagoya University UPWARDS office | E-mail: upwards@t.mail.nagoya-u.ac.jp

Curriculum

- Tour of research facilities at Nagoya University's HIGASHIYAMA campus
- Introduction to the sample preparation process and material analysis
- Discussions with faculty, researchers, and graduate students in semiconductor research laboratories
- Tours of semiconductor and/or automotive electronics companies in the Tokai region
- Credits will not be awarded in this program

Eligibility

- **Undergraduate student in electrical engineering, applied physics, or material engineering, Preferably with knowledge of electronics, solid-state physics, or materials science.**
- **Graduate student in the STEM field interested in semiconductor engineering.**

Housing for students

- Nagoya University will provide accommodation:
From the night of July 27 to the morning of August 8, 2025 [Details will be provided later]

Fee

Approximately USD 3,500 includes tuition, housing, clean room and other equipment use, university insurance, and travel expenses for off-campus factory visits. However, students must pay for their meals at the Nagoya University cafeteria or campus store. The cost should be around ¥500-800 JPY (about \$3-5 USD) per meal.



University cafeteria



Campus store

Documents to be submitted through the partner university

- ① Document includes Name, Gender, Class (Freshman, Sophomore, Junior, Senior, Master, PhD), Department of affiliation, Major, Expected year of graduation, E-mail, and residential address.
- ② CV
- ③ Motivation and interest in participating in Nagoya University's summer program (approximately 100 words to 200 words)
- ④ Photocopy of passport page, which shows the participant's name, date of birth, and nationality
- ⑤ Headshot photo in JPG format with adequate pixel size for 3cm-width x 4cm-height
- ⑥ Declaration of Applicable Specific Categories <https://nuss.nagoya-u.ac.jp/s/8nyYKHGW6Ed2XKF>

Application deadline and submission of materials

Deadline: **April 30, 2025**

Please upload documents ① to ⑥ above to the URL below and contact us by E-mail.

Upload URL: <https://nuss.nagoya-u.ac.jp/s/bsffaKiTe7wnm4S>

E-mail: upwards@t.mail.nagoya-u.ac.jp

Program schedule (tentative)

DATE	EVENTS
July 28 (Mon)	Welcome ceremony / University campus tour / Welcome reception
July 29 (Tue)	Lab tour Center for Low-temperature Plasma Sciences (cLPS) / CTEFs, Center for Integrated Research of Future Electronics (CIRFE)
July 30 (Wed)	NU semiconductor experiments
July 31 (Thu)	Factory tour [Nagoya / AICHI] / Moving to Hiroshima city [TENTATIVE]
Aug. 1 (Fri)	Factory tour and communication event at MICRON Hiroshima [TENTATIVE]
Aug. 2 (Sat)	Free time [sightseeing, experiencing Japanese culture]
Aug. 3 (Sun)	Free time [sightseeing, experiencing Japanese culture]
Aug. 4 (Mon)	Laboratory lectures/experiments I
Aug. 5 (Tue)	Laboratory lectures/experiments II
Aug. 6 (Wed)	Laboratory lectures/experiments III
Aug. 7 (Thu)	Laboratory lectures/experiments IV
Aug. 8 (Fri)	Final debriefing (Short presentations from US students) / Completion ceremony (Awarding of completion certification)

Laboratory lectures/experiments related to (tentative plans)

- Semiconductor physics and device technologies
- Wide bandgap semiconductor devices
- Plasma science and process technology
- Nanomaterials and processes for Si ULSI devices
- Si LSI circuit technologies

*Participants will be grouped according to their skills, preferences, and grades in school.

Factory tour to MICRON (Hiroshima) [July 31-Aug. 1] [TENTATIVE]

Visiting MICRON Hiroshima for a factory tour and communication event with engineers and researchers of Micron Japan.