

Program Highlights

Our courses are designed to enable you to experience a range of different engineering disciplines such as electric, micro- to nano-scale mechanical systems used for cars, aircraft and spacecraft, and energy conservation before you specialize in a mechanical engineering topic. This allows students to build a strong foundation to understand the needs of modern society. Studying the fundamentals often requires mathematics and physics, leading to the solid knowledge base you will build on in later years. Along with the fundamental subjects, some courses are delivered by external leading experts invited from various industries. From the third year onwards, our courses extend to practical modules, allowing students to develop their research skills through the undertaking of small projects in the laboratory. As Nagoya is at the heart of Japan's industrial sector with a cluster of manufacturing companies in and around the area, Nagoya University has become one of Japan's leading technology and innovation hubs. If this sounds exciting to you, this may be the program for you!

Does This Program Suit You?

- Students who are willing to overcome difficulties.
- Students with curiosity and the passion to make innovation happen.
- Students who are interested in a broad range of topics in mechanical engineering.
- Students from different backgrounds.

This may be the program for you!

NAGOYA UNIVERSITY GLOBAL30 INTERNATIONAL PROGRAMS

We are one of the few universities in Japan offering a wide array of programs fully taught in English for the full 4 years of undergraduate education. 10 programs in total are offered under the umbrella of the G30 International Programs, ranging from various STEM programs to Social Sciences and Humanities. We welcome students with a passion for innovation and research!

- Point1** Taught in English
(No Japanese knowledge required)
- Point2** Intensive Japanese language course
- Point3** Research-focused university
- Point4** Diverse world-class faculty
and students
- Point5** Good career prospects
- Point6** 帰国子女OK

▶ Find out more about the programs:

<https://admissions.g30.nagoya-u.ac.jp/>



Stay connected with us through:

- Nagoya University International Programs
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#NagoyaUniversity



Automotive Engineering Program

Mechanical Engineering
School of Engineering



Degree Awarded:

Bachelor of Engineering
Concentration in Automotive Engineering

Duration : 4 years

Start Early October

Our Strengths and Unique Points

Our Automotive Mechanical Engineering program is the only one in Japan that specializes in automotive engineering taught exclusively in English. You will study various topics in the automotive and aerospace fields related to mechanical engineering.

One of the unique things about our program is we emphasize research and industry collaboration, that allows you to explore your ideas and unleash your creativity. Alongside regular classes, several courses are designed to offer opportunities for students to gain applied knowledge from eminent experts invited from top leading companies. In addition, the laboratory placement will help you extend your engineering design skills through practical experience. Students also develop effective communication skills in a bilingual and inclusive environment.

Yasumasa Ito
Professor of Engineering

Curriculum

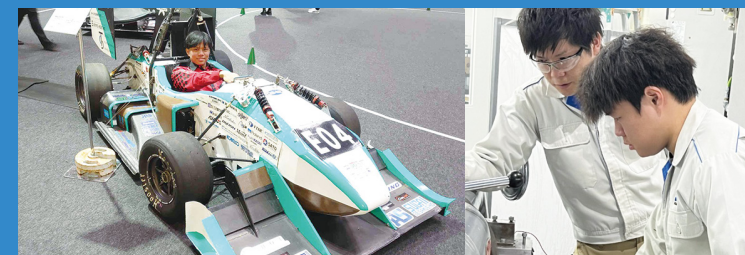
| | |
|----------|---|
| 1st year | Japanese Language, Liberal Arts & Basic Courses |
| | Take foundational courses to ease into life at Nagoya University: <ul style="list-style-type: none"> Calculus I/II Linear Algebra I/II Computer Software Fundamentals of Physics I/II Fundamentals of Chemistry I/II Introduction to Automotive Engineering |
| 2nd year | Basic Specialized Courses |
| | Start building your engineering foundation by taking basic specialized courses: <ul style="list-style-type: none"> Mathematics I/II + Tutorial Thermodynamics Analytical Dynamics Kinematics of Machines Design Practice I Electrical Circuits Engineering Metallic and Ceramic Materials Mechanics of Materials Fluid Mechanics I Vibration Engineering |
| 3rd year | Specialized Courses & Laboratories |
| | Start deciding on your specialization through specialized elective courses: <ul style="list-style-type: none"> Control Engineering Material Processing Specialized Elective Courses Automobile Engineering Laboratory I/II Design Practice II / III |
| 4th year | Research and Thesis |
| | Complete your research on your chosen specialization/field: <ul style="list-style-type: none"> Graduation Research A Graduation Research B |

* Note: This curriculum outline serves to show a snapshot of what the program has to offer and does not list all graduation requirements. Please refer to the program's Graduation Requirements found on the admissions website.

Timetable

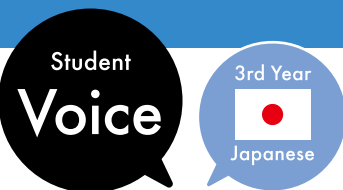
3rd Year Spring Timetable Sample

| | MON | TUE | WED | THU | FRI |
|---|-----------------------------------|------------------------------|------------------------------------|-----------------------------------|-----------------------------------|
| 1 | | | | | |
| 2 | Environment and Recycling | Vehicle Dynamics and Control | | Heat Transfer Engineering | |
| 3 | Electronic Devices in Automobiles | Design Practice III | Intelligent Transportation Systems | Automobile Engineering Laboratory | Automobile Engineering Laboratory |
| 4 | | | | | |
| 5 | | | | | Scientific and Technical Japanese |



Your Future Career

As mechanical engineering principles and skills are high in demand in various areas such as designing, developing, and manufacturing, our graduates are empowered with extensive career options. More than half of our graduates have continued their studies at Nagoya University, pursuing master's and doctoral degrees whereas some graduates have gone on to study at graduate schools in prestigious universities around the world. Our employment prospects are also good: our previous graduates earned good job placements and many of them have chosen to stay in Japan after graduation. Quite a few of our graduates hold positions at multinational automotive companies, such as at Toyota Motor Corporation.



What sparked your interest in the G30 Automotive Engineering program?

The G30 Automotive Engineering program caught my attention since it is a well-established engineering program fully taught in English at a well-known Japanese university. Although I am Japanese, I lived in China for 11 years, where I attended an international school. With this background, I wanted to look for a Japanese university that has an international environment while providing a high level of education specialized in mechanical engineering. I think the program perfectly meets my expectations with many challenging yet rewarding course modules that focus on engineering.

What courses did you take in high school?

In high school, I took the International Baccalaureate (IB) Diploma Programme (DP). Students taking the IB DP are required to take a total of 6 courses with at least 3 of them being a Higher Level. Each class can be taken at either a Higher Level (HL) or Standard Level (SL), and both difficulty and workload differ. The courses I took were:

| | | |
|---------------------------------------|--|---|
| English A: Language and Literature SL | Japanese A: Language and Literature SL | Mathematics: Analysis and Approaches HL |
| Economics SL | Physics HL | Chemistry HL |

1 DAY SCHEDULE | What does a day look like in your 3rd year?

