Studying engineering at Nagoya University allows students to learn necessary skills to be successful in the future. As Nagoya University is home to top-level researchers, as well as being centrally located within Japan's industrial hub, students have access to special lectures conducted by expert leaders in the automotive industry.

Automotive Engineering – Electrical, Electronic and Information Engineering Program would be the best fit for you if you are seeking opportunities to study such areas as: vehicle engines, vehicle design, vehicle dynamics and control, car electronics, power electronics, energy, metallic, ceramic and organic materials for automobiles, aerospace engineering, intelligent transportation systems, environmental issues and recycling.

#### Does This Program Suit You?

- Curious and open-minded students eager to confront the challenges of modern society through engineering.
- Students who are able to manage a curriculum heavily weighted by mathematics and physics.
- Students who are able to understand the needs of society and its people.
- Students looking for the (best) automotive engineering program in Japan and wishing to develop skills and knowledge that are in demand by employers in automotive industries around the world.

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!

Taught in English (No Japanese knowledge required) Intensive Japanese language course

Research-focused university

Diverse world-class faculty and students

Good career prospects

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Find out more about the programs:

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



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NAGOYA UNIVERSITY INTERNATIONAL PROGRAMS



# Automotive Engineering Program

Electrical, Electronic and Information Engineering

School of Engineering



Degree Awarded: **Bachelor of Engineering** 

**Concentration in Automotive Engineering** 

Duration: 4 years

Start Early October

#### Our Strengths and Unique Points

A distinctive aspect of our program is the commitment to our student's academic and career advancement. From the third year onwards, you will be spending more time in the laboratory and learn broader concepts of automotive engineering related to the car's electrical systems such as motors, batteries, and essential technologies used for autonomous driving systems. Specialized courses also include electromagnetism, electric and electronic circuits, power electronics, software engineering, signal processing, and functional material science. The program also offers an opportunity for students to spend a few weeks during summer or spring break to take on special internship programs. Having such industry experiences enables students to learn technology used in the field of automotive engineering and gain hands-on experience in the subject they are specialized in. You will be spending your fourth year in your assigned laboratory. The lab placement will help you develop industry connections and provide you with transferable skills needed upon graduation from university.

#### Muneaki Kurimoto

**Associate Professor of Engineering** 

#### Your Future Career

Studying automotive engineering at Nagoya University opens many opportunities upon graduation. Many alumni have gone on to graduate schools in and outside Japan. This list consists of many top-ranked universities around the world, including Nagoya University. Since automotive engineering can encompass multiple areas of study, the solid foundation of knowledge across a range of engineering disciplines you learn at Nagoya University will help set you apart. Our graduates have also gone on to work in major industrial sectors, such as information and communication, semiconductors, and energy.

#### Curriculum

1st year	Japanese Language, Liberal Arts & Basic Courses				
	Take foundational courses to ease into life at Nagoya University:				
	Calculus I/II     Calculu				
	Basic Specialized Courses				
2nd year	Start building your engineering foundation by taking basic specialized courses:				
	<ul> <li>Thermodynamics</li> <li>Vehicle Structures</li> <li>Design Practice I</li> <li>Fluid Mechanics I</li> <li>Computer Software II</li> <li>Mathematics I/II + Tutorial</li> <li>Vibration Engineering</li> <li>Electricity and Magnetism</li> <li>Intro to Electrical, Electronic and Info Engineering</li> </ul>				
	Specialized Courses & Laboratories				
3rd year	Start deciding on your specialization through specialized elective courses:				
	Power Electronics     Automobile Engineering Laboratory I/II				

- Scientific Measurements
- nts Control Engineering + Tutorial
- Scientific Measurement
- Specialized Elective Courses

#### Research and Thesis

4th year Complete your research on your chosen specialization/field:

- Graduation Research A
- Graduation Research B

<sup>\*</sup> 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.







## What sparked your interest in the G30 Automotive Engineering program?

I was already interested in cars and automobiles from a young age and this led me to be interested in a program that focuses on vehicles/automobiles. My curiosity was further sparked in high school during a physics class and it was really amusing to learn the concepts of how such small electronic devices are the main components of all the different electronic devices that we see all around us. I naturally gravitated toward a program that combines both passions. This blend of automotive technology and electronics aligns perfectly with my interests and long-term goals. So when I heard about this program, I knew that it was a perfect fit for me.

#### **Timetable**

#### 2nd Year Spring Timetable Sample

	MON	TUE	WED	THU	FRI
1	Integrated Japanese II	Japanese Language Seminar II	Integrated Japanese II	Integrated Japanese II	Japanese Language Seminar II
2	'	Linear Algebra II	Fundamentals of Physics III		Calculus II
3				Fundamentals of Chemistry II	Health and Sports Science
4		History		Mathematics Tutorial 2a/2b	Introduction to Cult. Studs
5			Modern Biology		Fundamentals of Physics Tut.



#### What courses did you take in high school?

In high school, I took:

Mathematics Engineering (Pre-Calculus) (Elective)

Computer Science

**Physics** 



