



Aoyama Gakuin University

Graduate School of
Science and Engineering



Graduate School
International
Master's Program

New master's
program starting
Fall 2017

All lectures and
assignments in
English

First program at
the graduate
schools of
Aoyama Gakuin
University

Cultivate solid abilities in our well-developed research environment

When I was in the third grade, I was deeply impressed by *Fabre's Book of Insects* and dreamed of becoming a biologist. However, when I reached my preteen years, my interest shifted to assembling radios. This hobby led me to studying RF engineering as a major in college. Though I changed my path, what is needed both in biology and engineering is the same—gathering data from objects, systematizing it, and finding out the truth.

The Graduate School of Science and Engineering at Aoyama Gakuin University was founded in 1969. We are home to 135 faculty members and offer well-developed education and research programs. In each course, students can not only develop expertise but also build up accomplishments and communicative abilities through interactions with students and faculty from other courses.

We have furthermore established the Center for Advanced Technology (CAT) and advanced a wide range of research and development projects aspiring to the basic philosophies of conducting “world-leading research” and “research open to the public.” We have achieved numerous results including acceptance into the 21st Century COE Program. Our graduate students who are the product of such a fertile research environment, are now active in a wide range of fields, playing important roles throughout society.

We apply great passion to nurturing scientists and engineers capable of working globally. We hope you will be able to cultivate solid abilities as well as expand your realms of possibility through the variety of experiences available at our campus.

Professor **Osamu Hashimoto**
Dean of the Graduate School of Science and Engineering
Aoyama Gakuin University



I chose the College of Science and Engineering at Aoyama Gakuin University for its exceptional learning environment. I am thankful to the Management Technology Course for greatly enhancing my knowledge, not only in terms of the big picture, but also through in-depth investigation on the details of technological applications in engineering management. The university's outstanding facilities helped me to focus on my studies and collaborate with other students. Furthermore, faculty provided valuable guidance, consultation, and encouragement for my studies.

Johmphot Tantawichien (Thailand)
Management Technology Course

Overview of Courses

Chemistry Course



This course consists of three fields: physical chemistry, organic chemistry, and inorganic analytical chemistry. Focusing on a wide range of molecular systems that include individual molecules and tissues showing organic and many other functions, the course bases its studies on

the primary viewpoint of chemistry and broadens and deepens students' knowledge in this area.

course examples

- Advanced Quantum Chemistry
- Advanced Organic Chemistry
- Advanced Coordination Chemistry on Material Science

Electrical Engineering and Electronics Course



With the aim of establishing themselves as engineers and researchers, students in this course are focused on fields that include electrical circuits, energy, measurement/control, information/communications, electronic devices, materials, and other related

fields. Emphasis is placed on directed research and through this we endeavor to provide students with the ability to think independently, make discoveries, and solve problems. We hope to welcome students with clearly defined study goals on their way to making a name for themselves as engineers or researchers.

course examples

- Advanced Semiconductor Devices
- Intelligent Control System

Materials Science Course



Focusing on the creation of substances with new functions, the course provides comprehensive studies concerning material design, device manufacture and other applications. Based on material physics, solid-state chemistry, materials science, thin-film engineering, electrical engineering and other fields, the course trains future leaders of most advanced materials science who are well informed on a broad range of issues.

course examples

- Introduction to Materials Science
- Advanced Solid State Physics II
- Advanced Surface Analysis

Intelligence and Information Course

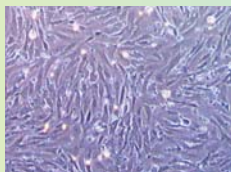


Education and research in the Intelligence and Information Course cover a wide range of computer and information-related topics including human-computer interaction, education technology, natural language understanding, big data, computer vision, machine learning, robotics, wearable devices, and network and web technology. The goal is to learn to create and master new technologies as well as to understand their role in human society.

course examples

- Internet Technologies
- World Wide Web Architecture
- Advanced Topics in Wearable Media

Biological Science Course



The rapid progress in biological science is expanding new frontiers of science and technology, and is beginning to influence the human society. The aim of the Biological Science Course is to provide students with fundamental knowledge of molecular biology as a common basis to work in this

wide field and to develop abilities to plan and carry out research by joining the ongoing research on the structure, function and regulation of the biological molecules. We encourage students to take part in the technical advancements in this field.

course examples

- Methods in Biological Science A
- Methods in Biological Science B

Management Technology Course



The Management Technology Course teaches advanced management technologies applied in production systems, supply chains, business management, environmental management, quality management, and other related areas. By conceptualizing those technologies, the course emphasizes advanced data analysis, system modeling, and optimization techniques. The course enables students to acquire deep understanding of the essence of advanced Japanese management systems, including production systems and total quality management.

course examples

- Advanced Mathematical Programming I
- Decision Theory I
- Advanced System Engineering I

※No recruitment below

Fundamental Science Course

Focusing in particular on mathematical sciences, materials science, solid-state physics, astrophysics, and atomic, molecular, and plasma physics, this course aims to serve students with a broad spectrum of interests and objectives in the natural sciences. The course is also extending to new fields such as complex systems, strongly correlated quantum systems, the physics of friction and earthquake. Specialized studies cultivate student abilities to build models for a range of issues and solve problems.

Mechanical Engineering Course

This course trains engineers and researchers who will contribute to the sustainable development of humanity by creating instruments and systems with superior performance. In other words, students base their studies on a broad range of viewpoints, such as energy, the environment, safety and ethics, while deepening their understanding of shapes, mechanisms, and the dynamic actions of materials. Combining a range of aspects, such as machines and intelligence, the course lets students acquire advanced skills in information processing, measurement, and analysis. The research and guidance provided nurture comprehensive skills in students, enabling them to identify and solve problems.



Wesley Chapel

Wesley Chapel is home to a carillon and features a cross-tipped steeple. It has come to be known as a symbol of the Sagami-hara Campus.



Library Facilities

AGU's libraries house a total of 2.2 million books. Basic services such as reserving books and extending return dates can be handled online.



Cafeteria

The student dining hall offers an extensive and inexpensive menu as well as space where students can enjoy takeaway dishes. There is also a convenience store and a large student lounge.



PC facility and Wi-Fi on campus

We have more than 1,000 PCs, and the public PC rooms are available while not in use for lessons. Wi-Fi Internet access is available for all students throughout campus.



Fitness Center

The fitness center has a variety of training equipment, as well as shower facilities. It is open to all students at special student rates. The fitness center also offers unique training programs including yoga, boxercise, and group running.

Selection Process

The selection of applicants is based on the evaluation of all application documents, and on an interview via phone or video call, or onsite in-person. The Chemistry Course also requires a written examination.

Application Documents

- Application form
- Academic transcript (undergraduate)
- Research plan: approximately 1,000 words in English (A4 or letter size)
- Letter(s) of recommendation: One or two letters
- Proof of English proficiency for non-native English speakers: TOEFL or IELTS score
- Certificate of graduation/completion or expected completion

The necessary forms will be made available on the following website: http://www.aoyama.ac.jp/en/prospective/exams_graduate.html

We recommend that applicants contact potential research advisors and discuss their proposed research plan prior to submitting application materials.

Please feel free to contact us via email at: in-rikou@aoyamagakuin.jp

Application form available online	Mid-March
Application period	Mid-May to mid-June
Interview (written examination for Chemistry Course)	Late June to early July
Notification of admission decision	Mid-July
Enrollment confirmation, tuition fee payment deadline	Late July
Entrance ceremony	September 7

For more details, see our website after October: <http://www.agnes.aoyama.ac.jp/en/>

Scholarships

Aoyama Gakuin offers various scholarship programs. Please visit our website below for more details, which also include other scholarship programs offered by external organizations.

http://www.aoyama.ac.jp/en/prospective/scholarships_support.html

Tuition

First-year tuition is ¥1,240,000 (Reference: 2016 academic year)

Accommodation

On-campus housing at Aoyama Gakuin is currently very limited. New international students are therefore likely to be responsible for finding an apartment or room for rent on their own. Housing information for international students, which provides a list of guest houses, apartments, and homestays, is available on our website: <http://web.iec.aoyama.ac.jp/english/exchange/housing.html>

SAGAMIHARA CAMPUS

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