



Faculty of
Science and Engineering,
Waseda University



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Professor TAKEUCHI, Atsushi

Campus Scene

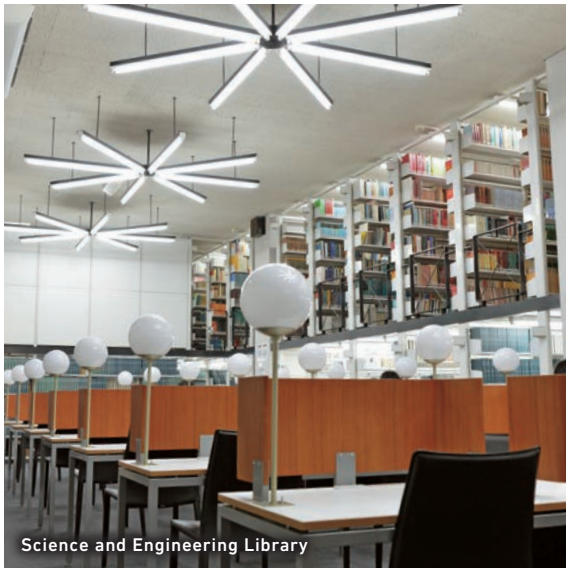
Science and Engineering in photos
A slice of student life at Waseda University's
Faculty of Science and Engineering

You can find a video tour of the Faculty of Science and Engineering campus, including the places introduced here, on our website. For more details, use the QR code to visit our homepage.



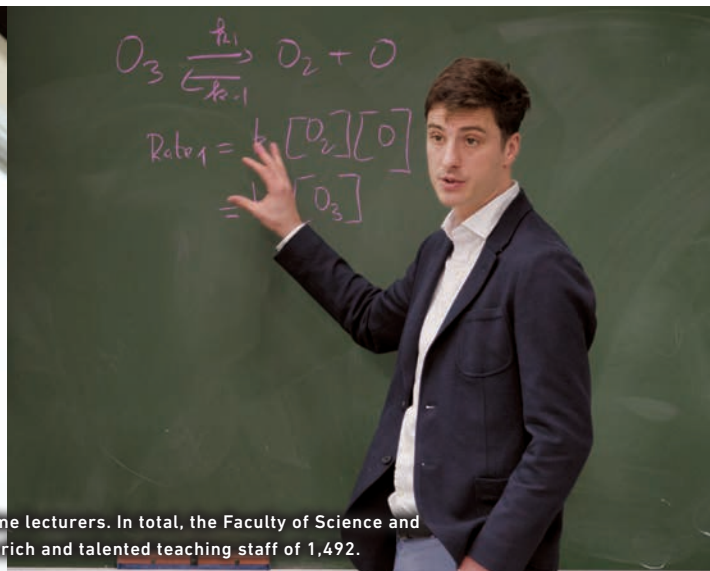
<https://www.waseda.jp/fsci/en/about/brochure/>







Full-time faculty members **355**



With 1,137 part-time lecturers. In total, the Faculty of Science and Engineering has a rich and talented teaching staff of 1,492.



Nuclear Magnetic Resonance Spectrometer



Graduation Ceremony



Manufacturing Laboratory



Night view from the roof top of Building 51



TWIns (Center for Advanced Biomedical Sciences)

Waseda University and Tokyo Women's Medical University (TWMU) have established this facility as a center of interdisciplinary research that cuts across medicine and engineering.



Dance performance at School Festival



Cafeteria

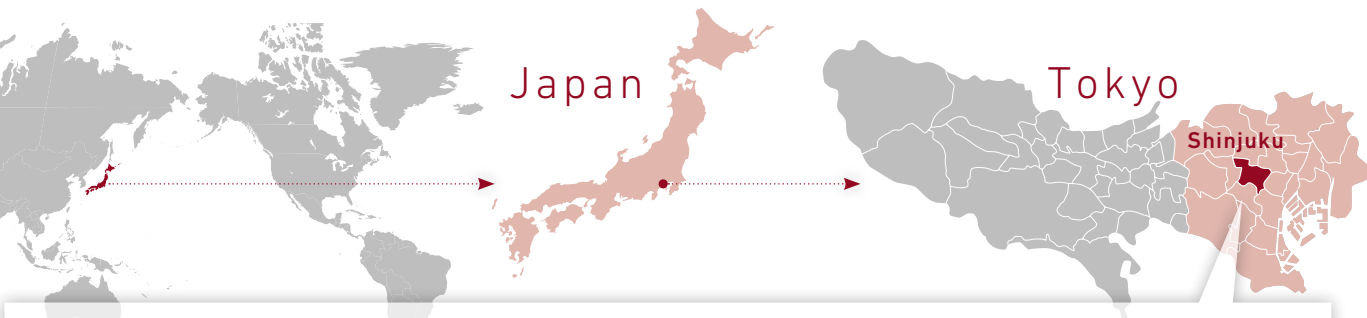


Overview

Faculty of Science and Engineering

TOKYO – the best place to live and study

As one of the world's leading cities, Japan's capital of Tokyo combines the best of traditional and modern cultures. Waseda University is located in Shinjuku ward, where Tokyo's urban functions are concentrated. With several train lines running through it, this area is ideal not only for academics but also for a fulfilling student life complete with shopping, sightseeing, and leisure. One of the cleanest and safest cities in the world, Tokyo is without a doubt one of the best places for international students to study.



Location of Waseda, Nishi-Waseda Campus

Waseda Campus

Nishi-Waseda Campus

Toyama Campus

Shinjuku

Shibuya

Tokyo Sky Tree

Asakusa

Akihabara

Tokyo

Ginza

Tokyo Metro Fukutoshin Line

Tokyo Metro Tozai Line

JR Yamanote Line

Schools, Majors and Departments

Undergraduate schools (Japanese-based Programs)	School of Fundamental Science and Engineering (Departments) Mathematics Applied Mathematics Applied Mechanics and Aerospace Engineering Electronic and Physical Systems Computer Science and Engineering Communications and Computer Engineering Intermedia Art and Science	School of Creative Science and Engineering (Departments) Architecture Modern Mechanical Engineering Industrial and Management Systems Engineering Civil and Environmental Engineering Resources and Environmental Engineering Division of Socio-Cultural Studies	School of Advanced Science and Engineering (Departments) Physics Applied Physics Chemistry and Biochemistry Applied Chemistry Life Science and Medical Bioscience Electrical Engineering and Bioscience
	School of Fundamental Science and Engineering (Majors, Minors) Majors Major in Mathematical Sciences Major in Computer Science and Communications Engineering Minors Minor in Mathematical Sciences Minor in Computer Science and Communications Engineering Minor in Applied Mechanics and Aerospace Engineering Minor in Physical Electronics Minor in Intermedia Art and Science	School of Creative Science and Engineering (Majors) Majors Major in Mechanical Engineering Major in Civil and Environmental Engineering	School of Advanced Science and Engineering (Majors, Minors) Majors Major in Physics Major in Chemistry Major in Bioscience Minors Minor in Electrical Engineering
Undergraduate schools (English-based Programs)	Graduate School of Fundamental Science and Engineering (Departments) Pure and Applied Mathematics Applied Mechanics and Aerospace Engineering* (Scheduled to be renamed in April, 2020) Electronic and Physical Systems* Computer Science and Communications Engineering Intermedia Studies Materials Science*	Graduate School of Creative Science and Engineering (Departments) Architecture Modern Mechanical Engineering Industrial and Management Systems Engineering* Business Design and Management* Civil and Environmental Engineering Earth Science Resources and Environmental Engineering	Graduate School of Advanced Science and Engineering (Departments, Cooperative Majors) Pure and Applied Physics Chemistry and Biochemistry Applied Chemistry Life Science and Medical Bioscience Electrical Engineering and Bioscience Integrative Bioscience and Biomedical Engineering Nanoscience and Nanoengineering Cooperative Major in Advanced Biomedical Sciences* Cooperative Major in Advanced Health Science* Cooperative Major in Nuclear Energy* Department of Advanced Science and Engineering*
	Graduate School of Information, Production and Systems	Graduate School of Environment and Energy Engineering	
Graduate schools	★ Japanese-based Program only		
Centers for Research & Education etc	Waseda Research Institute for Science and Engineering Kagami Memorial Research Institute for Materials Science and Technology Information, Production and Systems Research Center Environmental Research Institute Global Information and Telecommunication Institute Center for Advanced Biomedical Sciences (TWIns) Environmental Safety Center Comprehensive Research Organization		
	Organization for University Research Initiatives Green Computing Systems Research Organization Advanced Collaborative Research Organization for Smart Society Research Organization for Next Generation Vehicles Future Robotics Organization Research Organization for Nano & Life Innovation Center for Data Science		

★ Japanese-based Program only

English-based Undergraduate Program

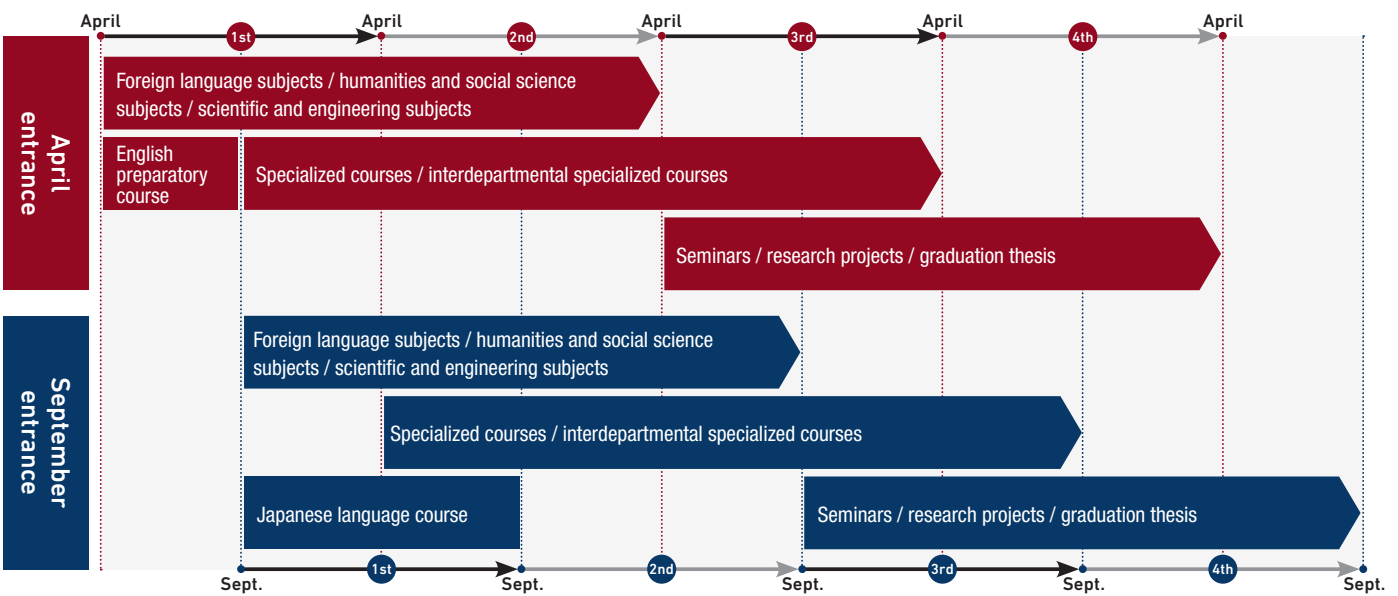
Most diverse fields of science and engineering offered in an International Program in Japan

In 2010, the Faculty of Science and Engineering at Waseda University became one of the first institutions in Japan to introduce an English-based Program, offering students the opportunity to acquire an undergraduate degree solely taught in English.

This program has been highly acclaimed both in Japan and overseas.

From April 2018, the undergraduate “English-based Program” is reorganized into seven Majors, with education and research programs strengthened through the addition of new disciplines and by boosting the faculty numbers. Based around this world-class program, we aim to create new value through the mutual stimulation of a diverse student body and by building the best possible environment for education in science and engineering.

The English-based program of the Faculty of Science and Engineering covers a wide range of scientific and engineering disciplines. We offer unique specialized courses that cannot be found in the international science programs of other universities in Japan. Please try to find your field of interest among the Majors and their keywords introduced from page 12.



- Seven Major courses covering a broad range of science and engineering fields have been established over three undergraduate schools. Students in the undergraduate English-based Program obtain degrees in each Major upon conducting studies across the entire curriculum in English. (The type of degree you can obtain depends on the chosen course.)
- In their first and second years, students mainly take courses aimed at acquiring the foundational knowledge required in all fields of science and engineering, while preparing to take the specialized courses under each Major that begin from the second year. During graduation research, students are assigned to a research laboratory or seminar and work on compiling their graduation thesis under the direct guidance of their supervising professors.
- Students enrolling in September are required to take Japanese language courses, and they may take the courses offered by the university's Center for Japanese Language.

7 Majors

School of Fundamental Science and Engineering



Major in Mathematical Sciences

Express, connect, and create – Mathematical sciences is the door to the future



Major in Computer Science and Communications Engineering

Incubating CSCE talents to contribute to society

School of Creative Science and Engineering



Major in Mechanical Engineering

Create New Pages of Mechanical Engineering with us



Major in Civil and Environmental Engineering

We create a new environment in the pursuit of a sustainable society

School of Advanced Science and Engineering



Major in Physics

Let's acquire a solid basis for flexible thinking!



Major in Chemistry

New chemistry opens a new world



Major in Bioscience

Bioscience unveils the “secrets” of life for its application to advanced medical practice



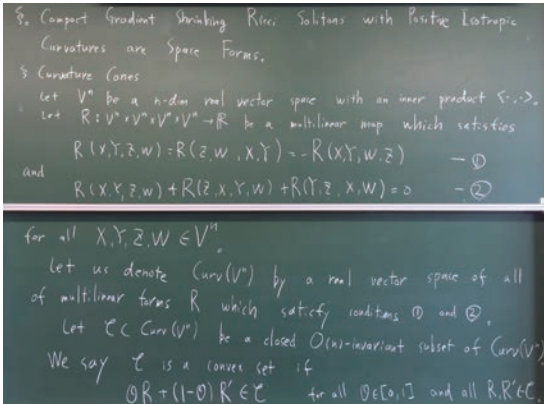
M

athematical Sciences

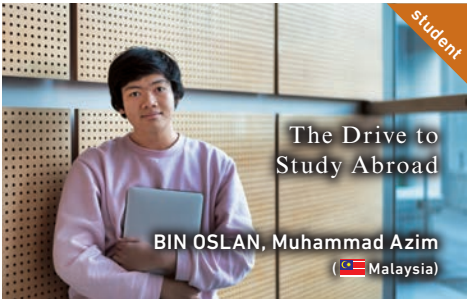
Degree you can obtain | Bachelor of Science, Bachelor of Engineering

Express, connect, and create
—Mathematical sciences is
the door to the future

The Major in Mathematical Sciences will provide a broad curriculum, ranging from fundamental to applied mathematics. The aim is to equip students with knowledge not only of mathematical sciences but also of its connections to scientific and engineering fields, and to provide students with the mathematical skills needed to make a contribution to society. The course places particular focus on three topics that are essential in modern society: nonlinear mathematics, computational mathematics, and statistical mathematics.



Message from student & graduate



Born a pure Malaysian, I studied at international schools for 10 years, undertaking the IB Diploma Programme and immersing myself in new cultures whilst developing myself in new languages conversationally.

The decision to study in Japan came from my desire to study abroad to once again experience new cultures as well as to facilitate an opportunity to develop an independent lifestyle. I specifically chose Waseda due to the nature of its English-based program as well as through high praise from the Japanese connections I made in my international education.

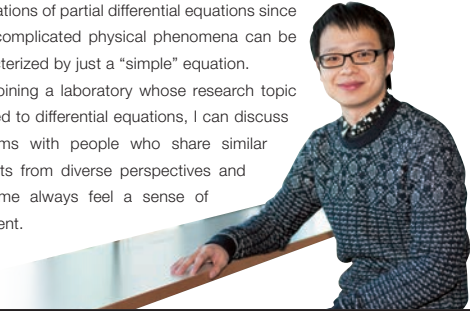
Enjoy doing the research
with friends who share
similar interests

Master's Student,
the Department of Pure and Applied Mathematics
YANG, Haoyu
(China)

Applied mathematics can be considered as a tool which applies to the problems that arises in different areas and it contains various branches such as computation and probability.

In my undergraduate life, I was deeply impressed by the wide applications of partial differential equations since such complicated physical phenomena can be characterized by just a "simple" equation.

After joining a laboratory whose research topic is linked to differential equations, I can discuss problems with people who share similar interests from diverse perspectives and it let me always feel a sense of fulfillment.



Faculty & Keywords

BOWEN, Mark	Nonlinear Systems
FUNAKI, Tadahisa	Probability Theory
GUEST, Martin	Geometry
HASHIMOTO, Kiichiro	Number Theory, Automorphic Functions
HOMMA, Yasushi	Differential Geometry
ITO, Kimihisa	Mathematical Materials Engineering
KAJI, Hajime	Algebraic Geometry
KASHIWAGI, Masahide	Numerical Analysis
KAWASHIMA, Shuichi	Partial Differential Equations
KOYAMA, Akira	Topology
KOJIMA, Sadayoshi	Topology
KOZONO, Hideo	Functional Analysis, Non-linear Partial Differential Equations
KUTO, Kousuke	Nonlinear Partial Differential Equations
MARUNO, Kenichi	Mathematical Physics
MATSUSHIMA, Toshiyasu	Information Theory and its Applications
MURAKAMI, Jun	Topology
NAGAI, Yasunari	Algebraic Geometry
NARITA, Hiroaki	Number theory and Automorphic forms
OISHI, Shinichi	Verification of Accuracy of Numerical Computations and Applications
OZAKI, Manabu	Algebraic Number Theory
SAGISAKA, Yoshinori	Speech and Language Information Processing
SASAKI, Hiroo	Mathematical Economics and Game Theory
SHIBATA, Yoshihiro	Partial Differential Equations
SHIMIZU, Yasutaka	Statistics and Actuarial Science
TAKAHASHI, Daisuke	Nonlinear Dynamical System
TANAKA, Kazunaga	Nonlinear Analysis
TANIGUCHI, Masanobu	Statistical Science
TOYOIZUMI, Hiroshi	Applied Probability
TRINH, Khanh Duy	Probability Theory and Applied Probability
UENO, Kimio	Algebraic Analysis
USUBA, Toshimichi	Mathematical Logic, Set Theory
YAMAZAKI, Masao	Partial Differential Equations
YONEDA, Gen	Theory of Relativity



Computer Science and Communications Engineering

Degree you can obtain | Bachelor of Engineering

Incubating CSCE talents to contribute to society

Students in the Computer Science and Communications Engineering Major acquire cutting-edge knowledge and skills required for an advanced networked and computerized society, encompassing computer science, computer engineering and communications engineering. The major aims to maximize the individual potential of each student and thereby foster future engineers who will be able to contribute to these fields in a global context and in a variety of professions. Career paths are diverse thanks to the recent computerization, and include software, electric machinery, telecommunications, broadcasting, and ICT services.



Message from student & graduate



Waseda has a very friendly atmosphere, from the teachers to my friends. Everyone is incredibly nice. Apart from all the theoretical knowledge I've learned so far, I also got the opportunity to learn things practically by performing complicated lab experiments every week. Waseda's school spirit is insanely contagious as well, with the several sport events and university circles. Waseda has been amazing so far. I'm sure you'll have a great time as well.

The purpose of education is to make contributions to society

IBM Japan
IT Specialist
LYU, Qiuyi
(China)

My professor, Yamana Hayato, always encourages us to challenge the cutting-edge technologies and make contributions to society which has inspired me a lot in my student life. Therefore, I took part in the security group in our lab, aiming to protect users' personal information while they are using location-based services like google maps, which present an unavoidable security concerns with the development of big data. I will keep working on finding better solutions for social problems by technological innovations in my work, as a female, an international citizen and a Waseda alumna.



Faculty & Keywords

FUKAZAWA, Yoshiaki	Software Engineering, Web-application Development, Agent-Based Software
HONIDEN, Shinichi	Self-adaptive systems, Automated software evolution, Automated program repair
ISHIKAWA, Hiroshi	Computer Vision, Discrete Optimization, Pattern Analysis
KAMEYAMA, Wataru	Multimedia Content Distribution, Information Sharing and Retrieving
KANAI, Kenji	Multimedia Communication and System, Mobile Networking and Computing
KASAHARA, Hironori	Supercomputing, Multicore, Parallelizing & Power Reducing Compiler
KATTO, Jiro	Future Networking and Multimedia Signal Processing
KIMURA, Keiji	Computer architecture, Parallelized Applications, Parallelizing compiler
KOBAYASHI, Tetsunori	Perceptual Computing, Spoken Language Processing, Image Processing, Intelligent Robot
LIU, Jiang	Optical Wireless Systems, Smart Grid Systems, IoT
MAEHARA, Fumiaki	Wireless communications and communications-related signal processing
MORI, Tatsuya	Information security and privacy
NAKAJIMA, Tatsuo	Infrastructures, Social Platforms, and Interaction Design in Distributed Computing Environments
NAKAZATO, Hidenori	Network Engineering, Distributed Computing
OGAWA, Tetsuji	Pattern Recognition, IoT, Audio and Speech Processing
ONAI, Rikio	Multimedia Computing and Interactive System
PAN, Zhenni	Green communications, Wireless access and networking, Next generation mobile systems
SAKAI, Tetsuya	Information access, Natural language processing, Interaction
SATO, Takuro	Wireless Communication Systems, Network Architecture, Modern Mobile Communication
SHIMAMOTO, Shigeru	Wireless Access, Air and Space Communication, Body Area Network
SHIMIZU, Kana	Computational Biology
SIMO-SERRA, Edgar	Machine Learning, Computer Graphics, Image Processing, Human Computer Interface
SUGAWARA, Toshiharu	Multi-Agent Systems, Distributed Artificial Intelligence, Machine Learning in Multi-Agent Systems Contexts
SUN, Heming	Video Compression, Heterogeneous Computing, FPGA, ASIC
TAKAHATA, Fumio	Wireless Communications
TANAKA, Yoshiaki	Telecommunication Network, Telecommunication Service
TERAUCHI, Tachio	Programming Languages, Program Verification, Program Synthesis, Type Systems, Automated Deduction
TOGAWA, Nozomu	Integrated circuit system design
UCHIDA, Masato	Data Science, Machine Learning, Information Security
UEDA, Kazunori	Design and Implementation of Programming Languages, High-performance Computer-Aided Verification
WASHIZAKI, Hironori	Software Engineering, Reliable Software Systems, Software Development Environments
WATANABE, Hiroshi	Video and Image Recognition, Video Coding
YAMANA, Hayato	Big Data (Secure Computation, Data Mining, IR), Pen-based Computing
YANAGISAWA, Masao	SoC (System LSI) design and CAD (Computer-Aided Design), Bioinformatics

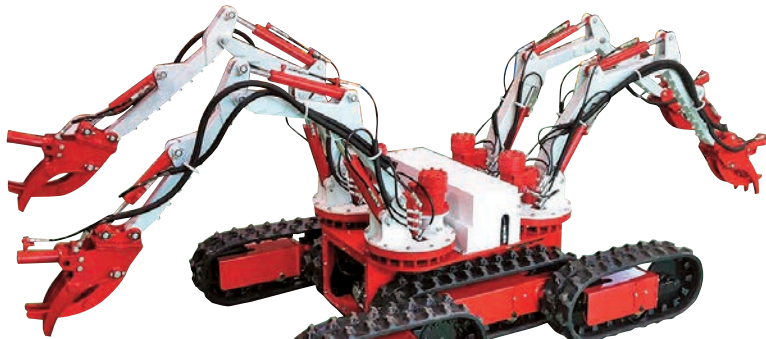


Mechanical Engineering

Degree you can obtain | Bachelor of Engineering

Create New Pages of Mechanical Engineering with us

"Modern mechanical engineering" covers traditional areas such as manufacturing as well as recent areas such as robotics and medical engineering. In response to recent various social demands, modern mechanical engineering is expected to integrate architecture and management system engineering into mechanical engineering. Students can graduate only by taking courses, including laboratory courses and graduation research, given in English, but students are recommended to take also courses given in Japanese to learn relationship between academia and industry in Japan.



Message from student & graduate

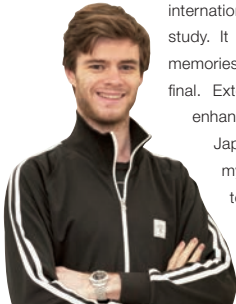


For someone who has always wanted to study abroad and explore the world, Waseda, being one of the best options for English language programs available in Japan, was naturally my first choice. At first, I had my worries about adapting to the college life but one of the real highlights of being here is definitely the sense of community you get with the people around you. Even though the workload is quite tough, the friends that I have made here really gave me that much needed extra push.

Waseda can be a perfect introduction into Japanese society

Master's Student,
Department of Modern Mechanical Engineering
TUCKER, Rawleigh
(Bermuda)

I came to Waseda with one goal; join the prestigious history of robotics research. I wanted to experience all parts of Japanese university life, so joined a rugby circle as the only international member during my undergraduate study. It provided me with some of my best memories, including a national league grand final. Extensive Japanese classes have also enhanced my communication with my Japanese friends as well as in the lab with my colleagues. Waseda is continuing to help me understand and be part of both the work and social aspects of Japanese society.



Faculty & Keywords

ARIGA, Takashi	Urban and Environmental Design
COSENTINO, Sarah	Human Performance Analysis And Enhancement Robotics, Human-Robot Interaction
GOTO, Masayuki	Research on Applied Information Science
HASUIKE, Takashi	Research on Mathematical Decision Making
HISHIYAMA, Reiko	Research on Intelligent Information System
ISHII, Hiroyuki	Biorobotics
ISHIMURA, Kosei	Design of Structures and Mechanisms
IWASAKI, Kiyotaka	Biomechanical and Biomedical Engineering
IWATA, Hiroyasu	Human Assistive and Augmentation Robotics/ Medical Robotics
KAMEZAKI, Mitsuhiro	Smart Human-Machine Interface and Interaction/ Mobile and Field Robotics
KANEKO, Shigehiko	Research on Systems Mechanics
KATSUTA, Masafumi	Environmental Power Systems
KISHI, Tomoji	Research on Software Engineering
KUSAKA, Jin	Thermal Energy Conversion
KOMATSUBARA, Akinori	Research on Human Life Engineering
MATSUDA, Yu	Thermo-Fluid Engineering, Visualization techniques for thermo-fluid phenomena
MIYASHITA, Tomoyuki	Design Methodology of Mechanical System
MORI, Yasuaki	Research on Intellectual Property Management
MUNETCHIKA, Masahiko	Research on Quality Management
NAKAGAKI, Takao	Environmental and Chemical Energy Conversion Research, Environment and Energy Division
OHMORI, Shunichi	Research on Logistics Engineering
OHYA, Jun	Image Engineering
SUGANO, Shigeki	Intelligent Machine
TAKAGUCHI, Hiroto	Environment Media
TAKAHASHI, Shingo	Research on Systems Science and Engineering
TAKANISHI, Atsuo	Robotics and Mechatronics
TAKATA, Shozo	Research on Life Cycle Engineering
TAKIZAWA, Kenji	Fluid-Structure Interaction
TANABE, Shin-ichi	Architectural Environment
UEDA, Masao	Research on Marketing Engineering
UMEZU, Mitsuo	Mechanical Engineering in Medical Field
UMEZU, Shinjiro	Micro/ Nano Engineering
WENG, Jiahua	Research on Operations Engineering
WESUGI, Shigeru	Co-creative Interface Design
YOSHIDA, Makoto	Transporters & Energy Plants Materials Science and Engineering
YOSHIMOTO, Kazuho	Research on Logistics Engineering
YOSHIMURA, Yasutaka	Research on Urban-tech
ZHOU, Beini	Research on Thermal Energy Conversion and Reaction Engineering

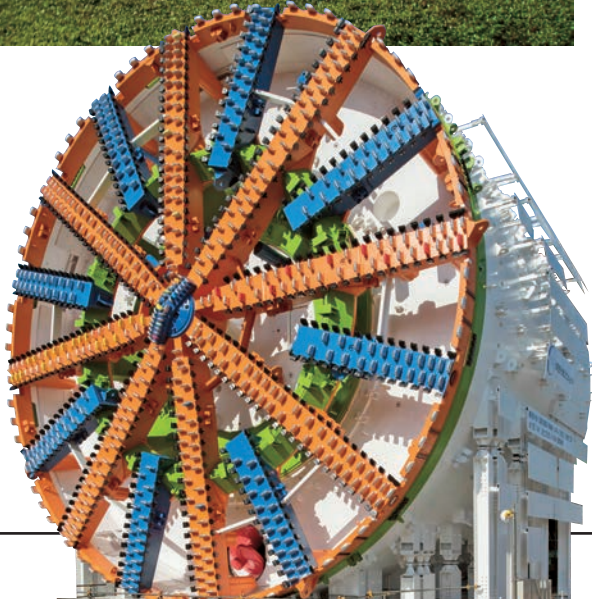


Civil Environmental Engineering

Degree you can obtain | Bachelor of Engineering

We create a new environment in the pursuit of a sustainable society.

Covering the fundamentals of civil engineering, students learn how to create a better and more sustainable human society through the construction of infrastructure. The course includes environmental approaches to development, ensuring safety and security against natural disasters, and the improvement of urban environments. Career paths include engineers and planners for civil service, construction, transport, and energy industries. The Department of Civil and Environmental Engineering manages the major's educational program in collaboration with the Department of Resources and Environmental Engineering and the Department of Architecture.



Message from student & graduate



Coming to Waseda University was a dream come true for me. I have always admired the strength students show in and out of class. With the diverse background of students and staff, I am able to learn a lot from people and about their cultures which I believe is very useful for what I am currently studying. While in Waseda, I believe that I would be able to get the quality education in civil and environmental engineering to bring about sustainable living and development to Japan and my home country, Sierra Leone.

Waseda opened a path for me to Europe

Sweco
Hydraulic engineer
OKUMURA, Non
(Japan)

I studied Civil and Environmental engineering at Waseda and focused on disaster management research in my last year. I was lucky to have had great relationships with my professors and to have met wonderful and motivating friends. My year in Shibayama laboratory inspired me to focus on hydraulic engineering and I pursued my masters at one of the best institutions in the field, TU-Delft in the Netherlands. Today I assess dam safety and simulate complex hydrodynamic processes to find creative solutions as a hydraulic engineer at Sweco, a technical consultancy in Sweden.



Faculty & Keywords

AKAGI, Hirokazu	Soil Mechanics & Geotechnical Engineering
AKIYAMA, Mitsuyosi	Concrete Engineering
ESTEBAN, Miguel	Sustainability Science, Natural Disasters, Climate Change, Renewable Energy
FURUI, Kenji	Geomechanics and Petroleum Production Engineering
HASEMI, Yuji	Safety Planning in Built Environment
IWANAMI, Motoi	Structural Engineering & Structural Design
KAMURA, Kazuo	Geo-environmental Science
KITANO, Naohiro	International Development, Regional Study
KOIWA, Masaki	History of Architecture
KOMINE, Hideo	Geotechnical Engineering
KURIHARA, Masanori	Petroleum Engineering
MORIMOTO, Akinori	Transportation Planning
MURATA, Masaru	Environmental and Occupational Hygiene
ONO, Kiyoshi	Structural Mechanics
OKOCHI, Hiroshi	Atmospheric and Aquatic Environmental Chemistry
OWADA, Shuji	Resources Recycling Engineering
SAKAKIBARA, Yutaka	Water Quality & Environmental Engineering
SASAKI, Yoh	Urban and Regional Design
SATO, Yasuhiko	Structural Engineering & Structural Design
SEKINE, Masato	River Engineering
SHIBAYAMA, Tomoya	Coastal Engineering and Management
TAKAGUCHI, Hiroto	Environment Media
TOKORO, Chiharu	Resources and Environmental Processing Engineering
UEDA, Takumi	Exploration Geophysics
YAMAGUCHI, Katsunori	Materials Processing Engineering

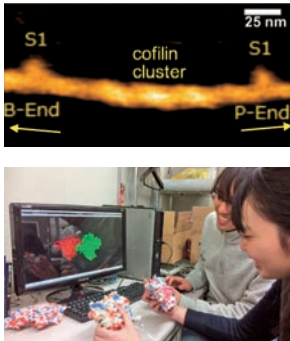
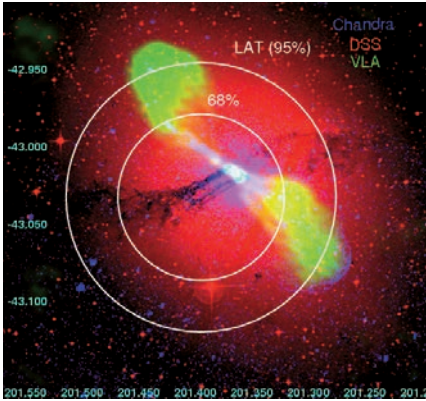


Physics

Degree you can obtain | Bachelor of Science, Bachelor of Engineering

Let's acquire a solid basis for flexible thinking!

The Major in Physics will provide you with a solid basis in physics, which strengthens your way of logical and scientific thinking and enables you to pursue cutting-edge researches on pure and applied physics. You can systematically learn the fundamentals in classical and modern physics and the basics in the physics-based engineering. In the graduation thesis, you may discover as-yet-unknown phenomena in physics, break new ground in the discipline, and develop epoch-making technologies. The faculty members who are well-versed in a wide area of physics are looking forward to enjoying physics with you!



Message from student & graduate

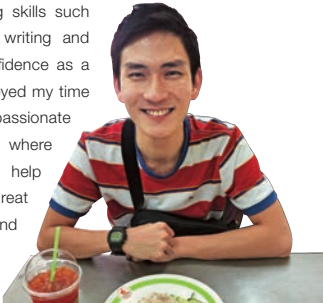


Living in Malaysia for almost my whole life, I was brought up in a multicultural community. Coming to Waseda felt just like home, welcoming me with a student-friendly atmosphere and an international environment. I enjoy studying physics because it unravels various mysteries of the universe in such a logical and concise manner. Since young, I loved playing sport and I'm glad to have joined the windsurfing club, where I can meet students from various departments and create everlasting bonds with my teammates. I'm confident to say, I'm having the best time of my life!

An English program with great challenge and excitement

P&G Japan
Technical Engineer
TSUJI, Masayuki
( Japan)

Learning physics in English was a privilege especially in Japan where the leading edge research was happening. The best thing about the IPSE Applied Physics program was that it provided me with the strong foundation. Not only on the core skills, but emerging skills such as programming, academic writing and presenting gave me the confidence as a Physics graduate. I most enjoyed my time with the experienced and passionate professors from freshmen where they were always willing to help whenever I needed them. A great course for a challenging and exciting experience!



Faculty & Keywords

ABE, Hiroyuki	Theoretical Particle Physics
AOKI, Takao	Quantum Optics Research
HARAYAMA, Takahisa	Nonlinear Physics
HASEGAWA, Tsuyoshi	Surface and Interface Physics
INOUE, Akio	Experimental Astrophysics
KATSUFUJI, Takuro	Complex Quantum Physics
KATAOKA, Jun	Applied Radiation Physics
KITA, Tomohiro	Integrated Optical Devices
KOIKE, Shigeaki	Mathematical Physics
KOMATSU, Shinichi	Optical Science and Engineering
MAEDA, Kei-ichi	Relativistic Astrophysics and Cosmology
MATSUDA, Azusa	Experimental Low Temperature Condensed Matter Physics
MIKHAILENKO Sergey	Experimental Biophysics
MIZOKAWA, Takashi	Electronic Correlation Physics
MOCHIZUKI, Masahito	Emergent Materials Physics
MORISHIMA, Shigeo	Image Information Processing
MOTZ, Holger Martin	Cosmic Ray Physics
NAKAZATO, Hiromichi	Fundamental Theory of Quantum Mechanics
NIIKURA, Hiromichi	Atomic, Molecular and Optical Physics
OTANI, Mitsuharu	Mathematical Physics
OZAWA, Tohru	Mathematical Physics
SAWADA, Hideyuki	Fundamentals and Applications of Pattern Information Processing
TABE, Yuka	Soft Matter Physics
TAKANO, Masatoshi	Theoretical Nuclear Physics
TAKANO, Mitsunori	Theoretical Biophysics
TAKAYAMA, Akari	Surface Science
TAKEUCHI, Atsushi	Semiconductor Device Engineering
TANAKA, Masashi	Experimental Particle Physics
UYEDA, Taro	Molecular Biophysics
WASHIO, Masakazu	High Quality Beam Science
YAMADA, Shoichi	Theoretical Astrophysics
YAMAZAKI, Yoshihiro	Physics of Non-equilibrium System
YASUDA, Kenji	Experimental Biophysics
YORITA, Kohei	High Energy Experimental Particle Physics
YUASA, Kazuya	Theoretical Quantum Physics

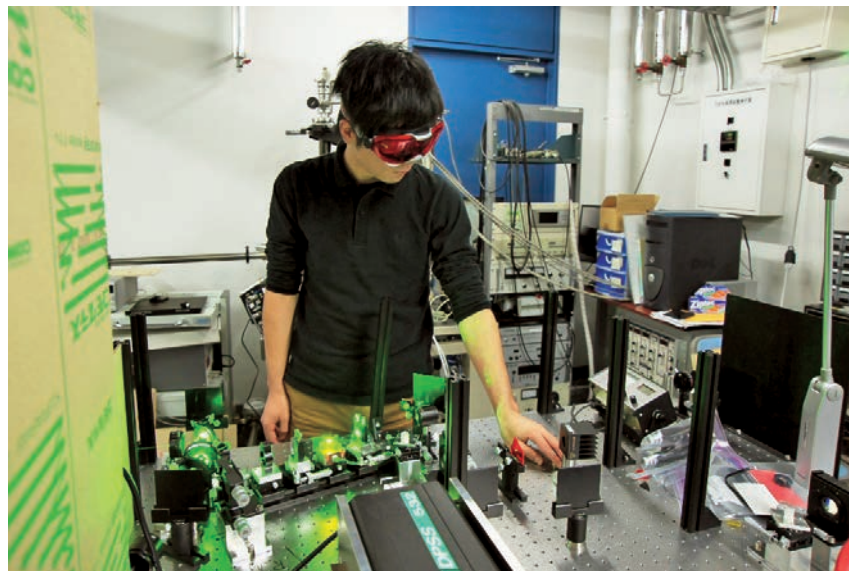


Chemistry

Degree you can obtain | Bachelor of Science, Bachelor of Engineering

New Chemistry opens a new world

Chemistry is a field of science that studies chemical syntheses and reactions, as well as the functions of substances and materials, at the atomic and molecular levels. Our undergraduate curriculum covers the major areas of chemistry and chemical engineering and is designed to provide students with broad knowledge and understanding. It also offers opportunities for more in-depth study in their specific area of interest in Japanese. Upon completion of our program, students have the choice of continuing their research in graduate programs or starting a professional career in a range of fields, such as environmental science, biotechnology, nanotechnology, and chemical engineering.



Message from student & graduate



A hint of what being in Waseda is like!

AL ABRI, Hajar Abdullah
(Oman)

Waseda for me is the place that showed me challenge and enormous amount of opportunities. Majoring chemistry here meant access to various laboratories and learning from the best professors in the field. People here have different backgrounds which allows me to learn so much from others. Classes are also different as they are usually small but can be big and each professor has his/her own teaching technique and they always welcome and encourage questions. We have plenty of circles and activities which allow close interactions with the Japanese culture.

How Waseda helped shape my future

ETH Zürich
Research Technician
OKUMURA, Rin
(Japan)

Studying at Waseda was an extraordinary experience. As a chemistry major, I was exposed to aspects of chemistry both theoretically and practically. I especially enjoyed the biomedical laboratory conducted at Tokyo Women's Medical University. This course was what ultimately motivated me to study biochemistry further. I recently started working as a research technician in a biology laboratory at ETH Zürich. It is a laboratory that focuses on studying the molecular and cellular mechanisms behind wound healing and skin cancer. The G30 programme is a perfect fit for any international students like myself.



Faculty & Keywords

FURUKAWA, Yukio	Structural Chemistry
GUEGAN Régis	Physical Chemistry
HANADA, Nobuko	Materials Science, Chemical Engineering
HIRASAWA, Izumi	Chemical Engineering, Separation Process Engineering, Environmental Engineering
HOMMA, Takayuki	Functional Surface Chemistry, Interface Electrochemistry
HOSOKAWA, Seiji	Synthetic Organic Chemistry
IMURA, Kohei	Photo-Physical Chemistry
ISHIHARA, Koji	Inorganic Reaction Chemistry
KANOMATA, Nobuhiro	Functional Organic Chemistry, Organic Stereochemistry, Heterocyclic Chemistry
KANYIVA Stephen Kyalo	Reaction Organic Chemistry
KINO, Kuniki	Fermentation Engineering, Microbial Metabolic Engineering, Applied Biochemistry
KIRIMURA, Kohtaro	Applied Biochemistry, Microbial Functions Development
KOHORI, Fukashi	Chemical Engineering, Interface Engineering
KOIDE, Takaki	Biomolecular Chemistry
KURODA, Kazuyuki	Inorganic Solid State Chemistry, Synthetic Inorganic Chemistry
MATSUKATA, Masahiko	Catalytic Chemistry, Membrane Separation
MOMMA, Toshiyuki	Applied Electrochemistry, Chemistry of Energy Materials
NAKADA, Masahisa	Synthetic Organic Chemistry, Total Synthesis of Bioactive Compounds, Asymmetric Catalysis
NAKAI, Hiromi	Electronic State Theory
NAKAO, Yoichi	Chemical Biology
NODA, Suguru	Reaction Engineering, Materials Process Engineering
OYAIZU, Kenichi	Polymer Chemistry
SEKINE, Yasushi	Catalysis, Surface Ionics
SHIBATA, Takanori	Reaction Organic Chemistry
SHIMOJIMA, Atsushi	Inorganic Solid State Chemistry, Synthetic Inorganic Chemistry
SUGA, Takeo	Polymer Chemistry, Functional Polymers
SUGAHARA, Yoshiyuki	Inorganic Materials Chemistry
TEAH, Heng Yi	Life Cycle Assessment, Sustainability Assessment ; Environmental Chemistry
TERADA, Yasuhiko	Molecular Biology & Cellular Biology
WADA, Hiroaki	Inorganic Solid State Chemistry, Synthetic Inorganic Chemistry
YAMAGUCHI, Junichiro	Organic Chemistry
YAMAGUCHI, Tadashi	Coordination Chemistry
YAMAMOTO, Kana	Synthetic Organic Chemistry

graduate

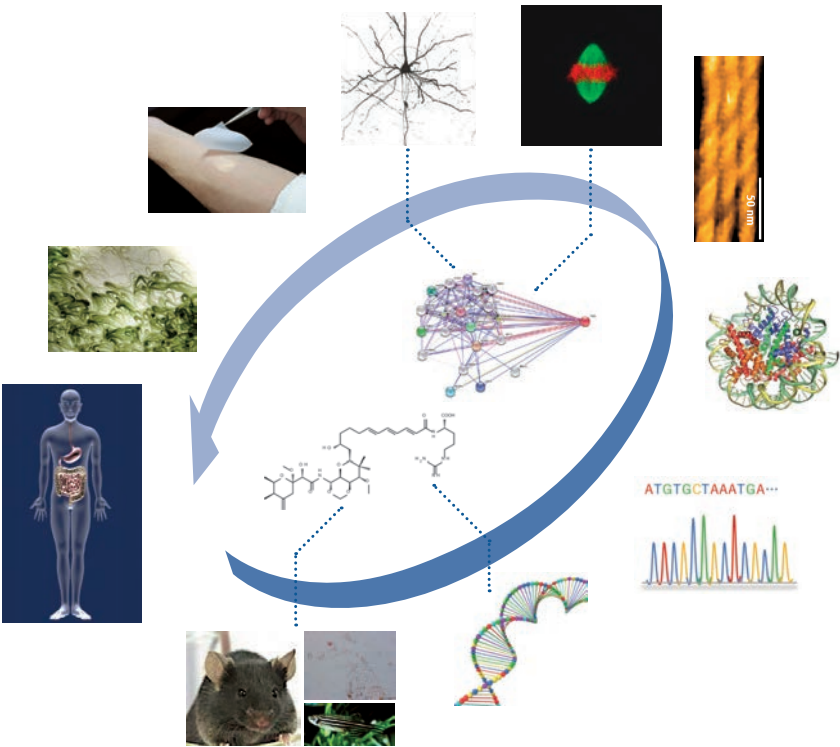


Bioscience

Degree you can obtain | Bachelor of Science, Bachelor of Engineering

Bioscience unveils the “secrets” of life for its application to advanced medical practice

The Bioscience Major fuels discovery in Life Science and innovation for medical practice by providing fundamental and cutting-edge knowledge and techniques to explore the diversity of living systems. In addition to Bioscience major-specific disciplines, students will receive basic training in core scientific fields such as mathematics, physics, chemistry, biology, medicine, engineering, and information science. To gain practical skills, laboratory sessions will be incorporated to cover experimental techniques across the full spectrum of physical, chemical and biological sciences.



Message from student & graduate



Having lived in many different countries, I was looking for a university where I can receive quality education with people from diverse background. Waseda University is an epitome of such university. As a Medical Bioscience major, I am able to study wide range of science and humanities courses with fellow Japanese and international students. When I am struggling with a certain class, students majoring in that subject helps me get through it. I feel so blessed to be a part of this community and am looking forward to four years in Waseda!

Enjoy the rich international environment and advanced research facilities!

Master's Student,
the Department of Life Science and Medical Bioscience
JO, Soo Hyun (Korea)

I entered Waseda university in 2012 and am currently studying neuroscience in the graduate school. The reason I decided to come to Waseda is because of its interdisciplinary education system, which allows students to combine different fields to study science. Also, the friendly atmosphere of the faculty members made it easier for us to communicate freely. In addition, the life science department has advanced research facilities and students will have many opportunities to learn different experimental techniques. They can even design their own research! I hope you will enjoy your future in Waseda!

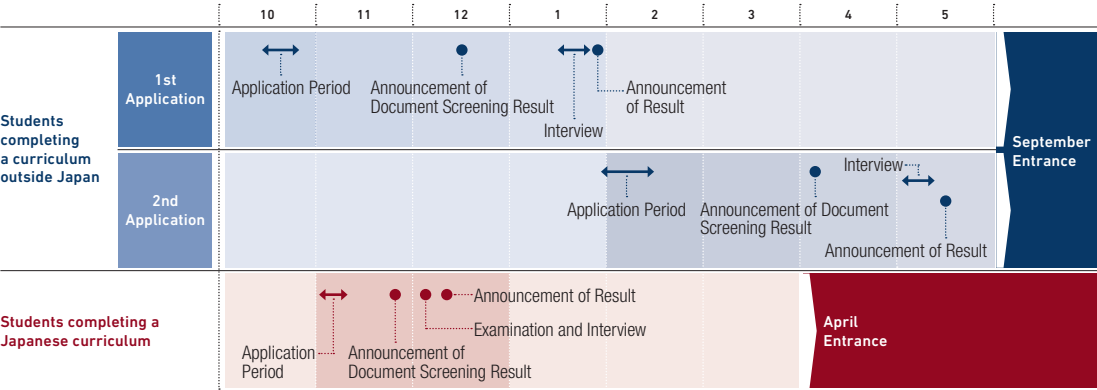


Faculty & Keywords

ASAHI, Toru	Bio Solid State Physics
CAMPBELL, Douglas S.	Neuroscience, Neuronal Remodeling, Cell Biology, Developmental Neurobiology
GODA, Nobuhito	Medical Biochemistry and Molecular Biology of Diseases
HAMADA, Michiaki	Bioinformatics, Computational Biology
HATTORI, Masahira	Genome and Metagenome Sciences, Bioinformatics
HOSOKAWA, Masahito	Biotechnology, Bioengineering, Microfluidic Device, Genomics
INOUE, Takafumi	Neurophysiology
INOUE, Masato	Probabilistic Information Processing
IWASAKI, Hideo	Biological Aesthetics/Art, Molecular Microbiology
KIGA, Daisuke	Synthetic Biology, Biochemistry
LI, Tianshu	Biomaterials, Nanomedicine, Cell Biology
OHSIMA, Toshio	Molecular Neuroscience
OKANO, Toshiyuki	Photobiology, Biochemistry
ORIHARA, Kanami	Immunology, Molecular Bioscience
SATO, Masamitsu	Molecular Cell Biology, Cytoskeletal Regulation
SHIBATA, Shigenobu	Pharmacology, Nutrients Science
SEMBA, Kentaro	Molecular Oncology
TAKEDA, Naoya	Biomaterials, Soft Interface, Tissue Engineering
TAKEOKA, Shinji	Science of Biomolecular Assembly, Engineering of Nanomedicine
TAKEYAMA, Haruko	Biomolecular Engineering and Biotechnology
TSUNEDA, Satoshi	Environmental Biotechnology
UYEDA, Taro	Molecular Biophysics
YANAGITANI, Takahiko	Biosensors, Ultrasonics

How to apply

Admission Schedule



There are two application periods. You may only submit an application for admission once per academic year. Please choose one of the two periods.
For students completing a Japanese education curriculum, there is an admissions program in April.

For more details



https://www.waseda.jp/fsci/en/admissions_us/

Tuition and Fees

First Year	Upon entry (Expenses for the first semester)	Expenses for the second semester	Total
School of Fundamental Science and Engineering	960,500	760,500	1,721,000
School of Creative Science and Engineering	975,500 ~ 976,500	775,500 ~ 776,500	1,751,000 ~ 1,753,000
School of Advanced Science and Engineering	984,500	784,500	1,769,000

The amounts are for September 2019 enrollment, including the admission fee (JPY200,000), regular tuition and various administrative fees. Please check the latest information on tuition fees when applying.

Scholarships

Waseda University offers two types of scholarships for foreign students. The first one is determined by the screening result, the students apply registering to enroll. For the second one, students apply after enrollment. In addition to the scholarships offered directly by Waseda University, students can also apply for external scholarships.

For more details



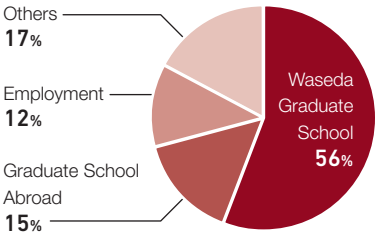
<https://www.waseda.jp/inst/cie/en/life/aid>

Career Path

Most graduates advance to a postgraduate school at Waseda or a university overseas. The remaining graduates find employment with Japanese or overseas enterprises and are active in a wide range of fields.

Career Paths of International Program Graduates

(based on the data provided by students at the time of graduation)



Message from the Senior Dean

Waseda University's Faculty of Science and Engineering, which offers both scientific and engineering studies, is characterized by a comprehensive learning system that enables students to study a wide range of subjects: everything from a quest for the deepest truths of nature to applications that directly serve society. There are no international boundaries placed on these studies. Indeed, our English-based Program, which allows students to conduct all their studies in English, is now in its tenth year, and international students from around the globe who have enrolled in and graduated from this program are heading out into the world as pioneering scientists and leaders in the international community. I hope that, together, we can continue to pioneer unknown frontiers of science and create new values and functionality.

Professor
TAKEUCHI, Atsushi
Senior Dean,
Faculty of Science and Engineering



Get to know the Faculty of Science and Engineering!



Check out our campus videos and university events on our website.

<https://www.waseda.jp/fsci/en/about/brochure/>

Waseda University Faculty of Science and Engineering

School of Fundamental Science and Engineering

School of Creative Science and Engineering

School of Advanced Science and Engineering

Nishi-Waseda Campus

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★ All student affiliations published in this pamphlet are based on information at the time of the interview.

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