

Degree Programs Conducted in English

Osaka University, Graduate School of Engineering
offers the following Master's Degree program
which is conducted in English
[Enrollment in April 2019]
For Privately Financed International Students

The Osaka University Graduate School of Engineering (GSE) offers the following special programs which are conducted in English. Each program consists of a master's course followed by a doctoral course to be admitted by a special selection for internal applicants.

Note: The quota advertised in this guideline has no pre-allocated scholarship, and is not available for applicants sponsored by the Special Programs with Japanese Government (MEXT) Scholarship in compliance with University Recommendation.

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http://www.eng.osaka-u.ac.jp/en/entrance/g_admissions.html

International Priority Graduate Program of “Quantum Engineering Design Course”

1. Program Summary

The aim of this program is to equip a new generation of young scientists with fundamental knowledge and cutting-edge research skills to realize quantum engineering design.

2. Important Program Features

(1) All students will conduct research under the academic supervision and instruction of a professor or an associate professor. Each student will choose one research theme from the following categories:

- 1 Creation of Frontier Mathematical Methods'
- 2 Elucidation of Emergent Material Function
- 3 Realization of New Generation Functional Materials

(2) The following are some of the lectures and seminars offered in the master's course:

Solid State Physics
Surface and Interface Science
Advanced Numerical Analysis
Topics in Quantum Simulation
Computational Science I
Design of Functional Materials and Composites
Tutorials on Computational Nano-materials Design I
Tutorials on Computational Nano-materials Design II
Molecular Electronic Engineering
Plasma Engineering for Nano Technologies
Theoretical Materials Science
Solid State Theory I
Analytical Dynamics
Electron Beam Nano Imaging
Chemical Reaction Dynamics I
Semiconductor Physics
Selected Topics in Quantum Physics of Solids
Special topics of extremely high precision machining
Advanced Computational Mechanics
Advanced Theoretical Solid Mechanics
Fusion Physics
Atomically Controlled Surface Processing
Interface Science and Technology
Optical Micro-measurement on Mechanical Engineering
Quantum metrology
Nuclear Reactor Control
Reactor Physics
Quantum Engineering Design Seminar I
Quantum Engineering Design Seminar II
Quantum Engineering Design Seminar III
Quantum Engineering Design Seminar IV
Quantum Engineering Design Seminar V
Quantum Engineering Design Seminar VI

(3) The following are some of the lectures and seminars offered in the doctoral course:

- Special Topics in Solid State Physics
- Advanced Surface Physics
- Advanced Nonlinear Systems Analysis
- Computational Physics
- Advanced Technological Innovation
- Tutorials on Computational Nano-materials Design III
- Tutorials on Computational Nano-materials Design IV
- Advanced Integrated Electronics Engineering
- Materials Science, Adv.
- Overview of Ultra Precision machining
- Atomically Controlled Materials Processing
- Quantum Engineering Design Seminar for Advanced Researches I
- Quantum Engineering Design Seminar for Advanced Researches II
- Quantum Engineering Design Seminar for Advanced Researches III
- Quantum Engineering Design Seminar for Advanced Researches IV
- Quantum Engineering Design Seminar for Advanced Researches V
- Quantum Engineering Design Seminar for Advanced Researches VI

3. Requirements for the Completion of the Course and Obtaining the Degree

(1) Master's Course

- ① Requirements: Completion of lectures and seminars corresponding to no less than 30 credits; completion of Special Research; submission and defense of the master's thesis; and passing the final examination of the course.
- ② Degree: Master of Engineering

(2) Doctoral Course

- ① Requirements: Completion of lectures and seminars corresponding to no less than 6 credits; completion of Special Research; successful defense of the doctoral dissertation; and passing the final examination of the course.
- ② Degree: Doctor of Philosophy in Engineering

4. Admission Quota

A few

5. Program Website

<http://www.dyn.ap.eng.osaka-u.ac.jp/QEDC/home.html>

Global Science and Engineering Course on Electric, Electronic and Information Technology

1. Program Summary

The aim of this program is to educate students to become scientists or engineers of the new generation with basic knowledge and state-of-the-art research skills necessary for: electronics, ubiquitous networking, nanotechnology, and electric power/energy. Through these educational and research activities, we seek to establish a safe and secure society, and an affluent, prosperous, sustainable, and human-friendly world.

2. Important Program Features

- (1) English will be used in all lectures, instructions, and research-related activities.
- (2) In the first and second semesters, students will acquire and establish a fundamental basis for electric, electronics and information technology through 20 intensive courses given by over 40 professors in the fields of Electrical Engineering, Information and Communications Technology, and Electronic Engineering. From the second year, the program is geared towards developing the ability for each student to carry out creative scientific research. As such, the single most important element of the curriculum for any individual is his/her own research project.
- (3) Also at the beginning of the initial semester, students will choose their research director, with the guidance of the faculty members and the advisory board of the course, and will soon begin actual experimental or theoretical work. The supervisor will be assigned from the professors in the Division of Electrical, Electronic and Information Engineering (check the website of the division: <http://www.eei.eng.osaka-u.ac.jp/english/academic-staff.html>).
- (4) In keeping with the goal of fostering an atmosphere of scholarly, independent study, formal course requirements are minimal and vary among disciplines; advisors can tailor the course requirements to best prepare each student for their chosen field of research. For example, a student who chooses to specialize in system-based science and engineering including half of electrical engineering and information and communication technology is normally expected to take minimum eight courses during the first year chosen from such topics as Dynamical Systems Theory, Applied Mathematical Sciences, Mathematical Fundamentals of Computer Networking, Multimedia Signal Analysis, and many more; another student who chooses to specialize in physics-based science and engineering including another half of electrical engineering and electronic engineering is normally expected to take minimum eight courses during the first year chosen from such topics as Surface Diagnostics, Optoelectronics, Semiconductor Physics, Neuro-system Engineering, and many more.
- (5) Doctoral courses on Electrical Engineering, Information and Communications Technology, and Electronic Engineering can be taken only in English after completing the Global Science and Engineering Course on Electric, Electronic and Information Technology and passing the entrance examination.

3. Requirements for the Completion of the Course and Obtaining the Degree

- ① Requirements: Completion of lectures and seminars corresponding to no less than 30 credits; completion of Special Research; submission and defense of the master's thesis; and passing the final examination of the course.
- ② Degree: Master of Engineering

4. Admission Quota

A few

5. Program Website

<http://www.eei.eng.osaka-u.ac.jp/english/>

6. Application Requirements

- (1) Citizenship and residence status: This advertisement is for those with the “Student” residence status. Those with other residence statuses are not eligible to apply for the entrance examination.
However, those who will change their residence status to “Student” prior to enrollment may apply.
Only for “Global Science and Engineering Course on Electric, Electronic and Information Technology”, those with Japanese nationality are eligible to apply for the examination as well.
- (2) Educational background : Applicants must fulfill one of the following qualifications:
 - 1 The applicant has graduated, or is expected to graduate by March 31, 2019, from a Japanese university.
 - 2 The applicant must have a bachelor’s degree or an equivalent degree granted upon completion of an academic program of either a foreign university or a foreign educational institution whose term of study is at least 3 years or more, by March 31, 2019.
 - 3 The applicant is no younger than 22 years of age as of March 31, 2019, and is recognized as possessing academic abilities equivalent to those of university graduates, by passing “the Preliminary Examination of Applicant’s Qualifications” conducted by Osaka University(See Note (2)).
- (3) Language ability: Applicants must have a good command of English. Those whose formal education has been conducted in a language other than English must submit a certificate of English proficiency. Acceptable certificates should include TOEFL, TOEIC, IELTS or CPE official test scores.
- (4) Health: Applicants must be physically and mentally healthy enough to pursue study at university.

Notes:

- (1) Admission will be revoked if arrival in Japan by the designated date is unavailable.
- (2) Applicants who fall under (2)-(3) must take the “Preliminary Examination of Applicant’s Qualification” in advance. Such applicants must consult the Admission Section at the Student Affairs Division, by July 2, 2018. The Admission Section will announce details concerning the documents required for this procedure. Applicants will be informed of the results as soon as they are available.

7. Application Procedure

Note:

Every applicant must find, well in advance, a supervisor suitable for the research field in which the applicant is interested, and contact him/her by email to confirm whether the field is adequately fitting to his/her laboratory.

- (1) Period of Application . . . **July 17 to July 20 , 2018 3:00 p.m. (Japan time)**
The application forms and other materials must be submitted to the Admission Section, Student Affairs Division, Graduate School of Engineering, Osaka University by post or by hand, to be reached strictly by the time limit.

(2) Forms and Certificates to Submit

Materials	Details
(1) Application Form	<ul style="list-style-type: none"> • Fill out the prescribed “Application for Admission” form. • A photograph (4cm×3cm) should be affixed to the first page. It should be taken within the last 3 months and should show the upper part of the body, without hat, in a frontal pose.
(2) Admission Ticket for an Examination and Photo Card (Only for applicants who already reside in Japan)	<ul style="list-style-type: none"> • Applicant’s name must be written on the prescribed form. • Two photographs (4cm×3cm) should be affixed. It should be taken within the last 3 months and should show the upper part of the body, without hat, in a frontal pose.
(3) Statement of Purpose	<ul style="list-style-type: none"> • A Statement of Purpose of the applicant (no more than three double-spaced, typed pages on A4 paper), stating their research proposal
(4) Certificate of (Expected) Graduation / Completion	<ul style="list-style-type: none"> • A certificate or certified true copy of certificate from the last school the applicant attended. The certificate should be the original document (not a copy). <p>Notes:</p> <ol style="list-style-type: none"> (1) Applicants who (are expected to) have master’s degrees should submit the original certificates of (expected) graduation/completion for both bachelor’s and master’s degrees. (2) Applicants whose last schools issue graduation (completion) certificates and degree certificates in separate sheets should submit both in the original forms.
(5) Certified Academic Records	<ul style="list-style-type: none"> • Certified Academic Records from the last school the applicant attended. The transcript should be the original document (not a copy). <p>Note: Applicants who already have master’s degrees should submit Academic Records for both bachelor’s and master’s degrees, certified by the universities the applicants attended.</p>

Materials	Details
(6) Certificate of English proficiency	<ul style="list-style-type: none"> • Attach TOEFL, TOEIC, IELTS or CPE official test scores as certification except for the cases below. The test score should be the original document (not a copy) - Applicants whose first language is English. - Applicants who have graduated from a university or a graduate school located in an English speaking country. - Applicants who have completed an undergraduate or graduate degree program where the language of instruction and examination was English. In this case, an official statement from the school will be required, confirming the use of English as the language of instruction and examination.
(7) Letter of Recommendation	<ul style="list-style-type: none"> • The letter should be addressed to the President of Osaka University from the academic supervisor of the university the applicant attended, the employer if the applicant works in, or the current supervisor.
(8) Certificate of Citizenship (A4 size paper)	<ul style="list-style-type: none"> • The applicant can submit a copy of the passport as well.
(9) Copy of applicant's Residence Card (Only for non-Japanese applicants)	<ul style="list-style-type: none"> • Required only for those who have a status of residence in Japan. • It must specify applicant's residence status, period of stay, and current address.
(10) Abstract of Graduation Thesis	<ul style="list-style-type: none"> • The abstract of the applicant's graduation thesis or equivalent document, including figures etc.
(11) Receipt Application Fee Payment (30,000 JPY)	<p>Refer P.8 (8. How to Pay the Application Fee) for payment procedures.</p> <p>*Not required for those who will enroll as a Japanese Government (MEXT) Scholarship student.</p> <p>Note: If applicants are unable to pay through the Payment System due to a compelling reason, please contact the Admission Section well in advance.</p>

Notes on submission:

- (1) Application documents should be typed or handwritten in BLOCK letters on A4 size paper in English. For documents in a language other than English, an English translation must be attached.
- (2) Admission Ticket for an Examination will be sent to applicants who do reside in Japan.
- (3) Once application documents have been received, they will not be returned.

8. How to Pay the Application Fee[

(1) Before Using the Payment System

① Check Your Device

Please make payment through the Internet by using a computer. The system may not be compatible with smartphones, tablets or cell phones. Please prepare a computer which meets the following conditions. In case you don't have your own computer, please use one in your school, acquaintance's house, etc.

▼ Browser Minimum Requirements

Please make sure to use the latest version of your internet browser.

[Windows] Internet Explorer11、 Google Chrome、 Mozilla Firefox、 Microsoft Edge

[Mac] Safari、 Google Chrome、 Mozilla Firefox

▼ Browser Specifications

JavaScript must be enabled.

Cookie must be enabled.

▼ Other requirements

In order to ensure compatibility for viewing PDFs, please use Adobe Reader version 11.0 or above.

※Recommended screen resolution is 1024 pixels and above.

② Prepare a Printer

The Receipt of Application Fee Payment System has to be printed out to submit.

If you don't have your own printer, please use one in your school, acquaintance's house, convenience stores, etc.

③ Prepare an Email Address

The registered email address will be used as the Login ID of the Application Fee Payment System. Please register a reachable email address and do not change or delete it until your entrance examination ends because important notices about the entrance examination from university will be sent to the address. Also, please ensure that you can receive emails from "@comappjapan.com."

④ Confirm Payment Method

Payment through these methods are available: credit card, China Pay, convenience store and Pay-easy.

Please confirm the payment procedure (available financial institutions, amount limit, etc.) beforehand because each method has its own restriction and instructions.

⑤ Prepare Application Documents

Please make sure to prepare the required documents well in advance because some documents may take time to be issued.

(2) Register for the Application Fee Payment System

Please access the following URL to visit the website of the Application Fee Payment System.
<https://osaka-u-afp.comappjapan.com/>

① User Registration

Please register an ID (email address) and a password.

After registering the ID, instructions for setting up password will be sent to the registered email address.

② Input Basic Information

Please input the applicant's basic information by following the instructions.

③ Input Information about Application

Please select a school and an admission type by following the instructions.

④ Confirm Application Contents

Please confirm the input information. Please click “Alter” button to alter the contents.

<Note>
 The information input at “②Input Basic Information” and “③Input Information about Application” will not be alterable after you complete the next step: “Application Fee Payment.” Please make sure there is no mistake in the input information before proceeding to “Application Fee Payment.”

(3) Application Fee Payment

①Application Fee 30,000 Japanese yen

※System operation fee (600 Japanese yen) will be charged separately.

②Choose Payment Method

Please confirm the amount of payment and choose the method of payment by following the instructions.

If you choose to pay by the convenience store or by the internet banking service of Pay-easy, an email message which gives required numbers to make payment will be sent to the registered email address.

The available banks and notes are as follows:

Payment Method/ Available Banks and Stores	Payment Period	Notes
Credit Card • VISA • Master • China Pay	July 2, 2018, 10:00 a.m. ~July 20, 2018, 3:00 p.m. *Japan time	The credit card holder’s name does not need to match the applicant’s name.
Convenience Store • LAWSON • FamilyMart • Circle K Sunkus • Daily Yamazaki • Yamazaki Daily Store • MINISTOP • Seicomart		Only for applicants who reside in Japan.
Bank Banks which offer the Pay-easy service (※)		Only for applicants who reside in Japan. The credit card holder’s name does not need to match the applicant’s name.

※Please refer to the following website to confirm the available banks.

<https://www.veritrans.co.jp/payment/bank/list.html>

< Notes >
 Please complete your payment and submit the application documents to Osaka University by the deadline. Please consider the time it takes for the application documents to reach Osaka University and make payment early.

○To Change the Payment Method

The payment method can be changed before completion of the payment.

[Login to the Application Fee Payment System] ⇒ [Top Page] ⇒ [Application Record]
 ⇒ [Restart]

⇒ [Change the Payment Method] ⇒ follow the instructions on the page.

After you cancel the payment by bank (Pay-easy,) please DO NOT use the invalid numbers.

○Refund of Application Fee

Application fees are not refundable except in the following cases. Furthermore, system operation fee (600 Japanese yen) will be deducted when the fee is refunded.

- (a) The applicant paid an application fee but was judged unqualified for application.
- (b) Application documents arrived after the application deadline and were refused.
- (c) There were deficiencies in the application documents, and therefore were not accepted.
- (d) The applicant paid an application fee but did not apply.
- (e) The applicant paid their application fee twice by mistake.

※To Request a Refund of Application Fee

Applicants who meet at least one of the above conditions will receive an email which gives the instructions to request a refund. The email will be sent to the registered email address. Please follow the instructions and complete a request for a refund in 7 days.

③Make Payment

Please make payment by selecting the listed methods.

The Receipt of Application Fee Payment will not be available until the payment is completed.

- Credit card : Input the card numbers on this Payment System.
- China Pay : Access the website of China Pay via this Payment System.
- Convenience store : Pay at the designated convenience stores.
- Pay-easy : Pay at the designated bank or by Internet banking service of Pay-easy.

(4) Print the Receipt of Application Fee Payment

After the payment is completed, the Receipt of Application Fee Payment (PDF) will be downloadable. Please print it in A4 size and submit with other application materials.

9. Selection and Announcement of the Results

(1) Examination will be conducted in either of the following ways:

- For applicants who do not reside in Japan:
Screening will be conducted by reviewing the application materials and documents submitted. An interview and/or academic examination might be conducted if deemed necessary.
- For applicants who do reside in Japan:
Screening will be conducted via an interview and academic examination, within the period between August 21 and August 24, 2018.

(2) The examinee's number of successful applicants will be posted on the Graduate School Admissions page of the Osaka University School/Graduate School of Engineering website by the middle of September 2018.

10. Admission Fee and Tuition

- (1) Admission fee: 282,000 JPY
- (2) Tuition: 535,800 JPY/year

Notes:

- (1) The bank transfer fee is to be paid by the applicant.
- (2) The amount of the admission fee and tuition are subject to change. Amendments to fees will be applied from the date of amendment.

11. Semester Starting Date

April 1, 2019

※The classes may start at a later date.

12. Notes for Applicants

- (1) Incomplete documents will not be accepted.
- (2) The content of submitted documents cannot be changed after the application procedure has been completed.
- (3) Application fee is non-refundable, excluding the following cases ① to ⑤. In such a case, please contact the Admission Section.
 - ① The applicant paid an application fee but was judged unqualified for application.
 - ② Application documents arrived after the application deadline and were refused.
 - ③ There were deficiencies in the application documents, and therefore were not accepted.
 - ④ Applicant paid an application fee but did not apply.
 - ⑤ The applicant paid the application fee multiple times by mistake.
- (4) Applications may be rejected or admission may be revoked even after matriculation, if any information or material in the application is found to be fraudulent.
- (5) Applicants who need assistance due to physical disabilities when taking exams and/or in taking courses of study after enrollment in Osaka University should consult the Admission Section at the following address by July 2, 2018.
- (6) On-campus parking spaces for cars and motorcycles are not available on the day of examination. Use of public transportation is encouraged instead.
- (7) Successful applicants will be strongly advised to learn about Japan (the people, society, culture, and geography) as well as the University prior to their arrival in Japan.
- (8) For any questions concerning the application procedure, please contact the Admission Section freely.

13. Policy on Handling Personal Information

- (1) Names, addresses, and other personal information obtained through the application procedure will be used in the Entrance Examination Process, in the Announcement of the List of Successful Applicants, in the Admission Procedures, and in the distribution of program leaflets. For those admitted into Osaka University, personal information will also be used in academic-related matters (such as keeping academic and registration records), in student support matters (such as health care management, school fee remissions, scholarship applications, career support, etc.), and in school fee management.
- (2) Information obtained through the entrance examination will be used in statistical analysis of examination results, and in research on admission methods.

14. Inquiries and Further Information

All inquiries to:

Admission Section
Student Affairs Division
Graduate School of Engineering
Osaka University
2-1 Yamadaoka, Suita,
Osaka 565-0871, JAPAN
Telephone: +81-6-6879-7226
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E-mail: iso-staff@eng.osaka-u.ac.jp