

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 program which is conducted in English. The 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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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>

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.
- (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.

6. 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	<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) Evidence of the payment of Application Fee *Complete the payment before the application period ends according to an instruction which you receive at your application to Admission Section.	<ul style="list-style-type: none"> • 30,000 Japanese Yen *Bank transfer fee is to be paid by the applicant. *The amount of the application fee is subject to change. *If you are unable to pay in Japan due to a compelling reason, we may accept the value through your credit-card. Please contact the Admission Section <u>well in advance</u>. *Not required for those who will enroll as a Japanese Government (MEXT) Scholarship student.

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.

Admission Ticket for an Examination will be sent to applicants who do reside in Japan.

Once application documents have been received, they will not be returned.

7. 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.

8. 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.

9. Semester Starting Date

April 1, 2019

※The classes may start at a later date.

10. 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.

11. 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.

9. 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
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