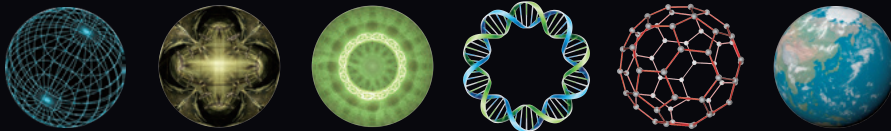


# Graduate School of Science

PROGRAMS FOR INTERNATIONAL STUDENTS














# STRUCTURE OF THE GRADUATE SCHOOL OF SCIENCE






## Departments and Courses

○...Course provided in cooperation with other departments of The University of Osaka  
●...Course provided in partnership with research institutes outside the university

 <p><b>Dept. of MATHEMATICS</b> Algebra Geometry Analysis Global Geometry &amp; Analysis Experimental Mathematics Mathematical Science ● Integrative Mathematical Sciences</p> 	 <p><b>Dept. of BIOLOGICAL SCIENCES</b> Molecular Cell Biology Animal Development and Evolution Plant Science Neurobiology Protein Function ○ Signal Transduction Biology ○ Protein Structure ○ ● Chemical Biology ○ Life Science</p> 
 <p><b>Dept. of PHYSICS</b> Condensed Matter Physics Particle and Nuclear Physics Fundamental Physics Quantum Physics Interdisciplinary Physics ○ Particle and Nuclear Reactions ○ Quark Nuclear Physics ○ Accelerator Physics ○ Science under Extreme Conditions ○ Advanced Photophysics ● Advanced Physics</p> 	 <p><b>Dept. of MACROMOLECULAR SCIENCE</b> Macromolecular Synthesis and Reactions Macromolecular Structure, Properties and Functions Macromolecular Assemblies ○ Informative Polymer Science</p> 
 <p><b>Dept. of CHEMISTRY</b> Inorganic Chemistry Physical Chemistry Organic Chemistry Interdisciplinary Chemistry ○ Functional Material Synthetic Chemistry ○ Inorganic Compound Function ○ Biomolecular Structure ○ Complex Molecular Chemistry ○ Computational Biology ● Highly Functional Material Properties ● Functional Peptides ● Structural Biomolecular Chemistry ● Chemical Biology for Medical and Health Sciences</p> 	 <p><b>Dept. of EARTH AND SPACE SCIENCE</b> Astrophysics and Planetary Science Earth and Planetary Material Sciences Extreme Material Science</p> 

## Attached Facilities

<p><b>Research Center for Thermal and Entropic Science</b></p> <p>Division of Entropic Science of Molecular Systems Division of Non-Equilibrium Thermal Science and Soft Matter Science Division of Extremely Small Scale Thermal Science and Nano-Calorimetry Division of Micro Biological Thermodynamics Division of International Collaborations</p> 	<p><b>Forefront Research Center</b></p> <p>Challenging Exploratory Research Division Cross-Disciplinary Project Research Division Forefront Research Division</p> 	<p><b>Center for Advanced High Magnetic Field Science</b></p> <p>Research Division of Physics I Research Division of Physics II Research Division of Chemistry and Biology Research Division of Cooperation Support Division for Joint-research</p> 
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## Office of Research Administration

Planning and Evaluation  
Educational Planning  
Research Planning  
International Affairs  
University-Industry Collaboration  
Public Relations  
Risk Management  
Safety and Hygiene Management  
Common Equipment Management  
Research Administration Support

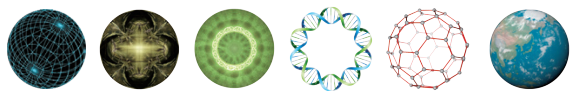
## Technical Support Division

Analytical Instrument Facility  
Promotion Office for Safety and Hygiene  
Support Office for Education and Research  
Promotion Office for Public Relations and Information

## Administrative Office

General Affairs Section  
Personnel Section  
Academic Affairs Section  
Graduate Students Section  
Accounting Section  
Contract Section  
Research Support Section

# EDUCATIONAL GOAL AND POLICY OF THE GRADUATE SCHOOL OF SCIENCE



## Graduate School of Science

- "Originality and Inspiration"



Inheriting the founding spirit and tradition of the School of Science, which was established at the same time as Osaka Imperial University, the Graduate School of Science has adhered to its "research-first" mission. The Graduate School of Science has about 200 full-time academic staff and 820 graduate students across six departments: mathematics, physics, chemistry, biological sciences, macromolecular science, and earth and space science. Many of the students and faculty are carrying out original and leading-edge research and trying to expand the fields of research and education. Inspired by watching their teachers pursue their research, students are following suit and developing into world-class researchers and scientifically literate public leaders. The activities of the Graduate School of Science cover the entire gamut from fundamental to applied science, thereby promoting the development of new fields and the accumulation of knowledge for the future.



## Graduate Degree Programs in English

### Special Integrated Science Course (SISC)

SISC was developed with the aim of training creative and independent researchers who have the capability to work in a broad range of fields and can work in new interdisciplinary areas. SISC offers a full range of lecture courses from high-level basic knowledge to cutting-edge topics, and students in the departments of chemistry, biological sciences, and macromolecular science can take classes that cross the boundaries of their disciplines.



### International Physics Course (IPC)

IPC aims to cultivate open-minded researchers and company employees with a wide range of knowledge and who will proactively engage in international research and rise to the challenge of new subjects for research. IPC offers a curriculum composed of lecture-style learning and research activities in the department of physics and related research institutes.



## Requirements for Completion of the Graduate Degree Programs

The University of Osaka awards a master's degree or doctoral degree (PhD) to students who have completed all credit requirements and passed the respective degree examinations. The students must have learned the essence of natural science through their efforts to pursue the truth and must have fully honed their research skills through the education provided by the Graduate School of Science.

### Master's Program

The master's program lasts two academic years and requires a thesis for completion. Students spend the first three semesters earning credits through lectures and research work and then write a master's thesis during the last semester.

### Doctoral Program

Doctoral students spend the majority of their three years conducting research for their doctoral thesis/dissertation under the supervision of an experienced faculty member.

\*When their thesis is completed, both master's and doctoral students give an oral presentation about it.

\*The department of chemistry has a four-year integrated program for students who enroll in the Master's program, enabling them to acquire a Master's Degree and a Ph.D. degree in four years at the earliest. The requirements for completion of this program are different from the above.

Note: We also accept international students who understand and speak Japanese sufficiently well into the graduate degree programs in Japanese across six departments: mathematics, physics, chemistry, biological sciences, macromolecular science, and earth and space science.



## Graduate Educational Programs for All Graduate Students

The following educational programs aim to produce graduates capable of serving as international leaders in the wide range of academia, business, and government. Students are required to attend assigned lectures and complete special activities. Financial aid is also available. For more information, please visit the website of each program.

Doctoral Program for World-leading  
Innovative & Smart Education

Program for Leading Graduate Schools

Honors Program for Graduate Schools  
in Science, Engineering and Informatics

Multidisciplinary PhD Program for  
Pioneering Quantum Beam  
Application



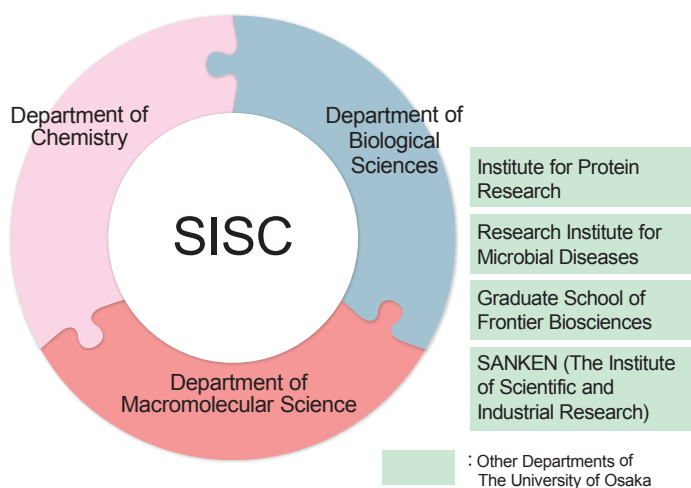
Cross-Boundary  
Innovation Program



Interactive Materials  
Science Cadet Program



## Special Integrated Science Course (SISC)



### Curriculum

The SISC curriculum is designed to introduce graduate students to the latest skills used for research and help them gain in-depth knowledge of advanced topics in chemistry, biology, and macromolecular science.

#### Master's Program

Basic Biology I & II	Organic Biochemistry
Science Core	Structural Organic Chemistry
Introductory Biology	Functional Molecules and Materials
Biological Science	Biological Regulation Chemistry
Bio/Chemoinformatics	Membrane Systems Biology
Basic Macromolecular Science	Radiation Chemical Biology
Advanced Macromolecular Science I & II	Topics in Inorganic Chemistry
Protein Chemistry	Advanced Chemical Experiment
Quantum Chemistry	Radiation Science in the Environment
Thermal and Entropic Science	Current Topics
Analytical Chemistry for Interface	Interactive Seminar
Complex Molecular Chemistry	Semestral Seminar
Natural Product Chemistry	

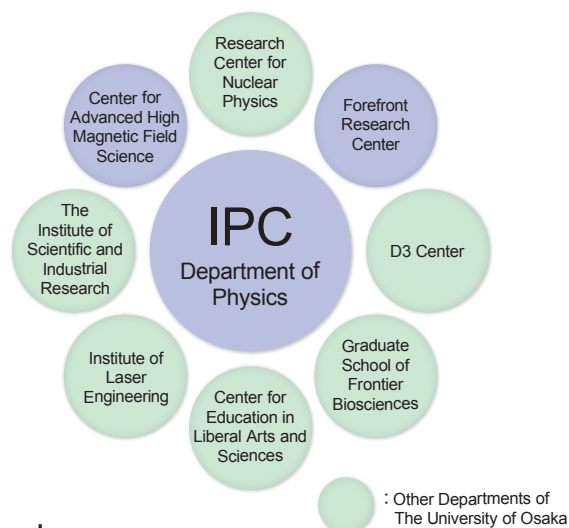
#### Doctoral Program

Current Topics  
Interactive Seminar for Advanced Research  
Seminar for Advanced Researches

Find more information about SISC  
<https://sisc.sci.osaka-u.ac.jp/global30/SISC/index.html>



## International Physics Course (IPC)



### Curriculum

The IPC curriculum is composed of classroom learning and research activity under the supervisor of the research group into which the student has been accepted.

#### Master's Program

Electrodynamics and Quantum Mechanics	Synchrotron Radiation Spectroscopy
Quantum Field Theory I & II	Computational Physics
Theoretical Particle Physics I & II	Cosmology
Introduction to Theoretical Nuclear Physics	High Energy Astrophysics
Quantum Many-Body Systems	Radiation Science in the Environment
Condensed Matter Theory	Semestral Seminar
Solid State Theory	
High Energy Physics	
Nuclear Physics in the Universe	
Optical Properties of Matter	

#### Doctoral Program

Topical Seminar  
Seminar for Advanced Researches

Find more information about IPC  
<http://www.rcnp.osaka-u.ac.jp/~ipc/>



## Application

### Contact a Professor

Applicants should contact the head of the research lab to which they intend to apply. In order to apply for a program, the applicant must submit a "Letter of Conditional Acceptance" from the prospective supervisor at The University of Osaka. For more information on our research labs, please go through the researchers' database at <https://www.sci.osaka-u.ac.jp/en/outline/researchers/>

### Admission Procedure

New graduate students will be selected through the screening of documents, a written examination, and an interview.

For more details, please visit our website. If you are unsure about eligibility or have any other query about your application, please contact the Graduate Students, Administrative Office at [ri-daigakuin@office.osaka-u.ac.jp](mailto:ri-daigakuin@office.osaka-u.ac.jp)





## Academic Fees (as of 2025)

Tuition fee per half year	267,900 yen	To be paid in May and November
Matriculation fee	282,000 yen	
Entrance examination fee	30,000 yen	No examination fees are required for IPC and SISC admission



\* These fees are subject to change.

\* Full-time privately funded students enrolled in The University of Osaka are eligible to apply for a tuition and/or enrollment fee exemption or deferred payment. Applications will be screened based on a student's academic achievements and financial status.



## Financial Support

There are some financial supports for international students at Graduate School of Science, The University of Osaka. For more information, please visit our website ([https://www.sci.osaka-u.ac.jp/en/overseas-study/financial\\_support/](https://www.sci.osaka-u.ac.jp/en/overseas-study/financial_support/)).

- Japanese Government (Monbukagakusho: MEXT) scholarship
- JASSO Honors Scholarship for Privately-Financed International Students (JASSO: Japan Student Services Organization)
- The University of Osaka Graduate School of Science Scholarship
- Support by Graduate Educational Programs
- Research Assistants (RA) or Teaching Assistants (TA) etc.



## Housing and Living Costs

Accommodation offered by The University of Osaka and public organizations is limited. Many new students live in privately owned accommodation near The University of Osaka. The average monthly living cost in Osaka is estimated at approximately 120,000 yen, including the rent. Detailed information is available at the Support Office. [https://www.osaka-u.ac.jp/en/international/support\\_office](https://www.osaka-u.ac.jp/en/international/support_office)



## Health and Counseling

The University of Osaka offers many personal counseling resources, including department faculty advisors, international student advisors, and professional counselors at the Health and Counseling Center. <https://hacc.osaka-u.ac.jp/ja/>



## Career Support

The Graduate School of Science and the Center for International Education and Exchange (CIEE) of The University of Osaka provide assistance for international students who are seeking employment in Japan. <https://ciee.osaka-u.ac.jp/en/>



## FAQ

Q: Do I have a chance to learn Japanese?

A: Yes, we offer an elective Japanese language program for non-Japanese students. For more details, please contact the Center for International Education and Exchange (CIEE) of The University of Osaka.

Q: How do I contact the professor I would like to work with in the graduate program?

A: Please visit the research pages of the departments in which you are interested. There you will see the names and research interests of our faculty who can supervise MSc and PhD students. The best way is to email a brief overview of your research interests to those who match them. At this stage, it is advisable to cc one of our offices, either [gssadmis@sci.osaka-u.ac.jp](mailto:gssadmis@sci.osaka-u.ac.jp) (for SISC) or [ipc-office@ipc.phys.sci.osaka-u.ac.jp](mailto:ipc-office@ipc.phys.sci.osaka-u.ac.jp) (for IPC).



## Double Degree Programs

Double Degree Programs are offered in partnership with distinguished universities worldwide. These programs enable students enrolled in the master's program or the doctoral program to obtain a degree at both universities after completing the coordinated curriculum.

For more information, please visit our website ([https://www.sci.osaka-u.ac.jp/en/overseas-study/double\\_degree\\_program/](https://www.sci.osaka-u.ac.jp/en/overseas-study/double_degree_program/)).



## Short-Term Non-Degree Programs

The University of Osaka offers a wide variety of short-term non-degree programs (one year or less) for international students from the foreign universities with whom there are student exchange agreements (these students are known as "short-term exchange students"). Within these programs, there are a number of classes in which Japanese students may also participate. Through these classes, a close interchange with Japanese students can be achieved. For more details, please refer to the following websites:

**FrontierLab@OsakaU:** for Engineering and Science Majors

**OUSSEP:** Osaka University Short-Term Student Exchange Program

**iExPO:** Immersion Exchange Program Osaka



In addition to above programs, the Graduate School of Science also accepts a variety of short-term international students. For more information, please visit our website.



