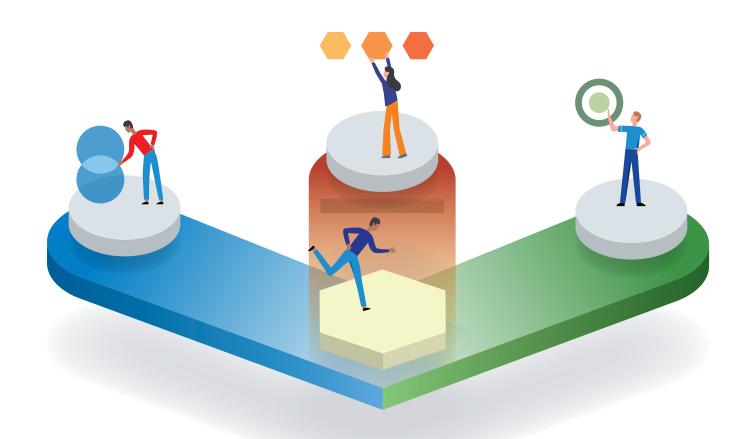
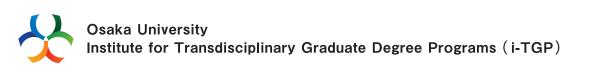


**Design Your Own Learning with** 

# Osaka University's Graduate Education System



















































that enable issues to be tackled from various angles.

Dramatic changes are also taking place in the form of advancements in Al and other technologies alongside the global spread of infectious diseases. We are said to live in an era of uncertainty when predictions are difficult to make.

In these conditions, graduate degree holders are expected to tackle problems with flexibility and a broad worldview, collaborate with diverse stakeholders, and leverage core expertise as they more broadly and deeply deploy their graduate school education.

Osaka University has been pursuing reforms to its graduate education system to enable students in its graduate schools to devise their own diverse learning patterns tailored to the types of expertise they seek to acquire. The new system is characterized by the ability for students to select their own study load and to design their own learning in accordance with their interests.

How you design your learning at graduate school is up to you. Make use of the wide array of options at Osaka University to enhance your own learning experience.

# Design Your Own Learning with Osaka University's Graduate Education System

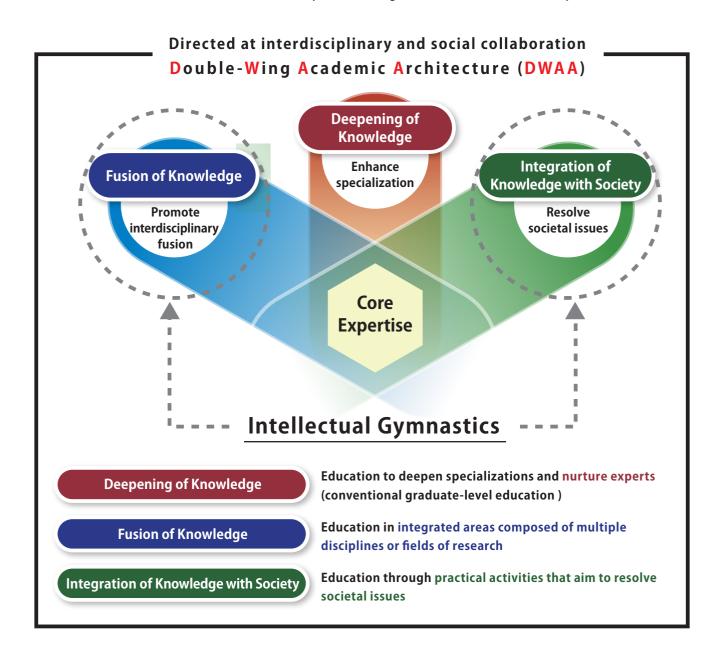


Since the 2021 academic year, Osaka University has been promoting the Double-Wing Academic Architecture (DWAA), an advanced graduate education system. It is geared toward interdisciplinary and social collaboration, with the aim of nurturing doctoral professionals capable of generating social innovations across a wide range of fields not limited to academia.

DWAA is composed of three areas: "Deepening of Knowledge," "Fusion of Knowledge," and "Integration of Knowledge with Society."

In addition to developing expert knowledge, which has been the focus of conventional graduate school education, one feature of this new system is expanding education in two new directions predicated on the acquisition of core expertise.

Osaka University has long offered a range of educational programs oriented toward the "Fusion of Knowledge" and the "Integration of Knowledge with Society." To provide students with more flexible choices, these programs have now been reorganized as "Intellectual Gymnastics Programs" (hereafter "Intellectual Gymnastics").



# **Intellectual Gymnastics Program Listings**

Category	Program Title	Eligible Departments	Selection Process	Completion Certificate Issued	Entry on Degree Certificate	
<b>C4 C4S</b> *1	<ul> <li>WISE Programs</li> <li>Program for Leading Graduate Schools</li> </ul>	All <sup>**2</sup> or Specified departments only	Yes	WISE $\times$ Leading $\triangle^{\!$	0	Prog
Total 14 or more credits	• Graduate Minor Program	All departments**3	No (some exceptions)	0	×	yrams systemat
C3 C3S	<ul> <li>WISE Programs</li> <li>Program for Leading Graduate Schools</li> <li>Honors Program for Grad. Schools in Science, Engineer- ing and Informatics</li> </ul>	All <sup>**2</sup> or Specified departments only	Yes	WISE × Leading △ Honors ○	WISE  Leading  Honors ×	Programs systematically compose of multiple courses  Credits
Total of between 7 and 13 credits	<ul> <li>Graduate Program for Advanced Interdisciplinary Studies</li> <li>Osaka University International Certificate Program</li> </ul>	All departments*3	No (some exceptions)	0	×	R
C2 Total 6 credits or less	Osaka University International Certificate Program	All departments*3	No (some exceptions)	0	×	egister for individual courses
C1	• Advanced Liberal Arts Education etc.	All departments	-	-	_	l courses Few

<sup>\*\* 1</sup> S (Special) = Programs with special conditions attached (restrictions on students' affiliations, selection processes, etc.), or programs provided as part of JST or MEXT schemes

<sup>%</sup> 2 The Cross-Boundary Innovation Program is open to all graduate schools except Osaka University Law School.

<sup>\*3</sup> Some subjects have restrictions on eligible departments.

<sup>\*\*4</sup> Coursework completion certificates are provided for Program for Leading Graduate Schools, but you need to complete your graduate school course of study in order to complete the program fully.

# Design your own program tailored to your interests and workload



I want to study new fields in depth, in addition to delving deeper into my own specialization



WISE Programs, Program for Leading Graduate Schools, Honors Programs for Graduate Schools in Science, Engineering and Informatics, Graduate Minor Program, etc.



I want to select courses that utilize my expertise from among a varied course menu, and organize my learning systematically



Graduate Program for Advanced Interdisciplinary Studies, etc.



I want to pick and choose courses in line with my interests



Advanced Liberal Arts Education, etc.

# **Program Details**

# WISE Programs (Doctoral Program for World-leading Innovative & Smart Education)



These are five-year integrated doctoral programs designed to foster doctoral professionals capable of tackling social issues and powering innovation in society, as well as playing leading roles in the creation and application of new knowledge and generating values for a new era. Those completing the program will have their completion recorded on their degree certificates when they complete the doctoral program in their affiliated graduate school.

Transdisciplinary
Program for
Biomedical
Entrepreneurship
and Innovation



An educational system based on industry-government-academia collaboration provides a platform that fosters doctoral professionals equipped with a comprehensive perspective on the biomedical sciences, critical research skills to achieve world-leading, cutting-edge advances in basic research, and the competence to translate one's own research findings rapidly and effectively into tangible solutions that our society needs.

Multidisciplinary
PhD Program for
Pioneering Quantum
Beam Application



Through a collaborative curriculum with top research institutions and corporations within and outside Japan, this program's objective is to train people capable of social implementation of innovative quantum beam application technologies to create a safe and super-smart society with abundance, health, and longevity.

# Curriculum

- 5-year integrated curriculum
- Systematic arrangement of multiple subjects (check specific programs for required number of credits)

# **How to Enroll**

- Must apply and be selected to participate
- Some programs are limited to specific graduate schools and departments



Program listing on the i-TGP website

# **Program for Leading Graduate Schools**



These are five-year integrated\*\* educational programs designed to cultivate leaders to take a wide variety of global roles in industry, academia, and government. Program completion is recorded on your degree certificate once you have satisfied the program conditions and successfully completed doctoral studies in your graduate school.

\* Some programs offer study patterns other than the five-year integrated model.

Cross-Boundary
Innovation Program



This program aims to cultivate leaders who will have the first-rate creative and practical skills to cross boundaries and to generate the innovation that can foster change. These new-generation graduates will achieve this "Cross-Boundary Innovation" by transforming their way of thinking and going beyond the shells of their specializations.

Interactive
Materials Science
Cadet Program



The IMSC Program aims to train program students as "Cadets for Materials Science" who will drive innovations in materials science research and development in a wide range of sectors spanning industry, government, and academia.

Humanware Innovation Program



This program aims to cultivate outstanding leaders via intensive interdisciplinary studies (Seido Jukugi: in-depth discussion) to foster leaders who can construct flexible, robust, and sustainable systems that support an ever-changing social environment by introducing an entirely new concept: humanware.

Interdisciplinary
Program for
Biomedical Sciences



This program aims to foster the next generation of leaders with a comprehensive understanding of integrated biomedical systems, the ability to pursue interdisciplinary research in life science fields, play active global roles in industry, academia, and government, and develop new therapies to conquer intractable diseases.

 $\frak{\%}$  Currently only available to specially selected international students in the Graduate School of Medicine

Doctoral Program for Multicultural Innovation



Students selected from both humanities/social science and natural science graduate schools come together in this program not only to deepen their expert knowledge in their fields of specialization but also to develop into researchers and practitioners equipped with the knowledge, skills, attitudes, and initiative to propose and implement concrete models for new forms of coexistence oriented to a shared future, based on the concept of "respect" informed by profound understanding of others

 $\divideontimes$  From the 2020 academic year, the program is accepting new applications as an accredited study program of the Graduate School of Human Sciences

# Curriculum

- 5-year integrated curriculum
- Systematic arrangement of multiple subjects; at least 14 credits (check each program for total credit requirements)
- $\ensuremath{\mbox{\%}}$  Some programs offer study patterns other than the five-year integrated model
- ※ The Doctoral Program for Multicultural Innovation is accepting new applications as an accredited study program of the Graduate School of Human Sciences

# **How to Enroll**

- Must apply and be selected to participate
- Some programs are limited to specific graduate schools and departments



Program listings on the i-TGP website

# Honors Program for Graduate Schools in Science, Engineering, and Informatics



This program is designed for students not only to develop strong research interest in their own scientific field, but also to develop multidisciplinary insight and acquire the ability to delve into different fields and new possibilities. Students select from one of the nine units available in the program, and take special subjects offered or designated by the program in addition to the curricular subjects in their own graduate school and department.

Honors Program for Graduate Schools in Science, Engineering, and Informatics



- Electronics and Informatics
   Research Unit
- Life Science Research Unit
- Photonics Research Unit
- Fundamental & Astro Physics
   Research Unit
- Environmental Materials & Joining Design Research Unit
- Social Design Research Unit
- Materials Science Research Unit
- Humanware Research Unit
- Pioneering Quantum Beam Application Research Unit

# Curriculum

- Four-year curriculum offered from 2nd year of the master course (can also be taken over the three years of the doctor's course.)
- Systematic arrangement of multiple subjects (minimum of 7 and maximum of 13 credits in total)
- \* Some units are operated as separate programs

# **How to Enroll**

- Must apply and be selected to participate
- Some units are limited to specific graduate schools and departments



Honors Program for Graduate Schools in Science, Engineering, and Informatics website

# **Graduate Minor Program / Graduate Program for Advanced Interdisciplinary Studies**

Category C4 / C3

The Graduate Minor Program and Graduate Program for Advanced Interdisciplinary Studies are educational programs in which subjects are systematically organized according to certain academic themes for students to effectively acquire multifaceted and comprehensive perspectives. In either program, students will be able to proactively take subjects that they are interested in, allowing them to explore the latest issues in the real world and academia while working with academic staff and students from different disciplines. Students will be awarded a certificate of completion for the program when a student satisfies the requirements specified for the program. The number of programs offered varies from year to year: in the 2022 academic year there are 19 Graduate Minor Programs and 40 Graduate Programs for Advanced Disciplinary Studies. The most up-to-date information is available on the website of the Center for Education in Liberal Arts and Sciences.

# Curriculum

# **Graduate Minor Program**

 Systematic arrangement of multiple subjects (total of 14 or more credits)

# Graduate Program for Advanced Interdisciplinary Studies

 Systematic arrangement of multiple subjects (minimum of 7 and maximum of 13 credits in total)

# **How to Enroll**

- Submit a request and register in the applicable subject(s)
- Some programs have a selection procedure



Center for Education in Liberal Arts and Sciences website

# **Osaka University International Certificate Program**



This is a hybrid education program composed of online subjects and Practical Study Abroad courses international fieldwork subjects utilizing Osaka University's ASEAN campuses.

In the 10-month program, students participate in a short study at an international institution that houses an ASEAN campus and receive a certificate of completion upon satisfying the requirements (earning between 6 and 8 credits). The number of programs offered varies from year to year: in the 2021 academic year, there were 5 programs.

# Curriculum

• Systematic arrangement of multiple courses (minimum of 6 and maximum of 8 credits in total)

# **How to Enroll**

Must apply and undergo a selection based on submitted



Profile page on the Osaka University website

# **Advanced Liberal Arts Education**



Advanced Liberal Arts Education are subjects designed for students in higher year levels and located within the "Liberal Arts" category, one of the three pillars of Osaka University's education system. Osaka University aims to cultivate "multifaceted and comprehensive viewpoints" which can be acquired from learning outside professional education and "high-level capability" to solve real-life problems through use of the advanced expert knowledge and skills acquired in specialized education. For this purpose, students are able to take subjects other than those offered within their own graduate school, undergraduate school, or department. Students from the fall semester of the second year of undergraduate studies through to graduate school level can be awarded credit upon completion of such subjects nominated by their own school, as advanced liberal arts and sciences subjects.

# Curriculum

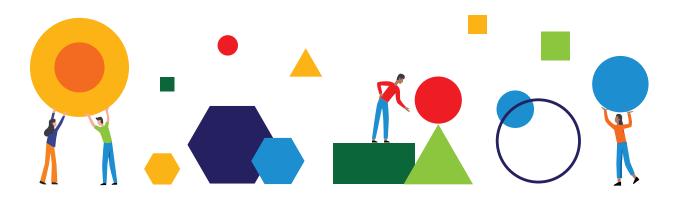
• Offered as single courses

# **How to Enroll**

• Register course by course

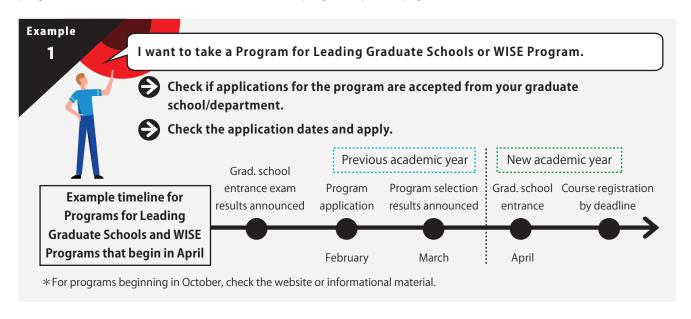


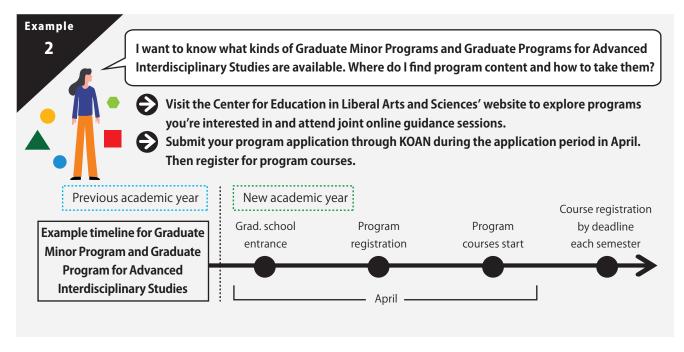
Profile page on the Osaka University website



# **Enrolling in the Programs**

If you are interested in taking one of these programs, check the methods and application periods before **submitting** a program application and registering for a course. Methods and application periods vary from program to program, so be sure to check the i-TGP website or program-specific pages for the latest information.







# Osaka University Institute for Transdisciplinary GraduateDegree Programs

# Want to know more?

For the latest information on any of these programs, check the official program website or the Center for Education in Liberal Arts and Sciences website. The website of the Institute for Transdisciplinary Graduate Degree Programs brings together information on all these programs.



https://itgp.osaka-u.ac.jp/en/

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