

# Student Application Guidelines for 2025(2)



Graduate Course for System-inspired Leaders in  
Multidisciplinary Science (SiMS)  
A Program for Leading Graduate Schools  
Osaka Metropolitan University

# Contents

	Page
I. Program Outline .....	2
I-1. Doctorate Program.....	2
I-2. Picture of Human Resources to be Nurtured.....	2
I-3. Curricula .....	2
I-4. Feature of the Program .....	4
II. Outline of Admission .....	5
II-1. Admission Policy .....	5
II-2. Admission Spaces .....	6
II-3. Application Qualifications .....	6
II-4. Application Documents .....	7
II-5. Submission of Application Documents .....	8
II-6. Screening Method.....	8
II-7. Examination Schedule .....	9
II-8. Announcement of Examination Results.....	10
II-9. Enrollment procedure and briefing.....	10
II-10. Start of SiMS course and eligibility .....	10
II-11. Contact.....	10

# **I. Program Outline**

## **1. Doctorate Program**

In order for industries to become more competitive and to realize a sustainable society through innovation, there is a strong demand for doctoral researchers who can demonstrate global leadership, and the ability to come up with multidisciplinary and cross-disciplinary strategies that can encompass the needs found from a social scientific point of view without being bound by specific fields is increasing more and more important. In this leading graduate school program, we aim to foster "System-inspired leaders in Multidisciplinary Science" who can develop research strategies that lead to new value creation (innovation) by combining interdisciplinary creativity with a broad bird's-eye view of multiple fields and the ability to deeply integrate the layers within the field.

## **2. Picture of Human Resources to be Nurtured**

We aim to foster researchers equipped with the following abilities and characteristics:

1. Solid academic foundation ability to lead the field of expertise.
2. A bird's-eye view of diverse academic fields without staying in a specific specialized field.
3. Ability to design research strategies stemming from multidisciplinary and multilevel interdisciplinary ideas.
4. Creativity and execution ability to link basic research to industrial innovation
5. Generalship and leadership to organize and lead diverse human resources to achieve their goals.
6. Ability to manage and execute R&D strategies.
7. Ability to disseminate one's ideas widely and have them deeply rooted in the global community.

## **3. Curricula**

This program is a five-year straight doctoral course designed to foster global leaders leading industries who have high abilities described in the above "2. Picture of human resources to be nurtured" The details are shown on the following page "Outline figure of Curriculum" and "Curricula and Accreditation."

Those who are enrolled should take curricula in both of their own major and this program course. Accordingly, they can acquire gradually the ability mentioned at "2. Picture of human resources to be nurtured."

**Curriculum and Accreditation of the SiMS Program** ( as of November, 2024)  
 (for students entered master's course before academic year 2023)

\*Compulsory

Courses	Subject title	Credits	Academic year	The number of credits for designated subjects
Literacy	Scientific Literacy*	②	1-2	4 credits or more
	Studies on International Environmental Issues	2	1-2	
	Special Seminar for Scenario Task Oriented Planning	2	1-2	
	Technology Based Entrepreneurship Course*	②	1-2	
Interdisciplinary	Special communication seminar based on multidisciplinary sciences	2	1-2	2 credits or more
	SiMS Special Research (Laboratory Rotation) *	②	3-5	
Ideation	Special Seminar for Strategic Reasoning and Thinking1*	②	1-2	4 credits or more
	Special Seminar for Strategic Reasoning and Thinking2*	②	1-2	
	The Ideation and Globalization Workshop	2	3-5	
Global	Special Seminar for Global Communication	2	1-2	2 credits or more
	Global Leader Workshop*	②	3-5	
Entrepreneurship	Technology-based-Entrepreneurship Course 1. (TEC-1 Business Planning)	2	3-5	4credits or more including 2 subjects (2 credits) from 8 subjects marked with (#).
	Technology-based-Entrepreneurship Course 2 A (#) (TEC-2A Management of Technology)	1	3-5	
	Technology-based-Entrepreneurship Course 2 B (#) (TEC-2B Management of Technology Exercises)	1	3-5	
	Technology-based-Entrepreneurship Course 2 C (#) (TEC-2C Intellectual Property Plan)	1	3-5	
	Technology-based-Entrepreneurship Course 2 D (#) (TEC-2D Idea Creation)	1	3-5	
	Technology-based-Entrepreneurship Course 2 E (#) (TEC-2E Management & Marketing)	1	3-5	
	Technology-based-Entrepreneurship Course 2 F (#) (TEC-2F Venture Business & Entrepreneurship Basics)	1	3-5	
	Technology-based-Entrepreneurship Course 2 G (#) (TEC-2G Venture Business)	1	3-5	
	Technology-based-Entrepreneurship Course 2 H (#) (TEC-2H Leadership)	1	3-5	
	Technology-based-Entrepreneurship Course 3 (TEC-3 Company Research Practical Seminar)	2	3-5	
	Technology-based-Entrepreneurship Course 4 (TEC-4 Training for Future R&D Leader Seminar)	2	3-5	
Number of credits required for completion				16 credits or more (including 12 required credits)

#### **4. Feature of the Program**

##### **(1) Excellent Support System**

###### **1) Personalized mentoring system by the experienced worker as corporative executives**

Students can receive comprehensive support for curriculum, research and study planning, research laboratory rotation and study abroad by personalized mentoring system.

###### **2) Business internship and career path support system**

Students can receive the support for selection of business internship and planning of personal career path from the Center of Advanced Education of Entrepreneurship and Innovation that has produced many researchers who are playing an active role in industry.

###### **3) Research grants and educational activities expenses support system**

Students can receive the expenses for the creative educational and research activities: approach to research project in different field; take lectures in foreign universities; attend international conference, within the budget.

###### **4) Overseas research support system**

Students have opportunities of study abroad for three months or longer, for the purpose of acquire and practice various qualities required to advanced researchers who lead industries globally. Students can receive the support from mentors not only for the expenses for study abroad educational activities of 3), but also setting the target of study abroad and destination.

##### **(2) Integrative five-year curriculum to acquire multidisciplinary thinking.**

- 1) Comprehensive understanding, multidisciplinary and multilevel interdisciplinary research skill through Interdisciplinary Courses and Laboratory Rotations.
- 2) Design skills, systems thinking, and international communication skills through Ideation and Global Courses.
- 3) Business development, management skills, intellectual property strategy, and leadership through Entrepreneurship Courses.
- 4) Research management skills, execution skills, and career design through interdisciplinary joint research and industry mentorship.

##### **(3) Exceptions to the interview for SPRING selection system**

Students enrolled in this program can obtain a letter of recommendation from the SIMS Office to waive the interview when applying for the Support for Pioneering Research Initiated by the Next Generation Home (SPRING) in the second year of the Master course.

## II. Outline of Admission

### 1. Admission Policy

The development of industry during the period of rapid economic growth in the 20th century has achieved its development with advanced stratification and deepening in individual fields based on discoveries in each scientific field. However, in recent years, the shift to industrial structure centered on new value creation that cannot be dealt with by technological frameworks in such individual fields has become apparent. In this change, it is urgent to build an industry that supports a sustainable society with international competitiveness by promoting strategic multilevel interdisciplinary research from the idea of starting from an industrial and business perspective beyond the seeds perspective, not just the integration of technical hierarchies.

In light of the awareness of the issues mentioned above, for this Leading Program, which aims to educate system-inspired leaders for multidisciplinary science, who can design research strategies stemming from multilevel interdisciplinary ideas inspired by new value creation and formed through higher reasoning and thinking.

we hope to recruit students who are highly motivated as follows:

- Students motivated to acquire a high level of expertise and excellent research skills in their major research.
- Students with an entrepreneurial mindset eager to link cutting-edge academic achievements with industrial innovation.
- Students motivated to actively work on multidisciplinary research in the global environment.
- Students motivated to demonstrate leadership and promote their own research.
- Students highly motivated and capable of designing one's own course-work and research plan for oneself so as to acquire the knowledge necessary for leaders with multidisciplinary science.

For more information, please visit the SiMS website.

<https://www.omu.ac.jp/las/sims/>

## 2. Admission Spaces

Name of Degree Program	Number of students to be admitted
“Graduate Course for System-inspired Leaders in Multidisciplinary Science (SiMS)” (Program for Leading Graduate Schools)	A few

## 3. Application Qualifications

Those who enrolled in the first year class of any one of the courses below at the time of applying to the SiMS program and commit to enrolling in the program if they pass the examination are qualified to apply for this Program.

[Master’s program, Osaka Metropolitan University]

Graduate School Courses	Agriculture
	Engineering
	Human Life and Ecology
	Informatics
	Rehabilitation Science
	Science
	Sustainable System Sciences

The other courses are to be discussed in advance.

## 4. Application Documents

Documents		How to prepare the forms, etc.
1	Application form	Follow the link listed in 5. <b>Submission of Application Documents</b> and submit the required information. The Reason for Application Form provided by the University (Form 2-1) should be used.

### Notes:

- (1) Please complete the “Application Form”.in Japanese or English.
  1. Student ID
  2. Name (Kanji/Alphabet, Katakana)
  3. Campus
  4. Graduate School Course
  5. Supervisor
  6. Photo (upload JPEG or PDF file -full-faced, from the waist up, no caps/hat taken in three months.)
  7. Reason for application (Form2-1:  
[https://www.omu.ac.jp/las/sims/applicant\\_guidelines/index.html#a2](https://www.omu.ac.jp/las/sims/applicant_guidelines/index.html#a2),  
upload MS Word or PDF)
- (2) Documents submitted for application will not be returned.
- (3) Changes in the application documents will not be accepted in principle once they are submitted.
- (4) If any erroneous or false statement is found in the submitted documents, the admission may be canceled.
- (5) Applicants’ personal information disclosed upon application documents will be utilized solely for screening purposes, while some information of those who have passed the examination, such as academic transcript, may be utilized for educational purposes in this program.
- (6) No examination fee is charged.



## 5. Submission of Application Documents

- (1) Submission period: December 16 - 17:00 December 20, 2024  
(2) Submission website: URL: <https://forms.office.com/r/TVwTf60FtD>

## 6. Screening Method

- (1) Examination contents

Examination subjects	Point allocation	Details
Small essay	100 points for full marks	Theme will be announced on the date of examination
Oral examination	100 points for full marks	The first five minutes will be spent on presentation of your current research subject. Then, questions will be asked to test your knowledge. We will provide the equipment you may need for your presentation (PC installed with Windows10(OS) and Microsoft PowerPoint 2019 and a projector). You may also bring in your own PC and other equipment for your presentation as necessary.
Interview	100 points for full marks	Taking into account the Reason for Application already submitted and the small essay, questions will be asked concerning the Admission Policy of the SiMS Degree Program.

- (2) Selection method

The selection is made according to the total scores of the small essay, oral examination, and interview.

## 7. Examination Schedule

Dates	Subjects	Timetable	Venue
January 10, 2025	(Assembling time)	(9:40)	303 Learning Commons, A6 building Nakamozu Campus Osaka Metropolitan University
	Small essay	10:00 - 11:30	
	Interview and oral examination	13:00 - 17:00	

Notes:

- (1) Timetable for an oral examination and an interview will be announced at the venue after the small essay test.
- (2) Late arrival to the venue up to 20 minutes for the small essay exam is still allowed to take the examination, but the examination time will not be extended. However, if the reason for late arrival is due to such reasons listed below, it would be allowed to for the applicant to sit for the examination within 40 minutes of the start of the exam, and the examination time may be extended.

Permitted reasons for late arrival:

\*Being late by 20 minutes or more because of suspension of public transport due to an accident, a natural disaster, and etc.

\*Unexpected accident, injury, illness on the way to the examination venue.

- (3) Items to be brought: student ID card, writing implement
- (4) A watch with calculation or communication capabilities are prohibited.
- (5) Cell phones must be turned off, as it not allowed to use them to check the time.
- (6) When the examination is cancelled or unable to be carried out according to the schedule because of natural disaster or other reasons, an “Emergency Notice” will be posted on the website of the SiMS Program. (<https://www.omu.ac.jp/las/sims/>) Please check to find the necessary information.
- (7) The emergency contact on the examination date is the same as the telephone numbers listed in 11. Contact.

## 8. Announcement of Examination Results

- (1) Time: 13:00 - 15:00 on January 31, 2025
- (2) Venues: The ID numbers of successful applicants will be listed on the SiMS website: <https://www.omu.ac.jp/las/sims/>
- ※ No inquiry by telephone nor e-mail will be accepted.

## 9. Enrollment procedure and briefing

- (1) Time: 15:00 on February 6, 2025 (about one hour)
- (2) Venues: 329, A6 Building in the OMU Nakamozu Campus
- (3) Contents: Enrollment procedure and explanation of curricula;
- \* Delivery of Acceptance notice
  - \* Filling up on documents and submission
  - \* Orientation
  - \* Delivery of Course registration guidance and syllabus, and explanation of curricula
  - \* Others

## 10. Start of SiMS course and eligibility

- (1) Start of SiMS: April 1, 2025
- (2) Eligibility: Successful applicants, who passed the examination and enrolled in the graduate school courses of Osaka Metropolitan University, are eligible for the enrollment in the SiMS program.

## 11. Contact

(SiMS Office)

Center for advanced education in entrepreneurship and innovation

Faculty of Liberal Arts and Sciences and Global Education

Osaka Metropolitan University

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1-1 Gakuencho, Naka-ku, Sakai City,

Osaka, Japan 599-8531

TEL: 072-254-7567 (direct number)

FAX: 072-254-8274

E-mail: [gr-idec-sims@omu.ac.jp](mailto:gr-idec-sims@omu.ac.jp)

URL: <https://www.omu.ac.jp/las/sims/>