Student Application Guidelines for 2026(1)

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

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I. Program Outline

1. Doctorate Program

In today's ever-evolving global landscape, the demand for highly-educated researchers capable of exhibiting robust leadership qualities is on the rise. This necessity stems from our collective goal of enhancing industry competitiveness and fostering sustainable innovation. Our mission is clear: to nurture exceptional individuals poised to take on pivotal roles across academia, industry, and government worldwide. In alignment with this vision, we present the "Graduate Course for System-inspired Leaders in Multidisciplinary Science," a comprehensive five-year doctoral program meticulously crafted to cultivate visionary leaders with a global mindset primed for the industrial sphere.

2. Picture of Human Resources to be Nurtured

Our objective is to nurture researchers who embody the following abilities and characteristics:

1. A robust academic foundation and the capability to lead within their area of expertise.
2. A comprehensive understanding of diverse academic domains, transcending specific specialized fields.
3. Proficiency in crafting research strategies derived from multidisciplinary and multilevel interdisciplinary concepts.
4. Ingenuity and the capacity to translate fundamental research into industrial innovation.
5. Leadership prowess and the aptitude to organize and guide diverse teams towards shared objectives.
6. Competence in managing and implementing R&D strategies effectively.
7. Proficiency in disseminating ideas widely and establishing a strong global presence within the academic 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 “Picture of human resources to be nurtured.”

４. The Leading Curriculum / the Double Degree Curriculum

Upon entering the program, students may choose to follow either the Leading Curriculum or the Double Degree Curriculum. The Leading Curriculum consists of the standard coursework outlined in "Curriculum and Accreditation of the SiMS Program." The Double Degree Curriculum enables students to earn a master's degree from the University of New Mexico (UNM)—either a Master of Science in Project Management or a Master of Science in Cybersecurity and Business Analytics—alongside their master's or doctoral degree from their affiliated graduate school at Osaka Metropolitan University. To do so, students must complete and earn credits for the designated UNM courses (see Appendix 1) in addition to the standard program requirements.

Curriculum and Accreditation of the SiMS Program (as of November 2025)
The Leading Curriculum *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	Case Studies in Startup and Business Strategy*	2	3-5	4credits or more including 2 subjects (2 credits) from 8 subjects marked with (#).
	Commercialization Consulting Seminar*	1	3-5	
	Intellectual Property Rights Strategy*	1	3-5	
	Idea Generation Workshop*	1	3-5	
	Management and Marketing Workshop*	1	3-5	
	Marketing and Management for Innovative Products/Services*	1	3-5	
	Venture Business and Entrepreneurship Basics*	1	3-5	
	Leadership and Team Management Workshop*	1	3-5	
	Business Planning Workshop	1	3-5	
	Research Internship	2	3-5	
	Collaborative Research Leaders Internship	2	3-5	
Number of credits required for completion				16 credits or more (including 12 required credits)

5. 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.

(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

Modern industry has advanced by deepening knowledge and discoveries within individual disciplines. In recent years, however, new industries have rapidly emerged that focus on creating value that cannot be generated through discipline-specific thinking and frameworks alone. In other words, it is becoming increasingly important not only to adopt an interdisciplinary approach that understands the different layers within a particular field and creates value through the integration of those layers, but also to adopt a cross-disciplinary approach that incorporates knowledge from diverse fields and generates new forms of value that lie beyond existing frameworks.

To develop internationally competitive industries and support a sustainable society amid such changes, it is essential to design multidisciplinary and cross-sectoral strategies grounded in social science perspectives, without being constrained by any single discipline. In response to this need, this Leading Program aims to cultivate "Systems-Inspired Leaders in Multidisciplinary Science" who can design research strategies that foster the creation of new value (innovation). These leaders are expected to combine broad multidisciplinary thinking that encompasses multiple fields with the capacity to integrate the layers within a given field at a deep level.

We seek to recruit highly motivated students, including those who meet the following criteria:

- Students motivated to acquire advanced expertise and strong research skills in their major field.
- Students with an entrepreneurial mindset who are eager to connect cutting-edge academic achievements with industrial innovation.
- Students motivated to engage actively in multidisciplinary research in a global environment.
- Students motivated to demonstrate leadership and advance their own research.
- Students who are highly motivated and capable of designing their own coursework and research plan in order to acquire the knowledge required of leaders in multidisciplinary science.

For more information, please visit the SiMS website. https://www.omu.ac.jp/las/sims/

2. Outline of selection method

Students of this program are selected in the 2 ways as follows.

Selection method 1 - Course selection (described in this guideline)
In the first year of enrollment in the master's program, students apply for and participate in the “Special Seminar for Strategic Reasoning and Thinking2” (common graduate school courses, the second semester: need registration in September).
The selection is made according to the evaluation in the course. Students are only required to take the course, not need to write small essay, interview, oral examination. The earned credits will be recognized as the credits for the “Special Seminar for Strategic Reasoning and Thinking2” as a subject of this program after enrollment in the SiMS program course.

Selection method 2 - Examinations (small essay, interview)
The selection is made according to the total scores of small essay, oral examination and interview.
After enrolment in SiMS program course, “Special Seminar for Strategic Reasoning and Thinking (1&2) “ must be taken same as other designated subjects of this program.

3. 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)	Around 10

4. 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.

5. Application Documents

Documents		How to prepare the forms, etc.
1	Application form	Follow the link listed in **6. Submission of Application Documents** and submit the required information.

Notes:

(1) Please complete the "Application Form".in Japanese or English.

1. Student ID
2. Campus
3. Graduate School Course
4. Supervisor
5. Photo (upload JPEG or PDF data -full-faced, from the waist up, no caps/hat taken in three months.)
6. Reason for application (approximately 300 words in Japanese /100 words in English)

(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.

6. Submission of Application Documents

(1) Submission period: December 1 - December 7, 2025

(2) Submission website: URL: https://forms.office.com/r/RLWrWfriVf

7. Screening Method

The selection is made according to the evaluation of "Special Seminar for Strategic Reasoning and Thinking 2"

8. Announcement of Examination Results

(1) Time: 13:00 - 15:00 on December 25, 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 5, 2026 (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, 2026

(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
Address: Room 312, 3rd Floor of A6 Building,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
URL: https://www.omu.ac.jp/las/sims/

Appendix 1

MSPM, MSCBA: Curriculums of University of New Mexico (UNM) as of 2025.

The Master of Science in Project Management (MSPM)

Requirement	Code No.	Subject title	Credits
Core MSPM Coursework (24 credits)	MGMT 506	Managing People in Organizations	3
	MGMT 515	Innovative Product Development	3
	MGMT 517	Technology Program Management	3
	MGMT 519	Project in Technology Commercialization	3
	MGMT 526	Financial Decision Making	3
	MGMT 529	Fundamentals of Project Management	3
	MGMT 530	Advanced Project Management Techniques	3
	MGMT 533	Analysis Tools for Managers	3
Elective Credit Hours (6 credits)	MGMT 502	Financial Accounting and Analysis	3
	MGMT 511	Technology Commercialization and the Global Environment	3
	MGMT 520	Operations Design and Decision Making	3
Number of credits required for completion	**30**		

The Master of Science in Cybersecurity & Business Analytics (MSCBA)

Requirement		Code	Subject title	Credits
Required Core Group (15 credits)		MGMT 501	Data Driven Decision Making	3
		MGMT 529	Fundamentals of Project Management	3
		MGMT 635	Data Analytics	3
		MGMT 636	Information Systems Security	3
		MGMT 637	Database Management Systems	3
Management Group (6 credits)		MGMT 502	Financial Accounting and Analysis	3
		MGMT 506	Managing People in Organizations	3
		MGMT 508	Business and Society	3
		MGMT 520	Operations Design and Decision Making	3
		MGMT 522	Managerial Marketing	3
		MGMT 526	Financial Decision Making	3
Technical Group (Select a Track)	Business Analytics Track **(12 credits)**	MGMT 533	Analysis Tools for Managers	3
		MGMT 588	Supply Chain Models and Strategy	3
		MGMT 645	Data Mining	3
		MGMT 660	Natural Language Processing for Business	3
	Cybersecurity Track **(12 credits)**	MGMT 646	Digital Forensics	3
		MGMT 647	Systems and Network Administration	3
		MGMT 648	Advanced IS Security	3
		MGMT 662	Security Risk Management	3
Number of credits required for completion		**33**		

<u>Reminder for the Doble Degree Curriculum</u>

- Separate tuition fees and other associated costs for the MSPM and MSCBA programs are required and must be paid by the student.
- Admission to the curriculum requires taking a separate entrance examination at UNM.
- Various support schemes are available to assist with expenses related to degree completion and studying abroad.
- Additional documentation may be required for study abroad procedures.