

Overview of Curricula for the Six Programs for Leading Graduate Schools

▪ Integrative Graduate Education and Research Program in Green Natural Sciences (IGER)

In order to understand the complexities of environmental problems, it is necessary to develop a broad knowledge in the field of natural science. Through the IGER coursework, students are encouraged to develop both specialized and strong general knowledge, and are expected to participate in advanced seminars in various research fields. Furthermore, the students also participate in the "Problem Solving Skills" training courses. These courses are divided into five categories: environment, intellectual property, career development, science communication, and research skills. Finally, students have the opportunity to acquire leadership ability through Overseas Residential Research, Internships, and International Education Planning.

▪ Leadership Development Program for Space Exploration and Research

In this program students acquire generalist knowledge of space science and engineering through "Space Science and Engineering Basics" and "Leadership Development Seminar" on leadership, social science, space utilization and manufacturing. Moreover, students acquire universal knowledge within the discipline through video coursework and specialization lectures. As part of the Leadership Development Seminar, students also develop implementation skills through the "Self-Development" type program in which students make their own proposals for implementation. In "Global Leadership Training" and "ChubuSat Implementation Program" they experience basic implementation training, then practical implementation in "Company Internship" and "Overseas Internship."

▪ Real-World Data Circulation Leaders

In order to improve the industrial competitiveness of Japan, training of human resource leaders that will drive the creation of new social values is essential. From the viewpoint of creating new social values, firstly, in order to obtain the principle values, i.e. convenience, fun, health, and wealth, it is needed to learn the methodologies of engineering (convenience), information science (fun), medicine (health), and economics (wealth) [Creative and Critical Thinking]. Secondly, to fulfill the users' desires, it is needed to foster the study of real-world data circulation by "acquiring" observation of real-world phenomena in the form of digital data, "analyzing" the acquired digital data using information technology, and "implementing" new products or services using the analysis results [Problem Solving Skills]. Finally, to flourish the above-mentioned abilities, it is needed to create the engagement and vision abilities for connecting people in various situations, places and teamwork experiences [Leadership Skills].

▪ Cross-Border Legal Institution Design

The pressing need in the field of law and political science is for lawyers adept in identifying and analyzing problems, organizational management, responding to societal demands and conflict resolution. This program aims to educate future leaders who demonstrate these practical abilities seamlessly across borders, bridging gaps between Japan and other jurisdictions. These leadership skills are taught through opportunities to participate in institution transplantation through assisting in development projects.

▪ Women Leaders Program to Promote Well-being in Asia

This program aims to foster future women leaders to achieve a better well-being in Asia, while deepening their understanding of the concept of well-being, developing their ability to analyze various issues concerning the well-being with a broad perspective, and nurturing their respect for diverse values and cultures that co-exist among Asian countries in different stages of development. The appreciation of diverse values in multicultural Asia would help remove prejudices in society, including those concerning gender bias. Moreover, the program seeks the traditional knowledge concerning cultural coexistence in society and the concept of well-being for sustainable development of Asia. This program fosters talented and capable future women leaders who can work globally, by developing their skills such as comprehension of gender-related issues and gender equality, planning skills, empathy, and communication skills. In addition, they will nurture a sense of commitment as a leader. Moreover, the program cultivates practical skills to identify and respond to complex issues and realities of multicultural societies.

▪ PhD Professional: Gateway to Success in Frontier Asia

PhD Professional: Gateway to Success in Frontier Asia is a doctoral program that aims to foster graduate students to be global leaders who work for the frontier Asia region for which Japan's growth strategy is essential. For this end, the first step is to learn fundamental values and principles of the society of humankind; students are required to develop cross-cultural sensitivity and to understand intellectual efforts in other fields other than their own major. The second step is to acquire both traditional and specialized knowledge. In this regard, students are expected to establish individuality by learning traditional knowledge, and are also required to identify the core competency through the graduate studies in their own doctoral program. As a final step, training and practice of implementation skills including communication, team management, and problem solving educates students to be global leaders.

For more information please visit our website

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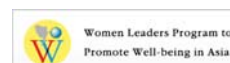
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Nagoya University Program for Leading Graduate Schools Outline of Integrated Curriculum

- Nurturing Next Generation Leaders Through a Transdisciplinary Approach -

About the Program for Leading Graduate Schools

- The Program for Leading Graduate Schools, sponsored by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and the Japan Society for the Promotion of Science (JSPS) establishes graduate programs specially designed to foster talents of excellent students who are both highly creative and internationally attuned and who will play leading roles globally.
- Nagoya University boasts the following six Programs for Leading Graduate Schools:
 - Integrative Graduate Education and Research Program in Green Natural Sciences
 - Leadership Development Program for Space Exploration and Research
 - Real-World Data Circulation Leaders
 - Cross-Border Legal Institution Design
 - Women Leaders Program to Promote Well-being in Asia
 - PhD Professional: Gateway to Success in Frontier Asia
- An integrated transdisciplinary curriculum facilitates the sharing of common courses and activities among the six programs. The curriculum focuses on nurturing the following three core areas in order to meet the program objectives:
 - Creative and Critical Thinking
 - Problem Solving Skills
 - Leadership Skills



Outline of the Integrated Curriculum for the Program for Leading Graduate Schools

Blue: New courses introduced by each LP
 Green: Courses that can be shared by all LPs (including Graduate School Common Courses)
 Black: Existing courses

		Green Natural Sciences	Space Exploration	Data Circulation	Legal Institution Design	Well-Being	PhD Professional	ESD Program*
Creative and Critical Thinking	A1 Fundamental Values and Principles	Common Course on “Understanding Values and Principles for a Sustainable Future of the Global Society” (2 lectures per program)						
	A2 Universal Knowledge	(Conservation of Nature and Global Society) Special Topics in Agricultural Sciences (History of Science), etc.	(Humankind, Earth & Universe – Universal Spirits of Great Voyage Frontiers) Leadership Development Seminar	(Universal Value of “Monozukuri” and Real World Data) Global Challenge I	(Shaping the Society for a Better Life) Introduction to Joint Research on Comparative Study of Law, Comparative Politics Workshop	(Multicultural Coexistence Society and Achieving Well-being in Asia) Research Skills A-2 (Logical Thinking Skills in Research Writing II), Seminar on Philosophy of Human Becoming I, Bioethics, International Cooperation in Agricultural Sciences I, etc.	(Harmonization of Values and Principles in a Changing World) Overseas Training, Retreat in Asia, Top Leader Talk	(Civilization and Sustainability of the Earth) Introduction to Sustainable Development, Cultures and Identities, Theory of Asian Cultural Interchange, etc.
Problem Solving Skills	B1 Advanced Knowledge	Collaborative Natural Science Lectures 1-3, Special Lecture on Molecular Science, Principles of Life Science 1&2, Selected Topics in Biotechnology I-IV, Advanced Lectures on Organic Materials Design 1-3, Core Inorganic Chemistry, etc.	Basics for Space Science and Engineering, Video Lectures for Space Science and Engineering, English Training (British Council) Academic Writing/Presentation	Advanced Lectures on System Programs, Advanced Lectures on Mechatronics, Human Body Morphology, Social Medicine, Agricultural Economics B, Marketing B, Finance B, etc.	Project Management I, Introduction to Joint Research on Comparative Study of Law, Comparative Politics Workshop	Global Leader 1, Global Leader 2, Research Skills B-1 (Fundamentals of Academic Writing), Development Assistance, etc.,	Young Mentorship, Coursework, Japanese Culture Experience	Water and Waste Management Policies, Housing and Environment, Sustainability and Environmental Studies, Japan’s Development Experience, Principles of Bioagricultural Sciences I, Basics of Bioagricultural Sciences, Basics of Bioresource Cycling System Science, etc.
	B2 Traditional Knowledge	IGER Green Natural Science Lectures, Advanced Lectures on Frontier Technologies and Sciences, etc.	Lectures on Space Science and Engineering, Short Courses on Space Science and Engineering, Overview of Space Exploration and Research, Video Lectures for Space Science and Engineering	Real World Data Analysis, Real World Data Circulation Systems I&II	Legal Transplantation, Special Research I&II, Special Lecture and Seminar, On-Demand Seminars	Seminar on Health Sciences, Development Cooperation, Education and Health, Social Medicine, Bioresource Cycling System Science, etc.	Young Mentorship, Courses in Student’s Major	Climate Change Policies, Global and Urban Warming, Laboratory Course in Regional Bioresources Management, Advanced Theory of River Basin Management, Conservation and Ecotoxicology of Soil and Water, Development Economics, etc.
	B3 Innovation Skills	Special Topics in Agricultural Sciences (Food Culture), etc.	Leadership Development Seminar	Global Challenge I	Legal Transplantation, Special Research I&II, Special Lecture and Seminar	Special Lecture on Multicultural Societies 1, Special Lecture on Multicultural Societies 2, Multi-Ethnic Society, etc.	Japanese Culture Experience, Courses in Student’s Major	On-site Research Training in Clinical Environmental Studies (ORT), Field Seminar on Environmental Studies, etc.
Leadership Skills	C1 Visioning and Management	Special Topics in Agricultural Sciences (International Cooperation in Agricultural Education, Bio-Venture, Agricultural and Forestry Administration), Global Career Exploration Program, etc.	Leadership Development Seminar	Data Tools Hands-On	Introduction to Joint Research on Comparative Study of Law, Comparative Politics Workshop, Special Research I&II, On-Demand Seminars	Special Lecture on Multicultural Societies 3, Global Leader 3&4, Introduction to Healthcare System in Asia, Education Development and Cooperation, Lecture on International Development I, etc.	Retreat in Asia, Courses in Student’s Major	Water and Waste Management Policies, Eco-Business Innovation, International Cooperation in Agricultural Sciences I, Theory on NGOs, Law and Development Studies, Civil Engineering and Policies for Developing Countries I, etc.
	C2 Basic Skills for Implementation	Workshop for Leadership Development, Workshop for Team Building Development, Workshop for Management Development, Workshop for Employability Development, Career and Life Development, Future Leaders of Japan	Global Leadership Training Course, Workshop for Leadership Development, Workshop for Management Development, Workshop for Employability Development, Career and Life Development, Future Leaders of Japan	Follow-up Visit, Workshop for Leadership Development, Workshop for Team Building Development, Workshop for Management Development, Workshop for Employability Development	Joint Research Workshop I-III, On-Demand Seminars	Special Lecture on Multicultural Societies 4, Special Lecture on Multicultural Societies 5, Global Leader 1, Global Leader 2	Overseas Training, Retreat in Asia, North Carolina Intensive Training, Workshop for Leadership Development, Workshop for Team Building Development, Workshop for Management Development, Workshop for Employability Development, Career and Life Development, Future Leaders of Japan	On-site Research Training in Clinical Environmental Studies (ORT)
	C3 Global On-site Training (GOT)	International Education Planning, Internships, Overseas Residential Research, English Proficiency, Visual Design of Research, Relationships & Communication, Academic Writing/Presentation	Global Leadership Training Course, Leadership Development Seminar, Workshop for Leadership Development, Workshop for Management Development, Workshop for Employability Development, Career and Life Development, Future Leaders of Japan	Industry-Academia-Government Project, Data Tools Hands-On, Visual Design of Research, Academic Writing/Presentation, Research Internship I&II	Joint Research Workshop I-III, On-Demand Seminars, Academic Writing	Well-Being Seminar I&II, English Proficiency, Overseas Training Program Seminar 1&2, Workshop for Leadership Development, Workshop for Team Building Development	Top Leader Talk, Business Mentorship, North Carolina Intensive Training, Professional Development, English Proficiency	English Communication in Environmental Issues, Field Seminar on Environmental Studies, Theme Workshop (Resource, Environment and Economic Growth), etc.
	C3 Global On-site Training (GOT)	Overseas Mid-Term Residential Research	ChubuSat Instrument Development Project, Internships (Corporate/International), Student-Planning Events (Workshops, Group Work, Exchange Events)	Global Challenge II	Seminar in International Law and Politics I&II	Global Leader 3, Global Leader 4, Overseas Training Program 1, Overseas Training Program 2	Gateway to Success Project, Professional Development	On-site Research Training in Clinical Environmental Studies (ORT), Field Seminar on Environmental Studies, etc.

*The Education for Sustainable Development (ESD) Program, which is implemented by five graduate schools, collaborates by offering its courses to the Program for Leading Graduate Schools