AKITA UNIVERSITY

STUDY GUIDE FOR INTERNATIONAL STUDENTS

- Faculty of International Resource Sciences
- Faculty of Education and Human Studies
- Faculty of Engineering Science
- Faculty of Medicine

- Graduate School of International Resource Sciences
- Graduate School of Education
- Graduate School of Engineering Science
- Graduate School of Medicine

TEGATA Campus

HONDO Campus

Access

From Tokyo
- Haneda Airport – Akita Airport (approx. 1hr)
- JR Tokyo Station – Akita Station (approx. 4hrs by Komachi, Akita Shinkansen)

From Nagoya
- Chubu Int'l Airport – Akita Airport (approx. 1hr 25min)

From Osaka
- Osaka Int'l Airport (Itami) – Akita Airport (approx. 1hr 20min)

From Sapporo
- New Chitose Airport – Akita Airport (approx. 55min)

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Faculty of International Resource Sciences

A stage for world-class learning and training resource specialists.

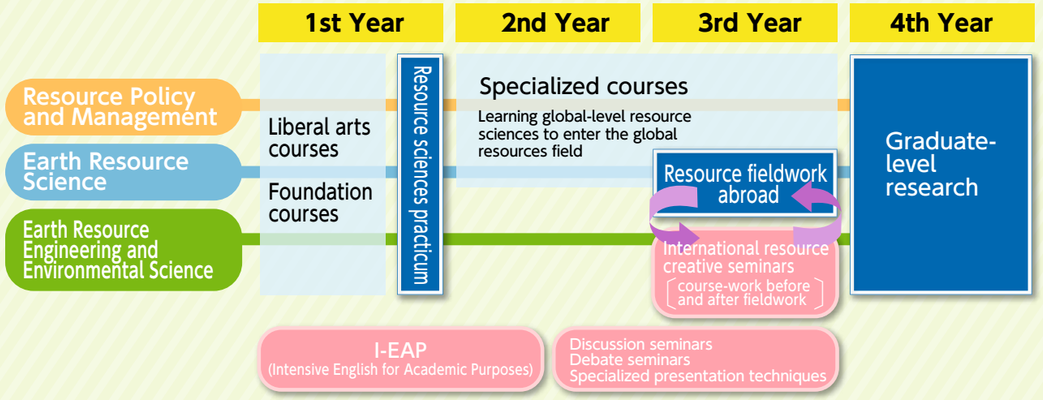
The Faculty of International Resource Sciences is the only faculty in Japan that approaches the study of natural resources, comprising science and technology studies from the fields of earth science and geotechnology, with a focus on economic minerals and petroleum exploration, development, and production. The Faculty also provides studies in humanities, with a focus on the politics and cultures of resource-producing nations. Students will learn from professors who are world-class researchers in their fields of expertise, which are related to natural resources and their importance in our daily life. Students will be able to apply their practical and theoretical knowledge at an international level, leveraging the strong ties between the faculty and other universities, companies, and research institutions both in Japan and abroad.

Department of International Resource Sciences

Developing practical abilities from an international perspective so graduates are ready to find solutions to global-scale resource and energy challenges.

Resource Policy and Management	Students study the cultures and circumstances of resource-producing regions and learn how to communicate with people from diverse cultural backgrounds and value systems. They deepen their knowledge of economics, policy, and law relating to resource development.
Earth Resource Science	This field of study is focused on the dynamics of earth history. Students study and research the formation and distribution systems of underground resources in the world such as economic minerals and petroleum resources through the analysis of 4.6 billion years of Earth History.
Earth Resource Engineering and Environmental Science	Students are given a comprehensive overview of resource development in the global environment in terms of resource exploration and development, recycling technologies and environmental conservation.

Distinctive Curricula



● Take specialized courses in English!

Specialized courses are provided in English. Intensive English for Academic Purposes (I-EAP) is a requirement for all students in their first and second years in order to build up a solid foundation in English, including listening, speaking, reading, writing, and other related communication skills.

● Participate in interdisciplinary courses integrating humanities, sciences, and technology!

Part of the specialized education component is a cross-disciplinary curriculum. Students gain a deeper grounding in the expertise and technologies needed for resource sciences. Understanding resources from the many and different perspectives provides a more enriched and nuanced view of complicated resource issues.

● On-site studies right from the first year of the program!

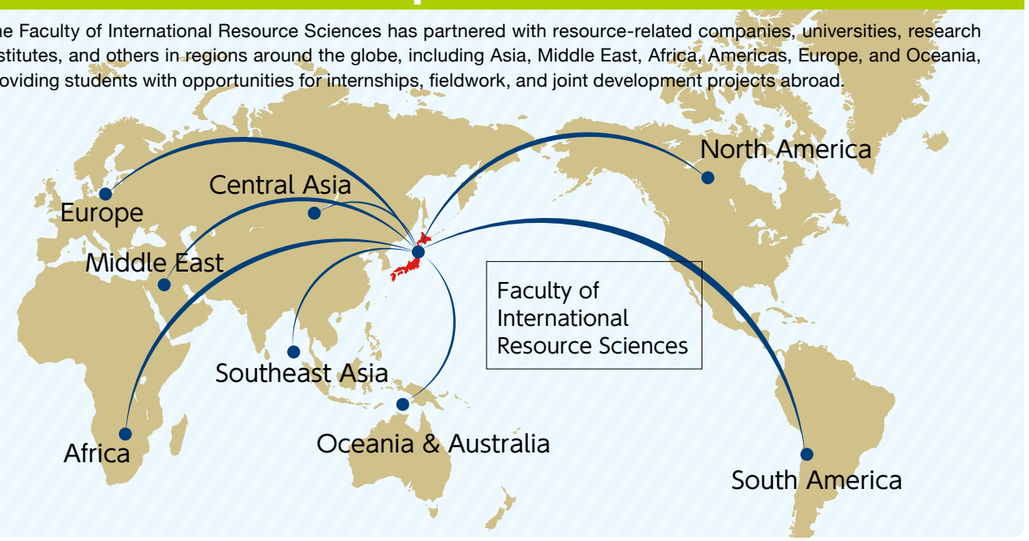
The Faculty of International Resource Sciences lays a solid emphasis on gaining practical abilities and expertise. In the first year, students participate in activities held at the various resource fields around Akita Prefecture, visiting resource-related experiential businesses and undertaking geologic surveys called “Practices in Resource Development.” The program provides experiential learning even at an early stage of the curriculum (first year), touching on geological phenomena and how they affect our lives.

● Learn while abroad!

In their third year, students gain exposure to applied resource sciences via resource fieldwork, such as practical training with mining companies or surveys with research institutions in resource-producing countries, usually conducted abroad. The direct experience of observing the goings on at resource sites around the world gives students a real and authentic taste of resource sciences by giving them a direct understanding of the issues and problems and leads them toward their graduate-level research.

Partnerships around the world

The Faculty of International Resource Sciences has partnered with resource-related companies, universities, research institutes, and others in regions around the globe, including Asia, Middle East, Africa, Americas, Europe, and Oceania, providing students with opportunities for internships, fieldwork, and joint development projects abroad.



Faculty of Education and Human Studies

Producing graduates with real-world know-how and lifelong learning skills

The Faculty of Education and Human Studies consists of two departments: the Department of School Education that focuses on teacher training and the Department of Regional Studies and Humanities that focuses on regional cooperation. The Department of School Education strives to train the teachers of tomorrow for active engagement in regional education through close partnerships with real-world classrooms. The Department of Regional Studies and Humanities aims to provide graduates with a multifaceted perspective in order to contribute to regional revitalization and to help in resolving regional issues.

Department of School Education

Training the teachers of tomorrow for active engagement in regional education

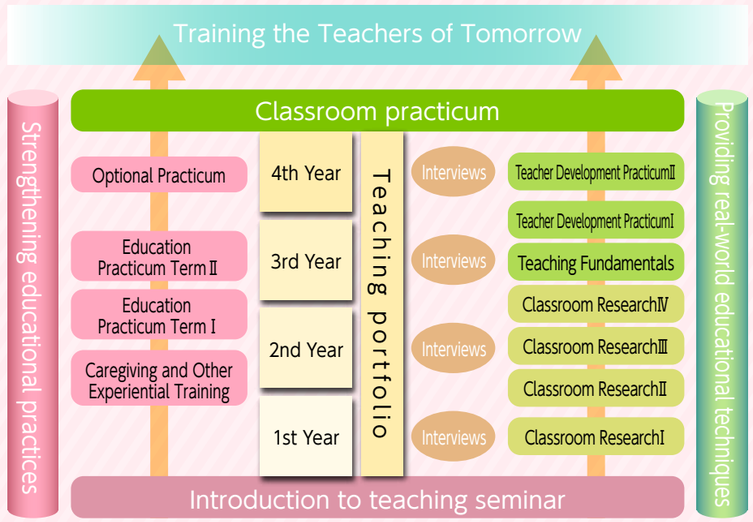
Compulsory School Teachers	The program trains teachers with the advanced practical skills needed to support top-class academics nationwide, with an emphasis on elementary and middle-school levels. Students will gain a deeper understanding of childhood development and physical and mental growth and gain competencies for teaching in both elementary schools and middle schools.
English Language Teachers	In addition to providing students with practical abilities in English education at elementary and middle-school levels, the program trains teachers in international communication skills so as to educate Akita's next generation and render them as globally competent people.
Science and Mathematics Teachers	Students in this program expand their systematic knowledge of science and mathematics. They learn how to make these subjects interesting for children and develop deep understanding.
Special Needs Education Teachers	The program trains teachers to be able to support the development and growth of students with special needs in an inclusive environment, as part of special-needs education at mainstream elementary and middle schools or special-needs schools.
Child Development and Education	The program offers training for teachers from nursery schools to elementary schools, thereby providing a thorough overview of human development and education at nursery schools, kindergarten, and elementary schools.

Department of Regional Studies and Humanities

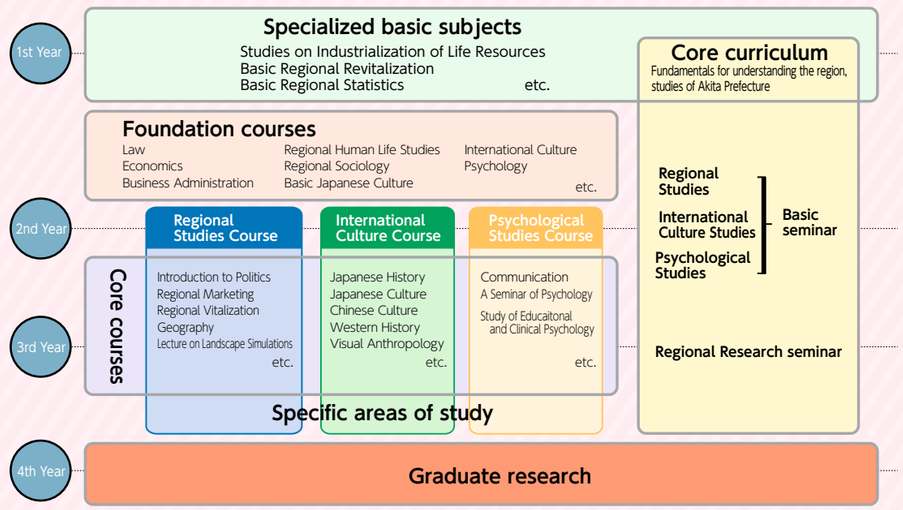
Training the leaders of tomorrow who can contribute to regional revitalization

Regional Studies	This course gives a diversified and comprehensive education in regional studies basically through not only law, politics, economics, business administration, and sociology but also geography, environmental studies, diet, health and nutrition, residential environment, and information science.
International Culture Studies	In this course, students learn about literature, history, philosophy, and the art and language of Asia (including Japanese), Europe, and America. The foreign language education program together with the overseas study program aims to provide students with the skills required to acquire a broad understanding of the international community, while also learning how to act “glocal” applying that knowledge to regional culture.
Psychological Studies	Students learn the required theory, practice, statistics, and interviewing skills for psychology from basic to advanced in a systematic manner. They also aim to obtain practical abilities and solve regional problems by using their skills and knowledge.

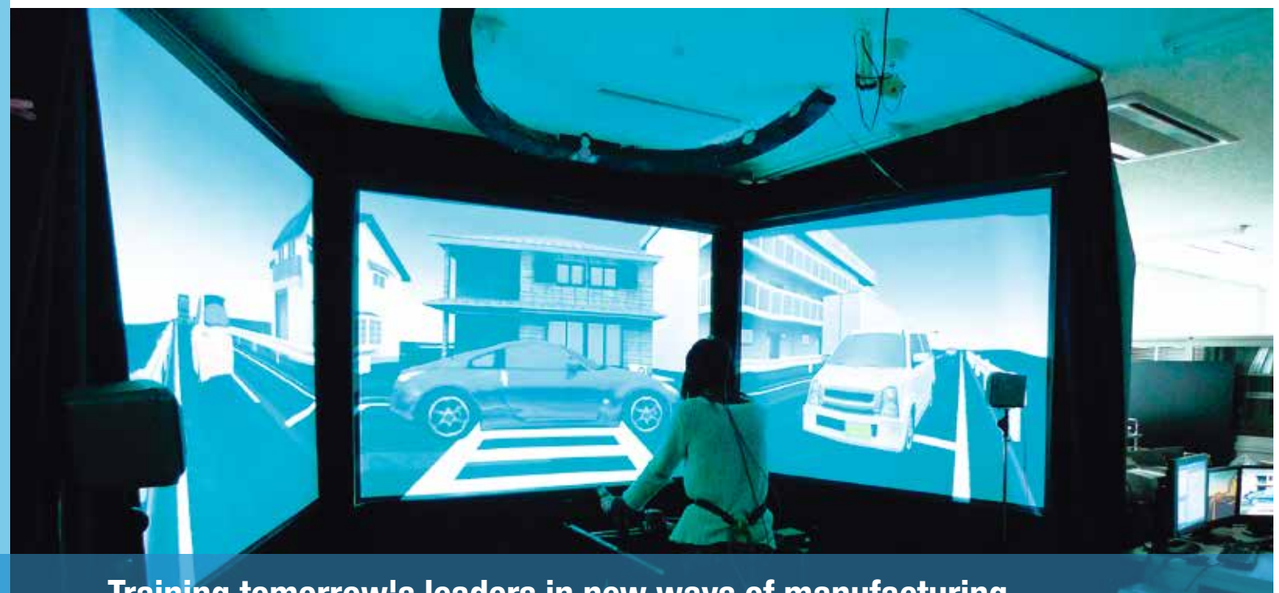
Courses of Study for the Department of School Education



Courses of Study for the Department of Regional Studies and Humanities



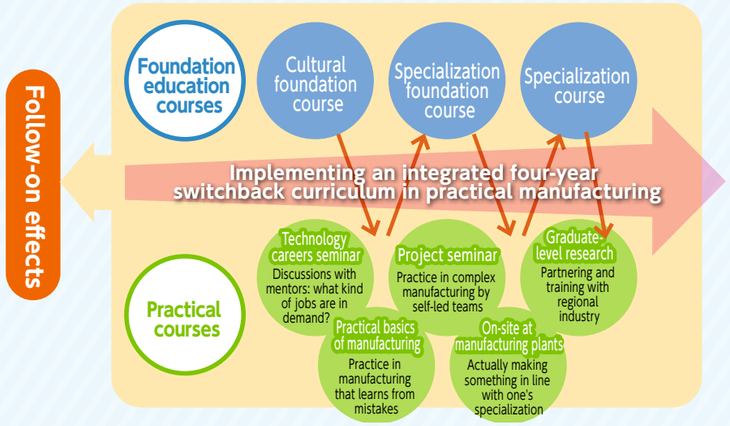
Faculty of Engineering Science



Training tomorrow's leaders in new ways of manufacturing backed by a solid foundation in the sciences

This faculty consists of four departments: the Department of Life Science, the Department of Materials Science, the Department of Mathematical Science and Electrical-Electronic-Computer Engineering, and the Department of Systems Design Engineering. These programs train advanced engineers and researchers in developing and researching world leading technology, such as technologies to help with the aging population; new materials research; technologies to clean the environment; rockets and other aerospace vehicles and structures; and research into regional disaster prevention, targeting disasters such as tsunami or snow damage.

What is switchback-style comprehensive education in manufacturing?



This project gradually advances the student's course of study by switching back and forth between fundamental and practical education starting from the first year of university. The goal of tightly integrating the fundamental and practical sides is to produce engineers who are capable of creative problem-solving and who can be an asset to any team, right from the beginning of their careers.

Department of Life Science

Training researchers and engineers who can tackle the diverse issues arising in life science fields

Life Science	To develop the ability to analyze various biological phenomena, students learn progressively from basic chemistry and biology to specialized biological fields including molecular biology, cell biology, biology of disease, protein biology, bioorganic chemistry, and supramolecular chemistry.

Department of Materials Science

Training researchers and engineers with a focus on state-of-the-art functional materials and chemical processes

Applied Chemistry	Students are exposed to a broad array of specialized fields in chemistry, from chemical engineering to bioprocessing, involving inorganic and organic materials, and energy.
Materials Science and Engineering	This program covers a broad range of subjects from fundamental science to engineering applications of materials, with a focus on solid-state physics, solid-state chemistry, metallurgy, and ceramic materials science.

Department of Mathematical Science and Electrical-Electronic-Computer Engineering

Training the future diverse leaders of mathematics, physics, electrical engineering, electronics, and computer science

Mathematical Science	Students will learn about mathematical science and computer science, with a focus on algebra, geometry, mathematical analysis, discrete mathematics, quantum mechanics, and electromagnetism.
Electrical and Electronic Engineering	This program focuses on power engineering, semiconductor device engineering, measurement electronics, and electrical machinery to teach about the fundamental technologies underlying electrical, electronic, computer, and telecommunications engineering.
Human-Centered Computing	Students will learn about advanced applied technologies that form the basis of computer science, with a focus on human-computer interfaces, welfare computer science, image analysis, IT, and networks.

Department of Systems Design Engineering

Training practical engineers to be able to initiate new kinds of manufacturing

Mechanical Engineering	This program teaches about mechanical engineering which serves as the basis for all industries, with areas of focus in material mechanics, fluid dynamics, thermodynamics, mechanical dynamics, control engineering, nanotechnology, medical engineering, biomechanics, and robotics.
Civil and Environmental Engineering	Students learn about techniques and technologies for building and maintaining a safe and comfortable regional environment, including structural mechanics, hydraulics, geotechnical engineering, urban planning, and construction materials.

Faculty of Medicine

Passing on knowledge and compassion to train tomorrow's medical professionals and researchers

School of Medicine

Training top-flight doctors with advanced knowledge and insight into human nature

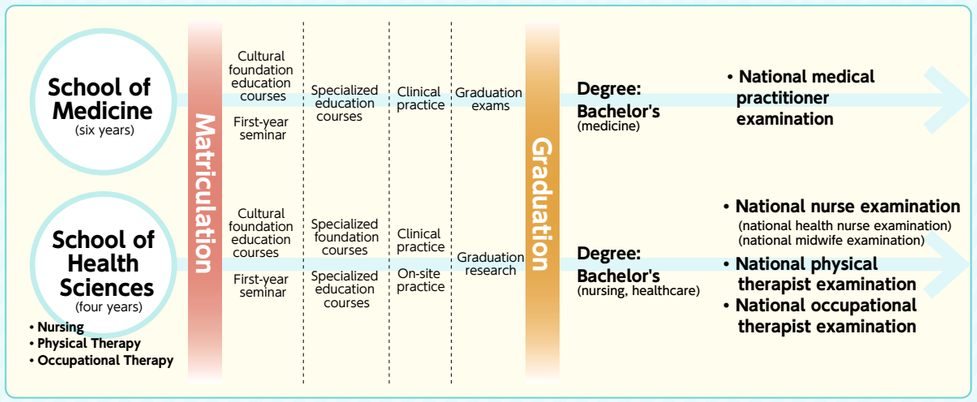
Medicine	The goal of the School is to develop graduates with the strong desire and capabilities needed to start clinical training or basic research, by providing a solid foundation in medicine and related sciences as well as medical technologies, offering rich cultural experiences, and inculcating high ethical standards. The School also aims to advance state-of-the-art medicine and medical care to contribute to regional welfare and healthcare, while also working to expand and develop education and research through the establishment of organic partnerships with bioscience education and other educational centers.

School of Health Sciences

Training medical technicians with compassion and ethics

Nursing	Students can select from the following three specializations: nursing, physical therapy, and occupational therapy. Graduates of the School of Health Sciences will be sensitive, cultured, and ethical medical technicians who can contribute to the national healthcare and welfare with their broad medical expertise and advanced technical knowledge and who can creatively help in advancing the status of medical education and research. In addition, as the basis of further education, the school aims to contribute to society through research, which will help develop knowledge and technologies that can be broadly applied to health sciences.
Physical Therapy	
Occupational Therapy	

Curriculum for the Faculty of Medicine



Graduate Schools

Graduate School of International Resource Sciences

The Graduate School of International Resource Sciences undertakes innovative research and education, with advanced learning and specialization related to Earth Resource Science and Earth Resource Engineering and Environmental Science. It is focused on bringing about “a recycling society.” Earth Sciences enable us to acquire a broad range of knowledge on resource development and environmental conservation. Our aim is to nurture talent amongst those who can act as world leaders.

Master’ s degree programs
Earth Resource Science Earth Resource Engineering and Environmental Science
Doctoral degree program
Resource Sciences

Graduate School of Education

The Graduate School of Education covers a range of teaching-related topics through a combination of theory and practice. We aim to train highly capable and enthusiastic teachers in the application and development of practical learning, and highly specialized school counselors who can contribute to local development through the support they give to teachers and schools.

Master’ s degree program	
Psychological Education	Psychological Education course
Professional degrees	
Teaching Practice	School Management course
	Curriculum and Teaching Development course
	Educational Development, Special Education course

Graduate School of Engineering Science

The Graduate School of Engineering Science was established to further regional development in collaboration with local industry and government. It nurtures highly-specialized engineers and researchers, global talent with local roots, challengers with an international perspective and who can further develop local industry in their own right, and talent which undertakes future innovation for the international society.

Master's degree programs	
Life Science	Life Science course
Materials Science	Applied Chemistry course Materials Science and Engineering course
Mathematical Science and Electrical-Electronic-Computer Engineering	Mathematical Science course Electrical and Electronic Engineering course Human-Centered Computing course
Systems Design Engineering	Mechanical Engineering course Civil and Environmental Engineering course
Cooperative Major in Life Cycle Design Engineering	
Doctoral degree programs	
Integrated Engineering Science	Field of Life Science Field of Materials Science Field of Mathematical Science and Electrical-Electronic-Computer Engineering Field of Systems Design Engineering

Graduate School of Medicine

The Graduate School of Medicine offers students the research capabilities and rich academic experience required to engage in their own independent research or work in advanced specialist disciplines.

Master's Degree Program		
Medical Science	Vital Functions Applied Functions	
Master's Degree Programs, Doctoral Degree Programs		
Health Sciences	Master's Degree	Nursing Science
		Rehabilitation Science
	Doctoral Degree	Lifelong Development and Health Care Support Nursing
		Science for Supporting Health and Wellness Development
Doctoral Degree Programs		
Medicine	Bioregulatory Medicine Oncoregulatory Medicine Organ Function-Oriented Medicine	
	Public Health and Environmental Medicine Cooperative Division	