

2018: Evolution Through 127 Years' History

Fostering a pioneer who will struggle with the problems on "Food". "Environment", "Health" and "Natural Resources and Energy". devoting his/her whole life

Guide for

Tokvo NODAI Graduate School

http://www.nodai.ac.jp/english/





Atsugi Campus

1737 Funako, Atsugi, Kanagawa, 243-0034 tel: 81-46-270-6225 [Section of Student and Academic Affairs]

Graduate School of Agriculture Agricultural Science **Animal Science Human and Animal-Plant Relationships**

tagava Campus

1-1-1 Sakuragaoka, Setagaya, Tokyo 156-8502 tel: 81-3-5477-2240 [Academic Affairs Section of Graduate School]

Graduate School of Agriculture Bioscience

Agricultural Chemistry Fermentation Science and Technology Nutritional Science and Food Safety Food and Nutritional Science Forest Science

Agricultural Engineering Landscape Architecture International Agricultural Development Agricultural Econmics Agribusiness Management **Ecological Symbiotic Science**

Hokkaido-Okhotsk

196 Yasaka, Abashiri, Hokkaido 099-2493 tel: 81-152-48-3813 [Section of Student and Academic Affairs]

Graduate School of Bioindustry Bioproduction Aquatic Bioscience Food and Cosmetic Science Business Science Bioindustry

Message from the President



TAKANO Katsumi, Ph.D. President

Tokyo University of Agriculture was founded in 1891 by Viscount Enomoto Takeaki, an international figure and scientist in modern Japan during the Meiji period (1868–1912), who held successive posts as Minister of Post and Telecommunications, Education, Foreign Affairs, and Agriculture. The university was originally established as the Department of Agriculture at the Ikueiko School, a subsidiary of the Tokugawa Ikuei-kai Foundation, and this year celebrates its 127th anniversary.

Before the year 1945, Japanese institutions that awarded doctorate degrees were generally limited to the former imperial universities. However, in 1934, alongside The University of Tokyo, Kyoto University, Kyushu University, and Hokkaido University, Tokyo University of Agriculture was recognized as an institution that offered the "Doctor of Agriculture" degree, and gained leader status in the field of agriculture.

Our university's Graduate School of Agriculture Master's program was set up in 1953 in accordance with the Japanese Rules for Degrees established in the same year. In 1959, after beginning to offer doctoral courses, the university increased the number of specialty courses, establishing the Graduate School of Bioindustry in line with the opening of the Hokkaido Okhotsk campus in 1993. The university has also established a Department of Nutritional Science and Food Safety in 2018.

Based on our educational principle "Return Man to the Farm," and our approach to teaching and research, "Practical Science," our graduate school teaches advanced expertise and techniques in specialized fields with foundations in agriculture or bioindustry, and fosters human resources with intellectual capacity, insight, practical ability, and imagination.

Going forward, our university will continue to challenge the evolution of agriculture, contributing to the world ethically for the happiness of humankind.



Utilize advanced research capabilities in diverse agricultural fields and support "IKIRU: living" for the future



UEHARA Mariko, Ph. D. Dean, Graduate School of Agriculture

The Graduate School of Agriculture, Tokyo University of Agriculture (Tokyo NO-DAI), was established in 1953, 62 years after the university was founded.

Agriculture continues to expand its presence in academia as a comprehensive science of the future, and involves biological resource science, life science, environmental science, health science, management, economics, and social science, and so on

The Graduate School initially conducted two major courses of agriculture and agricultural economics, but with the growing significance of studying agriculture in academia, we have now set up 15 majors, and reinforced our identity as a private graduate school of agriculture, the largest graduate school there is.

In educational research, we provide graduate students with rich insights and global perspectives in domestic and international agricultural fields based on the spirit of construction, "Return man to the farm," and the philosophy of educational research, "Practical Science". In each specialty, we aim to train human resources who will become active and independent in the field and who will be researchers, educators, and highly specialized technicians demonstrating well-balanced and cooperative temperament.

Tokyo NODAI supports "IKIRU: living." This graduate school will also contribute to various "IKIRU" projects aiming at world-class research in natural science and social science.

The Only Bioindustrial Research Center in Japan, Combining Production and Utilization of Biological Resources in the Okhotsk with Industrial Management

SHIOMOTO Akihiro, Ph. D. Dean, Graduate School of Bioindustry



The Okhotsk area is blessed with terrestrial and aquatic biological resources. Our graduate school, the only center for bioindustrial research and education in Japan, is located in such area. Our school has four major fields of study in the Master's program, Bioproduction, Aquatic Bioscience, Food and Cosmetic Science, and Business Science; in the Doctoral program we have a major in Bioindustry. The nature in Okhotsk area gives us abundant biological resources. This area includes Shiretoko Peninsular, which has been inscribed on the World Heritage List. This area is also a major food production base in Japan, as well as a sanctuary that offers an ecosystem of wild fauna and flora. You must study and know the mechanisms supporting the abundant biological production system for sustainable use. In addition, even if much production that advantages to abundance is given, you must use the production well for getting richness. By providing many people with the products, the richness of Okhotsk is returned to society.

Our graduate students learn and study the biological production system, the application to use and processing of products, and the management in the distribution of products deeply; the students also take multidisciplinary programs. We pursue the development of human resources who can contribute to the international and local communities through their broad knowledge and global perspective, based on the wide range of insights gained in the Okhotsk area.

Entrance Examination Data

Graduate School of Agriculture

		2018					
	Major	Applicants		Accepted			
		Tokyo NODAI	Others	Total	Tokyo NODAI	Others	Total
Master's / Grad	Agricultural Science	23	0	23	16	0	16
	Animal Science	15	0	15	15	0	15
	Human and Animal-Plant Relationships	20	2	22	16	2	18
	Bioscience	52	5	57	44	4	48
	Agricultural Chemistry	37	0	37	31	0	31
	Fermentation Science and Technology	39	4	43	30	3	33
	Nutritional Science and Food Safety	19	1	20	19	1	20
uat	Food and Nutritional Science	4	0	4	3	0	3
raduate Programs	Forest Science	9	0	9	7	0	7
roe	Agricultural Engineering	5	2	7	3	2	5
gran	Landscape Architecture	4	6	10	4	2	6
ns	International Agricultural Development	12	7	19	12	7	19
	Agricultural Economics	2	2	4	2	1	3
	Agribusiness Management	5	1	6	4	1	5
	Total	246	30	276	206	23	229
	Agricultural Science	7	0	7	5	0	5
	Animal Science	0	1	1	0	1	1
	Human and Animal-Plamt Relationships	1	0	1	1	0	1
	Bioscience	7	0	7	7	0	7
octoral Program	Agricultural Chemistry	5	0	5	5	0	5
ora.	Fermentation Science and Technology	4	0	4	4	0	4
_ _ _	Food and Nutritional Science	2	0	2	2	0	2
	Forest Science	1	0	1	1	0	1
ram	Agricultural Engineering	5	1	6	5	1	6
	Landscape Architecture	2	0	2	2	0	2
	International Agricultural Development	3	1	4	3	1	4
	Agricultural Economics	2	0	2	2	0	2
	Agribusiness Management	0	1	1	0	1	1
	Ecological Symbiotic Science	1	5	6	1	5	6
	Total	40	9	49	38	9	47
	Grand Total	286	39	325	244	32	276

Graduate School of Bioindustry

		2018					
	Major	Applicants			Accepted		
		Tokyo NODAI	Others	Total	Tokyo NODAI	Others	Total
	Bioproduction	6	1	7	4	1	5
	Aquatic Bioscience	4	0	4	2	0	2
Master's / Graduate Programs	Food and Cosmetic Science	14	2	16	12	2	14
	Business Science	1	3	4	1	2	3
	Total	25	6	31	19	5	24
Doctoral Program	Bioindustry	0	0	0	0	0	0
	Total	0	0	0	0	0	0
	Grand Total	25	6	31	19	5	24

The way to complete the study in Graduate School

Master's Program

1st Year

- ①Select an academic supervisor
- ②Decide a theme of master thesis, start experiments and investigation
- 3 Attend mainly lectures of specialized area

2nd Year

- ①Summarize experiments and investigation; write a thesis
- ②Present orally at academic conference, etc.
- 3 Present a thesis in a specialized department
- Take a final examination in the specialized department

Proceeding to the Doctoral Program

1st Year

- ①Select an academic supervisor
- ②Decide a research theme; start experiments and investigation

2nd Year

- (1) Continue experiments and investigation
- ②Write a book, an academic thesis or a research paper
- ③Present orally at academic conference, etc.
- 4 Send out a thesis to the academic conference

3rd Year

- ①Summarize experiments and investigation
- ②Write a thesis
- 3Submit a thesis
- 4) Present a thesis in the specialized department
- ⑤Take final examination in the specialized department

Approval by Committee of Graduate School's Department

Completion (Commencement)

Qualifications

Teacher's licenses available at the Graduate School

Major	Course	Junior High License	High School License	
Agricultural Science	Master's Program		Agriculture	
Animal Science	Master's Program		Agriculture	
Human and Animal-Plant Relationships	Master's Program		Agriculture	
Bioscience	Master's Program	Science	Science	
Agricultural Chemistry	Master's Program	Science	Science	
Fermentation Science and Technology	Master's Program	Science	Science	
Nutritional Science and Food Safety	Master's Program			
Food and Nutritional Science	Master's Program	Science	Science	
Forest Science	Master's Program		Agriculture	
Agricultural Engineering	Master's Program		Agriculture	
Landscape Architecture	Master's Program		Agriculture	
International Agricultural Development	Master's Program		Agriculture	
Agricultural Economics	Master's Program		Agriculture	
Agribusiness Management	Master's Program		Agriculture	
Bioproduction	Master's Program		Agriculture	
Aquatic Bioscience	Master's Program	Science	Science	
Food and Cosmetic Science	Master's Program	Science	Science	
Business Science	Master's Program	Social studies	Civics	

^{*} All of the following conditions must be satisfied to acquire a specialized license for junior high or high school.

^{1.} The primary license for junior high or high school for the relevant subject has been acquired.

At least 24 credits of the relevant major at the Graduate School have been acquired. (Some classes of the major and credits acquired at other majors are excluded.)

^{3.} The master's degree is certified.

Graduate School of Agriculture

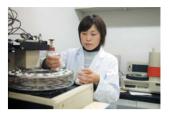
Atsugi Campus

Pursuing Environmentally-Friendly Crop Production for Food and Satisfaction

Agricultural science

This department seeks to establish technology for the stable production and distribution of safe, high-quality crops while taking steps for the preservation and protection of the environment. Our purpose is to nurture educators, researchers, high-level professional technologists, and other such human resources who possess outstanding thinking and problem-solving abilities, as well as a strong sense of mission, and who, working from a practical scientific perspective, wish to pursue education and research in specialized scholarly principles related to crops as well as the microorganisms and insects that are involved with them.

<Master's and Doctoral Programs>



Professors and research themes

AMAKI Wakanori Micropropagation system of horticultural crops. Environmenta regulation and physiology of growth and flowering of horiticultural crops

ISHIKAWA Tadashi Systematics and ecology of true bugs (Heterodera)

KAWAI Yoshitaka Studies on growth and physiology of fruit trees and production of high quality fruits KOJIMA Hiroaki Taxonomy and ecology of the phytophagous beetles and applied insect systematics

SHINOHARA Hirosuke Research for the systematics and identification of the microorganism that inhabits on plants and

biological control

NAGASHIMA Takavuki Insect technology

NISHIO Zenta Studies on the improvement of disease resistance and quality in crops NEGISHI Hiromitsu

Taxonomy, identification and detection of plant pathogens and diagnosis of plant diseases BABA Tadashi Studies on biological and environmental factors affecting postharvest life of fruits, vegetables and flowers

MINE Yoko Physiological studies on vegetables for growth control technology in production systems

MORITA Shigenori Biomass crop production and design of roots YOSHIMATSU Shin-ichi Taxonomy of Lepidoptera, mainly Noctuidae

Science of Animal Life and Production

Animal Science

<Master's and Doctoral Programs>



This department conducts education and research at various levels, with approaches from both the life sciences and production science fields, so as to cover the entire breadth of animal science, taking environmental protection into account, and spanning the range from ecologies to molecules. Our purpose is to foster human resources who have both the advanced knowledge and the technology required to pursue active careers and to respond always to the demands of the times in every animal science specialization as well as in interdisciplinary

Professors and research themes

NOMURA Koh Studies on useful genes of indigenous livestock and wild animals KUWAYAMA Takehito

Studies on the avian reproductive endocrinology

IWATA Hisataka Molecular mechanism underlying age-related abnormalities in germ cells SHIRASUNA Koumei Physiological and pathophysiological molecular mechanisms of pregnancy HANZAWA Kei Adaptation physiological genetics on domestic animals and poultry HIRANO Takashi

Studies on quantitative traits and defective phenotype of domestic animals KURAMOTO Takashi Gene-nutrient interaction in domestic and laboratory animals

TADA Kotaro Utilization of animal by products to food materials TORII Yasushi

Studies on treatment of disease using bacterial toxin molecular

KOBAYASHI Eiii Studies on animal genomics and breeding

Creating Meaningful Lives and Heart-warming Communities

Human and Animal-Plant Relationships

<Master's and Doctoral Programs>

This department pursues environmental agricultural science, which aims to harmonize the preservation and protection of the natural environment with people's lives, and welfare agriculture, which aims to enhance and improve the quality of people's lives as well as their physical, mental, and emotional health. Our purpose is to foster human resources who have expansive sensibilities and problem-solving abilities, who acquire and conduct research on advanced specialized knowledge, and who have the capability to disseminate and develop new interdisciplinary fields that fuse natural science and social science.



Professors and research themes

Systematic and conservational studies of Sino-Himalaya and Japanese plants

ASANO Fusavo Relationship between thanatology and landscape. Methods and evaluation of plant assisted therapy for

children

KOIKE Yasuhiko Studies on the people-plant relationship

Relationship between companion animal and ower

MATSUBAYASHI Hisashi Wildlife ecology, conservation and management in Japan and Borneo MIKAGE Masavuki Cultivation studies for producing high-quality medicinal herbs. MITSUI Yuki Conservation and effective utilization of wild plant resources

OGAWA Hiroshi Avian reproduction and conservation OHTA Mitsuaki Effects of horseback riding on human health

SASAKI Takeshi Molecular genetic approach toward a comprehensive understanding of population of wild animal

TSUCHIHASHI Yutaka Effects of gardening on QOL.

Setagaya Campus

Applying the Power of Advanced Bioscience to Various Fields

Bioscience

This department provides advanced education by promoting creative and original research that takes full advantage of leading-edge knowledge and technologies in life sciences, and cultivates the capability to present and discuss the research contents, thereby aiming at nurturing the human resources who share a rich sense of humanity and contribute to the development of research and industry, either domestic or overseas.

<Master's and Doctoral Programs>



Professors and research themes

KIDA Satoshi Studying molecular and cellular cognition

KONO Tomohiro Studies on mechanisms of genomic modification in germ line cells SAKATA Yoichi

ABA signaling in plants

NIIMURA Youichi Biochemistry and Molecular Biology of oxygen and its metabolism to Application YAJIMA Shunsuke Cellular functions based on structural and chemical biology

CHIBAZAKURA Taku Mechanism of mammalian cell proliferation control

KAWASAKI Shinii Isolation of novel organisms and identification of their useful metabolic systems OGAWA Hidehiko Mechanism of cell differentiation in mammalian cells

OBATA Yavoi Development of mammalian gametes

TAJI Teruaki Dissecting genetic control of natural variation in abiotic stress tolerance of plants

ASAI Kei Bacterial life and death and development of microbial cell factory MATSUMOTO Takashi Development of crop breeding based on next-generation genome technology

NAKAMURA Shin-ichi Analysis of heavy metal behavior in plants and its application to crop breeding

UMEZAWA Akihiro Stem Cell Biology

SAITO Hidekazu Study on follicle development, ovulation and quality of oocytes

TANAKA Yoshiaki Studies on regulatory mechanisms of insect growth and development using genome information

HATA Kenichiro Epigenetic analysis of mammalian reproductive system AKUTSU Hidenori Research for epigenetic reprogramming and pluriporent stem cells

MIYADO Kenii Studies on transition systems from gametes to zygotes

Chemistry and Biotechnology – Frontier Technology of Practical Science –

Agricultural Chemistry

<Master's and Doctoral Programs>



The purpose of research in this department is to employ an agricultural chemistry approach to resolving the issues involved in human life, working on the basis of practical scientific principle and from the perspectives of food, the environment, and health. Our purpose is to foster human resources who have the scientific analytical capability and logical development ability to address these research issues in a system for education and research that enables acquisition of the ability to pursue both fundamental and applied research.

Professors and research themes

IGIMI Shizunobu Research on lactic acid bacteria and their applications
UCHINO Masataka Studies on function and safety for food products
OHYAMA Takuji Nitrogen nutrition and metabolism of plants

TAKANO Katsumi Structure and function of protein, emzyme and polysaccharide in food
TSUJII Yoshimasa Research on mechanisms that affect flavor and palatability of food
NOGUCHI Tomohiro Effect of protein disulfide isomerase on characteristic of foods
HIGUCHI Kvoko Mineral nutrition of plants

MAEDA Yoshiyuki Ecophysiological studies on salt tolerance of plants
MATSUSHIMA Yoshitaka Organic synthesis of biologically active compounds

YAMAMOTO Yuji Studies on tumor suppresser mechanism and life style related disease

Developing the Future with the Power of Fermentation Science

Fermentation Science and Technology

<Master's and Doctoral Programs>



The principle of this department is to develop human resources who will contribute to the scientific exploration of Japan's own unique fermentation technologies and fermented foods and to the industries utilizing the microorganisms that will sustain the next generation. On that basis, our purpose is to foster human resources who are fully versed in basic scientific knowledge about the brewing industry and other industries using microorganisms, and who have the ability to perform research in microbiology, chemistry, and bioengineering. We also seek to foster researchers and advanced specialists who are thoroughly familiar with fermentation technology and who will support the development of industries using microorganisms.

Professors and research themes

KAINUMA Akiko
Biochemical and molecular biological studies on acetic acid fermentation
HOSAKA Masaru
Isolating yeast from natural environment and utilization for alcoholic beverages
KASHIWAGI Yutaka
Application of genome science on the fermentation and food production
SUZUKI Kenichiro
Studies on the diversity and taxonomy of microorganisms in fermentation
NUKADA Tomoo
Carbonhydrate chemistry

NUKADA Tomoo Carbonhydrate chemistry

FUJIMOTO Naoshi Microorganism-related problems in drinking water treatment

SHINDO Hitoshi Studies on fermentation mechanisms in sake mash

MAEHASHI Kenji Sensory and physiological function of fermented food

ISHIKAWA Morio Biochemical and taxonomic studies on food microorganisms

YAJIMA Arata Chemical biology of microorganisms
OHNISHI Akihiro Hydrogen fuel production by fermentation

NAKAYAMA Shunichi Metabolic engineering of fermentation microorganism

TANAKA Naoto Application of microbial resources

Establishing scientific evidences for safety and biofunction of food-related chemicals

Nutritional Science and Food Safety

The goal of this department is to define biofunction and toxicity/safety of food-related chemicals, thereby ultimately contributing to human health and welfare. The NFoS consists of seven core fields: i.e., chemical toxicology; analytical biotechnology; risk assessment science; food processing technology; bioactive substance science; physiology and metabolism; molecular bioregulation. This program is devoted to produce outstanding scientists with adequate knowledge and advanced research skills in the related fields.

<Master's Program>



Professors and research themes

UEHARA Mariko

ABE Naoki Studies on bioactive substances in food materials

AKUZAWA Savuri Texture and rheological properties of foods and their materials

IWATSUKI Ken Characterization of gastroinstestinal and taste stem cells using 3D cell culture systems

MIYAJIMA Katsuhiro Molecular pathology for the effects of environmental factors, including food toxicity, in endocrine and

NAKAE Dai The control of aging and carcinogenesis, and the safety assessment of (food-related) chemicals

NAKAYAMA Tsutomu Study on biomolecular interactions of food components OISHI Yu-Ichi Molecular biological study on food function in skin

TAKAHASHI Nobuyuki Molecular and physiological analysis of the metabolic information network in multiple organ and tissue TOMIZAWA Motohiro

Defining drug-binding surfaces through chemical biology approach

Effects of functional phytochemicals and minerals on bone and lipid metabolisms.

Featuring Food and the Nutrition Functionality leading to Health

Food and Nutritional Science

The purpose of this department is to foster human resources who will become high-level specialists capable of holding leadership positions in research and industrial development, who can conduct specialized research in such areas as the development of food products, on the assurance of their safety, and on the therapeutic use of diet, and who have abundant specialized knowledge, techniques, and research ability in the fields of food science and nutrition science.

<Master's and Doctoral Programs>



Professors and research themes

ABE Naoki Studies on bioorganic chemistry of bioactive substances in food materials AKUZAWA Savuri*

Texture and rheological properties of food and their materials

HATTORI Kazuo Study on food components that prevent lifestyle-related diseases and allergy

HOMMA Kazuhiro Nutrition of breast milk

IWATSUKI Ken* Study on how taste/gut cell function using newly designed 3-D culture system

KAWANO Yukari Sports nutrition for athletes, Public health nutrition, Studies on physical activity and dietary intakes for

MATSUZAKI Hiroshi Nutritional physiological studies on regulation of mineral metabolism and dietary minerals intake MIYAJIMA Katsuhiro*

Molecular pathology for the effects of environmental factors, including food toxicity, in endocrine and metabolic disorders

NAKAE Dai* The control of aging and carcingenesis, and, the safety assessment of (food-related) chemicals

OISHI Yuichi® Studies on effects of nutritional conditions and hormones on skin.

SHIMIZU Makoto Studies on intestinal functions - transport, detoxification, inflammation, immunity- and their modulation

by food substances

SUZUNO Hiroko Effect of various cooking conditions on the physical properties and composition of food

TAKAHASHI Nobuyuki* Molecular and physiological analysis of the metabolic information network TANAKA Etsuro The relationship between microcirculation and nutrition in human TOMIZAWA Motohiro* Defining ligand binding surfaces through chemical biology approach

UEHARA Mariko Effects of functional phytochemicals and minerals on bone and lipid metabolisms

HIDA Azumi Nutritional epidemiology on athletes, health promotion and prevention of lifestyle-related diseases

KATSUMATA Shinichi Studies on the relationships between dietary mineral intake and lifestyle diseases

* Professons in charge of Doctoral Program only

Research/Education Connecting Forest, Tree, wood and humankind

Forest Science





The purpose of this department is to develop human resources who possess advanced knowledge and understanding of forests, forestry, forest products industries, and agricultural mountain villages on scales ranging from the local to the global, who have comprehensive, advanced research and management capabilities with regard to the function of forests to produce resources and to protect the environment, and who will be able to contribute to the protection of forests, the sophisticated utilization of their multifaceted functionality, the preservation of biodiversity, and the formation of a recycling society.

Professors and research themes

MIYABAYASHI Shigeyuki The Utilization of forest and development of mountain village

IMATOMI Yuki Forest engineering UEHARA Iwao Silviculture, Forest therapy

EGLICHI Fumio Forest product chemistry, Mushroom science

SUGAWARA Izumi

OHBAYASHI Hirova Wood Science and technology

SATO Takayoshi Forest management TAKYU Masaaki Forest ecology

YAGUCHI Yukio Forest pathology, forest microbial eco-logy

FUKUNAGA Kenii Revegetation technology SEKIOKA Haruo Forest policy, Forest education

YAMAZAKI Koji Ecology and management of large wild mammals

Environment Engineering Approach toward Agriculture/Rural Villages/Food Problems

Agricultural Engineering

<Master's and Doctoral Programs>



The purpose of this department is to develop human resources who take as their principles the effective use of local resources with consideration for the environment and the construction of a recycling society. They will seek to realize these principles technologically in concrete form by engaging in practical education and research in the principal scholarly areas of irrigation, drainage, and reclamation engineering and of agricultural machinery, and they will have the ability to achieve a balance between scholarly research and advanced technology development and problem-solving in the field

Professors and research themes

MIHARA Machito Rehabilitation and conservation of soil and water environment and sustainable use of regional resources NAKAMURA Takahiko

Materal cycle and mass transfer around rural areas

FUJIKAWA Tomonori Techniques and policies for farm land conservation in rural and urban areas SHIMADA Sawahiko

Environmental monitoring using Remote Sensing data and GIS WATANABE Fumio Effective water usage methods in arid and semi-arid areas SUZUKI Shinii The impact of climate change on hydrothermal region of grable land

KOYANAGAWA Masashi Reliability of concrete pavement

KAWANA Futoshi Non-destructive testing method for agricultural facilities TAKEUCHI Yasushi Maintenance and rehabilitation method for agricultural facilities

OKAZAWA Hiromu Developing environmental models of coupled hydrological and biochemical (N, P) cycling at catchment-scale HONDA Naomasa

Prediction and countermeasure of natural disaster based on numerical simulation

TAJIMA Kiyoshi Development of tillage system for farm work robot

SASAKI Yutaka System development for agricultural informatics and bio-robotics

SAKAGUCHI Eiichiro Studies on rice processing technology

MURAMATSU Yoshiki Transport phenomenon in processing and transportation of agricultural products

Consider from "稍 jutsu (Technique)" of Analysis to "芸 gei (Art)" of Integration

Landscape Architecture

The purpose of this department is to develop human resources to improve the planning and design concepts and technological capabilities needed to realize comfortable environments ranging from cities to natural areas, in addition to gardens, parks, and other such basic landscaped spaces. They will advance the knowledge and practical capabilities related to biological resources, including plants that are components of the environment, scenic landscape planning, and construction engineering, and they will contribute to the formation of prosperous local communities and social capital by means of their educational and research activities.

<Master's and Doctoral Programs>



Professors and research themes

KANEKO Tadakazu Urban Landscape Planning and Park Management SUZUKI Kojiro Life history and appllication of Landscape botany.

SUZUKI Makoto History of Landscape Design

TAKAHASHI Shinpei Growth Characteristic and appllication of Lawn and Groundcover plants.

HATTORI Tsutomu The composition and meaning of japanese garden.

MIZUNIWA Chizuko Interaction of environment and plants

YAMASAKI Motoya 3D ROAD Landscape Architecture using Geographic Information system and Virtual Reality

HAMANO Chikayasu Distribution and regional environment factor of trees

International Development Cooperation to Farmers/Agriculture/Environment

International Agricultural Development

<Master's and Doctoral Programs>



The purpose of this department is to foster high-level specialists and researchers who are capable of making contributions in such fields as agricultural development and international cooperation as well as to the growth of the global community. They will do this by means of work in education and research that is founded on practical, international perspectives as well as in comprehensive approaches that integrate scholarly disciplines in agricultural science across the range from natural sciences to social sciences.

Professors and research themes

TAKANE Tsutomu Agricultural and Rural Development in Africa
SHIWACHI Hironobu Study on Morphology and Physiology in Tropical Crops
SUGIHARA Tamae Rural Development and Traditional Customs
NATSUAKI Keiko, T. Identification and Diversity Analysis of Plant Pathogens

ADATI Tarô Integrated Pest Management
IRIE Kenji Genetic diversity of tropical crops

TANAKA Nobuyuki Rehabilitation of degraded lands in tropics, restoration of natural forest ecosystems, and climate change

impact on vegetation

GENMA Hiroshi Study on postharvest technology of tropical fruits

YAMADA Ryuichi Farm management in Asia

 NAKANISHI Yasuhiro
 Nutrients Dynamic and Impact in Tropical Environment

 KOSHIO Kaihei
 Chemical Control of Tropical Horticultural Crops

 TOMOOKA Norihiko
 Diversity and Use of the Asian Vigna Genetic Resources

 ISHIKAWA Masayuki
 Studies on the Mechanisms of Plant Virus Multiplication

MAOKA Tetsuo Studies on Identification, Diagnosis and Characterization of Plant Virus Diseases

ITAGAKI Keishiro Agricultural and Rural Development in Asia

Approach to World Agriculture/Food/Environment/Rural Problems

Agricultural Economics

<Master's and Doctoral Programs>



This department is to foster the development of researchers and high-level professionals who possess multi-faceted knowledge in economics, business administration, sociology, geography, history, and other social sciences in the fields of agriculture, food, and the environment, and who have the analytical capability and logical reasoning ability to respond precisely to changing social and economic circumstances.

Professors and research themes

HARA Juri Sociological Study on Rural Life and Gender

HOTTA Kazuhiko Study on Rural Revitalization by the Agriculture, Commerce and Industry Network

KAMIOKA Miho Economic Study on Food Consumption Structure and Food and Nutrition Education (Shokuiku)

KANADA Norikazu Econometric Study on Agricultural Trade

KITADA Kikuo Study on Business Administration and Information of Farm Management

OURA Yuji Study on Food Marketing and Consumer Behavior

SUGANUMA Keisuke Study on the Problems of Agriculture and Rural Development in Asia.

TAKAYANAGI Nagatada Economic Geographical Study on Global Food Systems

TANAKA Hiroto Study on Environmental Valuation

TATEIWA Toshikazu Study on World Agriculture and Agricultural Pr

TATEIWA Toshikazu Study on World Agriculture and Agricultural Problems
TERAUCHI Mitsuhiro Econometric study on food demand and supply.

TOMODA Kivohiko Historical Study on Agriculture. Food and Environment

YOSHINO Keiko Study on Resource management and Local Community in Japan and Third World

Pioneers in Agribusiness Management

Agribusiness Management

The purpose of this department is to develop human resources to carry on practical education and research related to management organizations (agribusiness) engaged in the production, processing, physical distribution, and other such aspects of food, agriculture, and the environment. They will contribute to the sustained development of agribusiness in Japan and other countries as professionals who have advanced specialized knowledge, who have cultivated international accomplishments, and who possess an ethical sense, linguistic ability, and strength of character.

<Master's and Doctoral Programs>



Professors and research themes

NIBE Akio Modeling of Food Production Using System Dynamics

TSUCHIDA Shiro Study on Biobusiness Administration

HATANAKA Katsumori Study on the Database and Analysis of Biobusiness Resource Information

INAIZUMI Hiroki Study on the Agricultural Knowledge and Information Systems in the Community of Practice

SHIBUYA Yukio Corporate management and Marketing Strategy
UCHIYAMA Tomohiro Study on the Farm Business management
SUZUMURA Gentaro Research on the Competency on Biobusiness

Research to Realize the Ecological Symbiotic Society

Ecological Symbiotic Science < Doctoral Program>



This department provides a Doctoral Program (Second Stage) to promote research to maintain the balanced, sustained symbiotic relationships that exist among all bioorganisms in the global environment, including the human race. Our purpose is to foster human resources with advanced research capabilities and comprehensive perspectives that will enable them to conduct research in integrated science.

Professors and research themes

ITAGAKI Keishiro Agricultural development and the possibility of increased export for food and agricultural products in Asia KASHIMURA Osamu Exercise physiology, high altitude medicine, circulation, functional food factors in sports

KAMIOKA Hiroharu Systematic review on complementary and alternative medicine, research methodology of interventional and observational studies

TAKEDA Kouji Studies on scientific educational materials utilizing the characteristics of agricultural sciences

TANAKA Naoto Application of microbial resources
HAMANO Chikayasu Distribution and regional environment factor of trees

FURUSHO Tadasu Study in the functional foods / Study in the metabolism on Vitamin A / Study in the food and nutrition education / promotion (shokuiku)

KAMEYAMA Yoshiaki Ecology and evolution of plant species

KUMAZAWA Eriko Study on the Modernization of Education in Japan / The history of Establishment of the Agricultural

Graduate School of Bioindustry

Hokkaido-Okhotsk Campus

Seeking Greater Depth and Sophistication in Approaches to Plant and Animal Resources Production

Bioproduction

This department engages in advanced research and education related to resource development, environmental symbiosis, and other such matters related to bioproduction and the protection of biodiversity in agricultural science, forest science, and animal science to which the category of natural ecology is added. Our purpose is to develop human resources who will work based on those principles to take up a variety issues from the perspectives of resource utilization and development, ecology, biotechnology, and related fields, and who are capable of fulfilling highly professional leadership roles in those areas.

<Master's Program>



Professors and research themes

OGURI Suguru Study on the sugar chain-protein interactions in plants

YOSHIDA Hozumi The development of the integrated crop production management technology on the cold latitudes area

KAMEYAMA Yuichi Developmental engineering in mammalian sperm and egg

SOUMA Kousaku A nutritional study of Yeso sika deer (Cervus nippon yesoensis) under farming NAKAMURA Takatoshi Ecophysiology of wetland plants

HIRAYAMA Hiroki Molecular biological study on improvement and increased production of livestock

TERAZAWA Kazuhiko Ecology and management of cool-temperate and boreal forests

ITOH Hirotake Study on the cultivation technic based on the root system in field crops
NAKAMARU M. Yasuo Biogeochemistry of agricultural soils for sustainable land management

Advancing Science through the Riches of Okhotsk Sea

Aquatic Bioscience





The objective of this department is to foster human resources capable of actual, practical action to protect the marine ecosystem and environment that enable sustainable supplies of aquatic resources in the Sea of Okhotsk and marginal seas and lagoons. To that end, our purpose is to foster human resources with the capability to fulfill highly professional leadership roles and with knowledge and techniques that are focused on sea areas subject to freezing. As these areas are not covered by conventional fisheries science, they call for backing from Okhotsk marine biology and environmental studies of the Okhotsk hydrosphere.

Professors and research themes

WATANABE Kenichi

MOY do we prevent the fish diseases with reliable and secure methods?

MATSUBARA Hajime

KOBAYASHI Mari

KOBAYASHI Mari

Investigation on ecology of marine mammals and it's conservation management

Application of exult timograp sections to fisheries management.

CHIBA Susumu Application of evolutionary ecology to fisheries management SEGAWA Susumu Marine ecosystem and cephalopod biology

NISHINO Yasuto Marine ecosystems of lower trophic levels in the ice-covered sea and seagrass bed

NAKAGAWA Yoshizumi Zooplankton ecology in the ice-covered sea

Mastering Cutting-Edge Science for Food and Cosmetic Applications

Food and Cosmetic Science

<Master's Program>

This department conducts research on the manufacture and quality control of food and cosmetic products from the perspective of chemistry, and also pursues research on the functions of food and cosmetic products using the methods of molecular biology and chemistry. Our purpose in these activities is to develop human resources with the advanced research capabilities to perform actively in fields related to diet and health promotion, ranging from resource utilization and product development to preservation, safety management, and functional analysis.



Professors and research themes

SATO Hiroaki

NIWA Koichi Cellular physiology on gastrointestinal tract and skin with cultured cells

Objective evaluation of the taste using the sensor

TOEDA Kazuki Development of cometics and functional foods using agricultural products in Hokkaido
YAMAZAKI Masao Development of browing control technique on food processing to improve the value of foods

SAGANE Yoshimasa Study on structure and function of food-related proteins MYODA Takao Analytical chemistry of plants and food aroma

Analysis of interactions between aroma compounds and taste

MINAMI Kazuhiro Study on effects of functional foods on human blood vessel

ENDO Akihito Ecology of fructophilic lactic acid bacteria, Prebiotic impacts in oligosaccharides fermentation

Revitalization of Biological Resources Industry Management within the Global Economy

Business Science



<Master's Program>

The purpose of this department is to foster researcher of business administration, highly skilled experts, management consultants, and the other human resources with a high level of specialization. This major offers programs in the theory and leading-edge methods of management and economics that support the development of local bioindustries. These will be people who engage in research based on practical science that contributes to sustainable development and problem-solving for backbone enterprises in local bioindustries that are achieving diverse growth and utilizing local resources by means of social scientific disciplines.

Professors and research themes

KIKUCHI Tetsuo Distribution System of Agricultural Product and Market Analysis

KUROTAKI Hidehisa Study on Reproduction Structure of Japanese Agriculture and Forestry

MATSUMURA Kanichiro Agricultural meteorology
Unmanned aerial vehicle, UAV for agriculture and drifting ice

SHIOMOTO Akihiro The influence of fluctuation of aquatic environment on the fishery industry
SHIRAI Shigeru Fisheries biology of fishes and shellfishes for conservation of resources

A Comprehensive Exploration of the Production, Processing and Distribution of Biological Resources

Bioindustry

This department provides a Doctoral Program (Second Stage) that integrates the four first-stage doctoral programs of the Department of Bioproduction, the Department of Aquatic Bioscience, the Department of Food and Cosmetic Science, and the Department of Business Science in a professional educational framework combining humanistic and scientific studies. The purpose of this department is to foster leaders who have acquired practical scholarly theory and skills in bioindustry from a comprehensive perspective while also delving deeply into a single aspect, whether it be ecosystem protection, agricultural and marine products, processing and development, or management and distribution.

*Professors of Master's Program also teach Doctoral Program

<Doctoral Program>



Takva NODAI Graduata Schools

Tokyo NODAI Graduate Schools								
Graduate School	Department	Program	Capacity	Campus				
	Agricultural Science Animal Science Human and Animal- Plant Relationships	Master Doctoral Master Doctoral Master Doctoral	14 5 12 4 10 3	Atsugi				
	Bioscience	Master Doctoral	30 6					
	Agricultural Chemistry	Master Doctoral	25 5					
	Fermentation Science and Technology	Master Doctoral	12 2					
A	Nutritional Science and Food Safety	Master	20					
gricu	Food and Nutritional Science	Master Doctoral	12 2					
Agriculture	Forest Science	Master Doctoral	12 4	Seta				
0	Agricultural Engineering	Master Doctoral	8 2	Setagaya				
	Landscape Architecture	Master Doctoral	12 3					
	International Agricultural Development	Master Doctoral	12					
	Agricultural Economics	Master Doctoral	10 5					
	Agribusiness Management	Master Doctoral	12 5					
	Ecological Symbiotic Science	Doctoral	5					
	Bioproduction Bioindustry	Master Doctoral	7 %8	Į Į				
Bioindust	Aquatic Bioscience Bioindustry	Master Doctoral	5 %8	Hokkaido				
dusti	Food and Cosmetic Science Bioindustry	Master Doctoral	5 %8) Okh				

Within Doctoral Programs the maximum number of students who can enroll for a major is the figure listed as total numbers.

Tokyo University of Agriculture Educational Corporation
Tokyo University of Agriculture Enducational Corporation
Tokyo University of Agriculture First High School
Tokyo University of Agriculture First High School
Tokyo University of Agriculture Second High School
Tokyo University of Agriculture First High School
Tokyo University of Agriculture First Junior High School
Tokyo University of Agriculture First Junior High School
Tokyo University of Agriculture First High School
Tokyo University of Agriculture Pilans to establish an elementary school in April 2019.

The approval of the establishment is being applied now.

Master

Doctoral

Business Science

Bioindustry

