国立大学法人
長岡技術科学大学
Nagaoka University of Technology

2026

OUTLINE OF MASTER'S PROGRAM and 5-YEAR INTEGRATED DOCTORAL PROGRAM

≪Major Fields & Research Areas≫

IN THE GRADUATE SCHOOL OF ENGINEERING

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1. Graduate School of Engineering
Outline of Major Fields and Research Areas

≪Master's Program≫

1. Mechanical Engineering

Mechanical engineering covers fields concerning development, design, production, inspection, and maintenance of various kinds of equipment, or machines, which enable us to make human-life and human-work convenient. Its main subjects are materials and strength, motion and control, design and production, and energy and environment. Mechanical engineering treats with equipment in various sizes from a large oil tanker to an atomic force microscope. Computers play very important roles in all those fields. A student in this major course studies the forefront of each subject and technology together with management engineering subjects and cultivates one's ability to find and solve engineering problems through seminars and researches for the master's thesis. This major course aims to train a leading engineer with practical competence and creativity.

Content of Courses

This major has five courses, Information and Control Engineering Course, Design and Production Engineering Course, Fluids and Thermal Engineering Course, Materials Science and Engineering Course, and Innovative Interdisciplinary Mechanical Engineering Course.

Research Areas

Information and Control Engineering

This research area covers control engineering, measurement engineering and computer application engineering. Control engineering deals with control theory, and visual feedback control of robots. Measuring engineering deals with instrumentation for production, geometrical product specifications and their verification, development of industrial standard measures, precision measurement, nanometrology and image data handling/processing. Computer application engineering treats computational mechanics for stress analysis of electrical packaging, paper die cutting simulation, simulation of flexible media (papers, bank notes, tickets) handling, and so on.

Design and Production Engineering

This research area covers machine elements, mechanical engineering design, precision engineering, production processes, dynamics of machinery, and tribology. Major research themes are dynamics of rolling bearings and gears, dynamics based system safety design focusing on construction and materials handling machines, ultrasonic cutting / grinding of difficult-to-machine materials and visualization of machining phenomenon, crystal growth and ultra precision processing of optoelectronics single crystals, speech recognition and synthesis in noisy environments, and so on.

Fluids and Thermal Engineering

This research area deals principally with fluids and/or heat that concern energy and environment, on which human life is essentially dependent. Engineering fields covered by this area include Fluids Engineering (Incompressible or Compressible Fluid Dynamics, Computational Fluid Dynamics, and Non-Newtonian Fluid Flow), Energy and Heat Transfer, Combustion Engineering, and Global/local Environmental Protection.

Research topics now running are: Flow-Induced Vibration, Optical-Rheometry, Heat Exchanger, Flame Instability, Chaos in Combustion, Ignition of Hydrogen, Smoldering or Flaming of Solid Combustible, Renewable Thermal Energy of Snow and Ground, Physical Properties of Snow and Ice, and so on.

Materials Science and Engineering

The concept is to apply basic understandings on the relationship between microscopic structure/texture and characteristics/functions to design and fabrication of new materials and integrated materials systems. The research areas are: materials analysis, measurement of physical and chemical properties; material design/production; structural/safety analysis, and materials recycles. The following materials are covered: metallic materials, ceramics, composites, functional materials, intermetallic compounds, non-ferrous alloys, heat resisting materials, environmental coatings and ultra-light materials.

Innovative Interdisciplinary Mechanical Engineering

This research area widely covers mechanical engineering fields and its research activities such as energy system, non-traditional machining, micro/nano processing, bio-integrated system and advanced sensing toward sustainable future society are interdisciplinary. Such state-of-art technologies demand multidisciplinary knowledge and thus, research and education in this course expand over not only traditional branches of mechanical engineering, but also other disciplines. Collaborative researches and activities with world's leading companies and other institutes are highly encouraged and being carried out. The students can learn wide and substantial expertise and useful skills in mechanical engineering, as well as fundamental knowledge of interdisciplinary areas that meets emerging needs.

2. Electrical, Electronics and Information Engineering

This major, on the basis of the fundamental knowledge learned during the corresponding undergraduate course, conducts interdisciplinary and practice-oriented education at the graduate school level through systematized cooperation with other related disciplines and aims to train leading high-level engineers who can conduct research and development of practice-oriented electrical, electronics and information engineering fields. The objectives of this major are directed not only toward the research and development for the functionally organized following three courses but also to the education to incubate the pioneering engineers who are rich in vitality, originality and service, i.e. **VOS** in abbreviation.

Research Areas

Electric Energy and Control Engineering

Activity in this research area focuses on the following topics: new energy systems, plasma applications, pulsed-power technology, electric power systems, energy conversion and control, motion control and robotics, industrial and transportation systems, home appliances, and new materials for energy systems. Research and development for enhancing and improving functionality and performance of those systems are demanded by human society in view of reducing the global environmental load.

The energy and electric power supply systems, the hubs of the transformation and distribution of energy, are of immense importance to our sophisticated modern society. This course has advanced its performance due to the development of new material parts for electronic devices. In fact the demands of society on the electric and electronic systems are becoming increasingly sophisticated, leading to multiplying components and a deepening relation with other disciplines. In order to coincide with such demands of modern industrial society, the important themes are how to develop electric and energy systems anchoring an integrated relation with the other disciplines and also how to develop the electronic devices which may be involved in such an electric power system. The continuous target of the energy systems research field is to study and develop energy and related systems in order to support the dynamism of modern and future society.

In this course, fundamental scholastic ability and practice-minded knowledge are cultivated through education of the corresponding undergraduate course. Also, due to the close interrelationship with other two courses in this major, knowledge of system application is to be deepened.

Electronic Devices and Light Wave Control Engineering

This research area consists of solid electronic engineering, semi-conducting material engineering, energy transforming element engineering and opto-electronics.

Electronic devices which utilize the basic properties of semi-conductors, magnetic substances, super-

conductors and dielectric substances are studied with regard to their properties and functions, including production technology, with the objective of improving the properties of electronic devices and developing new electronic and opto-electronic devices with new technology.

Electronic engineering plays an important role in modern society, contributing to wide areas including domestic electronic appliances, electronic computers, control devices and electronic devices for educational and medical use. It is to be said that electronic engineering has become indispensable to every aspect of science and technology. Therefore, it is no exaggeration to say that the future development of science and technology depends on the close interrelation of electronic engineering to all other disciplines. Because of this reasoning, great expectations are held of leading engineers to partake in the development and production of electronic devices to support future development.

In addition fundamental scholastic ability and practice-minded knowledge are cultivated through education of the corresponding undergraduate course. Furthermore, due to the close interrelationship with other two courses in this major, knowledge of system application is to be deepened.

Information, Telecommunication and Control Systems

This research area is concerned with studying the information and telecommunication systems which are considered to be worthwhile in the present global age supported by the diverging evolution of the information technology.

Activity in this research area is focused on the following disciplines: electronic computer engineering, human information processing, mathematical informatics, digital signal processing, human interface and sound communication systems, multi-media information processing, electric circuit theory, knowledge-based information processing, and natural language processing, and cybernetics. These research fields are closely related to the previously mentioned two courses because the information technology may play a crucial role as an infra-technology in the modern industrial society which requires global human communication systems as is well appreciated nowadays. Performance-improving developments and new proposals in these areas are among the main priorities determining the research area activity.

In similar to the above-mentioned two courses, fundamental scholastic ability and practice-minded knowledge are cultivated through education of the corresponding undergraduate course. In addition, due to the close interrelationship with other two courses in this major, knowledge of system application is to be deepened.

3. Information and Management Systems Engineering

It is clear that Information & Communication Technology(ICT) is transforming not only ways of doing business but also the basis of society as we know it and that it will increasingly be the key to the creation of successful and competitive businesses in the future.

However, the successful transition to the new information society will require not only the development of groundbreaking new information technology itself but also the expertise to take full advantage of the strategic potential of information technology. Although leading the world in many areas of electronics, data processing and communication technology, Japan lags behind in the application of ICT to creation of innovative new management and social systems. This situation is undoubtedly due in large part to a shortage of highly-skilled manpower with sufficient mastery of the new technology to develop new applications for the design, implementation and control of management information systems.

The objective of this Department is to study information and management systems and to train specialists with the expertise knowledge and skills necessary to develop the vast potential of information and management technology and to do so with an appreciation of socioeconomic environment of the real world. Such expertise is necessary to imagine totally new and different social structures and to develop innovative ways of organizing and managing businesses.

Research Areas

Applied Informatics

The Applied Informatics Group conducts education and research to analyze humans from the viewpoint of informatics and to integrate the analytical results for developing artificial systems in the manner of systems engineering. For the purpose we study complicated human physiology and psychology as well as behaviors to solve those principles, then utilize the discoveries to develop new systems, e.g. for controlling the human situation to the appropriate state and for assisting humans on daily tasks.

Management System

In order to manage companies or organizations, corporate managers must undertake various issues including organizational, managerial as well as strategic ones. Corporate management should be also conducted taking into account structure changes caused by economic globalization, technology innovation, energy and natural resources, the global environment, the financial environment, and even international politics. The Management Systems Group conducts education and research about management systems based on social sciences as well as the viewpoint of informatics.

Data Science

Our daily lives could be supported by various information technologies. Some of them are those to record and analyze human activities, e.g. political, economic, educational and cultural activities as well as behaviors in the daily lives including those in the Internet, which might facilitate well-being in our future daily lives. The Social Information Systems Group conducts education and research to analyze human behaviors, activities and their interactions with informatics and to apply the results to artificial systems that support our daily lives.

4. Materials Science and Bioengineering

The major of Materials Science and Bioengineering aims to develop engineers who can learn, integrate, and implement the following two approaches: the materials science approach to artificially control the structures of the finite varieties of atoms and compounds through combinations and interactions in order to create new materials, as well as the bioengineering approach to discover the engineering applications of biological functions that comprise complex, diverse, and multilevel systems. This major offers a creative educational curriculum that emphasizes the comprehensive acquisition of knowledge on materials science and biotechnology, undertaking of creative research through participation in research projects, and cultivation of the presentation skills needed to make strong impressions when communicating one's research results to an international audience.

This major aims to develop leading engineers and researchers who can succeed internationally and contribute to society's sustainable development; are able to apply information technology to research and development as well as the reformation of production processes; and possess the practical abilities to engage in problem solving in the development of cutting-edge materials that play crucial roles in future creative industries, social changes, the environment, health care, long-term care, and agriculture.

Content of Courses

This major has three courses, Resource Utilization Engineering Course, Materials Creation Engineering Course, and Biological and Environmental Engineering Course.

Research Areas

Resource Utilization Engineering

This research division is concerned with effective and value-added utilization of plant resources by plant breeding and microbial functions, development and creation of chemicals and materials from various natural resources. It also aims to harness various environmental and natural resources for production of renewable energy. Specific research topics include useful plants by new molecular breeding techniques, green building construction using moss plants, microbial conversions of cellulose and lignin to high value products, microbial synthesis of nanocellulose, bio-manufacturing based on the

latest fermentation science, recycling and generation of high value products from natural rubber and its waste, development and application of environment-friendly and sustainable materials, development of ceramic materials that can effectively utilize various elements, computational analysis of a wide range of substances, hydrogen generation from water by photocatalyst, development of materials for solid polymer fuel cells, and lifetime extension of lithium ion secondary batteries.

Materials Creation Engineering

This research division deals with technologies for material synthesis, physical and chemical characteristics of natural and biological materials, material manufacturing processes, computer-based prediction of structure/physical properties, and evaluation of materials for various uses. By understanding world-wide progresses in the field of material sciences, the research division makes full use of data-driven material development (Material DX), bioinformatics, and life cycle assessment (LCA). The ultimate aim is to foster engineers and researchers with an international perspective who take the initiative in part or all of the creation of innovative materials with simultaneously controlling each layer from the atomic and molecular levels of substances and organisms to the nano-micro to visible scales where they are aggregated. Creation of cutting-edge and innovative materials will be implemented in society in concert with environment and nature.

Biological and Environmental Engineering

This research division aims to improve environmental sustainability and human health using biological materials and systems. Understanding biological molecules and organisms is also at the heart of this research area. Specific research topics include development of materials for environmental measurement and improvement, new functional materials for medical application, environmental remediation using microorganisms, molecular and cellular engineering for clinical application, and wildlife management technology.

5. Civil and Environmental Engineering

Civil and Environmental engineering is the discipline of construction of the infrastructure which helps people to maintain a highly developed civilization while securing harmony with the nature environment, and this major aims to create new technology which can solve various problems in construction of infrastructure with a wide view and deep insight from the standpoint of earth engineering.

Therefore, this major instructs students in high-level technology in each area through lectures, experiments and training and, at the same time, offers a chance to study interdisciplinary areas and management, planning, life cycle based design for sustainable development, and natural disaster prevention and restoration which are essential knowledge for civil engineers. Thus, this major aims to train students as civil engineers who can solve practical problems in civil and environmental engineering from a wide viewpoint.

This major is divided into four research areas called Infrastructure Design Engineering, Infrastructure Management Engineering, Disaster Prevention Systems Engineering and Environment Management Engineering.

Content of Courses

Understanding that construction works, as they become large-scaled, have a grave impact on human society and the natural environment, courses offered fully take into account various effects and impacts of construction and are woven under an integrated view.

Research Areas

Infrastructure Design Engineering

This research area is composed of three groups: regional and urban planning group, geotechnical engineering group and transportation engineering group. The regional and urban planning group focuses on land use analysis, policy and planning. The geotechnical engineering group studies soil engineering,

especially focuses on mechanical property of various soils and advanced technology in tunneling engineering. The transportation engineering group studies all around technology for construction and maintenance of paved road.

Infrastructure Management Engineering

This research area is composed of three groups: social system management group, steel structural engineering group and concrete engineering group. The social system management group studies the management of social system including SCM and TDM, and the evaluation of management policy especially in transportation. The steel structural engineering group studies the basic aspects of structural analysis, corrosion durability of steel structures and observation based maintenance system. The concrete engineering group studies the properties of concrete, durability and structural performance of concrete structures.

Disaster Prevention Systems Engineering

This research area is composed of four groups: disaster prevention and restoration systems group, hydraulic engineering group, environment and disaster prevention engineering group and earthquake engineering group. The disaster prevention and restoration systems group focuses on advanced planning and policy for disaster prevention and restoration. The hydraulic engineering group, the environment and disaster prevention engineering group and the earthquake engineering group study characteristics of disaster-causing natural phenomena and carry out basic and applied research on modern development of infrastructure. River engineering, coastal engineering, geotechnical earthquake engineering including strong motion seismology, slope engineering and simulation of earth structures are some of the topics covered. Risk assessment for various disasters is focused.

Environment Management Engineering

This research area is composed of three groups: global environment engineering group, water environment control engineering group and resource-energy recycle engineering group. The global environment engineering group focuses on the water and energy cycle at all spatial and temporal scales, fully utilizing in-situ and remote sensing data and high-speed, large sized computers. The water environment control engineering group focuses on the advanced technology of wastewater treatment and biotechnology for protection of the water environment. The resource-energy recycle engineering group studies the treatment technology of solid and hazardous wastes and environment-oriented production process technology.

6. Nuclear Technology

Content of Courses

Education Objectives

The objective of this major is to train practical and leading engineers who are able to ensure safety in the planning, development, and operation of light water reactors, advanced reactors, and nuclear fusion systems, used in nuclear power plants, nuclear reactor equipment manufacturers, nuclear fuel processing companies, and nuclear-related research laboratories around the world through the application of system safety. This major offers subjects that enable the integrated acquisition of system safety engineering knowledge based on nuclear engineering (from nuclear physics to back-end technologies) and risk-based design for graduates of universities or technical college advanced courses who have specialized knowledge in the fundamental engineering fields of mechanical engineering, electrical engineering, materials science, civil engineering, and bioengineering. The subjects are composed of lectures, practical training, and experiments. Together with the consolidation of each student's research activities in their master's thesis and presentation, the major aims to train students in nuclear technology expertise that can prevent catastrophic disasters, even in cases of malfunctions or accidents.

Education Objectives

The goals of this major are to train nuclear technology engineers and researchers who have the following knowledge/abilities and are able to excel in international society:

(1) Fundamental knowledge related to safety engineering for designing nuclear equipment.

(2) Basic knowledge on communication, risk assessment, and relevant laws for conducting safety management.

(3) Knowledgeable about nuclear physics, materials science and chemistry, thermal hydrodynamics, and electrical power generation and transformation technologies required for the use of nuclear equipment.

(4) Communication ability to obtain understanding from others regarding the logical construct of research content, thereby facilitating the development and spread of new nuclear technologies.

Research Areas

Subject Organization

Nuclear technology involves the application of safety technology and safety management to fundamental nuclear technologies, and is centered on ensuring safety for each target device. The subjects in this major include both compulsory subjects and elective subjects, which are divided into 3 main categories: 1) Advanced Radiation Engineering, 2) Nuclear System Engineering, and 3) Nuclear Safety Engineering.

7. System Safety Engineering

In an integrated composite of hardware/software, humans, laws/criteria and so on, to achieve the acceptable risk throughout all phases of the life cycle such as design, production and use, it is required to reveal all hazards in advance systematically and to analyze and evaluate the effects of those on the associated risks and finally to take adequate safety measures. System safety is a discipline which integrates and applies both safety technologies and safety management skills to perform all the required actions mentioned above. The objective of this department is to provide engineering education to students, based on the concept of system safety, so as to become researchers and practical professional experts.

Research Areas

Safety-Certification

In order for industry to maintain and develop its international competitiveness with foreign countries, knowledge of internationally organized safety certification is indispensable. In this area, we conduct technological development and research related to safety certification. For example, it involves learning and understanding the basic knowledge of safety certification, developing a new safety certification scheme, study on new safety certification standards, and the validity of newly proposed international standards. Graduates can acquire advanced knowledge, practical ability, and research ability to carry out their duties as leaders such as safety certification of their own products at manufacturers, product certification at safety certification companies, and so on.

Safety Standard and Design

This research area covers safety standards and design methods. The education and research work on safety standards deal with the concept and structure of safety standards and how to understand “safety.” Safety standards are mainly international, regional and national standards and these standards often have relation with regulations. The education and research work on design methods deal with the design procedure globally accepted and established. Based on these fundamentals on safety design, considerations how to apply to the design procedures for the extend field with advanced technology, such as functional safety using AI, IoT and so on, are current topics in this field.

Safety Management

Since the pioneering work of W. H. Heinrich in the early 20th century, safety management of workplaces has been the most important area of scientific studies for safety researchers and professionals. How to design organizations, train staff, motivate employees, and make a scientific analysis of causes of injury are the most commonly asked questions among safety professionals. In the latter half of the 20th century, traffic safety, complex socio-technical systems safety, medical safety, and consumer safety emerged as new areas for safety management studies. Several new questions, such as how to design social, institutional and legal environments, how to analyze psychological aspects of human behavior, and so on, have been added to the research agenda. In the coming years, along with the extensive use of information technologies, how to manage safety data will become another important topic for safety professionals.

8. Common courses

(1) Objectives of the Common Subjects

In order to develop advanced leading engineers with the practical and creative abilities to bring about global technological development, NUT aims to instill program-specific expertise and technical skills, as well as the following 3 abilities and qualities: multifaceted and flexible thinking abilities in science and technology, strategic technological development abilities, and global engineer leadership skills. The common subjects are designed to teach students these abilities and qualities, and are offered to students from all programs.

(2) Subject Organization

The common subjects are organized into the following 10 groups to support the development of the aforementioned abilities and qualities. Information in parentheses indicate the corresponding undergraduate and master's programs diploma policies (Degree Conferment Policies 1 –4).

○Multifaceted and flexible thinking abilities in science and technology (B1, M2)

A. Ability to utilize the concepts and techniques of science and mathematics that support technology.

B. Ability to comprehend technology from the perspectives of life, people, and society.

C. Trained to understand and conceptualize combined technologies involving multiple specialized fields.

○Strategic technological development abilities (B2, M3)

D. Possess the language and logical skills needed to form the basis for understanding, thinking, expression, and dialogue.

E. Ability to consider the effects of technology on safety, environment, and culture.

F. Trained to have technology management skills that can interpret trends in global society and industries.

○Global engineer leadership skills (B4, M4)

G. Ability to communicate about technology in English.

H. Ability to collaboratively work within a team with an international perspective.

I. Ability to perform international competitive activities fairly as an organizational member.

* J. Includes content from multiple groups (A to I).

The university selects the subjects related to Economics and Management, and safety as recommended subjects to learn as engineers. The subjects indicated as "Safety" in the remarks of Attached Table are the subjects related to safety and ones indicated as "Economics and Management" in the remarks of Attached Table are the subjects related to Economics and Management. These subjects are elective and students are strongly recommended to take.

(3) Subject Requirements and Criteria

With the exception of subjects for students in graduate school special courses, all common subjects are elective. Students except major in System Safety Engineering require 6 credits or more from these subjects.

Credits for “Cross-cultural Mapping: Developing Your Cultural Awareness” will be awarded based on a total of 2 months or more of overseas experience (applicable only to educational and research activities conducted at a graduate school). In order to acquire credits, students must attend 3 lectures (intensive) and submit a report before departing for the overseas experience. Therefore, students intending to acquire credits for this subject should take these lectures in advance.

≪5-year Integrated Doctoral Program≫

Science of Technology Innovation

(1) Fostering Human Resources

This department offers a 5-year integrated doctoral program that combines the conventional master's program and doctoral program. In this program, students may acquire a doctoral degree in as little as 3 years without having to undergo master's thesis screening, as well as participate in long-term overseas study programs and earn an MBA.

With a foundation in advanced research capabilities and an education that incorporates different disciplines and cultures, we aim to cultivate outstanding leaders (global innovation leaders) that are globally competitive, have the power to innovate, and the ability to drive Japanese and global industries. The following exemplify the types of personnel that we aim to foster in this department.

◇Startup Company/Business-Oriented Personnel◇

Here, we cultivate engineers with the ability to adopt a managerial perspective by integrating front-line research experience in specialist fields with an MBA earned from the International University of Japan, which is a collaborative partner of Nagaoka University of Technology.

◇Project Manager-Oriented Personnel◇

By providing experience in multidisciplinary research projects, we train project managers who are able to implement a cross-disciplinary approach.

(2) Education Objectives

With a focus on the target personnel described above, this program aims to facilitate the acquisition of the following abilities in students to cultivate global innovation leaders who can play an active role at the international level.

1. A strong interest in the courses and research conducted at Science of Technology Innovation, the ability to innovate at the global level, and fulfill a leading role in the advancement and development of the world's industries
2. Advanced research capabilities in various fields (such as mechanical engineering, electrical engineering, materials science, civil engineering, and bioengineering), a multifaceted perspective, as well as practical and interdisciplinary integrated capabilities in science and technology
3. English language ability, communication capability, facilitation capability, research proposal development capability, and the fundamental capabilities for business development that can aid in research, project promotion, and information transmission
4. Ability to recognize the core essence of a research topic through scientific methods, and to deduce truly innovative solutions
5. Farsighted perspective, business-mindedness, strong ethical values, and the ability to practically utilize these abilities

大学院工学研究科修士課程 Graduate School of Engineering (Master's Program)

※印は、他に主担当の専攻・分野を有する教員を表します。

Note: In the "Title" column, ※ indicates the staff who hold another main major of field.

＊印は、その個数によって、今後5年以内に定年退職予定の教員を表します。

志望する課程の修業年限に照らして、研究室への受入可否を出願前に教員とご相談ください。

Note: In the "Name" column, the number of * indicates staff who will be retired within the next five years.

Before you apply, please consult with your prospective supervisor about plans if he/she retires before you graduate.

＊ ：2026年3月末退職予定 * indicates the staff who will be retired on March 31, 2026."

＊＊ ：2027年3月末退職予定 ** indicates the staff who will be retired on March 31, 2027."

＊＊＊ ：2028年3月末退職予定 *** indicates the staff who will be retired on March 31, 2028."

＊＊＊＊ ：2029年3月末退職予定 **** indicates the staff who will be retired on March 31, 2029."

＊＊＊＊＊：2030年3月末退職予定 ***** indicates the staff who will be retired on March 31, 2030."

工学専攻

1. 機械工学分野 Mechanical Engineering

(1)機械情報・制御工学講座 Information and Control Engineering group

職 名 Title	氏 名 Name	研 究 室 等 Laboratory
教 授 Professor	明田川 正人 * AKETAGAWA, Masato	ナノメートル・ピコメートル計測制御研究室 Nanometer & Picometer Measurement Control Laboratory
教 授 Professor	遠藤 孝浩 ENDO, Takahiro	知能機械システム学研究室 Intelligent Machine System Engineering Lab
教 授※ Professor	木村 哲也 KIMURA, Tetsuya	レスキュー工学研究室 Rescue Engineering Laboratory
教 授 Professor	倉橋 貴彦 KURAHASHI, Takahiko	数理設計研究室 Mathematical Design Laboratory
教 授※ Professor	三好 孝典 **** MIYOSHI, Takanori	協働ロボット研究室 Collaborative Robot Laboratory
准教授 Associate Professor	韋 冬 WEI, Dong	ナノメートル・ピコメートル計測制御研究室 Nanometer & Picometer Measurement Control Laboratory
准教授 Associate Professor	小林 泰秀 KOBAYASHI, Yasuhide	騒音・振動制御工学研究室 Noise and Vibration Control Laboratory
助 教 Assistant Professor	上林 恵太 KANBAYASHI, Keita	数理設計研究室 Mathematical Design Laboratory

(2)設計・生産工学講座 Design and Production Engineering group

職 名 Title	氏 名 Name	研 究 室 等 Laboratory
教 授 Professor	會田 英雄 AIDA, Hideo	結晶工学研究室 Crystal Engineering Laboratory
教 授※ Professor	阿部 雅二朗 * ABE, Masajiro	機械 - 環境系設計工学研究室 Machine-Environment System Design Engineering Laboratory
教 授 Professor	磯部 浩巳 ISOBE, Hiromi	精密加工・機構研究室 Precision Machining and Mechanism Laboratory
教 授 Professor	太田 浩之 **** OHTA, Hiroyuki	機械要素研究室 Laboratory of Machine Elements
准教授 Associate Professor	山崎 洋人 YAMAZAKI, Hirohito	ナノ光生命流体工学研究室 Nanoscale Opto Biofluidics Lab
助 教 Assistant Professor	川村 拓史 KAWAMURA, Hirofumi	精密加工・機構研究室 Precision Machining and Mechanism Laboratory
助 教	横田 和哉	機械 - 環境系設計工学研究室

Assistant Professor	YOKOTA, Kazuya	Machine-Environment System Design Engineering Laboratory

(3)熱・流体工学講座　Fluids and Thermal Engineering group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授	上村　靖司	雪氷工学研究室
Professor	KAMIMURA, Seiji	Snow & Ice Engineering Laboratory
教　授※	鈴木　正太郎	反応性流体工学研究室
Professor	SUZUKI, Masataro	Laboratory of Reactive Fluid Engineering
教　授	髙橋　勉　**	流体工学研究室
Professor	TAKAHASHI, Tsutomu	Fluids Engineering and Rheology Laboratory
教　授※	山形　浩史　***	システム安全工学研究室
Professor	YAMAGATA, Hiroshi	System Safety Engineering Laboratory
准教授※	山﨑　渉	航空流体工学研究室
Associate Professor	YAMAZAKI, Wataru	Computational Fluid Dynamics Laboratory
助　教	杉原　幸信	雪氷工学研究室
Assistant Professor	SUGIHARA, Yukinobu	Snow & Ice Engineering Laboratory

(4)材料システム工学講座　Materials Science and Engineering group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授	武田　雅敏	エネルギー材料研究室
Professor	TAKEDA, Masatoshi	Energy Materials & Devices Laboratory
教　授	南口　誠	高温材料研究室
Professor	NANKO, Makoto	High Temperature Materials Laboratory
教　授	宮下　幸雄	材料強度・接合強度研究室
Professor	MIYASHITA, Yukio	Strength of advanced materials and joints
准教授※	大塚　雄市	構造安全性評価研究室
Associate Professor	OTSUKA, Yuichi	Structural Integrity Assessment
准教授	馬場　将亮	エネルギーマネジメント材料研究室
Associate Professor	BABA, Masaaki	Energy Management Materials Laboratory
准教授	本間　智之	ナノ・原子レベル解析研究室
Associate Professor	HOMMA, Tomoyuki	Nano & Atomic Scale Analysis Laboratory
准教授	中田　大貴	先端軽金属材料研究室
Associate Professor	NAKATA, Taiki	Advanced Light Metals Laboratory
助　教	郭　妍伶	高温材料研究室
Assistant Professor	KUO YENLING	High Temperature Materials Laboratory
助　教	チャン　ナン	材料強度・接合強度研究室
Assistant Professor	ZHANG NAN	Strength of advanced materials and joints
助　教	山下　健	高温材料研究室
Assistant Professor	YAMASHITA, Ken	High Temperature Materials Laboratory

(5)創未来テクノロジー講座　Innovative Interdisciplinary Mechanical Engineering group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授※	中山　忠親	環境・プロセスデザイン研究室
Professor	NAKAYAMA, Tadachika	Environment and Process Design Laboratory
教　授※	山田　昇	エネルギー工学研究室
Professor	YAMADA, Noboru	Energy Engineering Laboratory

准教授 Associate Professor	勝身　俊之 KATSUMI, Toshiyuki	燃焼エネルギー研究室 Combustion and Energy Laboratory
准教授 Associate Professor	庄司　観 SHOJI, Kan	ナノ・バイオインテグレーテッドシステム研究室 Nano/Bio Integrated System Laboratory
准教授 Associate Professor	溝尻　瑞枝 MIZOSHIRI, Mizue	マイクロ・ナノプロセス応用研究室 Micro/Nano Processing Laboratory
助　教 Assistant Professor	滝本　祐也 TAKIMOTO, Yuya	環境・プロセスデザイン研究室 Environment and Process Design Laboratory

2. 電気電子情報工学分野　Electrical, Electronics and Information Engineering

(1)電気エネルギー・制御工学講座　Electric Energy and Control Engineering group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授※ Professor	伊東　淳一 ITOH, Jun-ichi	パワーエレクトロニクス研究室 Power Electronics Laboratory
教　授※ Professor	菊池　崇志 KIKUCHI, Takashi	プラズマ力学研究室 Plasma Dynamics Laboratory
教　授※ Professor	江　偉華　** JIANG, Weihua	パルスパワー研究室 Pulsed Power Laboratory
教　授※ Professor	佐々木　徹 SASAKI, Toru	プラズマ力学研究室 Plasma Dynamics Laboratory
教　授 Professor	三浦　友史 MIURA, Yushi	電力工学研究室 Power Engineering Laboratory
教　授 Professor	宮崎　敏昌 MIYAZAKI, Toshimasa	メカトロニクス研究室 Mechatronics Laboratory
准教授 Associate Professor	日下　佳祐 KUSAKA, Keisuke	先進エネルギー変換研究室 Advanced Energy Conversion Labratory
准教授※ Associate Professor	須貝　太一 SUGAI, Taichi	パルスパワー研究室 Pulsed Power Laboratory
准教授 Associate Professor	髙橋　一匡 TAKAHASHI, Kazumasa	プラズマ力学研究室 Plasma Dynamics Laboratory
准教授 Associate Professor	横倉　勇希 YOKOKURA, Yuki	モーションコントロール研究室 Motion Control Laboratory
助　教 Assistant Professor	チャン　フォン　タオ TRAN PHUONG THAO	メカトロニクス研究室 Mechatronics Laboratory
助　教 Assistant Professor	パドロン　パラガ　ファン　ビセンテ PADRON PARRAGA JUAN VICENTE	メカトロニクス研究室 Mechatronics Laboratory
助　教 Assistant Professor	舟木　秀明 HUNAKI, Hideaki	電力工学研究室 Power Engineering Laboratory
助　教 Assistant Professor	渡辺　大貴 WATANABE, Hiroki	パワーエレクトロニクス研究室 Power Electronics Laboratory

(2)電子デバイス・光波制御工学講座　Electronic Devices and Light Wave Control Engineering group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授 Professor	鵜沼　毅也 UNUMA, Takeya	ナノエレクトロニクス研究室 Nanoelectronics Laboratory
教　授 Professor	小野　浩司　*** ONO, Hiroshi	応用波動光学研究室 Applied Waveoptics Laboratory

教　授 Professor	加藤　有行 KATO, Ariyuki	光物性工学研究室 Hikari Engineering Physics Laboratory
教　授 Professor	木村　宗弘 KIMURA, Munehiro	液晶デバイス研究室 Liquid Crystal Device Laboratory
教　授※ Professor	末松　久幸　**** SUEMATSU, Hisayuki	高出力レーザー開発・応用工学研究室 High Power Laser Development and Application Engineering Laboratory
教　授※ Professor	鈴木　常生 SUZUKI, Tsuneo	加速器応用・新材料設計研究室 Accelerator Applications and Novel Material Design Laboratory
教　授 Professor	田中　久仁彦 TANAKA, Kunihiko	光エネルギーデバイス研究室 Photo-Energy Devices Laboratory
准教授 Associate Professor	岡元　智一郎 OKAMOTO, Tomoichiro	電子セラミックス研究室 Electroceramics Laboratory
准教授 Associate Professor	坂本　盛嗣 SAKAMOTO, Moritsugu	応用波動光学研究室 Applied Waveoptics Laboratory
准教授 Associate Professor	佐々木　友之 SASAKI, Tomoyuki	電磁波制御デバイス研究室 Electromagnetic Wave Control Device Laboratory
准教授 Associate Professor	玉山　泰宏 TAMAYAMA, Yasuhiro	メタマテリアル研究室 Metamaterials Laboratory
准教授 Associate Professor	山下　智樹 YAMASHITA, Tomoki	計算材料科学研究室 Computational Materials Science Laboratory
助　教 Assistant Professor	金井　綾香 KANAI, Ayaka	光エネルギーデバイス研究室 Photo-Energy Devices Laboratory
助　教 Assistant Professor	柴田　陽生 SHIBATA, Yosei	液晶デバイス研究室 Liquid Crystal Device Laboratory

(3)情報通信制御工学講座　Information, Telecommunication and Control group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授 Professor	岩橋　政宏　***** IWAHASHI, Masahiro	画像・メディア工学研究室 Image and Media Information Laboratory
教　授 Professor	坪根　正 TSUBONE, Tadashi	非線形システム工学研究室 Nonlinear System Engineering Laboratory
准教授 Associate Professor	杉田　泰則 SUGITA, Yasunori	信号処理応用研究室 Signal Processing Application Laboratory
准教授　※ Associate Professor	南部　功夫 NAMBU, Isao	脳情報工学研究室 Neural Engineering Laboratory
准教授 Associate Professor	原川　良介 HARAKAWA, Ryosuke	画像・メディア工学研究室 Image and Media Information Laboratory
准教授 Associate Professor	平沢　壮 HIRASAWA, Takeshi	画像計測システム工学研究室 Imaging and sensing system laboratory
准教授 Associate Professor	眞田　亜紀子 MANADA, Akiko	データシーケンス構造研究室 Laboratory for Data Sequence Structure
講　師 Lecturer	豊田　充 TOYODA, Mitsuru	システム制御工学研究室 System Control Engineering Laboratory
助　教 Assistant Professor	白清　学 HAKUSEI, Manabu	非線形システム工学研究室 Nonlinear System Engineering Laboratory
助　教 Assistant Professor	藤井　賢吾 FUJII, Kengo	画像・メディア工学研究室 Image and Media Information Laboratory

助　教 Assistant Professor	和田森　直 WADAMORI, Naoki	非線形システム工学研究室 Nonlinear System Engineering Laboratory

3. 情報・経営システム工学分野　Information and Management Systems Engineering

(1)応用情報学講座　Applied Informatics group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授 Professor	土居　裕和 DOI, Hirokazu	認知神経情報学研究室 Cognitive Neuroinformatics Laboratory
教　授 Professor	野村　収作 NOMURA, Shusaku	アンビエント生体医工学研究室 Ambient Biomedical Engineering Laboratory
准教授 Associate Professor	秋元　頼孝 AKIMOTO, Yoritaka	実験心理学研究室 Experimental Psychology Laboratory
准教授 Associate Professor	大岩　孝輔 OIWA, Kosuke	医療・福祉支援工学研究室 Medical and Human Support Engineering Laboratory
准教授 Associate Professor	大橋　智志 OHASHI, Satoshi	スポーツ工学・情報学研究室 Sports Engineering and Informatics Laboratory
准教授 Associate Professor	奥島　大 OKUSHIMA, Dai	スポーツ生理・情報・工学研究室 Sports Physiology, Informatics and Engineering Laboratory
准教授 Associate Professor	中平　勝子 NAKAHIRA, Katsuko, T.	知覚情報科学研究室 Perceptual Informatics Laboratory
准教授 Associate Professor	西山　雄大 NISHIYAMA, Yuta	理論生命科学研究室 Theoretical Life Science Laboratory
助　教 Assistant Professor	エディリシンハ　アーラッチゲー　チャヤニ　ディルクシ EDIRISINGHE ARACHCHIGE CHAYANI DILRUKSHI	アンビエント生体医工学研究室 Ambient Biomedical Engineering Laboratory
助　教 Assistant Professor	永森　正仁 NAGAMORI, Masahito	スポーツ工学・情報学研究室 Sports Engineering and Informatics Laboratory

(2)マネジメントシステム講座　Management System group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授 Professor	李　志東　** LI, Zhidong	３Ｅ（エネルギー、環境、経済）研究室 3E's (Energy, Environment and Economy) Laboratory
教　授 Professor	綿引　宣道 WATAHIKI, Nobumichi	経営社会研究室 Economic Sociology
准教授 Associate Professor	鈴木　信貴 SUZUKI, Nobutaka	経営戦略・技術経営・ものづくり経営研究室 Strategic, Technology and Manufacturing Management Laboratory
講　師 Lecturer	雲居　玄道 KUMOI, Gendo	機械学習理論研究室 Theory of Machine Learning Laboratory
助　教　※ Assistant Professor	ヌル　アデリン　ビンティ　アブ　バカル NUR ADLIN BINTI ABU BAKAR	機械学習理論研究室 Theory of Machine Learning Laboratory
助　教 Assistant Professor	周　蕾 Lei, Zhou	経営社会研究室 Economic Sociology

(3)データサイエンス講座　Data Science group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授 Professor	羽山　徹彩 HAYAMA, Tessai	知識メディア研究室 Knowledge Media Laboratory
教　授 Professor	湯川　高志　*** YUKAWA, Takashi	知識システム研究室 Knowledge Systems Laboratory
准教授※ Associate Professor	張　坤 ZHANG, Kun	安全データマネジメント研究室 Safety data management Laboratory
助　教 Assistant Professor	安藤　雅洋 ANDO, Masahiro	知識システム研究室 Knowledge Systems Laboratory
助　教 Assistant Professor	金崎　権 KANESAKI, Chikara	知識システム研究室 Knowledge Systems Laboratory
助　教 Assistant Professor	黒田　大貴 KURODA, Hiroki	知識メディア研究室 Knowledge Media Laboratory
助　教 Assistant Professor	鈴木　泉　*** SUZUKI, Izumi	知識システム研究室 Knowledge Systems Laboratory
助　教 Assistant Professor	吉田　富美男　** YOSHIDA, Fumio	知識システム研究室 Knowledge Systems Laboratory

4. 物質生物工学分野　Materials Science and Bioengineering

(1)資源活用工学講座　Resource Utilization Engineering group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授※ Professor	小笠原　渉 OGASAWARA, Wataru	発酵科学研究室 HAKKO Science Laboratory
教　授 Professor	河原　成元 KAWAHARA, Seiichi	グリーン資源化学研究室 Laboratory of Green Resources Chemistry
教　授※ Professor	田中　諭 TANAKA, Satoshi	セラミックス構造設計研究室 Ceramic Material Design Laboratory
教　授 Professor	政井　英司　***** MASAI, Eiji	微生物代謝工学研究室 Laboratory of Microbial Metabolic Engineering
准教授 Associate Professor	上村　直史 KAMIMURA, Naofumi	微生物代謝工学研究室 Laboratory of Microbial Metabolic Engineering
准教授 Associate Professor	志田　洋介 SHIDA, Yosuke	発酵科学研究室 HAKKO Science Laboratory
准教授 Associate Professor	白仁田　沙代子 SHIRONITA, Sayoko	エネルギー材料科学研究室 Materials Science for Energy Laboratory
准教授 Associate Professor	髙原　美規　**** TAKAHARA, Yoshinori	応用植物工学研究室 Laboratory of Applied Plant BioTechnology
准教授 Associate Professor	西村　泰介 NISHIMURA, Taisuke	植物エピジェネティクス工学研究室 Laboratory of Plant Epigenetics
助　教 Assistant Professor	中村　彰宏 NAKAMURA, Akihiro	発酵科学研究室 HAKKO Science Laboratory
助　教 Assistant Professor	藤田　雅也 FUJITA, Masaya	微生物代謝工学研究室 Laboratory of Microbial Metabolic Engineering
助　教 Assistant Professor	山野　将輝 YAMANO, Masaki	グリーン資源化学研究室 Laboratory of Green Resources Chemistry

(2)材料創成工学講座　Materials Creation Engineering group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授 Professor	石橋　隆幸 ISHIBASHI, Takayuki	光・磁性材料工学研究室 Optic & Magnetic Materials Laboratory
教　授 Professor	今久保　達郎 IMAKUBO, Tatsuro	超分子物性化学研究室 Laboratory of Supramolecular Solid State Chemistry
教　授 Professor	本間　剛 HONMA, Tsuyoshi	機能ガラス工学研究室 Functional Glass Engineering Laboratory
教　授 Professor	前川　博史　***** MAEKAWA, Hirofumi	有機反応設計研究室 Laboratory of Organic Reaction Design and Synthesis
准教授 Associate Professor	木村　悟隆　***** KIMURA, Noritaka	高分子機能工学研究室 Polymer Functionalization Laboratory
准教授 Associate Professor	桑原　敬司 KUWAHARA, Takashi	生物材料工学研究室 Material Laboratory for Bioengineering
准教授 Associate Professor	西川　雅美 NISHIKAWA, Masami	機能材料化学研究室 Functional Materials Chemistry Laboratory
准教授 Associate Professor	藤原　郁子 FUJIWARA, Ikuko	生体運動研究室 Laboratory for Biological Motility
准教授 Associate Professor	船津　麻美 FUNATSU, Asami	表面・界面化学研究室 Surface & interface chemistry laboratory
助　教 Assistant Professor	チャフィ　ファティマ　ザーハラ CHAFI FATIMA ZAHRA	光・磁性材料工学研究室 Optic & Magnetic Materials Laboratory
助　教 Assistant Professor	戸田　智之 TODA, Tomoyuki	高分子材料化学研究室 Laboratory of Polymer Materials Chemistry

(3)生体環境工学講座　Biological and Environmental Engineering group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授 Professor	斎藤　秀俊　*** SAITOH, Hidetoshi	医療支援先進セラミックス研究室 Medical Supporting Advanced Ceramics Laboratory
教　授 Professor	高橋　祥司 TAKAHASHI, Shouji	環境生物化学研究室 Environmental Biochemistry Laboratory
教　授 Professor	滝本　浩一　* TAKIMOTO, Koichi	分子生理工学研究室 Laboratory for Molecular Physiology
准教授※ Associate Professor	大沼　清 OHNUMA, Kiyoshi	システム幹細胞工学研究室 Stem Cell Technology Laboratory
准教授 Associate Professor	笠井　大輔 KASAI, Daisuke	環境微生物工学研究室 Laboratory of Applied and Environmental Microbiology
准教授 Associate Professor	佐藤　武史 SATO, Takeshi	糖鎖生命工学研究室 Laboratory of Glycobiology
准教授 Associate Professor	霜田　靖 SHIMODA, Yasushi	神経機能工学研究室 Laboratory for Molecular Neuroengineering
准教授 Associate Professor	髙橋　由紀子 TAKAHASHI, Yukiko	環境ナノ材料研究室 Nano Dyes and Thin Films Laboratory
准教授 Associate Professor	多賀谷　基博 TAGAYA, Motohiro	ナノバイオ材料研究室 Nano-Bio Materials Laboratory
准教授 Associate Professor	山本　麻希 YAMAMOTO, Maki	野生動物管理学研究室 Laboratory of Engineering of Wildlife Management

助　教 Assistant Professor	今西　大生 IMANISHI, Daiki	環境生物化学研究室 Environmental Biochemistry Laboratory
助　教 Assistant Professor	小松　啓志 KOMATSU, Keiji	光・電子セラミックス研究室 Opto-Electronic Ceramics Laboratory

5. 環境社会基盤工学分野　Civil and Environmental Engineering

(1)社会基盤デザイン講座　Infrastructure Design group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授※ Professor	髙橋　修　*** TAKAHASHI, Osamu	交通工学研究室 Highway Engineering Laboratory
教　授 Professor	豊田　浩史 TOYOTA, Hirofumi	地盤工学研究室 Geotechnical Engineering Laboratory
准教授 Associate Professor	松川　寿也 MATSUKAWA, Toshiya	都市計画研究室 Urban Planning Laboratory
助　教 Assistant Professor	丸岡　陽 MARUOKA, Akira	都市計画研究室 Urban Planning Laboratory

(2)社会基盤マネジメント講座　Infrastructure Management group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授 Professor	岩崎　英治　*** IWASAKI, Eiji	鋼構造研究室 Steel Structural Engineering Laboratory
教　授 Professor	佐野　可寸志　*** SANO, Kazushi	都市交通研究室 Urban Transport Engineering & Planning Laboratory
教　授 Professor	下村　匠　***** SHIMOMURA, Takumi	コンクリート研究室 Concrete Laboratory
准教授 Associate Professor	中村　文則 NAKAMURA, Fuminori	コンクリート研究室 Concrete Laboratory
准教授 Associate Professor	林　厳 HAYASHI, Gen	鋼構造研究室 Steel Structural Engineering Laboratory
講　師 Lecturer	加藤　哲平 KATO, Teppei	都市交通研究室 Urban Transport Engineering & Planning Laboratory
助　教 Assistant Professor	稲葉　紅子 INABA, Kouko	コンクリート研究室 Concrete Laboratory

(3)防災システム講座　Disaster Prevention Systems group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授 Professor	池田　隆明　**** IKEDA, Takaaki	地震工学研究室 Earthquake Engineering Laboratory
教　授 Professor	細山田　得三　*** HOSOYAMADA, Tokuzo	水圏防災研究室 Hydraulic Disaster Prevention Laboratory
准教授 Associate Professor	犬飼　直之　***** INUKAI, Naoyuki	水圏防災研究室 Hydraulic Disaster Prevention Laboratory
准教授 Associate Professor	髙橋　一義 TAKAHASHI, Kazuyoshi	防災・復興システム工学研究室 Disaster resilience and reconstruction systems engineering laboratory
助　教 Assistant Professor	志賀　正崇 SHIGA, Masataka	地震工学研究室 Earthquake Engineering Laboratory

(4)環境マネジメント講座　Environment Management group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授 Professor	小松　俊哉　** KOMATSU, Toshiya	資源エネルギー循環研究室 Laboratory of Resource and Energy Cycles
教　授※ Professor	姫野　修司 HIMENO, Shuji	資源エネルギー循環研究室 Laboratory of Resource and Energy Cycles
教　授※ Professor	山口　隆司 YAMAGUCHI, Takashi	水圏土壌環境研究室 Aqua and Soil Environmental Laboratory
教　授 Professor	陸　旻皎　* LU, Minjiao	水文気象研究室 Laboratory of Hydrology and Meteorology
准教授※ Associate Professor	太田　朋子 OHTA, Tomoko	放射能環境動態工学研究室 Radioactive Environmental Dynamics and Engineerng Laboratory
准教授 Associate Professor	熊倉　俊郎　***** KUMAKURA, Toshiro	水文気象研究室 Laboratory of Hydrology and Meteorology
准教授 Associate Professor	幡本　将史 HATAMOTO, Masashi	水圏土壌環境研究室 Aqua and Soil Environmental Laboratory
准教授　※ Associate Professor	牧　慎也 MAKI, Shinya	生命機能利用工学研究室 Laboratory of Biological Function Applied Engineering
准教授 Associate Professor	渡利　高大 WATARI, Takahiro	水圏土壌環境研究室 Aqua and Soil Environmental Laboratory
助　教 Assistant Professor	楊　宏選 YANG, Hongxuan	水文気象研究室 Laboratory of Hydrology and Meteorology
講　師 Associate Professor	辻　雅晴　** TSUJI, Masaharu	水圏土壌環境研究室 Aqua and Soil Environmental Laboratory

6. 量子・原子力統合工学分野　Nuclear Technology

(1)原子力安全講座　Nuclear Safety Engineering group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授※ Professor	髙橋　修　*** TAKAHASHI, Osamu	交通工学研究室 Highway Engineering Laboratory
准教授 Associate Professor	大場　恭子 OBA, Kyoko	原子力社会工学研究室 Nuclear Social Engineering Laboratory
准教授 Associate Professor	竹澤　宏樹 TAKEZAWA, Hiroki	原子力システム工学研究室 Nuclear System Design Engineering Laboratory
助　教 Assistant Professor	松本　義伸 MATSUMOTO, Yoshinobu	放射化学研究室 Laboratory for Nuclear and Radiochemistry

(2)原子力技術講座　Nuclear System Engineering group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授 Professor	鈴木　達也 SUZUKI, Tatsuya	放射化学研究室 Laboratory for Nuclear and Radiochemistry
教　授 Professor	鈴木　常生 SUZUKI, Tsuneo	加速器応用･新材料設計研究室 Accelerator Applications and Novel Material Design Laboratory
准教授 Associate Professor	太田　朋子 OHTA, Tomoko	放射能環境動態工学研究室 Radioactive Environmental Dynamics and Engineerng Laboratory
助　教 Assistant Professor	大沢　直樹 OSAWA, Naoki	放射化学研究室 Laboratory for Nuclear and Radiochemistry

(3)量子・放射線講座　Advanced Radiation Engineering group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授 Professor	菊池　崇志 KIKUCHI, Takashi	プラズマ力学研究室 Plasma Dynamics Laboratory
教　授 Professor	江　偉華　** JIANG, Weihua	パルスパワー研究室 Pulsed Power Laboratory
教　授 Professor	末松　久幸　**** SUEMATSU, Hisayuki	高出力レーザー開発・応用工学研究室 High Power Laser Development and Application Engineering Laboratory
准教授 Associate Professor	須貝　太一 SUGAI, Taichi	パルスパワー研究室 Pulsed Power Laboratory
助　教 Assistant Professor	ドウ　ティ　マイ　ズン DO THI MAI DUNG	高出力レーザー開発・応用工学研究室 High Power Laser Development and Application Engineering Laboratory

7. システム安全工学分野　System Safety Engineering

(1)安全認証講座　Safety-Certification group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授 Professor	木村　哲也 KIMURA, Tetsuya	レスキュー工学研究室 Rescue Engineering Laboratory
教　授 Professor	三好　孝典　**** MIYOSHI, Takanori	協働ロボット研究室 Collaborative Robot Laboratory
准教授 Associate Professor	北條　理恵子　*** HOJO, Rieko	産業安全行動分析学研究室 Behavior-based Safety Laboratory
助　教 Assistant Professor	高橋　憲吾 TAKAHASHI, Kengo	レスキュー工学研究室 Rescue Engineering Laboratory

(2)安全規格・設計講座　Safety Standard and Design group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授 Professor	阿部　雅二朗　* ABE, Masajiro	機械‐環境系設計工学研究室 Machine-Environment System Design Engineering Laboratory
教　授 Professor	鈴木　正太郎 SUZUKI, Masataro	反応性流体工学研究室 Laboratory of Reactive Fluid Engineering
准教授 Associate Professor	大塚　雄市 OTSUKA, Yuichi	構造安全性評価研究室 Structural Integrity Assessment

(3)安全管理講座　Safety Management group

職　名　Title	氏　名　Name	研　究　室　等　Laboratory
教　授 Professor	山形　浩史　*** YAMAGATA, Hiroshi	システム安全工学研究室 System Safety Engineering Laboratory
准教授 Associate Professor	張　坤 ZHANG, Kun	安全データマネジメント研究室 Safety data management Laboratory
准教授 Associate Professor	眞砂　英樹 MASAGO, Hideki	フィールドシステムマネジメント研究室 Field System Management Laboratory

技術科学イノベーション専攻 Science of Technology Innovation

(1)エネルギー技学講座 Gigaku Energy group

職 名 Title	氏 名 Name	研 究 室 等 Laboratory
教 授 Professor	伊東 淳一 ITOH, Jun-ichi	パワーエレクトロニクス研究室 Power Electronics Laboratory
教 授 Associate Professor	佐々木 徹 SASAKI, Toru	プラズマ力学研究室 Plasma Dynamics Laboratory
教 授 Professor	山田 昇 YAMADA, Noboru	エネルギー工学研究室 Energy Engineering Laboratory
准教授 Associate Professor	南部 功夫 NAMBU, Isao	脳情報工学研究室 Neural Engineering Laboratory

(2)環境技学講座 Gigaku Environment group

職 名 Title	氏 名 Name	研 究 室 等 Laboratory
教 授 Professor	小笠原 渉 OGASAWARA, Wataru	発酵科学研究室 HAKKO Science Laboratory
教 授 Professor	姫野 修司 HIMENO, Shuji	資源エネルギー循環研究室 Laboratory of Resource and Energy Cycles
教 授 Professor	山口 隆司 YAMAGUCHI, Takashi	水圏土壌環境研究室 Aqua and Soil Environmental Laboratory
准教授 Associate Professor	牧 慎也 MAKI, Shinya	生命機能利用工学研究室 Laboratory of Biological Function Applied Engineering
准教授 Associate Professor	山﨑 渉 YAMAZAKI, Wataru	航空流体工学研究室 Computational Fluid Dynamics Laboratory
助 教 Assistant Professor	中村 彰宏 NAKAMURA, Akihiro	発酵科学研究室 HAKKO Science Laboratory
助 教 Assistant Professor	ヌル アデリン ビンティ アブ バカル NUR ADLIN BINTI ABU BAKAR	機械学習理論研究室 Theory of Machine Learning Laboratory

(3)材料技学講座 Gigaku Materials group

職 名 Title	氏 名 Name	研 究 室 等 Laboratory
教 授 Professor	田中 諭 TANAKA, Satoshi	セラミックス構造設計研究室 Ceramic Material Design Laboratory
教 授 Professor	中山 忠親 NAKAYAMA, Tadachika	ナノ秒・ナノテク研究室 Nano Second and Nanometre Technology Laboratory
准教授 Associate Professor	大沼 清 OHNUMA, Kiyoshi	システム幹細胞工学研究室 Stem Cell Technology Laboratory

大学院工学研究科修士課程　専攻・分野・講座名 Research Areas of Master's Program

専攻・分野名 Fields of Study		講座名 Research Areas
工学専攻 Engineering	機械工学分野 Mechanical Engineering	機械情報・制御工学講座 Information and Control Engineering
		設計・生産工学講座 Design and Production Engineering
		熱・流体工学講座 Heat and Fluids Engineering
		材料システム工学講座 Materials Science and Engineering
		創未来テクノロジー講座 Innovative Interdisciplinary Mechanical Engineering
	電気電子情報工学分野 Electrical, Electronics and Information Engineering	電気エネルギー・制御工学講座 Electric Energy and Control Engineering
		電子デバイス・光波制御工学講座 Electronic Devices and Light Wave Control Engineering
		情報通信制御工学講座 Information, Telecommunication and Control
	情報・経営システム工学分野 Information and Management Systems Engineering	応用情報学講座 Applied Informatics
		マネジメントシステム講座 Management System
		データサイエンス講座 Data Science
	物質生物工学分野 Materials Science and Bioengineering	資源活用工学講座 Resource Utilization Engineering
		材料創成工学講座 Materials Creation Engineering
		生体環境工学講座 Biological and Environmental Engineering
	環境社会基盤工学分野 Civil and Environmental Engineering	社会基盤デザイン講座 Infrastructure Design
		社会基盤マネジメント講座 Infrastructure Management
		防災システム講座 Disaster Prevention Systems
		環境マネジメント講座 Environment Management
	量子・原子力統合工学分野 Nuclear Technology	原子力安全講座 Nuclear Safety Engineering
		原子力技術講座 Nuclear System Engineering
		量子・放射線講座 Advanced Radiation Engineering
	システム安全工学分野 System Safety Engineering	安全規格・設計講座 Safety Standard and Design
		安全管理講座 Safety Management
		安全認証講座 Safety-Certification

大学院工学研究科５年一貫制博士課程　専攻・講座名
Research Areas of 5-year Integrated Doctoral Program

課 程 Course	専 攻 名 Fields of Study	講 座 名 Research Areas
５年一貫制博士課程 5-year Integrated Doctoral Program	技術科学イノベーション専攻 Science of Technology Innovation	エネルギー技学講座 GIGAKU Energy
		環境技学講座 GIGAKU Environmental
		材料技学講座 GIGAKU Materials

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