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Department	Research Area		Research Instruction		Doctor		Ma Super				Vice Supervisor	
Department of Architecture	Architectural Design	landi tanakanal	Study on the creative activity of architecture through the history; design method and expression of traditional architecture; profession of architect; preservation and conservation of architecture.	D01	D51	Associate Professor	Doctor of Engineering (Waseda University)	KOIWA, Masaki	koiwa@waseda .jp			
Department of Architecture	Architectural Design	Aspects of Architectural	Researching and presenting new methodology and planning about city, architecture and housing with Past things, ruins, concrete custom. Study on the history of Japanese architecture in modern era, fro 18th Century to the present especially in ideology and technorogical aspect.	n D20	D70	Professor	Doctor of Engineering (Waseda University)	NAKATANI, Norihito	rhenin@wased a.jp			
Department of Architecture	Architectural Design	and	Design of the architecture projects include regional planning for numbers of districts to connect the conception of the architecture and society. In addition, research of various Asian districts and urban cities lead to design social methods to create Architecture.	D03	D53	Associate Professor	Doctor of Engineering (The University of Tokyo)	WATANABE, Taishi	watanabetais hi@waseda jp			
Department of Architecture		Research on Architectural	The aim of our research is to develop and provide a new method or strategy of architectural design through an investigation of architectural theory of modern and contemporary architects. These studies and researches will be developed in architectural design and urban strategies in practical competitions or projects.	D04	D54	Assistant Professor	Doctor of Architecture (Waseda University)	YAMAMURA, Takeshi	t- yamamura@aon i.waseda.jp	Professor		FURUYA, Nobuaki
Department of Architecture	Architectural Design	Research on Architectural Design and Information	Research focusing on the widening role of architecture within the age o information, where the relationships between society, city, buildings, and humans are directly relating to the way / space we live in.	f D26	D76	Associate Professor		KOBAYASHI, Keigo	k_kobayashi@ waseda.jp			

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Department	Research Area		Research Instruction	Master			Ma Super				Vice Supervisor	
Department of Architecture	Architectural Design	Architecture and Space	Project-based-learning on architectural designs through finding present social problems of architecture, urban space, and surrounding environment. Research on existing examples, architects, literatures, an on-the-spot investigations.	DOS	D56	Professor		FURUYA, Nobuak i	furuya@wased a.jp	Associate Professor		FUJII, Yuri * yurifujii@ao ni.waseda.jp
Department of Architecture	Architectural Design		Research of comprehensive and practical architectural design theory connected art and architecture. For this purpose, development of design study through finding problem about history of plastic theory on art with architecture with architect.	-	_	Professor		FURUYA, Nobuaki	furuya@wased a.jp	Professor		AKASAKA, Yoshiaki * y. akasaka@wa seda. jp
Department of Architecture		Landscape and	Through research of theoretical composition and distinct characteristic of the urban and regional area, it is possible to present an ideal lifestyle, social structure and spatial form. These characteristics include natural spatial features, historical elements and public nature	_	D58	Professor	Doctor of Engineering (Waseda University)	GOTO, Haruhiko	hgoto@waseda .jp			
Department of Architecture	Architectural Design	Kesearch on	Advanced course of academic research and dissertation writings involves both theoretical and methodological works concerning non-governmental community development, citizens' participatory planning, and collaborative environmental design with regard to the sustainabilities of city.	D22	D72	Professor	Doctor of Philosophy (University of California, Berkeley)	ARIGA, Takashi	tariga@wased a.jp			
Department of Architecture	Architectural Design	Research on Regenerative Design of the Built Environment	Establish urban design methods and theoretical research exercises that focus on sustaining and enhancing built environment through understanding physical, social, ecological and technological underlying system of the cities as a whole.	D27	D77	Professor		YAGUCHI, Tetsuya	tetsuya. yagu chi@aoni. was eda. jp			

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Department	Research Area		Research Instruction			Doctor		Ma Super		:		Vice Supervisor	
Department of Architecture	Architectural Design	Research on Urban Theory and Community Planning	Research includes both big-picture and urban theory which explains the backgr cities, and community planning as know	l community-level standpoints: rounds of physical condition of th n as 'Machidukuri' in Japanese.	e –	D78	Professor	Doctor of Philosophy (University of California, Berkeley)	ARIGA, Takashi	tariga@wased a.jp	Associate Professor	Doctor of Engineering (Waseda University)	UCHIDA, Naomi
Department of Architecture	Architectural Design	Reserch on	Research and practice on the impact of as robots, drones, digital-fabrication design. Draw a future vision while inv interaction of people, technology and	n-tools on architecture and urban restigating the historical	n D31	D81	Professor		YOSHIMURA, Yasutaka	ystkysmr@aon i.waseda.jp	Professor		FURUYA, Nobuaki
	Architectural Engineering	Structural Response	Structural control and modeling, activisolated structures, smart structures monitoring, structural system identifistructural and social systems	technology, structural health		D61	Professor	Doctor of Philosophy (Columbia University), Doctor of Engineering (Waseda University)	NISHITANI, Akira	anix@waseda. jp	Professor	Doctor of Engineering (Waseda University)	MAEDA, Toshiro
Department of Architecture	Architectural Engineering	Research on Continuum	Based on the continuum mechanics, rese the combination of observations, exper research themes are seismic propagatir structure modelling, soil-structure in mechanical performance of historic mas	riments, and analyses. Current ng wave simulation, subsurface nteraction modelling, and	D12	D62	Professor	Doctor of Engineering (Waseda University)	MAEDA, Toshiro	tmaeda@wased a.jp			

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Department	Research Area		Research Instruction	Master			Ma Super				Vice Supervisor	
Department of Architecture		Structural	Researches and developments on the structural form, systems and rational structural design methods, which are based on architectural design, seismic isolation structure and response controlled-structure.	-	D79	Professor		HAYABE, Yasuhiro	graduate@sci .waseda.jp			
Department of Architecture	Architectural Engineering	Safety Planning in Built	Physics of and human behavior in fire and disasters are studied as the basis for the design and development of safe built environments. These studies are applied to the restoration of historic monuments, safety design of barrierfree buildings and development of fire-safe innovative structures and building materials.	D15	D65	Professor	Doctor of Engineering (Waseda University)	HASEMI, Yuji	hasemi@wased a.jp	Professor	Doctor of Engineering (Waseda University)	TANABE, Shin-ichi
Department of Architecture	Architectural Engineering	Research on Architectural Environment	Thermal comfort, Indoor air quality, daylighting, sustainable architecture, next-generation HVAC system, zero energy building (ZEB)	D16	D66	Professor	Doctor of Engineering (Waseda University)	TANABE, Shin-ichi	tanabe@wased a.jp			
	Architectural Engineering	Research on Building Construction	We will study what will happen after the completion of buildings from the view of building construction and building economy. The concerns of this study are the durability, the life time estimation, the maintenance and the life cycle management of buildings, and we will study about evaluation, realization and feedback methods to the design proceess of them.	1	D68	Professor	Doctor of Engineering (The University of Tokyo)	KOMATSU, Yukio	ykom@waseda. jp	Professor	Doctor of Engineering (Waseda University)	KOSHIISHI, Naoyuki
	Architectural Engineering	Research on Building	Documentation, investigation and experiment are conducted on the matters related to building materials such as the methods for selecting building materials, performance evaluation of building materials and their components, addition of newly developed functions and enhancement of performance, diagnosis and repair of deteriorated structures, effective use of industrial waste, historical transition of building materials and so forth.	_	D69	Professor	Doctor of Engineering (Waseda University)	KOSHIISHI, Naoyuki	kosiisi@wase da.jp			

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Department	Area		Instruction	Master	Doctor		Super	visor		Supervisor	
	Architectural Engineering	Research on Environment Media	We are involving the methodology to find the optimized solution by understanding the relations between human being, environment and technology, through the development of the environmental monitoring system, application of the media, and the research and education about sustainable architecture.	D21	D7 1	Professor	Doctor of Engineering (Waseda University)	TAKAGUCHI, Hiroto	takaguchi@wa seda.jp		
	Architectural Engineering	Construction Engineering	This area covers the domain of Construction Industry, Construction Engineering and Construction Management which provide building process with high quality. Cost effectiveness, constructability, fast project delibery, environmental frendliness.	-	D80	Professor	Doctor of Engineering (Waseda University)	KOSHLISHI, Naoyuki	kosiisi@wase da.jp		

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Department	Research Area		Research Instruction	Master	de Doctor		Ma Super				Vice Supervisor	
Department of Modern Mechanical Engineering	Advanced Design and Co-creation Division	Plants	For improve energy efficiency and reliability of modern mechanical systems, such as automobiles, high speed trains, airplanes and electric power plants, R&D are carried as to new materials and fabricating process for these systems.	E05	E55	Professor	Doctor of Engineering (Waseda University)	YOSHIDA, Makoto	makoto- yoshida@wase da.jp			
Department of Modern Mechanical Engineering	Design and	Mechanical System Design	Technologies aided mechanical design, for example optimization of structural and control system and concept design process, are studied based on structural and dynamical analysis. Technologies for computer aided engineering and finite elements method are also treated from a broad view of an application for various structures including human bodies and membrane structures.	E06	E56	Professor	Doctor of Engineering (Waseda University)	MIYASHITA, Tomoyuki	tomo miyashi ta@waseda jp			
Department of Modern Mechanical Engineering	Advanced Design and Co-creation Division		Designing Being between Human and Tools. The tools, generally technologies, used through human body can create new functions by organizing relation between the body and the tools. Designing being between human and tools means focusing on this organizing process, and ordering the procedure meaningfully for achieving a specific purpose. Our research aims are exploring and embodying a methodology of increasing potentiality of experiences which are how human being is involved with the world, such as human's motion, cognition, imagination, expression and communication, through the involvement of tools.	E16	E66	Professor	Doctor of Engineering (Waseda University)	UESUGI, Shigeru	wesugi@wased a.jp			
Department of Modern Mechanical Engineering	Advanced Design and Co-creation Division	Research on Transporters Production Technologies	R&D of production technologies for automobile and railway cars.	-	E72	Professor	Doctor of Engineering (Waseda University)	YOSHIDA, Makoto	makoto- yoshida@wase da.jp	Associate Professor	Doctor of Engineering (The University of Tokyo)	OKANE, Toshimitsu
Department of Modern Mechanical Engineering	Advanced Design and Co-creation Division	Research on Technology on Micro/Nano Fabrication	Technologies on micro/nano fabrication in the field of cutting-edge area.	E29	E79	Associate Professor	Doctor of Engineering (Waseda University)	UMEZU, Shinjiro	umeshin@wase da.jp			

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Department	Research Area		Research Instruction	Master			Ma Super				Vice Supervisor	
Department of Modern Mechanical Engineering	Advanced Design and Co-creation Division	Mechanical	To inovate future mechanical structural systems, we research the system design focusing on the mechanical interaction design = "various interactions between components, machines and objects (environment etc.), mechanical systems". In particular, it covers space structural systems including deployable structures.	E02	E52	Professor	Doctor of Engineering (The University of Tokyo)	ISHIMURA, Kosei	graduate@sci .waseda.ac.j p			
	Robotics and Medical/Welfa re Service Division	Research on Intelligent Machine	Research on Intelligent Robotics, Human Interface, Machine Psychology/Physiology, Intelligent Manufacturing System based on Biomechanism. 1) Human-symbiotic Robot, 2) Emergence of Mind in Mechanical Systems, 3) WABOT-HOUSE Project (Design of Structured Environment).	E07	E57	Professor	Doctor of Engineering (Waseda University)	SUGANO, Shigeki	sugano@wased a.jp			
Department of Modern Mechanical Engineering	Robotics and Medical/Welfa re Service Division	Engineering	Analysis for the function related to circulation of blood flow in lifes, to extract the nature and characteristics of these functions by using mechanical engineering approch.	_	E59	Professor	Doctor of Engineering (Waseda University)	IWASAKI, Kiyotaka	iwasaki@wase da.jp	Professor Associate Professor	Doctor of Engineering (Waseda University), Doctor of Medicine (Tokyo Women's Medical University) Doctor of Engineering (Waseda University)	UMEZU, Mitsuo YAGI, Takanobu
Department of Modern Mechanical Engineering	Robotics and Medical/Welfa re Service Division	Research on	By constructing anthropomorphic/humanoid robots that function and behave like a human, we attempt to develop a design method of a humanoid robot having human friendliness to coexist with humans naturally and symbiotically, as well as to scientifically build not only the physical model of a human but also the mental model from the engineering view point.	E10	E60	Professor	Doctor of Engineering (Waseda University)	TAKANISHI, Atsuo	contact@taka nishi.mech.w aseda.ac.jp			

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Department	Research Area		Research Instruction	Master	Doctor		Super				Supervisor	
Department of Modern Mechanical Engineering	Robotics and Medical/Welfa re Service Division	Research on Biomechanical Engineering	This major includs an area to recognize a living system from a mechanical engineering point of view.	_	-	Professor	Doctor of Engineering (Waseda University), Doctor of Medicine (Tokyo Women's Medical University)	UMEZU, Mitsuo	umezu@waseda . jp			
Department of Modern Mechanical Engineering	Robotics and Medical/Welfa re Service Division	Docearch on	System integration design for human supportive robotics facilitating human's perception, cognition and motor functions by minimum intervention with robotics technology (RT): 1) Perception assistive rehabilitation RT, 2) RT based motor re-learning, 3) Psychophysical or Neuro imaging evaluation, 4) Embodiment interface for intelligent construction machinery and 5) Engineering based emgergency medicine.	E24	E74	Professor	Doctor of Engineering (Waseda University)	IWATA, Hiroyasu	jubi@waseda. jp			
Department of Modern Mechanical Engineering	Robotics and Medical/Welfa re Service Division	l n.	Research on Mechanical System Design based on Bio-mechanism	_	E75	Professor	Doctor of Engineering (Waseda University)	SUGANO, Shigeki	sugano@wased a.jp	Professor Associate Professor	Doctor of Engineering (The University of Tokyo) Ph. D. (Interdiscip linary Information Studies) (The University of Tokyo)	FUKUDA, Toshio TAMAKI, Emi
Department of Modern Mechanical Engineering	Robotics and Medical/Welfa re Service Division	I KESEALLII UII	R&D of Field Robots operated in Natural Environment	_	E76	Professor	Doctor of Engineering (Waseda University)	SUGANO, Shigeki	sugano@wased a.jp	Professor Professor	Doctor of Engineering (Waseda University) Doctor of Engineering (Tokyo Institute of Technology)	MIYASHITA, Tomoyuki YOKOI, Kazuhiro

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Department	Research Area		Research Instruction	Appli Co Master	cation de Doctor		Ma Super				Vice Supervisor	
Department of Modern Mechanical Engineering	Robotics and Medical/Welfa re Service Division	Research on Human-robot Interface	Research on Intelligent Interface for Human-Robot Communication	_	E77	Professor	Doctor of Engineering (Waseda University)	SUGANO, Shigeki	sugano@wased a.jp	Professor Professor Professor Associate Professor Associate Professor	Doctor of Engineering (Waseda University) Doctor of Engineering (Waseda University) Doctor of Engineering (The University of Tokyo) Doctor of Literature (Kyoto University) Doctor of Science (Kyoto University)	UESUGI, Shigeru IWATA, Hiroyasu OKUNO, Hiroshi NISHINA, Shigeaki SHOUNO, Osamu
Department of Modern Mechanical Engineering	Robotics and Medical/Welfa re Service Division	Research on Image	Algorithms that recognize and understand 3D scenes containing moving objects by analyzing the video sequences and/or still images acquired by video cameras are researched. In particular, we focus on research on computer vision technologies that can contribute to the actualization of robot visions and autonomous medical systems.	E28	E78	Professor	Doctor of Engineering (The University of Tokyo)	OHYA, Jun	ohya@waseda. jp			
Department of Modern Mechanical Engineering	Environment and Energy Division	Research on Exergy Engineering	This area of research aims to develop environmentally conscious energy systems of mutual conversion among electric, thermal and chemical energy from the viewpoint of exergy. Specific research areas include: Energy storage system for levelizing variable renewables, CO2 Capture and Sequestration, Chemically Recuperation, Fuel Cells and Li-ion Batteries.	E12	E62	Professor	Doctor of Engineering (Waseda University)	NAKAGAKI, Takao	takao nakaga ki@waseda jp			

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Department	Research Area		Research Instruction	Master	Doctor		Super				Supervisor	
Department of Modern Mechanical Engineering	Environment and Energy Division	Research on Thermal Energy Reaction Engineering	Research area is placed on the chemico-thermo fluid dynamics for the development of low emissions and high thermal efficiency internal combustion engines, catalyst and batteries for the use of automobiles.	E13	E63	Professor	Doctor of Engineering (Waseda University)	KUSAKA, Jin	jin. kusaka@w aseda. jp			
Department of Modern Mechanical Engineering	Environment and Energy Division	Environment-	Research and development of energy conversion machines using an external-combustion and/or natural refrigerants. Studies on their applications to advanced distributed power generation and co-generation, and high-efficient refrigeration and air-conditioning. Study on optimum utilization of unused or renewable energy.	-	E67	Professor	Doctor of Engineering (Waseda University)	SEKIYA. Hiroshi	sekiya@wased a.jp			
Department of Modern Mechanical Engineering	Environment and Energy Division	Research on Applied Mechanics of Fluid- Structure Interaction	We focus on computational engineering analysis with advanced flow simulation and modeling methods developed by us. We focus on the advanced research with immediate relevance — research that brings solution and analysis to real-world problems and makes impact on our lives.	E30	E80	Professor	Doctor of Science (Tokyo Institute of Technology)	l Konii	kenji.takiza wa@waseda.jp			
Department of Modern Mechanical Engineering	Environment and Energy Division	Control of Internal Combustion	In the present research, it is investigated that internal combustion engine system including air-path, combustion and exhaust gas after treatments is optimized for cleaner and more efficient one. Each component model is combined to develop the total simulator which can predict engine out-put power and exhaust gas emissions performances. Thus, models for engine control are validated to have agreements with engine test results and to modified toward more accurate model.	_	-	Professor	Doctor of Engineering (Waseda University)	KUSAKA, Jin	jin.kusaka@w aseda.jp	Professor	Doctor of Engineering (Tokyo City University)	FUKUMA, Takao

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Department	Research Area		Research Instruction		Doctor		Ma Super			Vice Supervisor	
Department of Industrial and Management Systems Engineering	-	Research on Software Engineering	Researches on software engineering in general, especially researches on software design such as software modeling, software architecture, software design verification, software design methodologies, software development environment and software product-lines are studied.	-	F67	Professor	Doctor of Philosophy in Information Science (Japan Advanced Institute of Science and Technology)	KISHI, Tomoji	kishi@waseda .jp		
Department of Industrial and Management Systems Engineering	_	Research on Applied Information Science	Though this research course mainly treats advanced information mathematics, pattern recognition and machine learning models from the theoretical viewpoints, its applications to the various problems in the field of industrial management are also covered. The technical side includes information theory, pattern recognition, machine learning, statistical analysis, Bayesian statistics, text mining, information retrieval and others. The application side includes marketing research, management information, business analytics, big data analysis, and other topics.	-	F66	Professor	Doctor of Engineering (Waseda University)	GOTO, Masayuki	masagoto@was eda.jp		
Department of Industrial and Management Systems Engineering	_	Human Life	Researches on human factors are conducted; especially, methodologies of design, operation and management of a system in which human being is involved are studied. Cognitive and behavior models of human natural behavior are studied.		F55	Professor	Doctor of Engineering (Waseda University)	KOMATSUBARA, Akinori	komatsubara ak@waseda jp		
Department of Industrial and Management Systems Engineering	_	Research on	His research interests include various topis in systems science and engineering. Currently he studies adaptive systems approaches, which includes mathematical and computational approach, especially by agent-based modeling and simulation, to complex adaptive systems such as organization, social and economic systems; systems approach to science and technology policy making; soft systems approach to participative decision making and policy making support.	_	F61	Professor	Doctor of Science (Tokyo Institute of Technology)	TAKAHASHI, Shingo	shingo@wased a.jp		
Department of Industrial and Management Systems Engineering	-	Research on Statistical Science	Research of Mathematical Statistics and Applied Statistics, especially, Theories and Applications of Statistical Decision Theory, Multiple Comparison Procedures and Multivariate Statistical Analysis.	-	F62	Professor	Doctor of Engineering (Osaka University)	NAGATA, Yasushi	ynagata@wase da.jp		

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Department	Research Area		Research Instruction	Master	Doctor		Ma Super			 Supervisor	
Department of Industrial and Management Systems Engineering	-	Intelligent Information System	Research on artificial intelligence, autonomous multi-agent systems, knowledge representation, autonomy oriented computing and related areas. Topic is viewed as an interdisciplinary field where computer science intersects with organization science, sociology, psychology, and other fields.	-	F65	Professor	Doctor of Infomatics (Kyoto University)	HISHIYAMA, Reiko	reiko@waseda .jp		
Department of Industrial and Management Systems Engineering	_	Mathematical	Research of decision making and operations research based on mathematical programming and network optimization. The main topic is decision making including uncertainty derived from randomness, flexibility of linguistic information analysis and human subjectivity. The applications include asset allocation, supply chain management, tourism and interactive decision support system.	-	F70	Associate Professor	Doctor of Philosophy in Information Science (Osaka University)	HASUIKE, Takashi	thasuike@was eda.jp		
Department of Industrial and Management Systems Engineering		Research on Operations Research and Optimization	uncertainty, especially for minimizing risks using the methodologies of	_	F69	Professor	Doctor of Engineering (Waseda University)	SHIINA, Takayuki	tshiina@wase da.jp		
Department of Industrial and Management Systems Engineering	_	Manufacturing Systems	Researches on design and management of intelligent manufacturing systems for sustainable society by using information and communication technology (ICT) more effectively. Main research topics are dynamic scheduling using evolutionary algorithms, green supply chain management considering both economical and ecological aspects, supply chain resilience to disasters, advanced cellular manufacturing systems.	_	F71	Professor	Doctor of Engineering (Osaka University)	TAN1M1ZU, Yoshitaka	tanimizu@aon i.waseda.jp		

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Department	Research Area		Research Instruction	Master			Ma Super			 Vice Supervisor	
	Infrastructur e Engineering	Research on Concrete Engineering	Safety and reliability issues, and long-term structural performance of concrete structures are studied. This includes the researches on a lifetime improvement of existing concrete structures and development for next generation concrete structures. In particular, current task is focusing on the structural design methodology based on a life-cycle perspective and damage-free seismic-resistant concrete structures.	G15	G65	Professor	Doctor of Engineering (Tohoku University)	AKIYAMA, Mitsuyoshi	akiyama617@w aseda.jp		And and the second seco
Department of Civil and Environmental Engineering	Infrastructur	Underground	Rational design method and construction method of underground structura are studied. We will also deal with research on maintenance of them. Main target structures are shield tunnels, deep shafts, cut and cover tunnels.	G18	G68	Professor	Doctor of Engineering (Waseda University)	lWANAMI, Motoìi	graduate@sci .waseda jp		
Department of Civil and Environmental Engineering	Infrastructur e Engineering	Structural	Current research is mainly concerned with mechanical behaviors of civil engineering structures. Research interests include buckling and ultimate strength of steel structures, nonlinear problems, elasto-plastic problems, and reliability problems.	G03	G53	Professor	Doctor of Engineering (Osaka University)	ONO, Kiyoshi	k- ono@waseda.j p		
	Infrastructur e Engineering	Structural	Study on structural design including repair/strengthening for hybrid structures and structural system made from cementitious composite typified by concrete, steel, and FRPs	G19	G69	Professor	Doctor of Engineering (Hokkaido University)	SATO, Yasuhiko	graduate@sci .waseda.jp		
Department of Civil and Environmental Engineering	Environment and Disaster Prevention	Research on Water and Environmental Engineering	Experimental and theoretical studies in the field of water and environmental engineering will be conducted, which include (1) restoration of water environment with resource recycling process, (2) advanced water and wastewater treatment processes, and (3) conservation of water environment using bio-barrier and simulation of water quality.	G06	G56	Professor	Doctor of Engineering (Nagoya University)	SAKAKIBARA, Yutaka	sakaki@wased a.jp		

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Department	Research Area		Research Instruction	Master	de Doctor		Ma Super				Vice Supervisor	
Department of Civil and Environmental Engineering	Environment and Disaster Prevention	Research on	Studies on river mechanics, hydraulics and urban inundation are studied. The main research topics are (1) sediment transport in river and river channel evolution, (2) mechanism of sand wave formation on river bed, (3) mechanism of natural river migration, and (4) inundation process in highly urbanized area with underground space.	G07	G 57	Professor	Doctor of Engineering (Waseda University)	SEKINE, Masato	sekine@wased a.jp			
Department of Civil and Environmental Engineering	Environment and Disaster Prevention		Study on the mechanical and geotechnical engineering issues concerned with soil and foundation. 1) Mechanical chracterization of sand and clay with microstructure. 2) Numerical simulation of mechanical response of soil due to the geotechnical construction activities, i.e. TBM tunnelling, Chemical injection and Pile driving. 3) Protection of geotechnical environment and remediation.	G08	G58	Professor	Doctor of Engineering (Waseda University)	AKAGI, Hirokazu	akagi@waseda . jp			
Department of Civil and Environmental Engineering	and Disaster	Research on	This subject is established under the alliance agreement between Japan Railway Technical Research Institute and Waseda Univesity. Japan has become the leading country in the civil engineering world with advanced tunnel engineering. Next generation tunnel engineering is investigated based on the rich case histories of urban and mountain tunnels in Japan, including the maintenance and management technology.	G13	G63	Professor	Doctor of Engineering (Waseda University)	AKAGI, Hirokazu	akagi@waseda .jp	Professor	Doctor of Engineering (Kyoto University)	TSUNO, Kiwamu
Department of Civil and Environmental Engineering	Environment and Disaster Prevention	Research on Coastal Engineering and	Study on the prevention of natural disasters, such as tsunamis, storm surges and high wave attacks are important research topics in coastal zone. Concepts in coastal engineering and hydrodynamics are studied and they are applied to multifarious environments. Global warming and resultant change of storm surge magnitude is calculated by using a numerical simulation model. Analyses of social system are also included in the study of coastal zone management.	G14	G64	Professor	Doctor of Engineering (The University of Tokyo)	SHIBAYAMA, Tomoya	shibayama@wa seda jp			
Department of Civil and Environmental Engineering	Environment and Disaster Prevention		This section develops practical technologies for mitigating natural disaster damage and solving environmental problem on the basis of Geotechnical engineering. Disposal technology for nuclear waste and radioactive contaminated soils, Reducing environmental impact and recycling of disaster wastes due to the Great East Japan Earthquake, Infrastructure reinforcement against Global warming/Climate change, Carbon dioxide fixation using industry wastes and developing countermeasures against liquefaction.	G16	G66	Professor	Doctor of Engineering (Waseda University)	KOMINE, Hideo	hkomine@wase da.jp			

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Department	Research Area		Research Instruction	Master	Doctor		Super			Supervisor	
Department of Civil and Environmental Engineering	Planning and Management	Landscape and	Study on urban planning/design, architecture of infrastructure, and public open space. Study on history of infrastructure and urban development. Both theoretical and practical approaches are applied on those themes with the awareness of the contemporary social conditions.	G12	G62	Professor	Doctor of Engineering (The University of Tokyo)	SASAKI, Yo	yoh@waseda j p		
Department of Civil and Environmental Engineering	Planning and	Transportatio	Focuses on the integration of land use and transportation planning for the sustainable city, studying the empirical solution of urban transportation planning issues. Also covers the role of environmental friendly traffic mode such as Light Rail Transit and bicycle, traffic impact assessment and traffic safety.	G17	G67	Professor	Doctor of Engineering (Waseda University)	MORIMOTO, Akinori	akinori@wase da.jp		
Department of Civil and Environmental Engineering	Planning and	Research on city and regional Planning	The focus of the study is the human-oriented city and regional planning, which is important to create active and attractive region and city. Through the data collection and analysis on the human behavior, we pursue the better understanding of human behavior and show the efficient evidence for city and regional planning.	G20	G70	Professor		-	sakaki@wased a.jp* (*contact address)		

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Department	Research Area		Research Instruction	Master		Main Supervisor					Vice Supervisor	
Department of Earth Sciences, Resources and Environmental Engineering	Science of Mineral Resources	Geochemistry of Mineral	Petrology, Mineralogy, and Geochemistry of Mineral Resources. Study on the transportation and concentration mechanism of valuable elements in the Earth crust. Study on stone materials used for masonry cultural heritages and their deterioration.	_	Н59	Professor	Doctor of Science (The University of Tokyo)	UCHIDA, Etsuo	weuchida@was eda.jp			
Department of Earth Sciences, Resources and Environmental Engineering	Science of Mineral Resources	Research on Applied Mineralogy	Applied mineralogy on natural minerals and industrial resource materials. Field mineralogy, synthesis method, reaction/property control and evaluation, crystal chemistry and crystal structure analysis of minerals. Research on the development of processing technology for the functional materials converted from unused resources and waste materials.	_	H61	Professor	Doctor of Engineering (Waseda University)	YAMAZAKI, Atsushi	ya81349@wase da jp			
Department of Earth Sciences, Resources and Environmental Engineering	Petrology	Research on	Studies on ultrahigh-pressure metamorphism, mantle metasomatism and the formation of diamond due to the deep continental subductions. Main subjects of our research are the evolution of deeply subuducted rocks and related fluids and the mechanism and environments of microdiamond formation in ultrahigh-pressure metacarbonate rocks.	-	H63	Professor	Doctor of Engineering (Waseda University)	OGASAWARA, Yoshihide	yoshi777@was eda.jp			
Department of Earth Sciences, Resources and Environmental Engineering	Petrology	Isotope	The main goals are to understand the formation and alteration of solid materials in the early solar system from the mineralogy and isotope chemistry of meteorites. Meteorites are also used to determine the characteristics and origin of mafic rocks from the Moon.	H14	H64	Professor	Doctor of Philosophy (University of California, Davis)	FAGAN, Timothy Jay	fagan@waseda . jp			·
Department of Earth Sciences, Resources and Environmental Engineering	Petrology	Research on Petrology and Volcanology	We conduct petrological and textural studies of volcanic products in order to reveal magmatic processes that are operating beneath active volcanoes. Our research questions include, 1) evolution of magma reservoir, 2) magma storage conditions, 3) triggering process of eruption and its timescale, 4) influence of syneruptive magma dynamics in conduit to final eruption style at surface. Integration of these contributes to forecasting volcanic eruption and mitigation of volcanic disaster.	H26	H76	Associate Professor	Doctor of Science (The University of Tokyo)	SUZUKI, Yuki	yksuzuki@was eda.jp			

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Department	Research Area		Research Instruction	Master	-		Ma Super		 		Vice Supervisor	
Department of Earth Sciences, Resources and Environmental Engineering	Petrology	Research on Petrology	Geological and cosmochemical materials are targeted for their elemental and isotopic compositions. Based on these data, the environment where these materials formed and the evolutional process after their formation are investigated.	H29	H79	Professor	Doctor of Science (The University of Tokyo)	EBIHRA Mitsuru				
Department of Earth Sciences, Resources and Environmental Engineering	Geningv	Research on Structural Petrology	Main aim of our research is to clarify kinematics and movement histories of major faults, and paleostress orientations using the methods of field survey, petrographic observation of oriented fault rocks, mineral and chemical analyses and isotopic dating. Tectonic evolution of the Median Tectonic Line and SW Japan is also included in our geological researches.	-	H67	Professor	Doctor of Science (Nagoya University)	TAKAGI, Hideo	hideo@waseda .jp			
Department of Earth Sciences, Resources and Environmental Engineering	Geology	Research on Sedimentary	Studies on sedimentary facies, mineralogical and geochemical compositions of sedimentary rocks for understanding Earth's surface environment during the geological periods. Especially, unraveling the formation and evolution of the Asian region will be the focus of the research.	1	H72	Professor	Doctor of Science (Waseda University)	OHTA, Tohru	tohta@waseda .jp			
Department of Earth Sciences, Resources and Environmental Engineering	Geology	Research on Paleobiology	Researches on evolutional history of ecosystem in geological past for understanding mechanisms of evolution and extinction. By analyzing and correlating life history of ancient animals and Earth's climate, interactions between life and environment in Earth history are discussed.	_	H73	Associate Professor	Doctor of Philosophy (The University of Tokyo)	MORIYA, Kazuyoshi	kmoriya@wase da jp			
Department of Earth Sciences, Resources and Environmental Engineering	Engineering of Geo-	l Gen-	The study focuses on clarifying environmental change, pollution problems and disasters using geo-scientific methods. The main focus of recent research has been: (1) Clarifying past environmental change using bottom sediments in ponds, (2) Geotechnical engineering in urban area, (3) Interpreting mechanism of geo-pollution and (4) Promoting landfill stabilization, etc.		Н58	Professor	Doctor of Science (Osaka City University)	KAMURA, Kazuo	kamura@wased a.jp			

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Department	Research Area		Research Instruction	Master			Ma Super		·	 Vice Supervisor	
Department of Earth Sciences, Resources and Environmental Engineering	Engineering	Research on	Geophysical Prospecting methods for energy resources, mineral resources, groundwater, environmental and engineering purposes. Developments of new geophysical technology, measurement systems, numerical simulation, interpretation of real field data.	H27	H77	Associate Professor	Doctor of Philosophy (The University of Utah)	UEDA, Takumi	_		
Department of Earth Sciences, Resources and Environmental Engineering	Development and Environmental	Petroleum	Research on petroleum engineering related subjects including basic reservoir engineering (petrophysics, fluid properties analysis, well test analysis, etc.), reservoir simulator development & reservoir simulation (black oil type, compositional, thermal, etc.), EOR/IOR, reservoir characterization & reservoir modeling, and unconventional hydrocarbon resources (heavy oil, shale gas, methane hydrate, etc.) development.	H20	H70	Professor	Doctor of Philosophy (The University of Texas at Austin)	KURIHARA, Masanori	kurihara m@w aseda jp		
Department of Earth Sciences, Resources and Environmental Engineering	Development and Environmental	Rock Mechanics and Oil Production	Rock mechanics and porous flow modeling using the finite difference, the finite element and the boundary element methods, drilling/production/casing/perforation problems, fracturing, productivity evaluation for horizontal wells, fractured wells, and gravel/screen completions, economic evaluation of petroleum engineering problems, fundamental rock mechanics.	H24	H74	Associate Professor	Doctor of Philosophy (The University of Texas)	FURUI, Kenji	furui@waseda .jp		
Department of Earth Sciences, Resources and Environmental Engineering	Resources Recycling Engineering	Research on Resources Recycling Engineering	(1) Fundamental research and technological development of physical and physico-chemical separation of solid wastes and mineral resources and (2) Clarifying the breakage mechanism of solid materials to improve liberation property, are the research targets in order to optimize various separation processes for achieving sound material-cycle society.	Н03	Н53	Professor	Doctor of Engineering (Waseda University)	OWADA, Shuji	owadas@wased a.jp		
Department of Earth Sciences, Resources and Environmental Engineering	Resources Recycling Engineering		(1) Advanced powder processing for wastewater treatment or soil washing of toxic metals, (2) Experimental research or modeling for pollution / removal mechanism of toxic metals, (3) Advanced solid / liquid separation using interfacial electrostatic phenomena, and (4) Application of powder simulation for advanced separation technologies toward sound material circulation society.	H18	Н68	Professor	Doctor of Engineering (The University of Tokyo)	TOKORO, Chiharu	tokoro@wased a.jp		

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Department	Research Area		Research Instruction	Master	Doctor		Super		· ·		Supervisor	
Department of Earth Sciences, Resources and Environmental Engineering	Environmental Protection	Research on Atmospheric and Aquatic Environmental Chemistry	Study on "the sources, reactions, transport, effects, and fates of chemical species in the hydrosphere, lithosphere, atmosphere, and biosphere" and "environmental diagnosis and protection of air, water, and forest". Research topics are precipitaltion scavenging of air pollutants, effect of acid deposition on forested ecosystem and stream water chemistry, development of solar-powered automatic monitoring system for air pollutants in the mountainous area, and development of water purification technique by aqueous photoreaction using iron rust and humic substances.	Н02	H52	Professor	Doctor of Engineering (The University of Tokyo)	OKOCHI, Hiroshi	hokochi@wase da.jp			
Department of Earth Sciences, Resources and Environmental Engineering	Environmental Protection	Environmental and Occupational	Research for reducing risks of environmental and occupational exposures to chemical hazards: (1) Development of methods for sampling and analysis of chemical substances in air, (2) Device or system development for controlling hazardous exposure, and (3) Chemical characterization of submicron aerosols in Tokyo and on the top of Mt. Fuji.	H25	Н75	Associate Professor	Doctor of Engineering (Waseda University)	MURATA, Masaru	mmurata@wase da jp			
Department of Earth Sciences, Resources and Environmental Engineering	Materials Processing Technology and Physical Chemistry	Research on Materials Processing Technology and Physical Chemistry	Research on Metallurgical Process Development, Process Physical Chemistry and Reaction mechanism studies using quantum chemistry.	H28	H78	Professor	Doctor of Engineering (Waseda University)	YAMAGUCHI, Katsunori		Associate Professor	Doctor of Engineering (Waseda University)	WENG, Jiahua

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	_	Application Code Main Research Supervisors										
Department	Research Area		Research Instruction	Master		Main Supervisor					Vice Supervisor	
Department of Business Design & Management	_	Research on Complex Production Systems	In order to create and sustain value in the complex and diverse society, companies need to address various issues such as management of manufacturing process and supply chains, development of portfolio diversification strategies and innovation, under constraints of resource, relationships with others, geography and so on. Research around this subject will be pursued via interdisciplinary approaches - e.g. complex systems theory, network science, big data analytics, modeling and simulation.	S19	\$69	Associate Professor	Doctor of Engineering (The University of Tokyo)	KITO, Tomomi	graduate@sci .waseda.jp			
Department of Business Design & Management	_	Research on Profit Engineering	It is essential for innovating new business and current business to make a long term and short term profit. Profit design engineering, which develop tools for evaluating how to design and implement sales and costis key issue. Those tools are studied in this department.		\$52	Professor	Doctor of Engineering (Waseda University)	ONO, Takahiro	ohno@waseda. jp			
Department of Business Design & Management	_	Life Cycle Engineering	Proper design and management of product and facility life cycles are indispensable for realizing sustainable manufacturing. For this purpose, researches are conducted with the emphasis on development of modeling and simulation technologies for evaluating effectiveness of various life cycle options such as reuse, recycling and maintenance.	ļ -	_	Professor	Doctor of Engineering (The University of Tokyo)	TAKATA, Shozo	takata@wased a.jp	Doctor of Engineering (The University of Tokyo)	MUNECHIKA, Masahiko	munechika@wa seda.jp
Department of Business Design & Management	_	Research on Quality Management	Good quality is defined as conformity to requirement, thus quality should be considered for all products. The purpose of the research is developing and improving techniques, concepts and statistical methods which are effective for quality management of various products.	_	\$54	Professor	Doctor of Engineering (The University of Tokyo)	MUNECHIKA, Masahiko	munechika@wa seda.jp			
Department of Business Design & Management	-	Research on Intellectual Property Management	We conduct research on the intellectual property management (including patent, design patent, trademark, copyright, trade secret etc.) especially from the viewpoints of collaboration among related departments in the company. The purpose of research is how to controle the increasing IPR cost and improve the effect of new product projects.	-	-	Professor		MORI, Yasuaki	m. cats@wased a.jp			

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Department	Research Area		Research Instruction		Doctor		Ma Super				Vice Supervisor	
Department of Business Design & Management	_	Research on Logistics Engineering	Performance of Product depend on both "Manufacturing" and "Logistics". This course forecast on design of Manufacturing and Material handling systems. These are "Facility planning", "Material handing", "VRP: Vehicle routing Problem" and "LRP: Location RP", applying mathematical approach. The standing points are optimization and pragmatisms.	-	\$56	Professor	Doctor of Engineering (Waseda University)	YOSHIMOTO, Kazuho	kazuho@wased a.jp	Professor	Doctor of Agriculture (The University of Tokyo)	OGITA, Takesh i
Department of Business Design & Management	_	Research on Marketing	This course mainly focuses on the study for analyzing marketing data and showing the solution about marketing problem such as brand management, price strategy and marketing communication. In addition, applying the result of the data analysis to real business is also the subject in this course.	_	\$65	Professor	Doctor of Commerce (Waseda University)	UEDA, Masao	m_ueda@aoni. waseda.jp	Professor	Doctor of Engineering (Waseda University)	ONO, Takahiro
Department of Business Design & Management		Research on Manufacturing , Retail and Distribution Process Innovation	Research on Manufacturing, Retail and Distribution process innovation and Demand/Supply Chain Management System. Such as Coupling point Inventory Planning theory, Rebirth as Enterprise and Corporate Modeling.	-	\$59	Professor	Doctor of Engineering (Osaka University)	MITSUKUNI, Koshichiro	koshi mitsuk un@waseda jp	Professor	Doctor of Engineering (Waseda University)	YOSHIMOTO, Kazuho
Department of Business Design & Management		Manufacturing	Research on methods of process designing and controlling of manufacturing management systems, such as engineer-to-order production system, global production system, flexible production system, etc.	-	1	Associate Professor	Doctor of Engineering (Waseda University)	WENG, Jiahua,	jiahua.weng@ aoni.waseda. jp	Professor	Doctor of Engineering (Chiba Institute of Technology)	ONARI, Hisashi
Department of Business Design & Management		Research on Organizationa I Behavior Management	Yuriko Zemba's research focuses on how people react to organizational harms (e.g., organizational accidents, organizational crimes). The assumption underlying this research is that understanding people's reactions is important to design an organization that is accepted by public. Her research includes following specific themes: how ordinary people judge responsibility for organizational harms, how organizational trust can be restored after organizational crisis, how perspective difference (whether the perceiver is inside or outside the organization) affects interpretations of organizational harms, etc.	1	-	Associate Professor	Doctor of Social Psychology (The University of Tokyo)	ZEMBA, Yuriko	zemba@waseda . jp			

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Department	Research Area	Research Instruction		Master	Doctor		Super				Supervisor	,,
Department of Business Design & Management	-	Research on Methodologies of products development and design based on Human Factors Design Process, and human error prevention are studied fro Management points of ergonomics and human life engineering.	Human Centred m the view	ı	S62	Professor	Doctor of Engineering (The University of Tokyo)	MUNECHIKA, Masahiko	munechika@wa seda.jp	Professor	Doctor of Engineering (Waseda University)	KOMATSUBARA, Akinori
Department of Business Design & Management	_	This research course mainly focuses on the study from the Research on Management information for the various kinds of management i.e. marketing research and strategy analysis. Application Information Technology and information analysis to busines are covered.	activities, s of	-	\$63	Professor	Doctor of Engineering (Waseda University)	ONO, Takahiro	ohno@waseda. jp	Professor	Doctor of Engineering (Waseda University)	GOTO, Masayuki
Department of Business Design & Management	_	Research on Business Management This research in company's management options. Given these circumstances, what management options to select and what course of actio taken. This research in conjunction with other research fideveloped into more concrete management design.	ning of we will study ns should be	_	-	Professor	Doctor of Engineering (Waseda University)	ONO, Takahiro	ohno@waseda. jp	Professor		ISHIKAWA, Masataka
Department of Business Design & Management	_	Research on Manufacturing system design and evaluation technologies ar construct innovative manufacturing systems, with which com Manufacturing Systems Engineering Engineering Systems of manufacturing system design and evaluation from the asp modeling and simulation.	panies can globalization, earch is in the field		_	Professor	Doctor of Engineering (The University of Tokyo)	TAKATA, Shozo	takata@wased a.jp	Professor	Doctor of Engineering (Osaka University)	Fumio