

**Graduate School of Engineering Science Specialization and research field of supervisors**

December 2024 Revised

Department	Unit	Name	Title	Specialization (M: Master's program) (D: Doctoral program)	Research Field	Language Requirements	Type of Students Accepted	
							Doctoral	Master's
Mechanical Engineering, Materials Science, and Ocean Engineering	Mechanical Engineering	<a href="#">ARAKI Takuto</a>	Professor	Mechanical Engineering(MD) and Energy Materials(D)	Thermo-fluid Dynamics, Mass and heat Transfer, Fuel Cells, Micro Electro Mechanical Systems	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Mechanical Engineering	<a href="#">ISHII Kazuhiro</a>	Professor	Mechanical Engineering(MD) and Aerospace Engineering(M)	Combustion Engineering, Chemical Propulsion	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Mechanical Engineering	<a href="#">YU Qiang</a>	Professor	Mechanical Engineering(MD) and Process Integration(M)	Computational Mechanics, Strength of Materials	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Mechanical Engineering	<a href="#">OZAKI Shingo</a>	Professor	Mechanical Engineering(MD) and Energy Materials(D)	Constitutive Equation, Plasticity, Friction, Self-healing materials, Terramechanics	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Mechanical Engineering	<a href="#">SATO Yasukazu</a>	Professor	Mechanical Engineering(MD)	Mechatronics, Electromechanical Systems, Fluid Power Control, Power Transmission	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Mechanical Engineering	<a href="#">HYAKUTAKE Toru</a>	Professor	Mechanical Engineering(MD)	Computational Fluid Dynamics, Biomechanics, Micro Nano Flow	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Mechanical Engineering	<a href="#">MAEDA Yusuke</a>	Professor	Mechanical Engineering(MD)	Robotics, Manufacturing systems engineering	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Mechanical Engineering	<a href="#">MATSUI Jun</a>	Professor	Mechanical Engineering(MD)	Internal Flow in Fluid Machinery , Computational Fluid Dynamics	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Mechanical Engineering	<a href="#">MARUO Shoji</a>	Professor	Mechanical Engineering(MD) and Process Integration(M)	Ultrahigh-precision 3D printing, Micromachine, Micro Total Analysis System	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Mechanical Engineering	<a href="#">INOUE Fumihire</a>	Associate Prof.	Mechanical Engineering(M) and Process Integration(M)	Advanced Packaging and 3D Integration	Japanese or English	—	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Mechanical Engineering	<a href="#">OTA Hiroki</a>	Associate Prof.	Mechanical Engineering(MD) and Process Integration(M)	Micro/Nano fabrication, Sensor engineering, Soft material	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Mechanical Engineering	<a href="#">KATO Ryu</a>	Associate Prof.	Mechanical Engineering(MD)	Robotics, Medical welfare machine, Rehabilitation engineering, Brain machine interface	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Mechanical Engineering	<a href="#">KITAMURA Keiichi</a>	Associate Prof.	Mechanical Engineering(MD) and Aerospace Engineering(M)	Aerodynamics, Computational Fluid Dynamics, Hypersonic Flow, Multiphase Flow	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Mechanical Engineering	<a href="#">SAKAI Seigo</a>	Associate Prof.	Mechanical Engineering(MD)	Heat Transfer, Numerical Simulation, Radiative Exchange	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Mechanical Engineering	<a href="#">SHINOZUKA Jun</a>	Associate Prof.	Mechanical Engineering(MD)	Cutting, FEM, Dynamic Behavior of Material	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Mechanical Engineering	<a href="#">TAKAO Yeshinori</a>	Associate Prof.	Mechanical Engineering(MD) and Aerospace Engineering(M)	Electric Propulsion, Plasma Application	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Mechanical Engineering	<a href="#">FUJISAWA Kei</a>	Associate Prof.	Mechanical Engineering(M)	Droplet impact, Erosion, Polishing, Modeling	Japanese or English	—	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Mechanical Engineering	<a href="#">FUJIIWAKI Ohmi</a>	Associate Prof.	Mechanical Engineering(MD) and Process Integration(M)	Micro mechanism, Micro manipulation, Actuator, Precise mobile robot	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Mechanical Engineering	<a href="#">KUROSE Kizuku</a>	Assistant Prof.	Mechanical Engineering(M)	Heat transfer engineering, Heat exchanger, Heat transport device, Phase change heat transfer	Japanese or English	—	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Materials Science Frontier	<a href="#">UMEZAWA Osamu</a>	Professor	Materials Science Frontier(MD) and Energy Materials(D)	Physical Metallurgy, Microstructural Design and Control, Deformation and Fracture	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Materials Science Frontier	<a href="#">NAKAO Wataru</a>	Professor	Materials Science Frontier(MD) and Energy Materials(D)	Machine material/material mechanics, Inorganic material/physical properties, Structural/functional materials	Japanese or English	○	○

Department	Unit	Name	Title	Specialization (M: Master's program) (D: Doctoral program)	Research Field	Language Requirements	Type of Students Accepted	
							Doctoral	Master's
Mechanical Engineering, Materials Science, and Ocean Engineering	Materials Science Frontier	<a href="#">HASEGAWA Makoto</a>	Professor	Materials Science Frontier(MD) and Aerospace Engineering(M)	Strength of Materials, Fracture Mechanics, Microstructure Control, Composites, Coatings	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Materials Science Frontier	<a href="#">HIROSAWA Shoichi</a>	Professor	Materials Science Frontier(MD) and Energy Materials(D)	Structural Materials Design, Microstructural Control of Metals, Computational Materials Science	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Materials Science Frontier	<a href="#">MUKAI Kohki</a>	Professor	Materials Science Frontier(MD)	Semiconductor Nanostructures, Quantum Optical Material, Optoelectronics Materials, Microfabrication of Metals	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Materials Science Frontier	<a href="#">OHTAKE Mitsuru</a>	Associate Prof.	Materials Science Frontier(MD), Energy Materials(D), and Process Integration(M)	Nanomaterials, Crystal Growth, Magnetism	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Materials Science Frontier	<a href="#">OONO-HORI Naoko</a>	Associate Prof.	Materials Science Frontier(MD)	Reactor Structural Materials, Extreme Materials, Microstructure Analysis	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Materials Science Frontier	<a href="#">NAKATSUGAWA Hiroshi</a>	Associate Prof.	Materials Science Frontier(MD)	Functional Material Engineering, Solid State Physics, Thermoelectric Materials, First Principles Calculation	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Materials Science Frontier	<a href="#">MAENO Tomoyoshi</a>	Associate Prof.	Materials Science Frontier(MD)	Manufacturing Processes, Forming Processes	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Materials Science Frontier	<a href="#">OSADA Toshio</a>	Visiting Prof.	Energy Materials(D)	High Temperature Structural Materials, Microstructure of Materials, Strength of Materials, Fracture Mechanics	Japanese or English	○	—
Mechanical Engineering, Materials Science, and Ocean Engineering	Systems Design for Ocean-Space	<a href="#">OKADA Tetsuo</a>	Professor	Systems Design for Ocean-Space(MD)	Ship Structural Design, Structural Analysis	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Systems Design for Ocean-Space	<a href="#">KAWAMURA Yasumi</a>	Professor	Systems Design for Ocean-Space(MD)	Structural Mechanics, Computer Aided Engineering, Structural Reliability	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Systems Design for Ocean-Space	<a href="#">NISHI Yoshiki</a>	Professor	Systems Design for Ocean-Space(MD)	Marine Resource, Deepsea development, Seawater desalination	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Systems Design for Ocean-Space	<a href="#">MIYAJI Koji</a>	Professor	Systems Design for Ocean-Space(MD) and Aerospace Engineering(M)	High Speed Aerodynamics, Computational Fluid Dynamics, Aircraft Design	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Systems Design for Ocean-Space	<a href="#">MURAI Motohiko</a>	Professor	Systems Design for Ocean-Space(MD)	Design of Ocean Structures, Hydroelastic Responses of Huge Floating Structures, Hydrodynamics, Ocean Environmental Engineering, Ocean energy	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Systems Design for Ocean-Space	<a href="#">TAKAGI Youhei</a>	Associate Prof.	Systems Design for Ocean-Space(MD)	Computational Fluid Dynamics, Drag Reduction, Multiphase Flow	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Systems Design for Ocean-Space	<a href="#">HIGUCHI Takehiro</a>	Associate Prof.	Systems Design for Ocean-Space(MD) and Aerospace Engineering(M)	Attitude Control / Guidance and Control of Aerospace Vehicles, Aerospace Systems Design, Optimal Control, Unmanned Aerial Vehicles	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Systems Design for Ocean-Space	<a href="#">HIRAKAWA Yoshiaki</a>	Associate Prof.	Systems Design for Ocean-Space(MD)	Ship Motion, Ocean Wave, Experiments in Towing Tank and Actual Sea	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Systems Design for Ocean-Space	<a href="#">MITSUYUKI Taiga</a>	Associate Prof.	Systems Design for Ocean-Space(MD)	Complex Systems Design, Systems Engineering	Japanese or English	○	○
Mechanical Engineering, Materials Science, and Ocean Engineering	Systems Design for Ocean-Space	<a href="#">LI Qiao</a>	Associate Prof.	Systems Design for Ocean-Space(M)	Motion Responses of Floating Structures, Marine Renewable Energy, Aquacultural Engineering	Japanese or English	—	○