

Department of Material Science (Master's Course)

Division	Research and Education Field	Class	Unit	Faculty	Class Style
Fundamental Physics	Fundamental Theoretical Physics	Mathematical Physics	4	MOTOYOSHI Akio	Lecture / Every year
		Advanced Course of Quantum Field	2	YAJIMA Satoshi	Lecture / Every year
		Advanced Theory of Atomic Physics	4	ARAI Kenzo	Lecture / Every year
		Advanced Course of Quantum Mechanics	2	MOTOYOSHI Akio	Lecture / Every year
		Advanced Theory of Astrophysics	2	ARAI Kenzo	Lecture / Every year
		Theory of General Relativity	2	ARAI Kenzo	Lecture / Every year
		Condensed Matter Physics I	2	ANIYA Masaru	Lecture / Every year
		Condensed Matter Physics II	2	ANIYA Masaru	Lecture / Every year
		Seminar of Fundamental Physics	8	All Staff	Seminar / Every year
		Research of Fundamental Physics	10	All Staff	
Solid State Physics	Fundamental Solid State Physics	Advanced Course of Condensed Matter Spectroscopy	4	FUJII Atsuhiko	Lecture / Every year
		Quantum Optics	4	MITSUNAGA Masaharu	Lecture / Every year
		Advanced Course of Solid State Physics I	4	OKADA Kunihide	Lecture / Every year
		Advanced Course of Solid State Physics II	4	OKADA Kunihide	Lecture / Every year
		Low Temperature Physics	4	FUJII Muneaki	Lecture / Every year
		Advanced Course of Magnetism I	2	ITO Kikuo	Lecture / Every year
		Advanced Electronic Properties of Solids	4	ICHIKAWA Fusao	Lecture / Every year
		Advanced Course of Magnetism II	2	ITO Kikuo	Lecture / Every year
		Seminar of Condensed Matter Physics	8	All Staff	Seminar / Every year
		Research of Condensed Matter Physics	10	All Staff	
Physical Chemistry	Basic Physical Chemistry	Advanced Chemical Spectroscopy	2	MATSUZAKI Susum	Lecture / Every year
		Solid State Physical Chemistry	2	ICHIMURA Kenji	Lecture / Every year
		Chemistry in the Surface Region	2	FUJIMOTO Hitoshi	Lecture / Every year
		Polymer Chemistry	2	YOSHIDA Masahumi	Lecture / Every year
		Physical Chemistry Seminar	6	All Staff	Seminar / Every year
		Study on Physical Chemistry	12	All Staff	
		Coordination Chemistry	2	MASTUMOTO Naohide	Lecture / Every year
		Advanced Inorganic Chemistry	2	NAKAMURA Masaaki	Lecture / Every year
		Structure Determination of Organic Compounds	2	NISHINO Hiroshi	Lecture / Every year
		Inorganic and Organic Chemistry Seminar	6	All Staff	Seminar / Every year
Study on Inorganic and Organic Chemistry	12	All Staff	Lecture / Every year		
Inorganic and Organic Chemistry	Basic Inorganic and Organic Chemistry				

Division	Research and Education Field	Class	Unit	Faculty	Class Style
Chemistry for Molecular Engineering	Applied Physical Chemistry	Advanced Physical Chemistry for Industry I	2	SAKAKI Sigeyoshi	Lecture / Alternate year
		Advanced Physical Chemistry for Industry II	2	SUGIMOTO Manabu	Lecture / Alternate year
		Advanced Organic Industrial Chemistry I	2	SHOSENJI Hideto	Lecture / Alternate year
Chemistry for Material Science	Separation Science and Technology	Advanced Separation Chemistry I	2	JO Akinori	Lecture / Alternate year
		Advanced Separation Chemistry II	2	IHARA Toshihiro	Lecture / Alternate year
	Chemistry of Inorganic Materials	Advanced Inorganic Materials I	2	KOINUMA Michio	Lecture / Alternate year
		Advanced Inorganic Materials II	2	MATUMOTO Yasumiti	Lecture / Alternate year
	Chemistry of Organic Materials	Advanced Organic Materials I	2	NONAKA Takamasa	Lecture / Alternate year
		Advanced Organic Materials II	2	KURIHARA Seiji	Lecture / Alternate year
	Radiochemistry	Advanced Radiochemistry	2	KISHIKAWA Toshiaki	Lecture / Alternate year
	Polymeric Material Chemistry	Advanced Polymeric Materials I	2	HIRAYAMA Chuichi	Lecture / Alternate year
		Advanced Polymeric Materials II	2	KUNITAKE Masashi	Lecture / Alternate year
	Biochemical Engineering	Applied Microbiology	Advanced Applied Microbiology I	2	KIDA Kenji
Advanced Applied Microbiology II			2	MORIMURA Sigeru	Lecture / Alternate year
Chemical Engineering		Advanced Chemical Engineering I	2	HIROSE Tsutomu	Lecture / Alternate year
		Advanced Bioseparations and Bioprocess Engineering	2	GOTO Motonobu	Lecture / Alternate year
		Advanced Biomolecular Chemistry I	2	IHARA Hirotsuka	Lecture / Alternate year
Biorelated Molecular Science	Applied Electrochemistry	Advanced Biomolecular Chemistry II	2	MUSASHI Yasuo	Lecture / Alternate year
		Advanced Applied Electrochemistry I	2	TANIGUCHI Isao	Lecture / Alternate year
		Advanced Applied Electrochemistry II	2	NISHIYAMA Katsuhiko	Lecture / Alternate year
Common to Division	Applied Chemistry Seminar	Applied Chemistry Seminar	4	All Staff	Exercise / Every year
		Applied Chemistry Laboratory	10	All Staff	Experient, Seminar / Every year

Department of Mathematics and Computer Science (Master's Course)

Division	Research and Education Field	Class	Unit	Faculty	Class Style
Algebra and Geometry	Algebra and Geometry	Discrete Mathematics	2	YAMAKI Hiroyoshi	Lecture / Every year
		Representation Theory of Finite Groups	2	WATANABE Atsumi	Lecture / Every year
		Topological Methods in Modern Differential Geometry	2	HURUSHIMA Mikio	Lecture / Every year
		Algebraic Design Theory	2	HIRAMINE Yutaka	Lecture / Every year
Analysis and Applied Analysis	Analysis and Functional Analysis	Seminar in Pure Mathematics	8	All Staff	Seminar / Every year
		Studies in Pure Mathematics	10	All Staff	Seminar / Every year
		Differential Equation in Complex Domains	2	KOHNO Mitsuhiro	Lecture / Every year
		Theory of Operator Algebras	2	OKA Yukimasa	Lecture / Every year
		Differential Equation and Hypergeometric Functions	2	KIMURA Hironobu	Lecture / Every year
		Mathematical Physics	2	IKEDA Kaoru	Lecture / Every year
		Theory of Special Functions	2	HARAOKA Yoshishige	Lecture / Every year
		Seminar in Applied Mathematics	8	All Staff	Seminar / Every year
		Studies in Applied Mathematics	10	All Staff	Seminar / Every year
		Advanced Theory of Stochastic Processes	2	HITSUDA Masuyuki	Lecture / Every year
Integrated Mathematics	Random Analysis and Mathematical Statistics	Advanced Statistical Inference	2	TAKADA Yoshikazu	Lecture / Every year
		Visualization of Differential Equations	2	OHWAKI Shin-ichi	Lecture / Every year
		Number Theory	2	ENDO Akira	Lecture / Every year
		Theory of Geodesics	2	ITO Jin-ichi	Lecture / Every year
		Seminar in Integrated Mathematics	8	All Staff	Seminar / Every year
		Studies in Integrated Mathematics	10	All Staff	Seminar / Every year

Department of Systems in Natural Environment (Master's Course)

Division	Research and Education Field	Class	Unit	Faculty	Class Style
Physical Earth Science	Physico-chemical Earth Science Earth Dynamics	Hydrology	2	SHIMADA Jun	Lecture, Seminar / Every year
		Physico-chemical Petrology	2	NISHIYAMA Tadao	Lecture / Every year
		Geomodeling	2	SHIBUYA Hidetoshi	Lecture / Every year
		Tectonics Evolution	2	HONZA Eichi	Lecture, Seminar / Every year
		Seminar on the Physical Earth Sciences	8	All Staff	Seminar / Every year
Historical Earth Science	Environmental Analytical Earth Science Paleo-environmental Earth Science	Advanced Research on the Physical Earth Sciences	12	All Staff	
		Evolutionary Paleontology	2	HASE Yoshitaka	Concentrated Lecture /Every year
		Structural Geology	2	TOYOHARA Fujio	Seminar / Every year
		Stratigraphy	2	AKIMOTO Kazumi	Seminar / Every year
		Paleo-oceanography	2	ODA Motoyoshi	Concentrated Lecture /Every year
Biological Function	Biological Function	Sedimentology	2	MATSUDA Hiroki	Concentrated Lecture /Every year
		Seminar on the Historical Earth Sciences	8	All Staff	
		Special Research on the Historical Earth Sciences	12	All Staff	
		Molecular and Cell Biology	2	SHIODA Masaki	Concentrated Lecture /Every year
		Nucleic Acids Biochemistry	2	IZUTA Shunji	Concentrated Lecture /Every year
		Plant Metabolic Biochemistry	2	YOSHITAMA Kunijiro	Seminar / Every year
		Plant Metabolic Physiology	2	YOSHITAMA Kunijiro	Seminar / Every year
		Physiology of Brain	2	SATOH Eiji	Concentrated Lecture /Every year
		Seminar in Biological Function	8	All Staff	
		Special Studies in Biological Function	12	All Staff	
		Cell Biology	2	TAKEITOMI Yoko	Seminar / Every year
		Biological Regulation	Biological Regulation	Animal Morphogenetics	2
Advanced Plant Tissue Culture	2			ONO Kanji	Seminar / Every year
Plant Genetics	2			TAKIO Susumu	Seminar / Every year
Molecular Biology	2			ABE Shin-ichi	Lecture / Every year
Molecular Genetics	2			TAKAMUNE Kazushi	Seminar / Every year
Life and Environmental Scienc	2			KUWANA Takashi	Concentrated Lecture /Every year
Plant Morphogenetics	2			TAKANO Hiroyoshi	Seminar / Every year
Seminar in Biological Regulation	8			All Staff	Seminar / Every year
Special Studies in Biological Regulation	12	All Staff			

Division	Research and Education Field	Class	Unit	Faculty	Class Style
Environmental Analyses	Environmental Measurements	Environmental Analysis	2	TODA Kei	Lecture / Every year
		Analytical Chemistry	2	SANEMASA Isao	Lecture / Every year
		Instrumental Chemical Analysis	2	MOMOSHIMA Noriyuki	Lecture / Every year
		Bioorganic Chemistry	2	KUROSAWA Kazu	Lecture / Every year
		Analysis of the Earth's Environment	2	HUKUMA Kouji	Lecture / Every year
		Lecture of Evolution of Earth and Planets	2	NOHDA Susumu	Lecture / Every year
		Seminar of Environmental Analysis	8	All Staff	Seminar / Every year
		Theme Study of Environmental Analysis	12	All Staff	
		Environmental Cytogenetics	2	UCHINO Akinori	Lecture / Every year
		Biodiversity	2	TAKAMIYA Masayuki	Lecture / Every year
Dynamics of Environments	Diversity of Life	Extreme Microbiology	2	ISHIDA Akio	Lecture / Every year
		Adaptation of Microorganisms	2	SUGIURA Naoto	Lecture / Every year
		Seminar of Environmental Dynamics	8	All Staff	Seminar / Every year
		Theme Study of Environmental Dynamics	12	All Staff	

Common to the Course

Division	Research and Education Field	Class	Unit	Faculty	Class Style
Common to the Course		Up-dated Science & Technology in Japan	1	All staff	Lecture / Every year
		English for Science & Technology	1	All staff	Lecture / Every year