

3-2. 「整理番号」コード表（英語版）（数字3桁、中分類は英字も可）

大分類	中分類（百の位）		小分類（十の位及び一の位）	
University-wide Open Courses	A	Common Seminar	01	Life science archive seminar for graduate course I
			02	Life science archive seminar for graduate course II
			03	Life science archive seminar for graduate course III
	B	Common Lecture	01	Life science archive common lecture I
			02	Life science archive common lecture II
			03	Life science archive common lecture III
Common Courses	A	Integrated Courses	01	Special Lecture on Frontier Science I
			02	Special Lecture on Frontier Science II
			03	Special Lecture on Frontier Science III
			04	Special Lecture on Frontier Science IV
			05	Special Lecture on Frontier Science V
			06	Special Lecture on Frontier Science VI
			07	Stress Management - to enjoy your student life and your social life
			08	Exercise for Health and Fitness I
			09	Exercise for Health and Fitness II
			10	International Systems Design Workshop
			11	Optimal System Design
			12	System Architecture
			13	Case Study: Social Design and Management
			14	Model Based Project Management
			15	Seminar in Aging Control Design
			16	GSFS Research Internship Through Specified Employment I
			17	GSFS Research Internship Through Specified Employment II
	B	Comprehensive Cooperation	01	Special Lecture on Frontier Science VII
			02	Special Lecture on Frontier Science VIII
			03	Special Lecture on Frontier Science IX
	C	Technical English	01	Special Lecture on Frontier Science X
			02	Special Lecture on Frontier Science XI
	D	Overseas Researches	01	Overseas Researches on Frontier Sciences I
			02	Overseas Researches on Frontier Sciences II
			03	Overseas Researches on Frontier Sciences III
			04	Overseas Researches on Frontier Sciences IV
			05	Overseas Researches on Frontier Sciences V
	E	Proactive Research Commons	01	Workshop on Advanced CAE
			02	Smart Sensing
			03	Introduction to Geospatial Big Data Analysis
			04	Morphogenetic Design Creation Seminar
05			Workshop of Proactive Research Commons	
06			Business-academia Cooperative Exercise	
07			Proactive Research Commons	

Division of Environmental Studies Common Subjects	F	World-leading Innovative Graduate Study Program in Proactive Environmental Studies	01	Proactive Environmental Studies I		
			02	Proactive Environmental Studies II		
			03	Advanced UTSIP		
			04	Overseas Exercise in Proactive Environmental Studies I		
			05	Overseas Exercise in Proactive Environmental Studies II		
			06	Research Internship for Proactive Environmental Studies I		
			07	Research Internship for Proactive Environmental Studies II		
			08	Transdisciplinary Skills and Theories I		
			09	Transdisciplinary Skills and Theories II		
			10	Advanced Field Exercise		
			15	Critical Thinking Basics - Select concepts, tools and techniques I		
			16	Critical Thinking Basics - Select concepts, tools and techniques II		
			17	Critical Thinking Skills - Select applications & reflection I		
			18	Critical Thinking Skills - Select applications & reflection II		
			A	Environment Management Program	01	Sustainability Perspectives in Environmental Issues
					02	Fundamentals of Environmental Planning
					03	Environmental Business
					04	Environmental Economics
05	Introduction to Environmental Systems					
06	Fundamentals of Natural Environmental Studies					
07	Introduction to Socio-Cultural Environmental Studies					
08	Business and Finance for Sustainable Development					
09	Special Lecture on Project Management					
B	Integrated Environmental Design Program	01	Urban Design Studio			
		02	Natural Environmental Design Studio I			
		03	Natural Environmental Design Studio II			
		04	Rural Design Studio			
		05	Landscape Design Studio			
		06	Architectural Structure Design Studio			
		07	Integrated Environment Design Theory			
		08	Urban Watershed Design Studio			
		09	Architecture Design Studio I			
		10	Architecture Design Studio II			
		11	Natural Environmental Design Studio I			
		12	ICT & Multimedia Design Studio			
		13	Community Business Design Studio			
		14	Urban Watershed Design Studio I			
		15	Urban Watershed Design Studio II			
		16	Community Business Design Studio I			
		17	Community Business Design Studio II			
C	Brazil-Japan Collaborative Courses on Naval Architecture and Offshore Engineering	01	Risers and Pipelines			
		02	Ocean Renewable Energy			
		03	Subsea Well Construction and Petroleum Production Systems			
		04	Material and Structural Mechanics			
		05	Ocean Fluid-Structure Dynamics			
		06	Introduction of Marine Energies and Environments			
		07	Efficient Shipbuilding			
		08	Design of Ocean System			
		09	Systems and Control Technology			
		10	Maritime Big Data and Satellite Utilization			
		11	Economics of Marine Natural Resources			
		12	High Speed Vessel Design			
		13	Brazil-Japan Internship on Naval Architecture and Offshore Engineering			
D	Minor Program in	01	Seminar on Sustainability Science I			
		02	Seminar on Sustainability Science II			

	E	Transdisciplinary Subjects of	01	Introduction to Environmental Systems
			02	Introduction to Socio-Cultural Environmental Studies
			03	Special Lecture on Project Management
Department of Advanced Materials Science	A	Basis of Advanced Materials Science	01	Introduction to Advanced Materials Science I
			02	Introduction to Advanced Materials Science II
			03	Introduction to Advanced Materials Science III
			04	Introduction to Advanced Materials Science IV
			05	Introduction to Advanced Materials Science V
			06	Introduction to Advanced Materials Science VI
			07	Introduction to Advanced Materials Science VII
			08	New Introduction to Advanced Materials Science I
			09	New Introduction to Advanced Materials Science IV
			10	New Introduction to Advanced Materials Science VI
			11	New Introduction to Advanced Materials Science VII
			12	New Introduction to Advanced Materials Science II
			13	New Introduction to Advanced Materials Science III
			14	New Introduction to Advanced Materials Science V
	B	Physics	01	Optical Properties of Solids A
			02	Optical Properties of Solids B
			03	Magnetism I
			04	Magnetism II
			05	Physics of Quantum Matter
			06	Introduction to superconductivity and superfluidity
			07	Solid State Physics by Soft X-ray and Neutron Spectroscopy
			08	Science of Non-equilibrium Systems
			09	Physics in Quantum Information Technology
			10	Introduction to Biological Physical Chemistry
			11	Introduction to magnetism and spintronics
			12	Strong Correlation Physics
	C	Chemistry	01	Chemistry and Physics of Organic Functional Materials
			02	Soft Matter Physics and Chemistry I
			03	Soft Matter Physics and Chemistry II
			04	Introduction to Biological Physical Chemistry
			05	Solid State Chemistry
			06	Physics of transition metal oxides
			07	Chemistry and Physics of Organic Functional Materials
			08	Introduction to Crystallography
	D	Materials Engineering	01	Environmental materials engineering
			02	Physical chemistry for high temperature processes
			03	Non-equilibrium process
			04	High-Temperature Materials Design
			05	Plasma Materials Science
			06	Semiconductor Device and Materials I
			07	Semiconductor Device and Materials II
	E	Computational Science • Data Science	01	Computational Science for Many-Body Problems
			02	Information Compression in Computational Science
			03	Computational Physics
04			Data Compression in Computational Science and Quantum Computing	

F	Interdisciplinary or Overhead View of Advanced Materials Science	01	Synchrotron Radiation Research	
		02	Introduction to Surface Science	
		03	Physics of transition metal oxides	
		04	Advanced Lecture for Materials Science I	
		05	Advanced Lecture for Materials Science II	
		06	Plasma Materials Science	
		07	Cluster Function Design	
		08	Advanced Materials Science	
		09	Frontier Materials Science I	
		10	Frontier Materials Science II	
		11	Introduction of Transdisciplinary Measurement Science	
		12	Introduction of Advanced Nano-probes	
		13	Practical Advanced Transdisciplinary Measurement Science	
		14	Special Lecture on Advanced Materials Science I	
		15	Special Lecture on Advanced Materials Science II	
		16	Special Lecture on Advanced Materials Science III	
		17	Special Lecture on Advanced Materials Science IV	
		18	Special Lecture on Advanced Materials Science V	
		19	Special Lecture on Advanced Materials Science VI	
G	Seminar · Special Research	01	Advanced Materials Science Seminar I A	
		02	Advanced Materials Science Seminar I B	
		03	Special Research on Advanced Materials Science I A	
		04	Special Research on Advanced Materials Science I B	
		05	Advanced Materials Science Seminar II A	
		06	Advanced Materials Science Seminar II B	
		07	Advanced Materials Science Seminar II C	
		08	Special Research on Advanced Materials Science II A	
		09	Special Research on Advanced Materials Science II B	
		10	Special Research on Advanced Materials Science II C	
Department of Advanced Energy	A	Space propulsion system	01	Energy Systems in Space
			02	Theory on Energy Conversion
			03	Propulsion and Energy Systems
			04	Advanced Energy Conversion
			05	Energy Transfer in Space Applications
	B	Material Science	01	Science and Engineering of Materials Under Severe
			02	Advanced Composite Materials
			03	Fracture and Energy
	C	Deep space exploration	01	Dynamics of High Enthalpy Flow
			02	Introduction to Deep Space Exploration
			03	Science and Technology of Atmospheric Entry
			04	Deep Space Exploration Mission Study
	D	Control system engineering	01	Welfare Control Engineering
			02	Advanced Motion Control Application
			03	Power System Dynamics
			04	Advanced Power Systems Engineering
	E	Electrical and Electric Engineering	01	Electric Vehicle Engineering
			02	Superconductor Technology
			03	Applied Electromechanical Dynamics
			04	Electromagnetic Environmental Engineering
	F	Energy and Environment	01	Energy-Environmental Systems Engineering
			02	Overview of Advanced Electric Energy Systems
			03	Power System Circuit Analysis
			04	Energy Electronics I
05			Energy Electronics II	
06			Transportation System Engineering	

	G	Nonlinear Science	01	Fundamentals of Plasma Physics
			02	Fundamentals of Fluid Dynamics
			03	Nonlinear Theory
	H	Plasma and Fusion Science	01	Plasma Physics and Controlled Nuclear Fusion
			02	Fusion Energy Engineering
			03	Plasma Diagnostic Techniques
			04	Plasma Applications
			05	Advanced Plasma Physics and Engineering
			06	Boundary Plasma Science and Technology
	I	Computational Science	01	Introduction to Computational Fluid Dynamics
			02	High-speed Numerical Simulation
	J	Overall view/Multidisciplinary view	01	Fusion Science Special Lecture I
			02	Fusion Science Special Lecture II
03			Special Lecture on Advanced Energy Engineering I	
04			Special Lecture on Advanced Energy Engineering II	
05			Special Lecture on Advanced Energy Engineering III	
06			Special Lecture on Advanced Energy Engineering IV	
07			Applied Transdisciplinary Design	
08			Seminar in Advanced Energy Engineering I	
09			Seminar in Advanced Energy Engineering II	
10			Special Research on Advanced Energy Engineering I	
11			Special Research on Advanced Energy Engineering II	
12			Special Seminar in Advanced Energy Engineering I	
13			Special Seminar in Advanced Energy Engineering II	
Department of Complexity Science and Engineering	0	Complexity Science and Engineering	01	Special Lecture on Complexity Science and Engineering I
			02	Special Lecture on Complexity Science and Engineering II
			03	Special Lecture on Complexity Science and Engineering III
			04	Special Lecture on Complexity Science and Engineering IV
			05	Special Lecture on Complexity Science and Engineering V
			06	Special Lecture on Complexity Science and Engineering VI
			07	Special Lecture on Complexity Science and Engineering VII
			08	Special Lecture on Complexity Science and Engineering VIII
			09	Special Lecture on Complexity Science and Engineering IX
			10	Special Lecture on Complexity Science and Engineering X
			11	Special Lecture on Complexity Science and Engineering X I
			12	Special Lecture on Complexity Science and Engineering X II
			13	Special Lecture on Complexity Science and Engineering X III
			14	Special Lecture on Complexity Science and Engineering X IV
			15	Special Lecture on Complexity Science and Engineering X V
			16	Special Lecture on Complexity Science and Engineering X VI
			17	Elementary Course of Experiments on Complexity Science and Engineering
			18	Seminar on Complexity Science and Engineering I
			19	Seminar on Complexity Science and Engineering II
			20	Special Research in Complexity Science and Engineering I
			21	Special Research in Complexity Science and Engineering II
			22	Plasma Wave Physics
			23	Turbulence-induced Transport
			24	Complex Condensed Matter Physics
			25	Atomistic process of thin film growth
			26	Surface-Solid State Chemistry
			27	Analyses of Complexity in Earth and Planets
			28	Evolution of Earth and Planets
			29	Observations and explorations of the Earth and planets
			30	Nonlinear System Analyses I
			31	Nonlinear System Analyses II

			32	Instrumentation and Information Processing
			33	Theory of Information and Coding I
			34	Theory of Information and Coding II
			35	Advanced Nuclear Fusion Science and Engineering
			36	Practical Exercises in Nuclear Fusion
			37	Complex biological phenomena
			38	Introduction to Data Driven Science I
			39	Introduction to Data Driven Science II
			40	Space and Planetary Environment
			41	Practical Applications for Deep Space Exploration
			42	Haptics
			43	Advanced Data Analysis
			44	Human-Machine System
			45	Advanced Statistical Modeling
			46	Neural circuits
			47	Introduction to plasma physics
			48	Remote Sensing Image Analysis
			49	Interdisciplinary Fusion Science
Department of Integrated Biosciences	A	Integrated Biosciences	01	Breakthrough Now and Then I (Pre-school)
			02	Breakthrough Now and Then II
			03	Bio-Medicine, Drug Discovery
			04	Molecular recognition
			05	Biochemistry of Cell Responsiveness
			06	Signal transduction
			07	Molecular mechanisms of adaptation
			08	Genomic Instability
			09	Eucaryotic cell biology
			10	Human Evolutionary Specificity
			11	Evolutionary genetics
			12	Control of Biological Function
			13	Microbe vs Non-Microbe Interactions
			14	Frontiers in Cancer Science
			15	Evolutionary genomics
			16	Animal Systems Biology
	B	Basic Biosciences	01	Basic Biochemistry and Molecular Biology
			02	Statistical Analysis for Biosciences
	C	Life Science English	01	Lessons in Writing Scientific Papers in English
			02	Practice in Oral Presentation in English
	D	Life Science Exercise	01	Debate on Ethics in Science and Technology
			02	Debate on Topics in Science and Technology
			03	Seminar in Integrated Biosciences
04			Research Project Planning	
05			Advanced Seminar in Integrated Biosciences	
06			Laboratory Course for Broadened Bioscience Skills	
E	Special Lecture	01	Frontiers in Molecular Biology I	
		02	Frontiers in Molecular Biology II	
F	Special Research	01	Research of Integrated Biosciences I	
		02	Research of Integrated Biosciences II	
F	Fundamental Lecture	01	Fundamental Course I	
		02	Fundamental Course II	
		03	Fundamental Course III	

Department of
Computational Biology
and Medical Sciences

A	Advanced Lecture	01	Advanced Course I
		02	Advanced Course II
		03	Advanced Course III
		04	Advanced Course IV
		05	Advanced Course V
		06	Advanced Course VI
		07	Advanced Course VII
		08	Advanced Course VIII
P	Fundamental Exercise	01	Fundamental Exercise I
		02	Fundamental Exercise II
		03	Fundamental Exercise III
		04	Fundamental Exercise V
T	Special Lecture / Advanced Exercise	01	Advanced Data Mining for Biology
		02	Bio-informatics Software
		03	Introduction to Medicine
		04	Introduction to Translational Research
		31	Special Lectures on Computational Biology I
		32	Special Lectures on Computational Biology II
		33	Special Lectures on Computational Biology III
		34	Special Lectures on Computational Biology IV
		35	Special Lectures on Computational Biology V
		36	Special Lectures on Computational Biology VI
B	Research Ethics / Intellectual Property / Public Policy and Governance in Medical Sciences	01	Introduction to Intellectual Property Law in Biotechnology
		02	Seminar of Intellectual Property in Biosciences
		03	Advanced Lecture on Biomedical Innovation I
		04	Advanced Lecture on Biomedical Innovation II
		05	Exercises of Comprehensive Analysis on Biomedical Innovation
		06	Advanced lecture on Medical Sciences and Public Policy I
		07	Advanced lecture on Medical Sciences and Public Policy II
		08	Research Ethics and Clinical Ethics I
		09	Research Ethics and Clinical Ethics II
S	Joint Lecture with Department of Bioinformatics and Systems Biology	01	Basics of Bioinformatics and Systems Biology I
		02	Basics of Bioinformatics and Systems Biology II
		04	Genome Sequence Analysis I
		05	Genome Sequence Analysis II
		06	Software and Algorithm Design for Biology I
		07	Software and Algorithm Design for Biology II
		08	Genome Biology
		09	Omics
		10	Systems Biology
		11	Data Mining for Biology
		12	Biostatistics
		13	Bioinformatics I
		14	Theoretical Biology
		15	Bioinformatics Programming
		16	Evolutionary and Ecological Informatics
		17	Bio-image Informatics
		18	Cell Biophysics
		31	Special Lectures in Bioinformatics and Systems Biology I
32	Special Lectures in Bioinformatics and Systems Biology II		
33	Special Lectures in Bioinformatics and Systems Biology III		
34	Special Lectures in Bioinformatics and Systems Biology IV		

N	Internationalization Exercise	01	Internationalization Exercises I (Poster presentation)	
		02	Internationalization Exercises II (ppt presentation)	
		03	Internationalization Exercises III (Writing)	
		04	Internationalization Exercises IV	
		05	Internationalization Exercises (Short-term global program)	
	D	Data Scientist Training/Education Program	01	Functional Bioinformatics
			02	Basic Lecture for Data Science for Drug Development
			03	Exercise of Data Science for Drug Development
			04	Exercise of Biological Data Programming I
			05	Exercise of Biological Data Programming II
			06	Practical Exercise of Data Science I
			07	Practical Exercise of Data Science II
			08	Practical Exercise of Data Science III
			09	Basics on Practical Drug Design
	C	Laboratory Seminar and Research	01	Seminar in Computational Biology and Medical Sciences I
			02	Research in Computational Biology and Medical Sciences I
			03	Compulsory Exercise for PhD Students I
			04	Compulsory Exercise for PhD Students II
			05	Seminar in Computational Biology and Medical Sciences II
			06	Research in Computational Biology and Medical Sciences II
			07	Seminar in Biomedical Innovation I
			08	Seminar in Biomedical Innovation II
			09	Research in Biomedical Innovation I
			10	Research in Biomedical Innovation II
	L	Course Lectures	01	Geosphere Change
			02	Environmental Chemistry
			03	Atmosphere and Ocean Dynamics
			04	Terrestrial Ecology
			05	Hydrosphere Ecology
			06	Environmental Evolutionary Adaptation
			07	Landscape Planning and Design
08			Environmental Policy	
09			Resource Management	
10			Water Resource Environment	
11			Natural Environmental Structures	
12			Changes of Natural Environment	
13			Biosphere Functions	
14			Bio-environmental Studies	
15			Biosphere Information Science	
16			Natural Environment Evaluation	
17			Natural Environment Formation	
18			Numerical Modelling for Global Environment Issues	
19			Environmental Information Science	
20			Marine Biogeochemical Cycles	
21			Marine Physical Environments	
22			Marine Mammal Science	
23			Modelling for ocean ecosystem	
24			Frontiers in Natural Environmental Studies	
25			Dynamics of Natural Environment	
26			Conservation of Natural Environment	
27			Coastal Marine Science	
28			Terrestrial Natural Environment	
29			Ocean Natural Environment	
30			Material Cycling of Environment	
31			Natural Environmental Landscape	

Department of Natural Environmental Studies	S	Exercises	32	Earth Surface Processes
			01	Seminar in Natural Environmental Studies I
			02	Seminar in Natural Environmental Studies II
			03	Advanced Seminar on Natural Environmental Studies I
			04	Advanced Seminar on Natural Environmental Studies II
			05	Advanced Seminar on Natural Environmental Studies III
	11	Seminar on Marine Affairs IV		
	P	Field Experiments	01	Extensive Fieldwork on Natural Environmental Studies
			02	Practice in Natural Environmental Studies
			03	Practice in Marine Studies
			11	Practice in Environmental Information Science
			12	Practice in internship for ocean law and ocean policy
			13	Practice in Coastal Environmental Studies
			21	Practice in Earth Surface Environment I
			22	Practice in Earth Surface Environment II
			23	Advanced Practice in Earth Surface Environment I
			24	Advanced Practice in Earth Surface Environment II
			25	Advanced Practice in Earth Surface Environment III
			31	Practice in Terrestrial Ecosystem I
			32	Practice in Terrestrial Ecosystem II
			33	Advanced Practice in Terrestrial Ecosystem I
			34	Advanced Practice in Terrestrial Ecosystem II
			35	Advanced Practice in Terrestrial Ecosystem III
			41	Practice on Marine Environmental Studies I
			42	Practice on Marine Environmental Studies II
			43	Special Practice on Marine Environmental Studies I
			44	Special Practice on Marine Environmental Studies II
			45	Special Practice on Marine Environmental Studies III
			51	Practice in Terrestrial Landscapes I
			52	Practice in Terrestrial Landscapes II
			53	Advanced Practice in Terrestrial Landscapes I
	54	Advanced Practice in Terrestrial Landscapes II		
	55	Advanced Practice in Terrestrial Landscapes III		
	T	Research Works	01	Research Work in Natural Environmental Studies I
			02	Research Work in Natural Environmental Studies II
			03	Advanced Research Work in Natural Environmental Studies I
			04	Advanced Research Work in Natural Environmental Studies II
			05	Advanced Research Work in Natural Environmental Studies III
	G	Seminars	11	Group Seminar in Natural Environmental Studies I
			12	Group Seminar in Natural Environmental Studies II
			13	Group Special Seminar in Natural Environmental Studies I
			14	Group Special Seminar in Natural Environmental Studies II
			15	Group Special Seminar in Natural Environmental Studies III
	E	Laboratory Experiments	11	Experiment in Natural Environmental Studies I
			12	Experiment in Natural Environmental Studies II
			13	Advanced Experiment in Natural Environmental Studies I
			14	Advanced Experiment in Natural Environmental Studies II
			15	Advanced Experiment in Natural Environmental Studies III

Department of Ocean Technology, Policy, and Environment	A	Ocean Technology Policy, New Industry Development, Marine Environment Creation	01	Ocean Technology Policy
			02	New Industry Development
			03	Marine Environmental Creation
			04	Design of Environmentally Harmonizing Systems
			05	Strategic Environmental Assessment
			06	Special Lecture on Ocean Technology, Policy and Environment I
			07	Special Lecture on Ocean Technology, Policy and Environment II
			08	Special Lecture on Ocean Technology, Policy and Environment III
			09	Project on Ocean Technology, Policy, and Environment I
			10	Project on Ocean Technology, Policy, and Environment II
			11	Social Implementation of Ocean Technology
			12	Ocean Utilization Systems
	B	Fundamentals	01	Ocean Development Systems
			02	Applied Fluid Dynamics
			03	Material and Structural Mechanics for Ocean Systems
			04	Special lecture on experimental methodology of ocean technology and environment
			05	Theory on Ship Propulsive Performance
			06	Marine Hydrodynamics
	C	Modeling	01	Marine Environmental Modelling
			02	Exercises on Ocean Information
			03	Ocean Data Science
	D	Sensing	01	Underwater Robotics
			02	Ocean Observation Technology
			03	Marine Robotics and Sensing
	E	Ocean Science	01	Polar Environment
			02	Dynamics of the ocean surface processes
			03	Metocean fundamentals for Engineers
	F	Internship	01	Practical Exercise on Ocean Industry I
			02	Practical Exercise on Ocean Industry II
	G	Oversea Internship	01	Special Exercise on Ocean Technology, Policy and Environment I
			02	Special Exercise on Ocean Technology, Policy and Environment II
			03	Special Exercise on Ocean Technology, Policy and Environment III
			04	Special Exercise on Ocean Technology, Policy and Environment IV
	H	Thesis Research	01	Research on Ocean Technology, Policy and Environment I s
			02	Research on Ocean Technology, Policy and Environment I w
			03	Research on Ocean Technology, Policy and Environment II s
			04	Research on Ocean Technology, Policy and Environment II w
			05	Special Research on Ocean Technology, Policy and Environment I s
			06	Special Research on Ocean Technology, Policy and Environment I w
			07	Special Research on Ocean Technology, Policy and Environment II s
			08	Special Research on Ocean Technology, Policy and Environment II w
			09	Special Research on Ocean Technology, Policy and Environment III s
			10	Special Research on Ocean Technology, Policy and Environment III w
	1	Environment Systems	01	Foundations of Environment Systems I
			02	Foundations of Environment Systems II
			03	Environment Systems I
			04	Environment Systems II
			05	Projects on Environment Systems
06			Seminar on Environment Systems	
2		<u>Energy & Resources</u>	01	<u>Environment Material Systems</u>
			02	<u>Environment Technology in Mineral Resources Development</u>
			03	<u>Resources and Energy</u>
			04	<u>Energy and environment systems</u>
		05	<u>Active Monitoring of Geological Environment</u>	

Department of Environment Systems	3	Assessment	01	Safety for Environment and its Systems	
			02	Life Cycle Impact Assessment	
			03	Management of Radiation Risk	
			04	Special Lecture on Environmental Risks	
			05	Environmental Toxicology	
			06	Environmental Assessment	
			07	Advanced Radiation Protection	
	4	Natural Environment	01	Studies of marine Environment	
			02	Environmental and material systems	
			03	Geosphere Environment	
			04	Bioecological System in Environment	
			05	Special Lecture on Environmental Ecology	
	5	Environment Conservation	01	Environmental Technology Development	
			02	Environmentally Friendly Chemical Process	
	6	Human & Society Environment	01	Environment economics system	
			02	Socio-environmental Systems	
			03	Reciprocity of artifacts and environmental problem	
	7	Computational Information Science	01	Introduction to Modeling of Environment Systems	
			02	Foundations of Environmental Informatics and Sensing	
	8	Special Lectures	01	Special Lecture on Environmental System I	
			02	Special Lecture on Environmental System II	
			03	Special Lecture on Environmental Systems III	
			04	Special Lecture on Environmental Systems IV	
	9	Internship/ha nds-on training	01	Internship on Environmental System	
			11	Overseas Researches on Environment Systems I	
			12	Overseas Researches on Environment Systems II	
			13	Overseas Researches on Environment Systems III	
			14	Overseas Researches on Environment Systems IV	
			15	Overseas Researches on Environment Systems V	
			16	Overseas Researches on Environment Systems VI	
	a	Master & Doctoral Researches	01	Researches on Environment Systems I	
			02	Researches on Environment Systems II	
			21	Experiments on Environment Systems I	
22			Experiments on Environment Systems II		
41			Special Researches on Environment Systems I		
42			Special Researches on Environment Systems II		
43			Special Researches on Environment Systems III		
61			Special Experiments on Environment Systems I		
62			Special Experiments on Environment Systems II		
63			Special Experiments on Environment Systems III		
A	Energy and	01	Advanced Lecture on Environmental Energy Systems		
		B	Mechatronics	01	Special lecture on environmental information equipment
				02	Vibration of elastic continuum
				03	Mechatronics for Environmental Studies
				04	Actuation technologies
				C	System engineering
03	Modeling and analysis of complex systems				
04	Special Lecture on Intelligent Construction System				
05	Special Lecture on i-Construction Systems for Infrastructure Projects				
06	Special Seminar on i-Construction Systems for Infrastructure Projects				

Department of Human and Engineered Environmental Studies	D	Information engineering	01	Human and Environmental Information Wearable Sensing	
			02	Environmental Simulation I	
			03	Environmental Simulation II	
			04	Environment Monitoring Devices	
			05	Robot Informatics	
	E	Mechanical engineering	01	Environmental Sound and Vibration	
			02	Dynamics and Control Seminar	
	F	Barrier-free	01	Assistive Technology	
	G	Electrical and Electric	01	Mechanical and Electrical Design of Flexible Devices	
			02	Biointerface	
	H	Overall view/Multidisciplinary view	01	Special Lecture on Human and Engineered Environment I	
			02	Special Lecture on Human and Engineered Environment II	
			03	Research into Artifacts	
			04	Physiological Science of Adaptation to Exercise	
			05	Human and Engineered Environmental Studies (Basic I)	
			06	Human and Engineered Environmental Studies (Basic II)	
			07	Human and Engineered Environmental Studies (Application)	
			08	Exercises in Human Environmental Design	
			09	Special Exercises in Human and Engineered Environment I	
			10	Special Exercises in Human and Engineered Environment II	
			11	Special Exercises in Human and Engineered Environment III	
			12	Special Exercises in Human and Engineered Environment IV	
			13	Special Exercises in Human and Engineered Environment V	
			14	Nanoprocessing and Nanometrology	
			15	Human and Engineered Environmental Studies (Development)	
16			Advanced Course of Mobility Engineering		
17			Special Lecture on Human Factors		
18			Special Lectures on Human and Engineered Environmental Studies		
19			Human and Engineered Environmental Studies (Basic II A)		
20			Human and Engineered Environmental Studies (Basic II B)		
21			Concept Rapid Prototyping		
22			Teaching Development in Higher Education		
23			Theory of measurement and analysis of biomedical		
24			Neuroengineering		
25			Special Lecture on Decommissioning and Dismantling E		
A	Society & Humanity	01	Environmental Movement		
		02	Environmental Ethics		
		03	History of Human and Environment		
		04	Studies in Culture and Environment		
		05	Historical Landscape Ecology		
		06	Seminar on Society and Humanity I		
		07	Seminar on Society and Humanity II		
		08	Seminar on Society and Humanity III		
		B	Spatial Planning & Design	01	<u>Design for Living Environments</u>
				02	<u>Spatial Planning and Design</u>
				03	<u>Management of Built Environment</u>
				04	<u>Exercise on Management of Built Environment</u>
				05	<u>Environmental Acoustics</u>
				06	<u>Exercise on Environmental Acoustics</u>
				07	<u>Morphology of Architectural Structures</u>
				08	<u>Exercise on Space Environment Engineering</u>
				09	<u>Practice in Architectural Design I</u>
10	<u>Practice in Architectural Design II</u>				
11	<u>Lighting Environment</u>				
12	<u>Seminar on Lighting Environment</u>				

Department of Socio-Cultural Environmental Studies	C	Water and Material Cycles	01	Sustainable Environmental Technology Systems
			02	Water and Wastewater Treatment for Material Recycling
			03	Seminar on Urban Water Environment
			04	Coastal Environment Infrastructure Studies
			05	Seminar on Coastal Environment Infrastructure Studies
			06	Analysis of Coastal Environmental Processes
			07	Seminar on Analysis of Coastal Environmental Processes
			08	Water and Environmental Hygiene
	D	Spatial Information Science	01	Development and Utilization of Spatial Database
			02	Spatial Information Analysis
			03	Seminar on Spatial Information Analysis
			04	Geographic Information and Design
			05	Seminar on Spatial Information System
			06	Statistical Data Analysis
			07	Urban and Regional Economic Analyses I
			08	Urban and Regional Economic Analyses II
			09	Urban and Regional Information Analysis
			10	Urban Computing
			11	Seminar on Spatial Information Analysis
	E	Socio-cultural Environmental Studies	01	Transdisciplinary Seminar on Socio-Cultural Environment
			02	Seminar on Socio-cultural Environment I
			03	Seminar on Socio-cultural Environment II
			04	Seminar on Socio-cultural Environment III
			05	Seminar on Socio-cultural Environment IV
			06	Practice on Socio-Cultural Environment
			07	Study on Socio-cultural Environment
			08	Special Seminar on Socio-cultural Environment I
			09	Special Seminar on Socio-cultural Environment II
			10	Special Study on Socio-cultural Environment
			11	Special Lecture on Socio-cultural and Socio-physical Environment I
			12	Special Lecture on Socio-cultural and Socio-physical Environment II
	A	Introductory Courses	01	Basic Mathematics for International Studies
			02	Introduction to Statistics and Quantitative Analysis
03			Instruments for ODA	
04			Theory and Practice of Fieldwork	
05			Theory and Practice of Fieldwork	
06			Basic Mathematics for International Studies	
07			Field Work and Formation of Hypotheses	
B		Core Courses	01	Field Work and Formation of Hypotheses
			02	Development Economics
			03	Development Research
			04	Asian network
			05	Environment and Resources Management I
			06	Environment and Resources Management II
			07	Rural Planning
			08	Introduction to Geoinformatics
			09	Studies of International Political Economy
			10	Project Decision Making
11	Game Theory for Conflict Management I			
12	Game Theory for Conflict Management II			
13	Mathematical Methods for International Studies I			
14	Mathematical Methods for International Studies II			
15	Foundations of Development Financial Economics			
16	Agricultural Water Management			
17	International Studies Research Seminar			

Department of
International Studies

		18	Interpersonal and Organizational Dynamics in International Cooperation
		19	Financial Economics I
		20	Environmental and Climate Justice
C	Applied Courses	01	Agricultural Development
		02	Seminar on Asian Network
		03	Agricultural Production Technology and International Cooperation
		04	Disaster and Risk Process Analysis I
		05	Disaster and Risk Process Analysis II
		06	Open Macroeconomics
		07	Development Model
		08	Collective Decision-Making I
		09	Collective Decision-Making II
		10	Process of Environmental and Technology Policies
		11	International Studies Lecture Series I
		12	International Studies Lecture Series II
		13	International Studies Lecture Series III
		14	International Studies Lecture Series IV
		15	International Studies Lecture Series V
		16	International Studies Lecture Series VI
		17	Advanced Lecture on International Studies I
		18	Advanced Lecture on International Studies II
		19	Advanced Lecture on International Studies III
		20	Advanced Lecture on International Studies IV
		21	Advanced Lecture on International Studies V
		22	Advanced Lecture on International Studies VI
		23	Advanced Lecture on International Studies VII
		24	Advanced Lecture on International Studies VIII
		25	Advanced Lecture on International Studies IX
		26	Advanced Lecture on International Studies X
		27	Water Security
		28	Water Security: Exercise
		29	Topics in Development Finance
		30	International Studies Lecture SeriesVII
		31	International Studies Lecture SeriesVIII
		32	International Studies Lecture SeriesIX
		33	International Studies Lecture Series X
		34	Agro-Environmental Studies
		35	Disaster and Risk Process Analysis
		36	Language and Discourse Analysis for International Cooperation
		37	Financial Economics II
		38	From Reading to Writing in Environment and Development Research
		39	Advanced Lecture on International Studies XI
		40	Advanced Lecture on International Studies XII
		41	Advanced Lecture on International Studies XIII
		42	Advanced Lecture on International Studies XIV
		43	Advanced Lecture on International Studies XV
D	Practical Courses	01	Exercise of Field Work
		02	Field Work for Development Aid
		03	Summer Program
		04	Masters Internship I
		05	Masters Internship II
		06	Doctoral Internship I
		07	Doctoral Internship II
		08	Exercise of Field Work

E	Thesis Research	01	International Studies Seminar I a	
		02	International Studies Seminar I b	
		03	International Studies Seminar II a	
		04	International Studies Seminar II b	
		05	International Studies Seminar IIIa	
		06	International Studies Seminar IIIb	
		07	International Studies Seminar IVa	
		08	International Studies Seminar IVb	
		09	Doctoral Research Seminar I a	
		10	Doctoral Research Seminar I b	
		11	Doctoral Research Seminar II a	
		12	Doctoral Research Seminar II b	
		13	Doctoral Research Seminar IIIa	
		14	Doctoral Research Seminar IIIb	
		15	Doctoral Research Seminar IVa	
		16	Doctoral Research Seminar IVb	
		17	Doctoral Research Seminar V a	
		18	Doctoral Research Seminar V b	
		19	Doctoral Research Seminar VIa	
		20	Doctoral Research Seminar VIb	
		21	International Studies Seminar I S1	
		22	International Studies Seminar I S2	
		23	International Studies Seminar I A1	
		24	International Studies Seminar I A2	
		25	International Studies Seminar II S1	
		26	International Studies Seminar II S2	
		27	International Studies Seminar II A1	
		28	International Studies Seminar II A2	
		29	Doctoral Research Seminar I S1	
		30	Doctoral Research Seminar I S2	
		31	Doctoral Research Seminar I A1	
		32	Doctoral Research Seminar I A2	
		33	Doctoral Research Seminar II S1	
		34	Doctoral Research Seminar II S2	
		35	Doctoral Research Seminar II A1	
		36	Doctoral Research Seminar II A2	
		37	Doctoral Research Seminar III S1	
		38	Doctoral Research Seminar III S2	
		39	Doctoral Research Seminar III A1	
		40	Doctoral Research Seminar III A2	
A	Science of Sustainability	01	Concepts and Methodologies of Sustainability Science	
		02	Socio-Environmental System and Sustainability	
		03	Advanced Concepts and Methodologies of Sustainability Science	
		04	Sustainability Science: Japanese Perspectives	
		05	Fundamentals of Sustainability Science	
			01	Strategies for Global Sustainability
			02	Environmental Sustainability
			03	Management and Policy Studies of Sustainability
			04	Sustainability of Resources
		05	Planning and Design for Sustainability	
		06	Education and Sustainability	
		07	Biodiversity	
		08	Frontier of Sustainability Science	
		09	Energy and Materials for Sustainability	

Graduate Program in Sustainability Science	B	Science for Sustainability	10	Critical Thinking Basics for Non-Native Speakers of English A
			11	Critical Thinking Basics for Non-Native Speakers of English B
			12	Critical Thinking Skills - Applications & Beyond the Basics A
			13	Critical Thinking Skills - Applications & Beyond the Basics B
			14	Special Lecture on Sustainability Science I
			15	Special Lecture on Sustainability Science II
			16	Special Lecture on Sustainability Science III
			17	Special Lecture on Sustainability Science IV
			18	Negotiation and Consensus Building for Sustainability
			19	Field Exercise on Sustainability Science
			20	Global Field Exercise A
			21	Global Field Exercise B
			22	Global Internship
			23	Management and Policy Studies of Sustainability
			24	Global Internship A
	25	Global Internship B		
	D	Thesis Research	01	Seminar on Sustainability Science (Master's)
			02	Master's Research on Sustainability Science I
			03	Master's Research on Sustainability Science II
			04	Master's Research on Sustainability Science III
			05	Master's Research on Sustainability Science IV
			06	Seminar on Sustainability Science (Doctoral)
			07	Doctoral Research on Sustainability Science I
			08	Doctoral Research on Sustainability Science II
			09	Doctoral Research on Sustainability Science III
10			Doctoral Research on Sustainability Science IV	
11			Doctoral Research on Sustainability Science V	
12			Doctoral Research on Sustainability Science VI	