

2022 Course List for International Graduate Programs (April 2022 - March 2023)

Program	Code	Subject	Sem.	Cr.	Time	Room	Lecture Type	Professor
General Courses	08992	TECHNICAL COMMUNICATION 1	Spring	2	Tue.2	14-B101	①	ISHIDA MAKO
	09013	TECHNICAL COMMUNICATION 1	Spring	2	Wed.3	12-202A	①	SUGIYAMA YUKIKO
	09028	TECHNICAL COMMUNICATION 2	Fall	2	Wed.3	12-202A	①	SUGIYAMA YUKIKO
	03020	TECHNICAL COMMUNICATION 2	Fall	2	Tue.2	14-B103	①	ISHIDA MAKO
	09597	SCIENCE, TECHNOLOGY AND CULTURE	Fall	2	Fri.4	12-104	①	INOUE KYOKO
	09931	MACROECONOMIC DEVELOPMENTS AND ECONOMIC POLICY IN JAPAN	Fall	2	Tue.5	12-101	②	KAWAGOE MASAOKI
Fundamental Science and Technology	00532	INTERNSHIP	Spring	2	-	-	-	SIMIZU SIRO
	00920	INTERNSHIP	Fall	2	-	-	-	SIMIZU SIRO
	07283	TOPICS IN MATHEMATICAL SCIENCES	Spring (Intensive)	2	*3	12-205	①	JAERISCH JOHANNES KLAUS BERNHARD
	00714	QUANTUM ELECTRONICS	Spring	2	Tue.2	12-102	③	HAYASE JUNKO
	12661	ADVANCED COURSE ON SPIN AND NANO-SCALED SOLID STATE PHYSICS	Spring Q2*1	2	Mon.5/Thu.2	12-102	①	KAIJU HIDEO/KAMIHARA YOICHI
	02605	INTELLIGENT MACHINE SYSTEM	Fall Q3*1	2	Mon.1/Mon.2	12-101	③	MURAKAMI TOSHIYUKI
	09601	NON-LINEAR DYNAMICS IN CHEMICAL SYSTEM	Spring	2	Tue.1	12-206	①	ASAKURA KOICHI
		SUPERCONDUCTIVITY AND SOLID STATE ENGINEERING						Not offered in 2022
	MATHEMATICAL ENGINEERING FOR QUANTUM MECHANICS						Not offered in 2022	
	TOPICS IN APPLIED PHYSICS A						Not offered in 2022	
Integrated Design Engineering	00877	INTERNSHIP	Spring	2	-	-	-	YAN JIWANG
	00934	INTERNSHIP	Fall	2	-	-	-	YAN JIWANG
	02129	ULTRAPRECISION MACHINING AND METROLOGY	Fall	2	Mon.2	-	④	YAN JIWANG
	02133	MEMS: DESIGN AND FABRICATION	Spring	2	Thu.2	12-105	③	MIKI NORIHISA/TAKAHASHI HIDETOSHI
	01998	MECHANICAL INTERFACE DESIGN	Fall	2	Thu.3	12-105	③	MORITA TOSHIO
	00236	SPACE EXPLORATION ENGINEERING	Fall	2	Fri.2	14-201	③	ISHIGAMI GENYA
	01323	BIOMIMETIC MICRO/NANO ENGINEERING	Spring	2	Mon.3	12-109	③	ONOE HIROAKI/TAKAHASHI HIDETOSHI
	11555	ADVANCED CONTROL SYSTEMS DESIGN	Spring	2	Mon.2	12-105	①	OHMORI HIROMITSU/NAMERIKAWA TORU
	07924	INTELLIGENT MACHINE SYSTEM	Fall Q3*1	2	Mon.1/Mon.2	12-101	③	MURAKAMI TOSHIYUKI
	07059	DIGITAL WIRELESS COMMUNICATIONS	Spring	2	Mon.2	14-211	①	SANADA YUKITOSHI
	10119	OPTICAL CONTROL OF QUANTUM SYSTEMS	Spring	2	Wed.2	14-204	①	SAIKI TOSHIHARU/FONS PAUL
	09420	OPTICAL NETWORK SYSTEM	Fall	2	Fri.2	12-102	①	TSUDA HIROYUKI
	07647	OPTO-ELECTRONICS	Spring	2	Thu.1	12-208	①	KANNARI FUMIHIKO
	07939	PHOTONIC NANOSTRUCTURE	Spring	2	Thu.3	12-207	①	TANABE TAKASUMI
	00255	ADVANCED SIGNAL PROCESSING	Spring	2	Wed.1	12-106	③	YUKAWA MASAHIRO
	00260	ADVANCED SYSTEM ELECTRONICS	Fall	2	Tue.2	-	④	KUBO RYOGO
	11589	LASER PROCESSING	Fall	2	Mon.3	12-101	①	TERAKAWA MITSUHIRO
	11593	ORGANIC ELECTRONIC MATERIALS AND DEVICES	Spring	2	Fri.1	-	②	NODA KEI
	13251	COGNITIVE ROBOTICS	Spring	2	Fri.5	12-101	②	MURATA SHINGO
	11612	CHEMICAL SENSORS / BIOSENSORS AND SENSING MATERIALS	Spring	2	Tue.2	12-206	①	CITTERIO DANIEL
	12676	ADVANCED COURSE ON SPIN AND NANO-SCALED SOLID STATE PHYSICS	Spring Q2*1	2	Mon.5/Thu.2	12-102	①	KAIJU HIDEO/KAMIHARA YOICHI
	09616	NON-LINEAR DYNAMICS IN CHEMICAL SYSTEM	Spring	2	Tue.1	12-206	①	ASAKURA KOICHI
	08643	COMPUTER VISION	Spring	2	Mon.5	14-202	①	SAITO HIDEO
	08328	COMPUTER ARCHITECTURE	Spring	2	Thu.1	12-203/14-203	①	AMANO HIDEHARU/KONDO MASAOKI
	INTRODUCTION TO COMPUTATIONAL SOLID MECHANICS						Not offered in 2022	
	MATHEMATICAL AND PHYSICAL METHODS IN FLUID DYNAMICS						Not offered in 2022	
Science for Open and Environmental Systems	00915	INTERNSHIP	Spring	2	-	-	-	MATSUBAYASHI NOBUO
	00566	INTERNSHIP	Fall	2	-	-	-	MATSUBAYASHI NOBUO
	00771	DYNAMICS IN ARCHITECTURAL ENGINEERING	Spring	2	Mon.2	12-207	①	MITA AKIRA
	07761	PUBLIC SPACE AND COMMUNICATION	Fall	2	Mon.5	12-106	①	INOUE KYOKO
	01725	ADVANCED COURSE ON SUSTAINABLE ARCHITECTURE AND CITIES	Fall	2	Fri.4	12-207	①	SANO SATOSHI
	00274	NON-LINEAR DYNAMICS IN CHEMICAL SYSTEM	Spring	2	Tue.1	12-206	①	ASAKURA KOICHI
	09707	COMPRESSIBLE FLUID DYNAMICS	Spring Q1*1 (Every other week)	2	Mon.2/Wed.1	12-102	③	MATSUO AKIKO
	00786	ADVANCED COURSE IN APPLIED AND COMPUTATIONAL MECHANICS 2	Fall	2	Mon.1	14-202	③	FUKAGATA KOJI/ MURAMATSU MAYU/ OBI SHINNOSUKE/ TAKEMURA KENJIRO/ OGIHARA NAOMICHI/ ANDO KEITA/ PENG LINYU
	02023	ADVANCED ACTUATOR ENGINEERING	Fall	2	Tue.2	12-202A	③	TAKEMURA KENJIRO
	09635	ADVANCED COURSE OF MOLECULAR DYNAMICS	Fall	2	Mon.5	12-209	①	YASUOKA KENJI
	02497	FUNDAMENTALS OF TURBULENCE AND ITS THEORY	Spring	2	Fri.2	12-206	③	FUKAGATA KOJI
	02281	INTRODUCTION TO TURBULENCE MODEL AND ITS APPLICATION	Fall	2	Tue.5	12-209	②	OBI SHINNOSUKE
	00494	FUNDAMENTALS OF MULTIPHASE FLOW	Spring	2	Mon.3	11-24	③	ANDO KEITA
	09415	FINITE ELEMENT MODELING AND SIMULATION	Fall	2	Tue.1	12-206	③	MURAMATSU MAYU
	12494	MECHANICS AND NUMERICAL SIMULATION OF ADVANCED MATERIALS	Spring	2	Tue.2	11-21	③	TAKANO NAOKI
	13008	NONLINEAR DYNAMICS	Fall	2	Thu.5	12-206	②	PENG LINYU
	08610	TOPICS IN COMPUTER OPERATING SYSTEMS	Spring	2	Tue.3	12-103	①	KONO KENJI
	08988	ADVANCED COURSE IN DATABASE SYSTEMS	Spring	2	Fri.3	12-104	①	TOYAMA MOTOMICHI/YAMADA HIROYUKI/NEMOTO JUN
	02592	MICROPROCESSOR ARCHITECTURE	Fall	2	Thu.3	12-103	①	YAMASAKI NOBUYUKI
	08567	FORMAL PROGRAMMING LANGUAGE THEORY	Fall	2	Thu.4	11-11	①	TAKIMOTO MUNEHIRO
	00179	COMPUTER SCIENCE: EXERCISES	Fall	2	*4	-	①	TAKADA SHINGO/AMANO HIDEHARU
	08605	ADVANCED COURSE ON NATURAL LANGUAGE PROCESSING	Fall	2	Wed.2	12-106	①	OHARA KYOKO/SAITO HIROAKI
	03709	DESIGN OF PHYSICALLY GROUNDED COMMUNICATION SYSTEM	Spring	2	Fri.2	12-101	①	IMAI MICHITA
	08935	DISTRIBUTED SYSTEMS	Fall	2	Fri.5	12-103	①	MATSUTANI HIROKI
	03364	ADVANCED COURSE ON NETWORK ENGINEERING	Fall	2	Mon.4	12-106/12-204	①	TERAOKA FUMIO
	11722	SOFTWARE ENGINEERING: DEVELOPMENT AND TESTING	Spring	2	Tue.5	12-101/12-102	①	TAKADA SHINGO
	01782	ADVANCED COURSE ON COMPUTER VISUALIZATION	Spring	2	Thu.4	14-201	①	FUJISHIRO ISSEI

Program	Code	Subject	Sem.	Cr.	Time	Room	Lecture Type	Professor
Science for Open and Environmental Systems	00183	ADVANCED COURSE ON NETWORK SERVICES	Fall	2	Fri.2	12-105	①	KANEKO KUNITAKE
	08309	REAL WORLD INTERACTIVE SYSTEM	Fall	2	Tue.2	14-204	①	SUGIURA YUTA
	07173	COMPUTER VISION	Spring	2	Mon.5	14-202	①	SAITO HIDEO
	08237	ADVANCED COURSE ON DIGITAL COMMUNICATION THEORY	Spring	2	Tue.2	14-204	①	SASASE IWAO
	03350	ADVANCED COURSE OF INTERNET BACKBONE ARCHITECTURE	Spring	2	Mon.2	14-204	①	YAMANAKA NAOAKI
	02975	AD HOC AND SENSOR NETWORK	Fall	2	Mon.3	14-201	①	OTSUKI TOMOAKI
	08313	COMPUTER ARCHITECTURE	Spring	2	Thu.1	12-203/14-203	①	AMANO HIDEHARU/KONDO MASAAKI
	00528	MIXED REALITY	Spring	2	Mon.3	12-206	①	SUGIMOTO MAKI
	11316	MODELS FOR CONCURRENCY	Spring(Intensive)	2	*5	-	②	YOSHIDA NOBUKO
	13285	MACHINE INTELLIGENCE	Spring	2	Fri.4	12-106	①	SUGIURA KOMEI
	07981	WEB INTELLIGENCE	Spring	2	Tue.4	12-108	①	OSAWA HIROTAKA
	08275	APPLIED STATISTICAL ANALYSIS	Fall	2	Mon.2	12-209	①	SUZUKI HIDEO
	01797	OPERATIONS MANAGEMENT	Fall	2	Mon.2	14-203	①	MATSUKAWA HIROAKI
	01801	OPEN SYSTEMS MANAGEMENT: LECTURE AND EXERCISES	Fall (Every other week*7)	2	Thu.4/Thu.5	14-211	③	TANAKA KENICHI/ NARUSHIMA YASUSHI/ MATSUKAWA HIROAKI/ HIBIKI NORIO/ SUZUKI HIDEO/YAMADA SHU/ IMAI JUNICHI/ KURIHARA SATOSHI/ MATSUURA SHUN
	12509	ADVANCED COURSE ON TOTAL QUALITY MANAGEMENT	Fall	2	Fri.5	12-101	③	YAMADA SHU
		INTRODUCTION TO COMPUTATIONAL SOLID MECHANICS						Not offered in 2022
		ANALYSIS OF ARCHITECTURAL FORM						Not offered in 2022
	ADVANCED FINANCIAL ENGINEERING 1						Not offered in 2022	
	ADVANCED COURSE ON APPLICATION OF EXPERIMENTAL DESIGN						Not offered in 2022	
	THERMAL AND REACTIVE FLUID DYNAMICS						Not offered in 2022	
	MODELING AND ANALYSIS OF STOCHASTIC SYSTEMS						Not offered in 2022	
Faculty of Science and Technology	06325	STABILITY THEORY IN DYNAMICS SYSTEMS / SPECIAL LECTURE IN MATHEMATICAL SCIENCE 1	Spring Q1+1	2	Mon.3/Thu.3	12-101	①	PENG LINYU
	12183	SPECIAL LECTURE IN MECHANICAL ENGINEERING	Spring Q1+1	2	Mon.5/Thu.5	12-202A	①	PENG LINYU
	44067	INTRODUCTION TO FLUID MECHANICS	Fall Q4+1	2	Tue.2/Fri.2	D408 *6	①	ANDO KEITA
Japanese	01046	JAPANESE ELEMENTARY CONVERSATION	Fall	1				Please see the Japanese Class Schedule for the latest information
	00729	JAPANESE ELEMENTARY CONVERSATION 2	Fall	1				
	05568	JAPANESE 1 (A)	Fall	1				
	03049	JAPANESE 1 (B)	Fall	1				
	02760	JAPANESE 1 (C)	Spring	1				
	03240	JAPANESE 1 (D)	Spring	1				
	03254	JAPANESE 2 (A)	Fall	1				
	04447	JAPANESE 2 (B)	Spring	1				
	05630	JAPANESE 3 (A)	Fall	1				
	03383	JAPANESE 3 (B)	Spring	1				
	05644	JAPANESE 4 (A)	Fall	1				
	03326	JAPANESE 4 (B)	Spring	1				
		JAPANESE 5 (B)	Fall	1				
		JAPANESE 5 (A)	Spring	1				

*1 Most courses are taught on a semester system, but the courses marked "Q1" "Q2" "Q3" or "Q4" are conducted on a quarter system which divides a semester into two halves.

Spring Q1courses: April to May

Spring Q2 courses: End of May to July

Fall Q3 courses: September to mid-November

Fall Q4: Mid-November to January

Please confirm page 8-9 of the "Course Guidebook" for Academic Year class schedule.

*2 "INTERNSHIP": Internship term is generally around three weeks or more. Please check the "Course Guidebook" in detail.

*3 "TOPICS IN MATHEMATICAL SCIENCES": This is an intensive course. Lecture days are as follows. Sep.5(2-5period), Sep.6(2-4period), Sep.7(2-5period), Sep.8(2-4period)

*4 "COMPUTER SCIENCE: EXERCISES": This course does not have lectures.

*5 "MODELS FOR CONCURRENCY": This is an intensive course. Lecture days are as follows: Aug.8(2-6period), Aug.9(2-6period), Aug.10(3-6period)

*6 This class is held in Hiyoshi Campus.

*7 "OPEN SYSTEMS MANAGEMENT:LECTURE AND EXERCISES" : Lecture days are as follows: Oct.13,27, Nov.10,24, Dec.8,22, Jan.12

[Type of Classes]

① : Face to Face Classes (conducted mainly in-person)

② : Online Classes (mainly real-time format)

③ : Online Classes (mainly on-demand format)

④ : Online Classes (completely on-demand format)

For more information, please attend the first class and check with the instructor.

List of Compulsory Course for Graduate School of Science and Technology

For Master's program

Subject	School	Center	Cr.
INDEPENDENT STUDY	Fundamental Science and Technology	Mathematics	4
		Physics	
		Molecular Chemistry	
		Applied Physics and Physico-Informatics	
		Chemical Biology	
	Biosciences and Informatics		
	Integrated Design Engineering	Multidisciplinary and Design Science	
		System Integration Engineering	
		Electronics and Electrical Engineering	
Science for Open and Environmental Systems	Material Design Science		
	Space and Environment Design Engineering		
	Science of Environment and Energy		
	Applied and Computational Mechanics		
Information and Computer Science			
Open Systems Management			
GRADUATE RESEARCH 1	Fundamental Science and Technology	Mathematics	6
		Physics	
		Molecular Chemistry	
		Applied Physics and Physico-Informatics	
		Chemical Biology	
	Biosciences and Informatics		
	Integrated Design Engineering	Multidisciplinary and Design Science	
		System Integration Engineering	
		Electronics and Electrical Engineering	
Science for Open and Environmental Systems	Material Design Science		
	Space and Environment Design Engineering		
	Science of Environment and Energy		
	Applied and Computational Mechanics		
Information and Computer Science			
Open Systems Management			

For Ph.D. program

Subject	School	Center	Cr.
GRADUATE RESEARCH 2	Fundamental Science and Technology	Mathematics	6
		Physics	
		Molecular Chemistry	
		Applied Physics and Physico-Informatics	
		Chemical Biology	
	Biosciences and Informatics		
	Integrated Design Engineering	Multidisciplinary and Design Science	
		System Integration Engineering	
		Electronics and Electrical Engineering	
Science for Open and Environmental Systems	Material Design Science		
	Space and Environment Design Engineering		
	Science of Environment and Energy		
	Applied and Computational Mechanics		
Information and Computer Science			
Open Systems Management			