2020 Course List for International Graduate Programs (April 2020 - March 2021)

Program	Code	Subject	Sem.	Cr.	Time	Room	Professor
General Course	09635	SCIENCE,TECHNOLOGY AND CULTURE	Fall	2	Mon/5	12/103	IMOTO, YUKI
	09047	TECHNICAL COMMUNICATION 1	Spring	2	Web/1	12/202B	OHARA, KYOKO
	09028	TECHNICAL COMMUNICATION 1			Thu/2	12/101	DIL, JONATHAN
	09051	TECHNICAL COMMUNICATION 2	Fall	2	Wed/1	12/202B	OHARA, KYOKO
	02956	TECHNICAL COMMUNICATION 2			Thu/2	12/101	DIL, JONATHAN
	09970	MACROECONOMIC DEVELOPMENTS AND ECONOMIC POLICY IN JAPAN	Fall	2	Wed/2	11/13	SAITO, JUN
Fundamental Science and Technology	00752 00810	INTERNSHIP	Spring Fall	2	- -	- -	HOSHINO, KAZUO
		CHEMISTRY AND DAILY LIFE					Not offered in 2020
		PRACTICAL PRESENTATION IN CHEMISTRY 1					Not offered in 2020
		PRACTICAL PRESENTATION IN CHEMISTRY 2					Not offered in 2020
		TOPICS IN CARBOHYDRATE CHEMISTRY					Not offered in 2020
		SEMINAR ON MODERN ORGANIC CHEMISTRY 1					Not offered in 2020
		SEMINAR ON MODERN ORGANIC CHEMISTRY 2					Not offered in 2020
		TOPICS IN ORGANOCATALYSIS					Not offered in 2020
	07852	ANALYTICAL METHODS IN APPLIED PHYSICS AND INFORMATICS	Spring	2	Mon/2	12/202C	HONDA, SATOSHI
		SUPERCONDUCTIVITY AND SOLID STATE ENGINEERING					Not offered in 2020
		PHYSICS AND MODELING OF SEMICONDUCTOR DEVICES					Not offered in 2020
		QUANTUM ELECTRONICS					Not offered in 2020
		MATHEMATICAL ENGINEERING FOR QUANTUM MECHANICS					Not offered in 2020
		NATURAL PRODUCTS CHEMISTRY					Not offered in 2020
		CONTROL THEORY FOR BIOSYSTEM					Not offered in 2020
		SYSTEM BIOMECHANICS					Not offered in 2020
		ADVANCED COURSE ON SPIN AND NANO-SCALED SOLIDSTATE PHYSICS					Not offered in 2020
	02129	INTELLIGENT MACHINE SYSTEM	Fall Q1*1	2	Mon/1,2	12/101	MURAKAMI, TOSHIYUKI
		INFORMATION OPTICS AND OPTICAL MEASUREMENTS					Not offered in 2020
		OPTICAL FUNCTIONAL MATERIALS					Not offered in 2020
	09640	NON-LINEAR DYNAMICS IN CHEMICAL SYSTEM	Spring	2	Tue/1	12/206	ASAKURA, KOICHI
Integrated Design Engineering	00767 00824	INTERNSHIP	Spring Fall	2	- -	- -	AOYAMA, HIDEKI
	00126	SPACE EXPLORATION ENGINEERING	Fall	2	Fri/2	14/201	ISHIGAMI, GENYA
		SPECIAL TOPICS ON ENGINEERING FOR SYNTHESIS AND DESIGN B					Not offered in 2020
	02372	ULTRAPRECISION MACHINING AND METROLOGY	Fall	2	Mon/2	12/202A	YAN, JIWANG
	06880	MATHEMATICAL AND PHYSICAL METHODS IN FLUID DYNAMICS	Fall	2	Thu/1	14/211	SAWADA, TATSUO
	01228	BIOMIMETIC MICRO/NANO ENGINEERING	Spring	2	Mon/3	12/109	ONOE, HIROAKI TAKAHASHI, HIDETOSHI
	01911	MECHANICAL INTERFACE DESIGN	Fall	2	Thu/3	12/105	MORITA, TOSHIO
	02387	MEMS: DESIGN AND FABRICATION	Spring	2	Thu/2	12/105	MIKI, NORIHISA TAKAHASHI, HIDETOSHI
	07939	ADVANCED DESIGN AND PRODUCTION SYSTEM	Spring	2	Mon/3	12/205	AOYAMA, HIDEKI OYA, TETSUO
	11627	ADVANCED CONTROL SYSTEMS DESIGN	Spring	2	Mon/2	12/105	OHMORI, HIROMITSU NAMERIKAWA, TORU
		SYSTEM BIOMECHANICS					Not offered in 2020
	07943	INTELLIGENT MACHINE SYSTEM	Fall Q1*1	2	Mon/1,2	12/101	MURAKAMI, TOSHIYUKI
	00150	ADVANCED SYSTEM ELECTRONICS	Fall	2	Tue/2	12/105	KUBO,RYOGO
	00145	ADVANCED SIGNAL PROCESSING	Spring	2	Wed/1	12/106	YUKAWA, MASAHIRO
	07063	DIGITAL WIRELESS COMMUNICATIONS	Spring	2	Mon/2	14/211	SANADA, YUKITOSHI
	11646	COMPREHENSIVE EXERCISE OF ELECTRONICS AND ELECTRICAL ENGINEERING	Spring	2	Mon/4	11/31	TANABE, TAKASUMI
		PHYSICS AND MODELING OF SEMICONDUCTOR DEVICES					Not offered in 2020
	07981	OPTO-ELECTRONICS	Spring	2	Thu/1	12/208	KANNARI, FUMIHIKO
		INFORMATION OPTICS AND OPTICAL MEASUREMENTS					Not offered in 2020
	10142	OPTICAL CONTROL OF QUANTUM SYSTEMS	Spring	2	Wed/2	14/204	SAIKI, TOSHIHARU, FONS, PAUL J.
	09783	OPTICAL NETWORK SYSTEM	Fall	2	Fri/2	12/102	TSUDA, HIROYUKI
	08199	PHOTONIC NANOSTRUCTURE	Spring	2	Tue/5	12/207	TANABE, TAKASUMI
	11670	ORGANIC ELECTRONIC MATERIALS AND DEVICES	Spring	2	Fri/1	12/211	NODA, KEI
	11665	LASER PROCESSING	Fall	2	Mon/3	11/16	TERAKAWA, MITSUHIRO
	11699	CHEMICAL SENSORS / BIOSENSORS AND SENSING MATERIALS	Spring	2	Tue/2	12/206	CITTERIO, DANIEL
		FUNCTIONAL THIN FILM ENGINEERING					Not offered in 2020
		TECHNICAL ENGLISH FOR INTEGRATED DESIGN AND ENGINEERING					Not offered in 2020
		OPTICAL FUNCTIONAL MATERIALS					Not offered in 2020
		ADVANCED COURSE ON SPIN AND NANO-SCALED SOLIDSTATE PHYSICS					Not offered in 2020
	00164	NON-LINEAR DYNAMICS IN CHEMICAL SYSTEM	Spring	2	Tue/1	12/206	ASAKURA, KOICHI
		INTRODUCTION TO COMPUTATIONAL SOLID MECHANICS					Not offered in 2020
	08390	COMPUTER ARCHITECTURE	Spring	2	Thu/1	14/203	AMANO, HIDEHARU
	07188	COMPUTER VISION	Spring	2	Mon/5	14/202	SAITO, HIDEO
	00805 00456	INTERNSHIP	Spring Fall	2	- -	- -	TAKADA, SHINGO
		INTRODUCTION TO COMPUTATIONAL SOLID MECHANICS					Not offered in 2020
		ANALYSIS OF ARCHITECTURAL FORM					Not offered in 2020
	01744	ARCHITECTURAL AND BUILDING DESIGN STUDIO B	Spring	4	Wed/4,5	34/321	ALMAZAN CABALLERO, JORGE KISHIMOTO, TATSUYA RADOVIC, DARKO CHIBA, MOTOO KONDO, TETSUO
	00661	DYNAMICS IN ARCHITECTURAL ENGINEERING	Spring	2	Mon/2	12/207	MITA,AKIRA

Program	Code	Subject	Sem.	Cr.	Time	Room	Professor
Science for Open and Environmental Systems	07795	PUBLIC SPACE AND COMMUNICATION	Fall	2	Thu/3	12/106	INOUE, KYOKO
	01649	ADVANCED COURSE ON SUSTAINABLE ARCHITECTURE AND CITIES	Fall	2	Fri/4	12/208	RADOVIC, DARKO
	08294	THERMAL AND REACTIVE FLUID DYNAMICS	Spring	2	Fri/1	12/209	UEDA, TOSHIHISA
	00164	NON-LINEAR DYNAMICS IN CHEMICAL SYSTEM	Spring	2	Tue/1	12/206	ASAKURA, KOICHI
	13304	ADVANCED COURSE OF COMPUTATIONAL SOFT MATTER	Fall	2	Fri/5	11/22	ARAI, NORIYOSHI
	01950	ADVANCED ACTUATOR ENGINEERING	Fall	2	Tue/2	12/202B	TAKEMURA, KENJIRO
	09745	COMPRESSIBLE FLUID DYNAMICS	Spring	2	Mon2/Wed1*2	12/102	MATSUO, AKIKO
	00676	ADVANCED COURSE IN APPLIED AND COMPUTATIONAL MECHANICS 2	Fall	2	Mon/1	14/202	OGIHARA, NAOMICHI TAKEMURA, KENJIRO TAKANO, NAOKI MATSUO, AKIKO YASUOKA, KENJI FUKAGATA, KOJI ANDO, KEITA PENG LINYU
	00714	FUNDAMENTALS OF MULTIPHASE FLOW	Spring	2	Mon/3	12/207	ANDO, KEITA
		BIOMECHANICS AND CONTROL OF HUMAN MOVEMENTS					Not offered in 2020
	09669	ADVANCED COURSE OF MOLECULAR DYNAMICS	Fall	2	Thu/2	12/209	YASUOKA, KENJI
		FINITE ELEMENT MODELING AND SIMULATION					Not offered in 2020
	12843	MECHANICS AND NUMERICAL SIMULATION OF ADVANCED MATERIALS	Spring	2	Tue/2	11/21	TAKANO, NAOKI MURAMATSU, MAYU
	02425	FUNDAMENTALS OF TURBULENCE AND ITS THEORY	Spring	2	Fri/2	12/206	FUKAGATA, KOJI
		INTRODUCTION TO TURBULENCE MODEL AND ITS APPLICATION					Not offered in 2020
	02918	AD HOC AND SENSOR NETWORK	Fall	2	Mon/3	14/201	OTSUKI, TOMOAKI
	03292	ADVANCED COURSE OF INTERNET BACKBONE ARCHITECTURE	Spring	2	Mon/2	14/204	YAMANAKA, NAOAKI
	08639	TOPICS IN COMPUTER OPERATING SYSTEMS	Spring	2	Tue/3	12/210	KONO, KENJI
	08586	FORMAL PROGRAMMING LANGUAGE THEORY	Spring	2	Mon/4	14/B101	TAKIMOTO, MUNEHIRO
	08385	COMPUTER ARCHITECTURE	Spring	2	Thu/1	14/203	AMANO, HIDEHARU
	02038	ADVANCED COURSE ON COMPUTER VISUALIZATION	Spring	2	Thu/4	14/201	FUJISHIRO, ISSEI
	00729	COMPUTER SCIENCE: EXERCISES	Fall	2	*3		TAKADA, SHINGO
	07188	COMPUTER VISION	Spring	2	Mon/5	14/202	SAITO, HIDEO
		SYSTEMS PERFORMANCE EVALUATION					Not offered in 2020
	08624	ADVANCED COURSE ON NATURAL LANGUAGE PROCESSING	Fall	2	Wed/2	12/106	OHARA, KYOKO SAITO, HIROAKI
	03641	DESIGN OF PHYSICALLY GROUNDED COMMUNICATION SYSTEM	Spring	2	Fri/2	12/101	IMAI, MICHITA
	11809	SOFTWARE ENGINEERING: DEVELOPMENT AND TESTING	Spring	2	Tue/5	12/101	TAKADA, SHINGO
	08309	ADVANCED COURSE ON DIGITAL COMMUNICATION THEORY	Spring	2	Tue/2	14/204	SASASE, IWAO
	09013	ADVANCED COURSE IN DATABASE SYSTEMS	Spring	2	Fri/3	12/104	TOYAMA, MOTOMICHI
	03307	ADVANCED COURSE ON NETWORK ENGINEERING	Fall	2	Mon/4	12/106	TERAOKA, FUMIO
	00733	ADVANCED COURSE ON NETWORK SERVICES	Fall	2	Fri/2	12/105	KANEKO, KUNITAKE
	00748	MIXED REALITY	Spring	2	Mon/3	12/206	SUGIMOTO,MAKI
	08969	DISTRIBUTED SYSTEMS	Fall	2	Fri/5	12/103	MATSUTANI, HIROKI
	11722	MODELS FOR CONCURRENCY	Spring	2	*4	14/B103	YOSHIDA, NOBUKO
	02516	MICROPROCESSOR ARCHITECTURE	Fall	2	Thu/3	12/103	YAMASAKI, NOBUYUKI
	08332	APPLIED STATISTICAL ANALYSIS	Fall	2	Mon/2	12/103	SUZUKI, HIDEO
	02057	OPEN SYSTEMS MANAGEMENT: LECTURE AND EXERCISES	Fall	2	Thu/4,5	14/211	IMAI, JUNICHI SUZUKI, HIDEO HIBIKI, NORIO MASUDA,YASUSHI MATSUKAWA, HIROAKI YAMAGUCHI, TAKAHIRA YAMADA, SHU KURIHARA, SATOSHI
	02042	OPERATIONS MANAGEMENT	Fall	2	Mon/2	14/203	MATSUKAWA, HIROAKI
	08882	MODELING AND ANALYSIS OF STOCHASTIC SYSTEMS	Fall	2	Fri/4	14/204	MASUDA, YASUSHI
	12858	ADVANCED COURSE ON TOTAL QUALITY MANAGEMENT	Fall	2	Fri/5	12/101	YAMADA, SHU
		ADVANCED FINANCIAL ENGINEERING 1					Not offered in 2020
Japanese	05549	JAPANESE 1A	Fall	1			
	02980	JAPANESE 1B	Fall	1			
	03034	JAPANESE 1C	Spring	1			
	03182	JAPANESE 1D	Spring	1			
	03197	JAPANESE 2A	Fall	1			
	05553	JAPANESE 2B	Spring	1		Please see the Japanese Class Schedule for the latest information	
	05606	JAPANESE 3A	Fall	1			
	03326	JAPANESE 3B	Spring	1			
	05625	JAPANESE 4A	Fall	1			
	03273	JAPANESE 4B	Spring	1			
	00953	JAPANESE ELEMENTARY CONVERSATION	Fall	1			
	00619	JAPANESE ELEMENTARY CONVERSATION 2	Fall	1			

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

Spring Q1courses: April to May

Spring Q2 courses: first class day of the courses are as follows: Monday June 15, Tuesday June 16, Wednesday June 17, Thursday June 11, Friday June 12, Saturday June 13

Fall Q1 courses: September to mid-November

Fall Q2 courses: first class day of the courses are as follows: Monday November 16, Tuesday Nov 17, Wednesday Nov 25, Thursday Nov 12, Friday Nov 13, Saturday Nov 14

Please confirm page 4-7 of the "Course Guidebook and Syllabus" for class schedule.

*2 "COMPRESSIBLE FLUID DYNAMICS": Lecture days are as follows: May 4,6,11,13,18,20,25,27 June 1,3,8,10

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

*4 "MODELS FOR CONCURRENCY": This is an intensive course. Lecture days are as follows: August 11 and 12 period 1 - 5, August 13 period 1 - 3

List of Compulsory Course for 2020 Spring Semester

For Master's program

Subject	Registration Code	School	Center	Cr.
INDEPENDENT STUDY	08734	Fundamental Science and Technology	Mathematics	4
	08753		Physics	
	08772		Molecular Chemistry	
	08089		Applied Physics and Physico-Informatics	
	08806		Chemical Biology	
	08830		Biosciences and Informatics	
	09310	Integrated Design Engineering	Multidisciplinary and Design Science	
	09305		System Integration Engineering	
	09286		Electronics and Electrical Engineering	
	08859		Material Design Science	
	09324	Science for Open and Environmental Systems	Space and Environment Design Engineering	
	07977		Science of Environment and Energy	
	01213		Applied and Computational Mechanics	
	09343		Information and Computer Science	
	09358		Open Systems Management	
GRADUATE RESEARCH 1	01209	Fundamental Science and Technology	Mathematics	6
	02789		Physics	
	03254		Molecular Chemistry	
	10578		Applied Physics and Physico-Informatics	
	08749		Chemical Biology	
	09339		Biosciences and Informatics	
	10468	Integrated Design Engineering	Multidisciplinary and Design Science	
	02698		System Integration Engineering	
	02573		Electronics and Electrical Engineering	
	10396		Material Design Science	
	10530	Science for Open and Environmental Systems	Space and Environment Design Engineering	
	11058		Science of Environment and Energy	
	01361		Applied and Computational Mechanics	
	11120		Information and Computer Science	
	09874		Open Systems Management	

For Ph.D. program

Subject	Registration Code	School	Center	Cr.
GRADUATE RESEARCH 2	02755	Fundamental Science and Technology	Mathematics	6
	03216		Physics	
	03364		Molecular Chemistry	
	10640		Applied Physics and Physico-Informatics	
	08791		Chemical Biology	
	10358		Biosciences and Informatics	
	10491	Integrated Design Engineering	Multidisciplinary and Design Science	
	02721		System Integration Engineering	
	02664		Electronics and Electrical Engineering	
	10434		Material Design Science	
	11024	Science for Open and Environmental Systems	Space and Environment Design Engineering	
	11081		Science of Environment and Energy	
	01400		Applied and Computational Mechanics	
	11153		Information and Computer Science	
	04117		Open Systems Management	