

**List of Subjects for
International Science and Technology Course,
Graduate School of Science and Engineering**

A I (Subjects of Specialized Fields)									
Department	Code	Class	Subject	Credits	Professor	Semester	Note *3	Day/Period	Class room
Information and Computer Science	31691001		Advanced Communications Engineering(E)	2	Jun Cheng	Fall		Wed/ 1	YE215
	31691002		Advanced Emergent Systems(E)	2	Katsunori Shimohara	Spring		Thu/ 2	TC3-105
	31691003		Advanced Language Processing(E) 【Intended for students enrolled in 2014 and before】	2	not available this year	-		-	
	31691008		Advanced Programming Language(E) 【Intended for students enrolled in 2015 and after】	2	not available this year	-		-	
	31691004		Advanced Embedded Systems(E) 【Intended for students enrolled in 2014 and before】	2	not available this year	-		-	
	31691005		Advanced Nature-Inspired Computing(E)	2	Ivan Tanev	Fall		Thu/ 2	TC1-204
	31691006		Advanced Information and Computer Sciences(E) 【Intended for students enrolled in 2017 and after】	2	Andrew Davis	Fall		Fri/ 3	TC1-315
	31691007		Internship(E)	2	Masashi Okubo			Intensive	
	31691009		Advanced Distributed Systems(E) 【Intended for students enrolled in 2015 and after】 ※Prior Registration	2	Takahiro Koita	Spring		Fri/ 1	JM202
	31691010		Advanced Natural Language Processing(E) 【Intended for students enrolled in 2015 and after】 ※Only for the students in the department of Information and Computer	2	not available this year	-		-	
	31691011		Advanced Optimization Technologies(E) 【Intended for students enrolled in 2015 and after】	2	Mitsunori Miki	Fall		Sat/ 2	TC1-121
	31691012		Advanced Knowledge Discovery in Databases(E) 【Intended for students enrolled in 2016 and after】	2	Miho Ohsaki	Fall		Fri/ 4	TC3-207
	31691013		Information and Communication Technology(E) 【Intended for students enrolled in 2017 and after】	2	Shigeo Kaneda Akio Ida	Fall		Thu/ 1	TC1-306 TC1-307
	31691081		Research and ExperimentsI (E) 【For entrance in spring】	2	*1	Spring	1st year	Intensive	
	31691082		Research and Experiments II (E) 【For entrance in spring】	2	*1	Fall	1st year	Intensive	
	31691083		Research and ExperimentsIII (E) 【For entrance in spring】	2	*1	Spring	2nd year	Intensive	
	31691084		Research and ExperimentsIV(E) 【For entrance in spring】	2	*1	Fall	2nd year	Intensive	
	31691091		Research and ExperimentsI (E) 【For entrance in fall】	2	*1	Fall	1st year	Intensive	
	31691092		Research and Experiments II (E) 【For entrance in fall】	2	*1	Spring	1st year	Intensive	
	31691093		Research and ExperimentsIII (E) 【For entrance in fall】	2	*1	Fall	2nd year	Intensive	
31691094		Research and ExperimentsIV(E) 【For entrance in fall】	2	*1	Spring	2nd year	Intensive		
31691090		Master's Thesis(E)					*2		
Electrical and Electronic Engineering	31692001		Advanced Infrastructure Engineering(E)	2	Naoto Nagaoka	Fall		Tue/ 2	TC1-229
	31692002		Advanced Opto-Electronic Waveguide	2	Hiroyuki Toda	Fall		Thu/ 2	TC-3213
	31692008		Electrical Power Systems Engineering(E) ※This subject is compulsory for the students who enrolled in and after 2017 in the department of Electrical and Electronic Engineering.	2	Yoshihiro Baba	Spring	1st year	Fri/ 3	YE420
	31692009		Advanced Applications of Electronics(E) ※This subject is compulsory for the students who enrolled in after 2017 in the department of Electrical and Electronic Engineering.	2	Yoshihiro Baba *This subject may be taught by an another Professor.	Fall	1st year	Wed/ 5	YE514
	31692010		Advanced Electrical and Electronic Engineering I (E) ※Only for the students in the department of Electrical and Electronic Engineering who have completed Code 31692008 or 31692009.	2	Yoshihiro Baba	Spring	2nd year	Tue/ 2	YE514
	31692011		Advanced Electrical and Electronic Engineering II (E) ※Only for the students in the department of Electrical and Electronic Engineering who have completed Code 31692008 or 31692009.	2	Yoshihiro Baba *This subject may be taught by an another Professor.	Fall	2nd year	Tue/ 5	YE514
	31692007		Internship(E)	2	Yoshihiro Baba			Intensive	
	31692081		Research and ExperimentsI (E) 【For entrance in spring】	2	*1	Spring	1st year	Intensive	
	31692082		Research and Experiments II (E) 【For entrance in spring】	2	*1	Fall	1st year	Intensive	
	31692083		Research and ExperimentsIII (E) 【For entrance in spring】	2	*1	Spring	2nd year	Intensive	
	31692084		Research and ExperimentsIV(E) 【For entrance in spring】	2	*1	Fall	2nd year	Intensive	
	31692091		Research and ExperimentsI (E) 【For entrance in fall】	2	*1	Fall	1st year	Intensive	
	31692092		Research and Experiments II (E) 【For entrance in fall】	2	*1	Spring	1st year	Intensive	
	31692093		Research and ExperimentsIII (E) 【For entrance in fall】	2	*1	Fall	2nd year	Intensive	
31692094		Research and ExperimentsIV(E) 【For entrance in fall】	2	*1	Spring	2nd year	Intensive		
31692090		Master's Thesis(E)					*2		
Mechanical Engineering	31693001		Advanced Fluid Dynamics(E)	2	Jiro Mizushima	Spring		Wed/ 3	TC3-109
	31693002		Advanced Mechanics of Materials(E)	2	Toru Fujii	Fall		Mon/ 3	TC3-109
	31693003		Advanced Spray Combustion Science(E)	2	Jiro Senda	Fall		Tue/ 1	KK201
	31693004		Advanced Fluid Engineering(E)	2	Hiroshi Yamaguchi	Spring		Fri/ 5	TC1-125
	31693005		Advanced Mechanical Materials(E)	2	Hiroyuki Miyamoto	Spring		Fri/ 3	TC3-109
	31693006	001	Advanced Mechanical Engineering I (E)	2	Valter Carvelli	Fall		Intensive	
	31693007		Advanced Mechanical Engineering II (E)	2	not available this year	-		-	
	31693008		Internship(E)	2	Kazuya Okubo			Intensive	
	31693081		Research and ExperimentsI (E) 【For entrance in spring】	2	*1	Spring	1st year	Intensive	
	31693082		Research and Experiments II (E) 【For entrance in spring】	2	*1	Fall	1st year	Intensive	
	31693083		Research and ExperimentsIII (E) 【For entrance in spring】	2	*1	Spring	2nd year	Intensive	
	31693084		Research and ExperimentsIV(E) 【For entrance in spring】	2	*1	Fall	2nd year	Intensive	
	31693091		Research and ExperimentsI (E) 【For entrance in fall】	2	*1	Fall	1st year	Intensive	
	31693092		Research and Experiments II (E) 【For entrance in fall】	2	*1	Spring	1st year	Intensive	
	31693093		Research and ExperimentsIII (E) 【For entrance in fall】	2	*1	Fall	2nd year	Intensive	
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	31693090		Master's Thesis(E)					*2	

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Applied Chemistry	31694001		Advanced Organic Chemistry(E)	2	Masahito Kodera Tomoyuki Koga Tadashi Mizutani	Spring		Tue / 2	TC3-112
	31694002		Advanced Inorganic Chemistry(E)	2	Minoru Inaba Masaki Kato Yoshifumi Kimura	Spring		Tue / 1	TC3-112
	31694003		Advanced Physical Chemistry(E)	2	Akihisa Shioi	Fall		Fri / 2	TC1-320
	31694004		Advanced Analytical Chemistry(E)	2	Kazuhiko Tsukagoshi	Fall		Tue / 2	TC1-202
	31694005		Advanced Transport Phenomena(E)	2	Katsumi Tsuchiya	Fall		Thu / 3	TC3-109
	31694006		Internship(E)	2	Tadashi Mizutani			Intensive	
	31694081		Research and ExperimentsI (E) 【For entrance in spring】	2	*1	Spring	1st year	Intensive	
	31694082		Research and Experiments II (E) 【For entrance in spring】	2	*1	Fall	1st year	Intensive	
	31694083		Research and ExperimentsIII (E) 【For entrance in spring】	2	*1	Spring	2nd year	Intensive	
	31694084		Research and ExperimentsIV(E) 【For entrance in spring】	2	*1	Fall	2nd year	Intensive	
	31694091		Research and ExperimentsI (E) 【For entrance in fall】	2	*1	Fall	1st year	Intensive	
	31694092		Research and Experiments II (E) 【For entrance in fall】	2	*1	Spring	1st year	Intensive	
	31694093		Research and ExperimentsIII (E) 【For entrance in fall】	2	*1	Fall	2nd year	Intensive	
	31694094		Research and ExperimentsIV(E) 【For entrance in fall】	2	*1	Spring	2nd year	Intensive	
	31694090		Master's Thesis(E)				*2		
Science of Environment and Mathematical Modeling	31695001		Advanced Analysis(E)	2	Yoshitsugu Takei	Fall		Tue / 1	TC1-319
	31695002		Advanced Numerical Analysis(E)	2	Mygdalskyy Volodymyr	Spring		Thu / 2	TC3-208
	31695003		Advanced Difference / Differential Equations(E)	2	Seiji Saito	Fall		Wed / 3	TC1-230
	31695004		Advanced Natural Environment Studies(E)	2	not available this year	-		-	
	31695005		Advanced Earth and Planetary Environment Science(E)	2	Akira Hayashida	Fall		Tue / 1	TC1-325
	31695006		Advanced Ecology(E)	2	Hiroshi Takeda	Spring		Tue / 5	TC1-201
	31695007		Advanced Environmental Systems Engineering(E)	2	Masatsugu Morimitsu	Spring		Wed / 1	TC3-207
	31695009		Advanced Human and Environmental Studies(E)	2	not available this year	-		-	
	31695008		Internship(E)	2	Yoshihide Watanabe			Intensive	
	31695081		Research and ExperimentsI (E) 【For entrance in spring】	2	*1	Spring	1st year	Intensive	
	31695082		Research and Experiments II (E) 【For entrance in spring】	2	*1	Fall	1st year	Intensive	
	31695083		Research and ExperimentsIII (E) 【For entrance in spring】	2	*1	Spring	2nd year	Intensive	
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	31695091		Research and ExperimentsI (E) 【For entrance in fall】	2	*1	Fall	1st year	Intensive	
	31695092		Research and Experiments II (E) 【For entrance in fall】	2	*1	Spring	1st year	Intensive	
31695093		Research and ExperimentsIII (E) 【For entrance in fall】	2	*1	Fall	2nd year	Intensive		
31695094		Research and ExperimentsIV(E) 【For entrance in fall】	2	*1	Spring	2nd year	Intensive		
31695090		Master's Thesis(E)				*2			

A II (Common Core Subjects)									
Department	Code	Class	Subject	Credits	Professor	Semester	Note *3	Day/Period	Class room
ALL	31696501		Computation Structure(E) ※Lectures will be given via internet	2	Hirohide Haga	Spring		-	
	31696502		Electric Circuit Theory(E)	2	Mami Matsukawa	Fall		Wed / 4	TC1-201
	31696503		Nonlinear Physics(E)	2	Masanori Takaoka	Spring		Mon / 4	TC1-107
	31696504		Materials Chemistry(E)	2	Akiko Nomura	Spring		Mon / 2	TC3-103
	31696505		Applied Mathematical Analysis(E)	2	Toshihiro Iwai	Fall		Tue / 2	TC3-105
	31696506	001	Biology(E)	2	Masaya Ikegawa Rie Kusakabe	Fall		Fri / 4	TC1-129
	31696507		Neuroscience(E) 【Intended for students enrolled in 2014 and after】	2	Kota Kobayashi	Spring		Fri / 2	TC3-104

B (Common General Subjects)									
Department	Code	Class	Subject	Credits	Professor	Semester	Note *3	Day/Period	Class room
ALL	31696601		Ethics for Scientists and Engineers(E)	2	Philip Tromovitch	Spring		Thu / 4	TC3-105
	31696602		Technology and Business Project Management(E)	2	Motoi Wada Makoto Sarata	Spring		Tue / 3・4	JM404
	31696603	001	Science and Engineering Writing 1(E)	2	Michael David McAuliffe	Spring		Wed / 3	TS101
	31696603	002	Science and Engineering Writing 1(E)	2	Michael David McAuliffe	Fall		Wed / 2	TS101
	31696608	001	Science and Engineering Writing 2(E) 【Intended for students enrolled in 2014 and after】	2	Philip Tromovitch	Spring		Thu / 3	TC3-105
	31696608	002	Science and Engineering Writing 2(E) 【Intended for students enrolled in 2014 and after】	2	Philip Tromovitch	Fall		Thu / 4	TC3-213
	31696605		Presentation Skills for Scientists and Engineers(E)	1	Philip Tromovitch	Fall		Thu / 3	TC3-213
	31696606		R & D Planning for Scientists and Engineers(E)	2	Motoi Wada	Fall		Mon / 2	TC3-104
	31696607		Japanese Corporate Culture(E)	2	Makoto Sarata	Fall		Tue / 3・4	JM203

*1 will be lectured by your supervisor

*2 register in final Spring semester

*3 1st year = the first and second semester, 2nd year = the third and fourth semester