

**<AY2024> List of Subjects for ISTC,
Graduate School of Science and Engineering**

A I (Subjects of Specialized Fields)								
Department	Code	Class	Subject	Credit	Lecturer	Semester	Day/Period	Note *4
Information and Computer Science	31691001		Advanced Communications Engineering (E)	2	JUN CHENG	Spring	Mon/2	
	31691002		Advanced Emergent Systems (E) 【For students enrolled in 2022 and before】	2	(not available this year)	—	—	
	31691008		Advanced Programming Language (E) *Lectures will be given via internet	2	HAGA Hirohide	Spring	—	
	31691005		Advanced Nature-Inspired Computing (E)	2	IVAN TANEV	Fall	Thu/2	
	31691006		Advanced Information and Computer Sciences (E) 【For students enrolled in 2023 and before】	2	ANDREW DAVIES	Fall	Fri/2	
	31691017		Advanced Information and Computer Sciences I (E) 【For students enrolled in after 2024】	2	ANDREW DAVIES	Fall	Fri/2	
	31691007		Internship (E)	2	IVAN TANEV	All	Intensive	
	31691009		Advanced Distributed Systems (E)	2	KOITA Takahiro	Spring	Fri/1	*Prior Registration
	31691010		Advanced Natural Language Processing (E)	2	TAMURA Akihiro	Fall	Mon/4	
	31691011		Advanced Optimization Technologies (E)	2	(not available this year)	—	—	
	31691012		Advanced Knowledge Discovery in Databases (E)	2	OSAKI Miho	Fall	Fri/4	
	31691014		Advanced Digital Signal Processing (E)	2	KATO Tsuneo	Spring	Thu/2	
	31691015		Advanced Data Science (E) 【For students enrolled in after 2024】	2	KATSURAI Marie	Fall	Tue/2	
	31691016		Advanced Pattern Recognition (E) 【For students enrolled in after 2024】	2	SHIRAHAMA Kimiaki	Sprint	Wed/4	
	31691081	*1	Research and Experiments I (E) 【For students enrolled in spring】	2	*2	Spring	Intensive	1st year
	31691082	*1	Research and Experiments II (E) 【For students enrolled in spring】	2	*2	Fall	Intensive	1st year
	31691083	*1	Research and Experiments III (E) 【For students enrolled in spring】	2	*2	Spring	Intensive	2nd year
	31691084	*1	Research and Experiments IV (E) 【For students enrolled in spring】	2	*2	Fall	Intensive	2nd year
	31691091	*1	Research and Experiments I (E) 【For students enrolled in fall】	2	*2	Fall	Intensive	1st year
	31691092	*1	Research and Experiments II (E) 【For students enrolled in fall】	2	*2	Spring	Intensive	1st year
31691093	*1	Research and Experiments III (E) 【For students enrolled in fall】	2	*2	Fall	Intensive	2nd year	
31691094	*1	Research and Experiments IV (E) 【For students enrolled in fall】	2	*2	Spring	Intensive	2nd year	
31691090		Master's Thesis (E)	—	—	All	Intensive	*3	
Electrical and Electronic Engineering	31692001		Advanced Infrastructure Engineering (E)	2	NAGAOKA Naoto	Fall	Fri/3	
	31692012		Advanced Optical Communication Engineering (E)	2	TODA Hiroyuki	Fall	Thu/2	
	31692008		Electrical Power Systems Engineering (E) *This subject is compulsory for the students are who enrolled in the department of Electrical and Electronic Engineering.	2	BEVRANI HASSAN	Spring	Intensive	1st year
	31692009		Advanced Applications of Electronics (E) *This subject is compulsory for the students are who enrolled in the department of Electrical and Electronic Engineering.	2	KOYAMA Daisuke *Lecturer may be changed.	Fall	Intensive	1st year
	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	BEVRANI HASSAN	Spring	Intensive	2nd year
	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	KOYAMA Daisuke *Lecturer may be changed.	Fall	Intensive	2nd year
	31692007		Internship (E)	2	KOYAMA Daisuke *Lecturer may be changed.	All	Intensive	
	31692081	*1	Research and Experiments I (E) 【For students enrolled in spring】	2	*2	Spring	Intensive	1st year
	31692082	*1	Research and Experiments II (E) 【For students enrolled in spring】	2	*2	Fall	Intensive	1st year
	31692083	*1	Research and Experiments III (E) 【For students enrolled in spring】	2	*2	Spring	Intensive	2nd year
	31692084	*1	Research and Experiments IV (E) 【For students enrolled in spring】	2	*2	Fall	Intensive	2nd year
	31692091	*1	Research and Experiments I (E) 【For students enrolled in fall】	2	*2	Fall	Intensive	1st year
	31692092	*1	Research and Experiments II (E) 【For students enrolled in fall】	2	*2	Spring	Intensive	1st year
	31692093	*1	Research and Experiments III (E) 【For students enrolled in fall】	2	*2	Fall	Intensive	2nd year
	31692094	*1	Research and Experiments IV (E) 【For students enrolled in fall】	2	*2	Spring	Intensive	2nd year
31692090		Master's Thesis (E)	—	—	All	Intensive	*3	
Mechanical Engineering	31693001		Advanced Fluid Dynamics (E)	2	(not available this year)	—	—	
	31693002		Advanced Mechanics of Materials (E)	2	OKUBO Kazuya	Fall	Thu/2	
	31693003		Advanced Spray Combustion Science (E)	2	SENDA Jiro	Fall	Tue/1	
	31693004		Advanced Fluid Engineering (E)	2	(not available this year)	—	—	
	31693005		Advanced Mechanical Materials (E)	2	MIYAMOTO Hiroyuki	Spring	Fri/3	
	31693006		Advanced Mechanical Engineering I (E)	2	(not available this year)	—	—	
	31693007		Advanced Mechanical Engineering II (E)	2	(not available this year)	—	—	
	31693008		Internship (E)	2	OKUBO Kazuya	All	Intensive	
	31693081	*1	Research and Experiments I (E) 【For students enrolled in spring】	2	*2	Spring	Intensive	1st year
	31693082	*1	Research and Experiments II (E) 【For students enrolled in spring】	2	*2	Fall	Intensive	1st year
	31693083	*1	Research and Experiments III (E) 【For students enrolled in spring】	2	*2	Spring	Intensive	2nd year
	31693084	*1	Research and Experiments IV (E) 【For students enrolled in spring】	2	*2	Fall	Intensive	2nd year
	31693091	*1	Research and Experiments I (E) 【For students enrolled in fall】	2	*2	Fall	Intensive	1st year
	31693092	*1	Research and Experiments II (E) 【For students enrolled in fall】	2	*2	Spring	Intensive	1st year
	31693093	*1	Research and Experiments III (E) 【For students enrolled in fall】	2	*2	Fall	Intensive	2nd year
	31693094	*1	Research and Experiments IV (E) 【For students enrolled in fall】	2	*2	Spring	Intensive	2nd year
	31693090		Master's Thesis (E)	—	—	All	Intensive	*3

A I (Subjects of Specialized Fields)								
Department	Code	Class	Subject	Credit	Lecturer	Semester	Day/Period	Note *4
Applied Chemistry	31694001		Advanced Organic Chemistry (E)	2	MIZUTANI Tadashi HITOMI Yutaka	Spring	Tue/2	
	31694002		Advanced Inorganic Chemistry (E)	2	OHTA Hiroto ENDO Takatsugu DOI Takayuki	Spring	Tue/1	
	31694003		Advanced Physical Chemistry (E)	2	SHIOI Akihisa	Fall	Fri/2	
	31694004		Advanced Analytical Chemistry (E)	2	TSUKAGOSHI Kazuhiko	Fall	Tue/2	
	31694005		Advanced Transport Phenomena (E)	2	TSUCHIYA Katsumi	Fall	Thu/3	
	31694006		Internship (E)	2	MIZUTANI Tadashi	All	Intensive	
	31694081	*1	Research and Experiments I (E) 【For students enrolled in spring】	2	*2	Spring	Intensive	1st year
	31694082	*1	Research and Experiments II (E) 【For students enrolled in spring】	2	*2	Fall	Intensive	1st year
	31694083	*1	Research and Experiments III (E) 【For students enrolled in spring】	2	*2	Spring	Intensive	2nd year
	31694084	*1	Research and Experiments IV (E) 【For students enrolled in spring】	2	*2	Fall	Intensive	2nd year
	31694091	*1	Research and Experiments I (E) 【For students enrolled in fall】	2	*2	Fall	Intensive	1st year
	31694092	*1	Research and Experiments II (E) 【For students enrolled in fall】	2	*2	Spring	Intensive	1st year
	31694093	*1	Research and Experiments III (E) 【For students enrolled in fall】	2	*2	Fall	Intensive	2nd year
	31694094	*1	Research and Experiments IV (E) 【For students enrolled in fall】	2	*2	Spring	Intensive	2nd year
	31694090		Master's Thesis (E)	—	—	All	Intensive	*3
Science of Environment and Mathematical Modeling	31695001		Advanced Analysis (E)	2	TAKEI Yoshitsugu	Fall	Tue/1	
	31695002		Advanced Numerical Analysis (E)	2	OMATA Seiro	Spring	Tue/2	
	31695003		Advanced Difference / Differential Equations (E)	2	SAITO Seiji	Fall	Wed/3	
	31695004		Advanced Natural Environment Studies (E)	2	(not available this year)	Spring	Tue/5	
	31695005		Advanced Earth and Planetary Environment Science (E)	2	(not available this year)	Fall	Mon/3	
	31695006		Advanced Ecology (E)	2	HASEGAWA Motohiro	Spring	Mon/3	
	31695007		Advanced Environmental Systems Engineering (E)	2	(not available this year)	—	—	
	31695009		Advanced Human and Environmental Studies (E)	2	(not available this year)	Spring	Wed/3	
	31695010		Advanced Statistical Finance (E)	2	TSUDA Hiroshi	Spring	Thu/4	
	31695011		Advanced Biodiversity Science (E)	2	OSONO Takashi	Fall	Thu/4	
	31695012		Advanced Atmospheric Environment Studies (E)	2	YAMANE Shozo	Spring	Thu/1	
	31695008		Internship (E)	2	TSUTSUMI Hiroyuki	All	Intensive	
	31695081	*1	Research and Experiments I (E) 【For students enrolled in spring】	2	*2	Spring	Intensive	1st year
	31695082	*1	Research and Experiments II (E) 【For students enrolled in spring】	2	*2	Fall	Intensive	1st year
	31695083	*1	Research and Experiments III (E) 【For students enrolled in spring】	2	*2	Spring	Intensive	2nd year
	31695084	*1	Research and Experiments IV (E) 【For students enrolled in spring】	2	*2	Fall	Intensive	2nd year
	31695091	*1	Research and Experiments I (E) 【For students enrolled in fall】	2	*2	Fall	Intensive	1st year
	31695092	*1	Research and Experiments II (E) 【For students enrolled in fall】	2	*2	Spring	Intensive	1st year
	31695093	*1	Research and Experiments III (E) 【For students enrolled in fall】	2	*2	Fall	Intensive	2nd year
31695094	*1	Research and Experiments IV (E) 【For students enrolled in fall】	2	*2	Spring	Intensive	2nd year	
31695090		Master's Thesis (E)	—	—	All	Intensive	*3	
A II (Common Core Subjects)								
Department	Code	Class	Subject	Credit	Lecturer	Semester	Day/Period	Note *4
ALL	31696501		Computation Structure (E) *Lectures will be given via internet	2	HAGA Hirohide	Fall	—	
	31696508		Advanced Information and Computer Sciences II (E) 【For students enrolled in after 2024】	2	MOHD HAFIZ BIN MOHD	Spring	—	Internet
	31696509		Advanced Information and Computer Sciences III (E) 【For students enrolled in after 2024】 *Lectures will be given via internet	2	MOHD HAFIZ BIN MOHD	Spring	—	Internet
	31696510		Advanced Information and Computer Sciences IV (E) 【For students enrolled in after 2024】 *Lectures will be given via internet	2	MOHD HAFIZ BIN MOHD	Spring	Thu/4	
	31696502		Electric Circuit Theory (E)	2	TODA Hiroyuki INOUE Kaoru KOYAMA Daisuke IBI Shinsuke	Fall	Wed/2	
	31696503		Nonlinear Physics (E)	2	TAKAOKA Masanori	Spring	Mon/4	
	31696504		Materials Chemistry (E)	2	NOMURA Akiko	Spring	Wed/2	
	31696511		Chemical Biology (E) 【For students enrolled in after 2024】	2	NOMURA Akiko	Fall	Wed/2	
	31696505		Applied Mathematical Analysis (E)	2	OMATA Seiro	Fall	Tue/2	
	31696506	001	Biology (E)	2	IKEGAWA Masaya	Fall	Fri/4	
31696507		Neuroscience (E)	2	KOBAYASHI Kota	Spring	Fri/2		
B (Common General Subjects)								
Department	Code	Class	Subject	Credit	Lecturer	Semester	Day/Period	Note *4
ALL	31696601		Ethics for Scientists and Engineers (E)	2	PHILIP TROMOVITCH	Spring	Thu/4	
	31696602		Technology and Business Project Management (E)	2	SARATA Makoto	Spring	Tue/3·4	
	31696603	001	Science and Engineering Writing 1 (E)	2	PHILIP TROMOVITCH	Spring	Wed/3	
		002	Science and Engineering Writing 1 (E)	2	PHILIP TROMOVITCH	Fall	Wed/3	
	31696608	001	Science and Engineering Writing 2 (E)	2	PHILIP TROMOVITCH	Spring	Thu/3	
		002	Science and Engineering Writing 2 (E)	2	PHILIP TROMOVITCH	Fall	Thu/4	
	31696605		Presentation Skills for Scientists and Engineers (E)	1	PHILIP TROMOVITCH	Fall	Thu/3	
	31696606		R & D Planning for Scientists and Engineers (E)	2	CAMILLE-FAITH PASCUA ROMERO	Fall	Thu/2	
	31696607		Japanese Corporate Culture (E)	2	SARATA Makoto	Fall	Tue/3·4	

*1 Please choose the class code from the list on the next page, p.13.

*2 It will be lectured by your supervisor.

*3 【Master's Thesis】 should be registered in final Spring semester.

*4 1st year=the first and second semester, 2nd year=the third and fourth semester

***1) Class Code for [Research and Experiments I ~ IV]**

Information and Computer Science	
Class	Lecturer
008	HAGA Hirohide MOHD HAFIZ BIN MOHD
010	WATABE Hirokazu
013	OKUBO Masashi
014	HASHIMOTO Masafumi
015	JUN CHENG
016	TSUCHIYA Takao
018	SATO Kenya
021	TAKAHASHI Kazuhiko
022	OSAKI Miho
023	IVAN TANEV
024	TSUCHIYA Seiji
025	KATO Tsuneo
026	KOITA Takahiro
027	OKUDA Masahiro
028	ONO Keiko
029	TAMURA Akihiro
030	KIMURA Tomotaka
031	KATSURAI Marie

Electrical and Electronic Engineering	
Class	Lecturer
001	INOUE Kaoru
002	KONDO Koichi
020	KATO Toshiji
026	MATSUKAWA Mami
027	KASUYA Toshiro
028	DEGUCHI Hiroyuki
030	IWAI Hisato
031	TODA Hiroyuki
032	BABA Yoshihiro
033	FUJIWARA Koji
034	OTANI Naoki
035	SATO Yuki
036	KOYAMA Daisuke
037	TAKAHASHI Yasuhito
038	IBI Shinsuke
039	SUZUKI Masayuki
040	SAKAI Kenji
041	HIRATA Kentaro

Mechanical Engineering	
Class	Lecturer
018	MATSUOKA Takashi
019	SENDA Jiro
022	TSUJIUCHI Nobutaka
024	HIRATA Katsuya
027	INAOKA Kyoji
028	OKUBO Kazuya
029	TAKAOKA Masanori
033	MIYAMOTO Hiroyuki
034	HIROGAKI Toshiki
036	TANAKA Tatsuya
039	TAKUWA Hideki
040	MATSUMURA Eriko
041	ITO Akihito
043	SASADA Masahiro
044	OBUNAI Kiyotaka
045	YUASA Motohiro
046	NAKAMURA Morimasa

Applied Chemistry	
Class	Lecturer
025	KODERA Masahito
026	MATSUMOTO Michiaki
027	TSUKAGOSHI Kazuhiko
029	MIZUTANI Tadashi
032	TSUCHIYA Katsumi
033	INABA Minoru
035	SHIOI Akihisa
036	SHIRAKAWA Yoshiyuki
037	KATO Masaki
038	KIMURA Yoshifumi
039	HITOMI Yutaka
040	KOGA Tomoyuki
041	TAKENAKA Sakae
042	HASHIMOTO Masahiko
043	KITAGISHI Hiroaki
044	DOI Takayuki

Science of Environment and Mathematical Modeling	
Class	Lecturer
016	SAITO Seiji
019	MORIMITSU Masatsugu
020	TSUDA Hiroshi
022	YAMANE Shozo
023	GOTO Takuya
024	IMAI Hitoshi
027	TAKEI Yoshitsugu
028	OSONO Takashi
029	TSUTSUMI Hiroyuki SHIBATA Kazunari
030	HASEGAWA Motohiro
031	AKAO Satoshi
032	ASAOKA Masayuki

**<AY2024> List of Subjects for ISTC,
Graduate School of Life and Medical Sciences**

A I (Subjects of Specialized Fields)								*5				
Graduate School	Code	Class	Subject	Credit	Lecturer	Semester	Day/Period	I	E	M	A	S
Life and Medical Sciences	31425107		Advanced Organic Chemistry (E)	2	OTA Tetsuo	Spring	Intensive	○	○	○	○	○

ISTC students in the Graduate School of Science and Engineering are able to take the subjects offered by the Graduate School of Life and Medical Sciences as above.

ISTC subjects of Graduate School of Life and Medical Sciences are counted as A I subjects (P.10, "How to register", ※1 ②)

**<AY2024> List of Subjects taught in English for Regular Course (non-ISTC),
Graduate School of Science and Engineering**

A I (Subjects of Specialized Fields)								*5				
Department	Code	Class	Subject	Credit	Lecturer	Semester	Day/Period	I	E	M	A	S
Information and Computer Science												
Electrical and Electronic Engineering	31620049	000	先端電気工学特別講義 1 (Special Lecture in Frontier Electrical Engineering 1)	2	BEVRANI HASSAN	Spring	Intensive	×	○	×	×	×
Mechanical Engineering												
Applied Chemistry												
Science of Environment and Mathematical Modeling												

Subjects of your own department other than ISTC (i.e. regular Japanese course subjects) can be counted.

In case you register these subjects, please follow their each registration guide.

(P.10, "How to register", ※1 ②)

*5 Whether the subjects can be counted as A I subjects (○) or not (×) for the students in the department of:

"I" = Information and Computer Science

"E" = Electrical and Electronic Engineering

"M" = Mechanical Engineering

"A" = Applied Chemistry

"S" = Science of Environment and Mathematical Modeling

Course Period and Length of Enrollment

For Master's Program, the standard period of study is 2 years.

The period cannot be extended more than 4 years.

School Hours

1st period	9:00 - 10:30
2nd period	10:45 - 12:15
3rd period	13:10 - 14:40
4th period	14:55 - 16:25
5th period	16:40 - 18:10
6th period	18:25 - 19:55

GPA (Grade Point Average) System

Doshisha University has been adopting the GPA system university-wide since 2004.

Graduate subjects are graded in 7 levels (A+, A, B+, B, C+, C, F). Each level is assigned with a Grade Point ranging from 4.5~0.0, with which the Grade Point Average per credit is calculated.

Grade	Grade Point	Description
A+	4.5	Exceptional
A	4.0	Excellent
B+	3.5	Very Good
B	3.0	Good
C+	2.5	Satisfactory
C	2.0	Adequate
F	0.0	Failure

Subjects that are not covered by the above system are graded as PAS (pass), FAL (fail), TFC (approved), PEN (pending) and CNT (continued).

GPA is calculated by firstly converting the grades for all the courses graded in the A+ ~ F range to grade points, and calculating the weighted average based on the number of credits. The formula to calculate GPA is

$$\text{Cumulative GPA} = \frac{([A+] \times 4.5 + [A] \times 4.0 + [B+] \times 3.5 + [B] \times 3.0 + [C+] \times 2.5 + [C] \times 2.0 + [F] \times 0.0)}{([A+] + [A] + [B+] + [B] + [C+] + [C] + [F])}$$

(A+ to F indicates the respective total numbers of credits for courses graded A+ to F)

Degree

For the department of Applied Chemistry and Science of Environmental and Mathematical Modeling, the name of degree is to be determined "Master of Science" or "Master of Science in Engineering" under the guidance of students' supervisor.