M

Doshisha University

Graduate School of Science and Engineering

International Science and Technology Course

ISTC

Course Registration Guide

Master's Degree Program

2024

— Contents —

Graduate School Calendar (2024)

Spring Semester

April, 2024	1 (Mon)	Start of Spring Semester
		Spring Semester Entrance Ceremony
	2(Tue)～10 (Wed)	Course guidance for new students
	4(Thu)～10 (Wed)	On-demand classes (DO Week)
	8 (Mon)	Course registration
	9 (Tue)	
	11 (Thu)	Face-to-face classes begin
	26 (Fri)	Deadline for payment of Spring Semester fees
	29 (Mon)～	Holidays
May	～5 (Sun)	Holidays
	6 (Mon)	Substitute holiday (classes held as usual)
July	15 (Mon)	Marine Day (classes held as usual)
	17 (Wed)	Last day of Face-to-face classes
	18 (Thu)	Final examinations begin
	31 (Wed)	Final examinations end
August	1 (Thu)	Spare day for Final examinations Summer Recess begins
September	12 (Thu)	Spring Semester thesis adjudication day
		Summer Recess ends
	13 (Fri)	Grade reports distribution to current students
	20 (Fri)	End of Spring Semester
	28 (Sat)	Spring Semester Ceremony for Bestowing Degrees

Fall Semester

September	21 (Sat)	Fall Semester Entrance Ceremony Start of Fall Semester
	24(Tue)-30 (Mon)	On-demand classes (DO Week)
	26 (Thu)	Changes the course registration accepted
	27 (Fri)	
October	1 (Tue)	Face-to-face classes begin
	14 (Mon)	National Sports Day (classes held as usual)
	31 (Thu)	Deadline for payment of Fall Semester fees
November	4 (Mon)	Substitute holiday (university holiday)
	23 (Sat)	Labor Thanksgiving Day (university holiday)
	26 (Tue)	"Doshisha EVE " School Foundation week (no classes)
	27 (Wed)	
	28 (Thu)	
	29 (Fri)	School Foundation Day (university holiday)
December	24 (Tue)	Winter Recess begins
	25 (Wed)	Christmas Day (university holiday)
January, 2025	5 (Sun)	Winter Recess ends
	6 (Mon)	Face-to-face classes recommence
	13 (Mon)	Coming - of - age Day (university holiday)
	20 (Mon)	Last day of Face-to-face classes
	21 (Tue)	Final examinations begin
	23 (Thu)	Founder's Day
February	10 (Mon)	Final examinations end
March	6 (Thu)	Fall Semester thesis adjudication day
	14 (Fri)	Grade reports distribution to current students
	20 (Thu)	Fall Semester DegreeConferment Ceremony
	21 (Fri)	
	22 (Sat)	
	31 (Mon)	End of Fall Semester

Educational Goals of Graduate School of Science and Engineering

Our university aims to nurture individuals who use their abilities as conscience dictates, and for this purpose we have three principles in our educational philosophy: Christian principles, liberalism, and internationalism. Based on these educational goals, our graduate school aims not only to provide individuals with basic and applied theories to become pillars of science and engineering but also to nurture them to be "the nation's conscience," contributing to society with knowledge and virtue. We also aim to cultivate creative engineers and researchers with diverse academic skills and advanced expert knowledge in their majors who can cope with the innovation of science technology and play leading roles in the field.

The Master's Program is designed to equip students with broad horizons and advanced knowledge, and to cultivate the abilities necessary to engage in highly-specialized occupations that require research capabilities in specialized fields and advanced expertise. The Doctoral Program is designed to equip students with advanced research capabilities required to conduct independent research activities in their majored fields, as well as rich knowledge to support such activities.

The Graduate School of Science and Engineering consists of five majors; Information and Computer Science, Electrical and Electronic Engineering, Mechanical Engineering, Applied Chemistry, and Science of Environment and Mathematical Modeling. The aims of education and research in each major and the guidelines of our education are as follows.

Information and Computer Science

◆Aims of Academic Activities

The Master's Program in Information and Computer Science at the Graduate School of Science and Engineering aims to cultivate world-leading engineers in advanced and broad-ranging information processing for developing environment-friendly and intelligent information systems that form the social infrastructure for many years to come. Students will acquire broad knowledge, views and skills through well-balanced lectures in terms of "information science" and "knowledge" science, and practical knowledge and techniques through laboratory experiments and presentations and discussions at academic conferences.

◆Diploma Policy

- Ability to understand issues in each area of information system development based on highly specialized knowledge, with advanced and broad knowledge and views about information processing for developing environment-friendly and intelligent information systems that form the social infrastructure for many years to come (Knowledge and Skills)
- Ability to use basic skills acquired for working as a top-level engineer in resolving highly specialized issues in information systems, and to present findings at academic conferences (Thinking Ability, Judgment, Self-expression)
- Ability to take the initiative in exploring solutions to highly specialized technical issues in various information systems (Independence, Diversity, Cooperativeness)

◆Curriculum Policy

Students in International Science and Technology Course are required to take total 30 credits from Group A-I, Group A-II and Group B. In Group A-I, set up for acquiring advanced specialist knowledge in information and computer science, 8 or more credits from Subjects of Specialized Fields and 8 credits from Experiment I to IV must be taken. Group A-II (Common Core Subjects) is for acquisition of broad general knowledge in science and engineering and understanding of other areas of specialization, and 6 or more credits must be taken. In addition, students must take 4 or more credits from Common General Subjects in Group B to equip themselves with a sense of ethics based on education of conscience, technological development and business management skills, and fundamental skills required for an engineer.

Electrical and Electronic Engineering

◆Aims of Academic Activities

The Master's Program in Electrical and Electronic Engineering at the Graduate School of Science and Engineering aims to cultivate specialists in the academic field that forms the basis of electrical energy and telecommunications essential to modern society, who work actively in the fields of electrical energy, devices and communication. Through the teaching of basic and applied theories by faculty members in the major, students are expected to equip themselves with knowledge in cutting-edge research, the ability to apply basic theory to technical development and problem solving, the ability to propose, plan and lead original research and technical development projects, communication skills and so on.

◆Diploma Policy

- Acquisition of profound knowledge in one of the four disciplines in the Electrical and Electronic Engineering major "infrastructure," "power electronics," "optoelectronic devices" and "telecommunications" through learning basic and applied theories, and understanding of technical issues in the discipline (Knowledge)
- Acquisition of problem-solving skills based on logical thinking through designing and simulating systems and circuits of electrical and electronic engineering (Knowledge and Skills)
- Ability to demonstrate presentation and communication skills as an engineer or researcher, in group work and other occasions (Thinking Ability, Judgment, Self-expression)
- Ability to define issues related to electrical and electronic engineering, explore solutions to them and put them into practice (Thinking Ability, Judgment)
- High ethical standards and international perspective, and the ability to take the initiative in transmitting research findings with the aim of creating electrical and electronic engineering technology useful for the development of diverse society (Independence, Diversity, Cooperativeness)

◆Curriculum Policy

Students in International Science and Technology Course are required to take total 30 credits from Group A-I, Group A-II and Group B. In Group A-I, set up for acquiring advanced specialist knowledge in electrical and electronic engineering, 8 or more credits from Subjects of Specialized Fields and 8 credits from Experiment I to IV must be taken. Group A-II (Common Core Subjects) is for acquisition of broad general knowledge in science and engineering and understanding of other areas of specialization, and 6 or more credits must be taken. In addition, students must take 4 or more credits from Common General Subjects in Group B to equip themselves with a sense of ethics based on education of conscience, technological development and business management skills, and fundamental skills required for an engineer.

Mechanical Engineering

◆Aims of Academic Activities

The Master's Program in Mechanical Engineering at the Graduate School of Science and Engineering aims to cultivate engineers and researchers who can flexibly apply advanced knowledge in mechanical engineering they acquired in actual circumstances. Specifically, laboratories are set up to extensively cover the disciplines that form the foundation of mechanical engineering, including materials, thermal fluid, vibration, control and manufacturing, encouraging students to not only deepen understanding of their area of specialization but to improve their comprehensive and fundamental abilities as a mechanical engineer. Furthermore, in accordance with the university's founding spirit, the program aims to cultivate individuals who use their expertise in mechanical engineering to contribute widely to society both domestically and internationally, as well as who can deal with diverse science and technology with mechanical engineering as a base and contribute to people's well-being through its development.

◆Diploma Policy

- Ability to understand complex issues in mechanical engineering based on advanced knowledge in the disciplines of materials, thermal fluid, and dynamics/control (Knowledge and Skills).
- Ability to actively tackle complex issues in mechanical engineering and explore solutions to them using methods of experimental analysis and designing of advanced systems (Thinking Ability, Judgment, Self-expression).
- Ability to plan and implement advanced systems and numerical experiments and make an appropriate use of the analysis of experiment results and numerical analysis techniques in order to resolve complex issues in mechanical engineering (Thinking Ability, Judgment, Self-expression).
- Sufficient language skills and international awareness for working in international society, and the ability to approach complex issues in mechanical engineering from an international perspective and contribute with high ethical standards to the development of "science and technology for people" in wide international society (Independence, Diversity, Cooperativeness).

◆Curriculum Policy

Students in International Science and Technology Course are required to take total 30 credits from Group A-I, Group A-II and Group B. In Group A-I, set up for acquiring advanced specialist knowledge in mechanical engineering, 8 or more credits from Subjects of Specialized Fields and 8 credits from Experiment I to IV must be taken. Group A-II (Common Core Subjects) is for acquisition of broad general knowledge in science and engineering and understanding of other areas of specialization, and 6 or more credits must be taken. In addition, students must take 4 or more credits from Common General Subjects in Group B to equip themselves with a sense of ethics based on education of conscience, technological development and business management skills, and fundamental skills required for an engineer.

Applied Chemistry

◆Aims of Academic Activities

The Master's Program (Engineering) in Applied Chemistry at the Graduate School of Science and Engineering aims to cultivate individuals who will play central roles in science and technology related to the creative development of functional materials, especially, individuals who will acquire their specialized knowledge and techniques related to creation and separation of important substances in engineering and their production processes. Through the systematically organized lectures and advanced research experiments and training that cover specialized fields from the fundamentals to the advanced fields related to chemistry and chemical engineering, students are expected to develop problem-solving ability with an international perspective and common sense, presentation skills to convey important points appropriately, and expertise research ability. This goal of the program is achieved in line with the university's educational philosophies (liberalism, Christian principles and internationalism).

◆Diploma Policy

- Ability to examine and develop methods to synthesize or separate new substances needed in chemical and other

industries (Knowledge and Skills)
・Ability to design production processes needed in chemical and other industries (Knowledge and Skills)
・Ability to communicate in English at the level required of chemical engineers (Knowledge and Skills)
・Ability to understand the nature of issues related to chemical engineering based on advanced knowledge in chemistry and chemical engineering (Thinking Ability, Judgment, Self-expression)
・Ability to acquire research and development skills necessary for resolving issues related to chemical engineering (Thinking Ability, Judgment, Self-expression)
・Ability to deal with issues related to chemical engineering with an international perspective and common sense (Thinking Ability, Judgment, Self-expression)
・Ability to make a relevant presentation to society on issues related to chemical engineering and measures and solutions to them (Independence, Diversity, Cooperativeness)
・Ability to take the initiative in locating chemistry-related issues confronting engineering, medicine and other fields of the present and future (Independence, Diversity, Cooperativeness)
・Ability to explore and solve chemistry-related issues confronting engineering, medicine and other fields of the present and future in cooperation with others, with an international perspective, common sense and understanding of the diversity of others (Independence, Diversity, Cooperativeness)

◆Curriculum Policy

Students in International Science and Technology Course are required to take total 30 credits from Group A-I, Group A-II and Group B. In Group A-I, set up for acquiring advanced specialist knowledge in applied chemistry, 8 or more credits from Subjects of Specialized Fields and 8 credits from Experiment I to IV must be taken. Group A-II (Common Core Subjects) is for acquisition of broad general knowledge in science and engineering and understanding of other areas of specialization, and 6 or more credits must be taken. In addition, students must take 4 or more credits from Common General Subjects in Group B to equip themselves with a sense of ethics based on education of conscience, technological development and business management skills, and fundamental skills required for an engineer.

<Master of Science>

◆Aims of Academic Activities

The Master's Program (Science) in Applied Chemistry at the Graduate School of Science and Engineering aims to cultivate individuals who will play central roles in science related to the creative development of functional materials, especially, individuals who will acquire their specialized knowledge and techniques related to synthesis and separation of important substances for the development of chemistry and theories describing them. Through the systematically organized lectures and advanced research experiments and training that cover specialized fields from the fundamentals to the advanced fields related to chemistry and chemical engineering, students are expected to develop problem-solving ability with an international perspective and common sense, presentation skills to convey important points appropriately, and expertise research ability. This goal of the program is achieved in line with the university's educational philosophies (liberalism, Christian principles and internationalism).

◆Diploma Policy

・Ability to appropriately conduct advanced chemical experiments needed for the development of chemistry (Knowledge and Skills)
・Ability to think of new methods of chemical reaction and separating substances based on theories (Knowledge and Skills)
・Ability to communicate in English at the level required of chemists (Knowledge and Skills)
・Ability to deeply understand the nature of issues related to chemistry based on basic academic theories (Thinking Ability, Judgment, Self-expression)
・Ability to acquire research skills needed for realizing the development of chemistry (Thinking Ability, Judgment, Self-expression)

・Ability to deal with issues related to chemistry with an international perspective and common sense (Thinking Ability, Judgment, Self-expression)
・Ability to make a relevant presentation to society on issues related to chemistry and measures and solutions to them (Independence, Diversity, Cooperativeness)
・Ability to take the initiative in locating issues necessary for the development of chemistry (Independence, Diversity, Cooperativeness)
・Ability to explore and solve issues confronting chemistry of the present in cooperation with others, with an international perspective, common sense and understanding of the diversity of others (Independence, Diversity, Cooperativeness)

◆Curriculum Policy

Students in International Science and Technology Course are required to take total 30 credits from Group A-I, Group A-II and Group B. In Group A-I, set up for acquiring advanced specialist knowledge in applied chemistry, 8 or more credits from Subjects of Specialized Fields and 8 credits from Experiment I to IV must be taken. Group A-II (Common Core Subjects) is for acquisition of broad general knowledge in science and engineering and understanding of other areas of specialization, and 6 or more credits must be taken. In addition, students must take 4 or more credits from Common General Subjects in Group B to equip themselves with a sense of ethics based on education of conscience, technological development and business management skills, and fundamental skills required for an engineer.

Science of Environment and Mathematical Modeling

<Master of Science in Engineering>

◆Aims of Academic Activities

The Master's Program in Science of Environment and Mathematical Modeling at the Graduate School of Science and Engineering aims to cultivate specialists in mathematical science and environmental science who work actively in industrial and educational circles. Through understanding the academic development in the related fields and pursuing cutting-edge research, students are expected to equip themselves with the skills to extract problems and analyze them scientifically and to use interdisciplinary knowledge to deal with problems.

◆Diploma Policy

・Ability to understand cutting-edge findings in environmental science and mathematical science based on basic knowledge in both fields (Knowledge and Skills)
・Ability to extract and analyze various problems in environmental science and mathematical science and to use the problem-solving skills based on interdisciplinary knowledge to pursue challenges faced in industrial and educational circles (Thinking Ability, Judgment, Self-expression)
・Ability to take the initiative in locating various problems in environmental science and mathematical science and make consistent efforts to explore solutions that are beneficial to the diverse environment of the earth (Independence, Diversity, Cooperativeness)

◆Curriculum Policy

Students in International Science and Technology Course are required to take total 30 credits from Group A-I, Group A-II and Group B. In Group A-I, set up for acquiring advanced specialist knowledge in science of environment and mathematical modeling, 8 or more credits from Subjects of Specialized Fields and 8 credits from Experiment I to IV must be taken. Group A-II (Common Core Subjects) is for acquisition of broad general knowledge in science and engineering and understanding of other areas of specialization, and 6 or more credits must be taken. In addition, students must take 4 or more credits from Common General Subjects in Group B to equip themselves with a sense of ethics based on education of conscience, technological development and business management skills, and fundamental skills required for an engineer.

<Master of Science>

◆Aims of Academic Activities

The Master's Program in Science of Environment and Mathematical Modeling at the Graduate School of Science and Engineering aims to cultivate specialists in mathematical science and environmental science who work actively in industrial and educational circles. Through understanding the academic development in the related fields and pursuing cutting-edge research, students are expected to equip themselves with the skills to extract problems and analyze them scientifically and to use interdisciplinary knowledge to deal with problems.

◆Diploma Policy

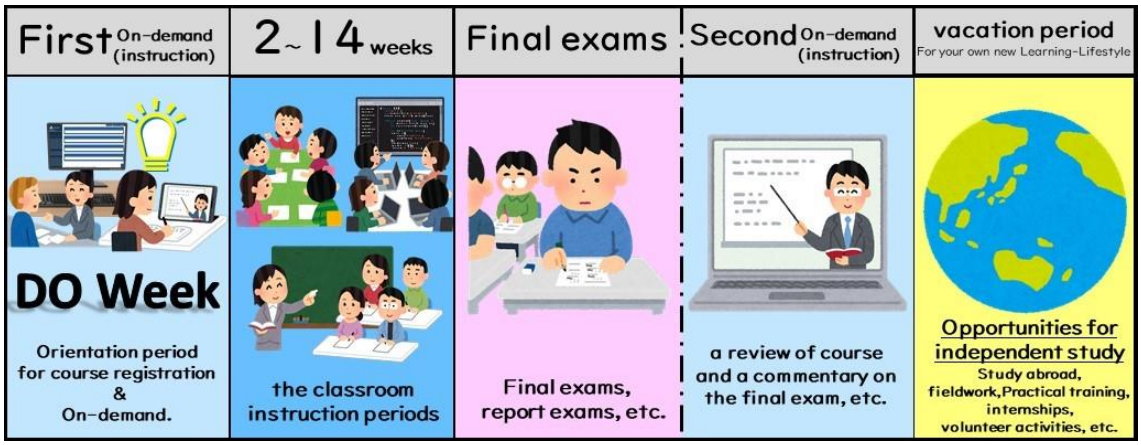
- Ability to understand cutting-edge findings in environmental science and mathematical science based on basic knowledge in both fields (Knowledge and Skills)
- Ability to extract and analyze various problems in environmental science and mathematical science and to use the problem-solving skills based on interdisciplinary knowledge to pursue challenges faced in industrial and educational circles (Thinking Ability, Judgment, Self-expression)
- Ability to take the initiative in locating various problems in environmental science and mathematical science and make consistent efforts to explore comprehensive and truth-seeking solutions, viewing humans as part of the universe full of diversity (Independence, Diversity, Cooperativeness)

◆Curriculum Policy

Students in International Science and Technology Course are required to take total 30 credits from Group A-I, Group A-II and Group B. In Group A-I, set up for acquiring advanced specialist knowledge in science of environment and mathematical modeling, 8 or more credits from Subjects of Specialized Fields and 8 credits from Experiment I to IV must be taken. Group A-II (Common Core Subjects) is for acquisition of broad general knowledge in science and engineering and understanding of other areas of specialization, and 6 or more credits must be taken. In addition, students must take 4 or more credits from Common General Subjects in Group B to equip themselves with a sense of ethics based on education of conscience, technological development and business management skills, and fundamental skills required for an engineer.

New Learning from 2024

Under the new academic calendar to be introduced in 2024, basically, students will take 13 times of classroom instruction and twice on-demand instruction. During the first week of the semester, an orientation period for registration and the first on-demand class will run concurrently.
This week is called "Doshisha Opening Week (DO Week) "



Regarding the on-demand instruction of the first week of class (DO Week), please check the URL for syllabus system, take the on-demand instruction class, and work on the assignments, etc. as instructed. For specific procedures, see the following URL.

■Academic Calendar from 2024

https://www.doshisha.ac.jp/en/students/curriculum/new_calender/index.html

■syllabus system

https://syllabus.doshisha.ac.jp/

How to Register

Students should follow their supervisor's instruction and take subjects according to the chart below.

Chart of credits required (minimum) for completion of Master's Program

<table>
<tr><td rowspan="4"></td><td colspan="3">Elective subjects</td><td rowspan="3">B（Common General Subjects）</td><td rowspan="4">Total</td></tr>
<tr><td colspan="3">A</td></tr>
<tr><td colspan="2">Ⅰ（Subjects of Specialized Fields）※1</td><td rowspan="2">Ⅱ（Common Core Subjects）</td></tr>
<tr><td>①Research and Experiment Ⅰ～Ⅳ</td><td>②Other Subjects</td></tr>
<tr><td rowspan="3">Credits</td><td>8</td><td>8 or more</td><td rowspan="2">6 or more</td><td rowspan="3">4 or more</td><td rowspan="3">30</td></tr>
<tr><td colspan="2">16 or more</td></tr>
<tr><td colspan="3">24 or more</td></tr>
</table>

※ 1. A I (subjects of specialized fields) have two sections

①Research and Experiments Ⅰ～Ⅳ【Compulsory】

Students are required to earn 8 credits of your own department.

It is compulsory to register one by one per each semester.

②Other subjects

Students need to earn 8 or more credits from following subjects;

-Subjects for ISTC of your own department

-Subjects for ISTC of other than your department

ISTC subjects of Graduate School of Life and Medical Sciences are included (P.14).

-Subjects of your own department other than ISTC

For example, regular Japanese course subjects;

in case you register these subjects, you need to follow Japanese registration guide.

※ 2.Students in the department of Electrical and Electronic Engineering need to register following compulsory subjects

-Electrical Power Systems Engineering (E)

-Advanced Applications of Electronics (E)

For non ISTC students to take subjects of ISTC, please visit the office of Faculty of Science and Engineering/Graduate School of Science and Engineering to register. Credits can be counted toward completion of the Master's Program within the limit of 6 credits together with other credits earned by subjects of other than your own course and of MOT course.

NOTE

<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)

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)

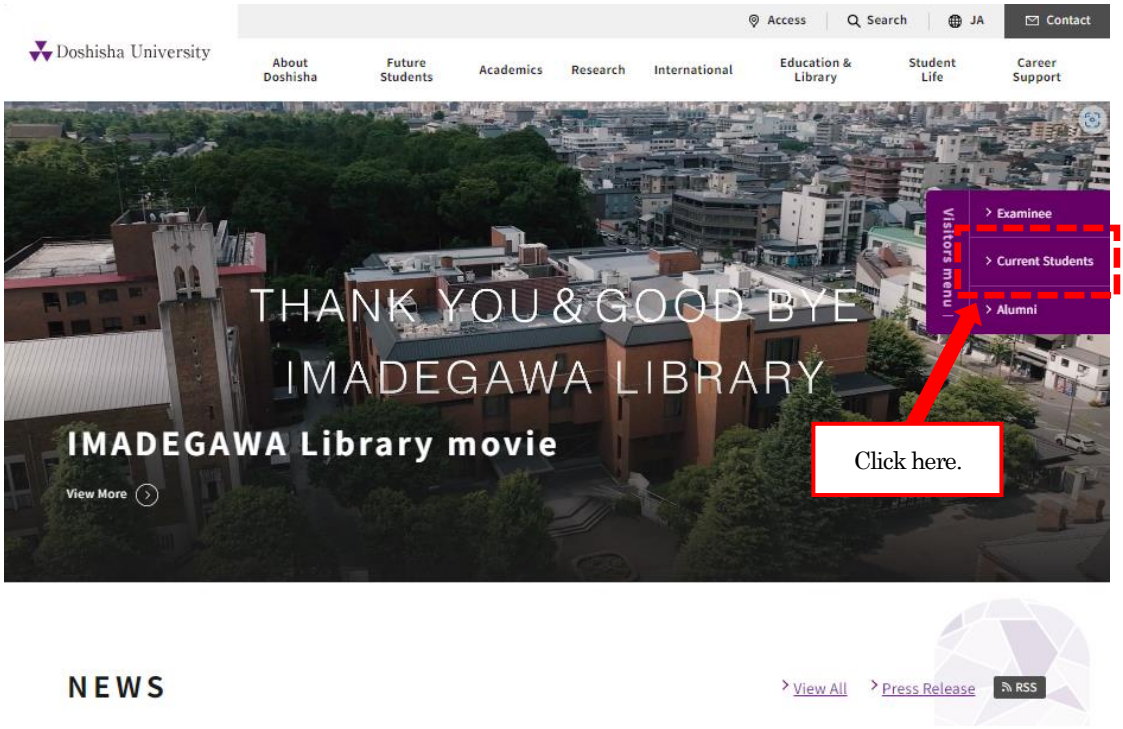
Degree

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.

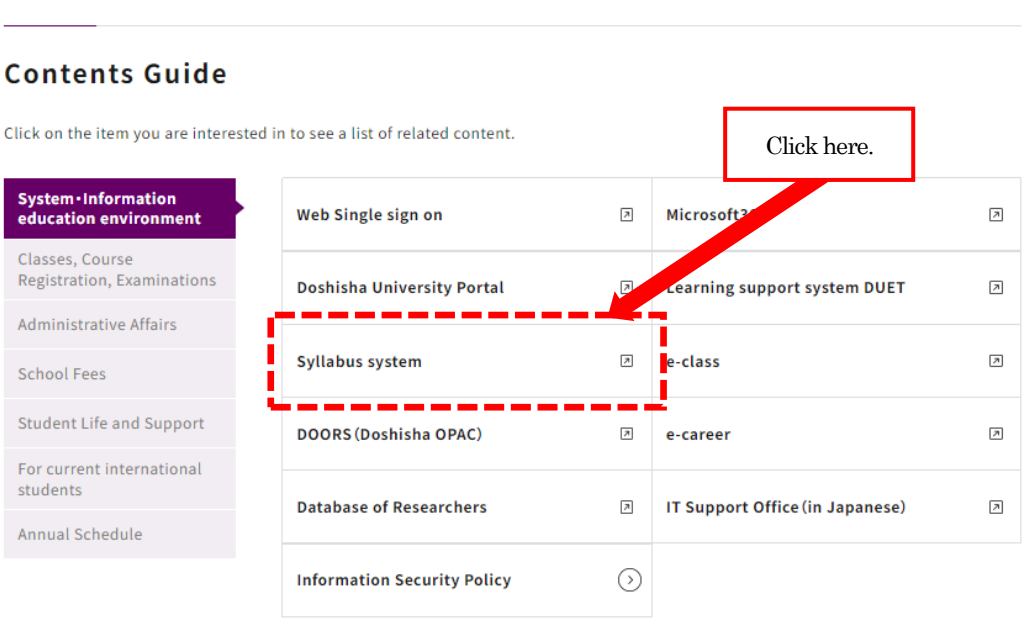
NOTE

How to Search the Course Syllabus

1. Open the home page of Doshisha University (http://www.doshisha.ac.jp/en/index.html), click the button of "Current students" and scroll down.

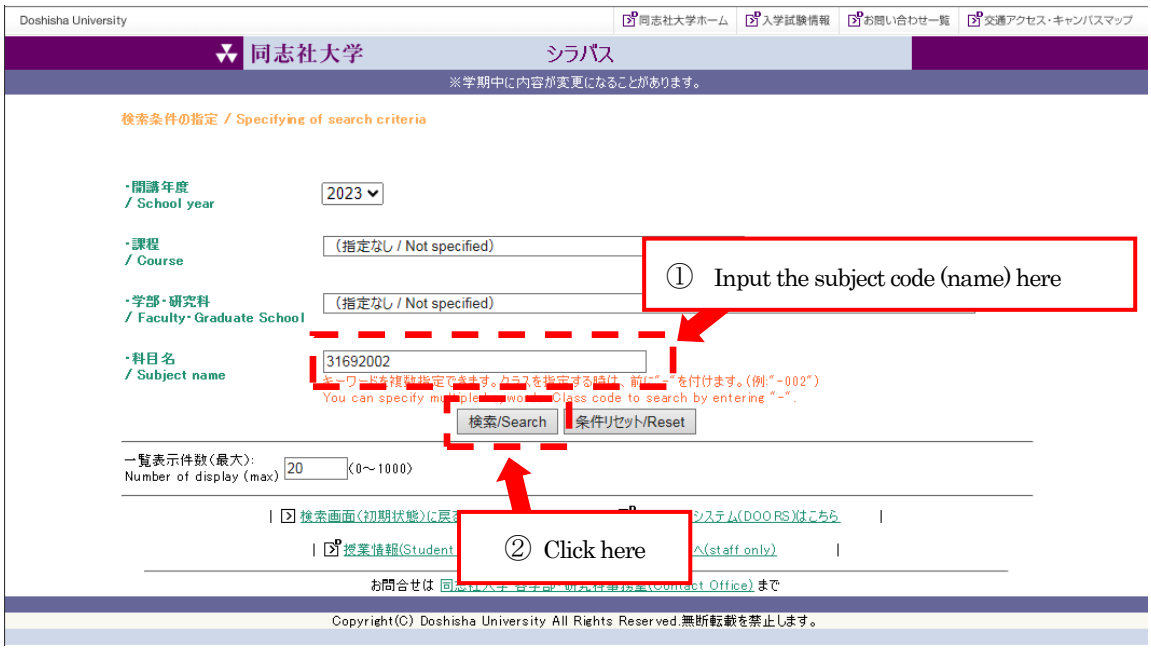


2. Click the button of "Syllabus system".



3. Input the subject code (name) into the box (①) and click the button of "Search"(②).

※ Refer to "List of Subjects" to find the subject code.



4. Click the title displayed in the Search results.

5. Details of the class are displayed.

Cancellation of Classes and Examinations in case of Typhoons and Storms

Ⅰ In case Public Transportation is unavailable (no reason is needed)

1. Imadegawa Campus

a) In the case of the interruption of both Kyoto City bus and subway in the whole area at a time
b) In the case of the interruption of two or more lines out of the following lines at a time (in all or part of the sections)

- Between Kyoto-kawaramachi Station and Osaka-umeda Station in Hankyu Line
- Between Demachi-yanagi Station and Yodoyabashi Station in Keihan Line
- Between Kyoto Station and Osaka-Namba Station (via Yamato-saidaiji Station) in Kintetsu Line
- Between Kobe Station and Maibara Station in JR Line

2. Kyotanabe Campus

a) In the case of the interruption of both Kyoto City bus and subway in the whole area at a time
b) In the case of the interruption of Kintetsu Railway (Kyoto Station - Yamato-saidaiji Station) in the whole area
c) In the case of the interruption of two or more lines out of the following lines at a time (in all or part of the sections)

1. Between Kyoto-Kawaramachi Station and Osaka-umeda Station in Hankyu Line
2. Between Demachi-yanagi Station and Yodoyabashi Station in Keihan Line
3. Between Kyoto Station and Osaka-Namba Station (via Yamato-saidaiji Station) in Kintetsu Line
4. Between Kobe Station and Maibara Station in JR Line
5. Between Kizu Station and Kyobashi Station in JR Line

Time of Re-opening the Train Service	When to Start Class
By 6:30 a.m.	From the 1st Period
From 6:31 a.m. to 10:40 a.m.	From the 3rd Period
From 10:41 a.m. to 3:55 p.m.	From the 6th Period
After 3:55 p.m.	All Classes are Cancelled.

Ⅱ Issuance of Storm Warning (Not Heavy Rain Warning)

- If a typhoon warning or any type of emergency warning is issued for any of the prefectural forecast area, sub-prefecture region 1, region comprising several municipalities or sub-prefecture region 2 in the table under "1. Areas Covered by the Warning," classes/final examinations scheduled for the day will be cancelled, starting from the next period after the issuance of the warning.
- For classes/final examinations that have already started or about to start at the time of the issuance of the warning, the university will decide whether or not to cancel them with due consideration of the level of urgency of the warning.
- An emergency warning is issued when the area concerned is in very dangerous situation. Students staying in the warned areas must immediately take necessary actions to protect themselves, regardless of the type of emergency warning. However, those who are on campus at the time of the issuance of the emergency warning should act as instructed by the university. Those who are at home or during commuting in an area where the emergency warning is issued should do what they consider is best to protect themselves.
- If the warning is withdrawn and safety is confirmed, the rest of the classes for the day will be held according to "2.Time of withdrawal of warning and classes/final examinations start time," except for cases where the university makes a separate announcement depending on the situation.

1. Areas Covered by the Warning

Prefectural forecast area	Sub-prefecture Region 1	Region comprising several municipalities	Sub-prefecture Region 2
Kyoto Prefecture	Nambu	Nantan-Kyo-tamba	Nantan-shi, Kyo-tamba-cho
		Kyoto-Kameoka	Kyoto-shi, Kameoka-shi, Muko-shi, Nagaokakyo-shi, Oyamazaki-cho
		Yamashiro Chubu	Uji-shi, Joyo-shi, Yawata-shi, Kyo-tanabe-shi, Kumiyamacho, Ide-cho, Uji-tawara-cho
		Yamashiro Nambu	Kizugawa-shi, Kasagi-cho, Wazuka-cho, Seika-cho, Minamiyamashiro-mura

Osaka Prefecture	Osaka Prefecture	Kita Osaka	Toyonaka-shi, Ikeda-shi, Suita-shi, Takatsuki-shi, Ibaraki-shi, Mino-o-shi, Settsu-shi, Shimamoto-cho, Toyono-cho, Nose-cho
		Tobu Osaka	Moriguchi-shi, Hirakata-shi, Yao-shi, Neyagawa-shi, Daito-shi, Kashiwara-shi, Kadoma-shi, Higashiosaka- shi, Shijonawate-shi, Katano-shi
		Osaka-shi	Osaka-shi
		Minami Kawachi	Tondabayashi-shi, Kawachi-nagano-shi, Matsubara- shi, Habikino-shi, Fujiidera-shi, Osaka-sayama-shi, Taishicho, Kanan-cho, Chihaya-Akasaka-mura
		Senshu	Sakai-shi, Kishiwada-shi, Izumi-otsu-shi, Kaizuka-shi, Izumi-sano-shi, Izumi-shi, Takaishi-shi, Sennan-shi, Hannan-shi, Tadaoka-cho, Kumatori-cho, Tajiri-cho, Misaki-cho

2. Time of withdrawal of warning and classes/final examinations start time

Time of Cancellation of the Warning	When to Start Class
By 6:30 a.m.	From the 1st Period
By 10:40 a.m.	From the 3rd Period
By 3:55 p.m.	From the 6th Period
Still under the Warning As of 3:56 p.m.	All Classes are Cancelled.

Ⅲ Notwithstanding I and II, classes or final examinations may be cancelled at the discretion of the President in the case that they have been determined to be not feasible or unsafe.

Ⅳ In the event that confirmed information about a planned suspension is announced in advance for any of the train/bus lines specified in Ⅰ, the university may cancel classes and final examinations depending on which train/bus lines will be affected.

Ⅴ In the event that classes and final examinations cannot be held as usual due to suspension of train/bus lines, typhoon warning or emergency warning, or other heavy weather or natural disaster, the university or the course instructor will inform the situation as necessary via the university website, Doshisha University Portal, DUET, e-class and so on.
Please check the university website, Doshisha University Portal, DUET, e-class and so on regularly to keep yourself updated.

NOTE

NOTE

ISTC Team – Doshisha University

Office of Faculty / Graduate School of
Science and Engineering, Doshisha University

2F, Rikagakukan (RG) Bldg.
E-mail: jt-istc@mail.doshisha.ac.jp
TEL: 0774-65-6200
Website: http://istc.doshisha.ac.jp/en/

<Opening hours>
Weekdays 9:00 - 17:00 (Closed 11:30 - 12:30)
※Closed on Saturdays, Sundays, National holidays and University holidays