Appended Form 1

Specifications for Major Program

Name of School (Program) School of Engineering Cluster 1 Mechanical Systems, Transportation, Material and Energy)

Program name (Japanese)	
(English)	Program of Energy Transform Engineering
1.Academic degree to be Acquired	Bachelor's degree in Engineering

2. Overview

(1) Overview of "English-based Bachelor's Degree Program"

This program aims to foster and produce future members of a global society who have the knowledge to be innovative, creative, take leadership, and possess language abilities that will help them play an important role in the international world.

This program focuses specifically on producing individuals who are capable of addressing various global issues

* For the relationship between evaluation items and evaluation criteria, see the attached Sheet 2 .
* For the relationship between evaluation items and class subjects, see the attached Sheet 3.
* For the curriculum map, see the attached Sheet 4.

9. Graduation Thesis (Graduation Research) (Positioning, when and how it is assigned, etc.)

○ Positioning

The graduation thesis is designed to be one component of the overall evaluation of academic achievement.

It is positioned as one of the major subjects to evaluate the following:

Ability/Skills (2) Developing the ability to solve engineering issues on one's own initiative with flexible thinking and creativity

Collective capacity (1) Developing communication skills and the ability to globally collect and dispatch information.

○ When and how it is assigned

When it is assigned: At the start of the fourth year. (Only those who satisfy the conditions for embarking on a graduation thesis will be assigned a thesis.)

○ Conditions for embarking on a graduation thesis

(1) Students must gain 43 credits or more out of 46 credits, the required number for graduation in Liberal Arts Education subjects.

(2) Students must gain 10 credits or more in the first group of specialized basic subjects

(3) Students must gain all of the required credits in Machine Design and Drawing, CAD, Machine Shop Training, Experiments in Mechanical Engineering , Experiments in Mechanical Engineering , and Mechanical Engineering Design and Production.

(4) Students must gain 13 credits or more out of 17 credits, the required number in Liberal Arts Education subjects, in the second group of specialized basic subjects.

(5) Students must gain a total of 68 credits or more in specialized basic subjects and specialized subjects.

○ How it is assigned

The research details of each laboratory to which the students can be assigned are explained by giving out

Conducting questionnaires (obtained at graduation) in suitable cycles, to evaluate the validity of the goals

- Position on feedback to students and how it should be conducted

Search records of each student's learning status, prepared by tutors, are kept in the office. Based on these records, study guidance is given to each student. At the same time, requests from students are discussed at teachers' meetings as needed. Furthermore, based on the results of the course improvement questionnaires obtained from students, subject teachers draw up class improvement plans that reflect the questionnaire results.

Cluster 1(Mechanical Systems, Transportation, Material and Energy)

◎ Required subject (period of registration specified)

○ Compulsory elective subject (any of these subjects shall be registered)

△ Free elective subject (any of these subjects shall be registered)

Subject type				Required No. of credits	Class subjects, etc.	No. of credits	Type of course registration	Year in which the subject is taken(*The lower figure means semester)(Note 1)															
								1st grade				2nd grade				3rd grade				4th grade			
								Spring		Fall		Spring		Fall		Spring		Fall		Spring		Fall	
								1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T
Liberal Arts Education Subjects	Peace Science Courses			2		2	Required		○														
	Basic Courses in University Education	Introduction to University Education		2	Introduction to University Education	2	Compulsory elective	◎															
		Introductory Seminar for First-Year Students		2	Introductory Seminar for First-Year Students	2	Compulsory elective		◎															
	Common Subjects	Area Courses		4	Courses in Arts and Humanities/Social Sc	2	Compulsory elective	○		○													
				4	Courses in Natural Sciences	2	Compulsory elective		○		○												
		Foreign Languages	English (Note 2･3) Basic English Usage	2	Basic English UsageI	1	Required	◎	◎														
					Basic English UsageII	1				◎	◎												
			English (Note 2･3) Communication I	2	CommunicationIA	1	Required	◎	◎														
					Communication IB	1		◎	◎														
			English (Note 2･3) Communication II	2	Communication IIA	1	Required			◎	◎												
					Communication IIB	1				◎	◎												
			Initial Foreign Languages (Select one language from German, French, Spanish, Russian, Chinese, Korean, and Arabic)	2	1 subjects from Basic language I	1	Compulsory elective	○															
					1 subjects from Basic language II	1			○														
		Information and Data Science Courses		2	Elements of Information Literacy or Exercise in Information Literacy	2	Compulsory elective	○	○														
		Health and Sports Courses		2		1or2	Compulsory elective	○	○	○	○												
	Basic Subjects			18	CalculusI	2	Required		◎														
					CalculusII	2					◎												
					Linear AlgebraI	2		◎															
					Linear AlgebraII	2				◎													
					Seminar in Basic Mathem	1			◎														
					Seminar in Basic Mathem	1					◎												
					General Mechanics I	2		◎															
					General Mechanics II	2				◎													
					Basic Electromagnetism	2							◎										
					Experimental Methods and Laboratory Work in Physics I(Note 4)	1				◎													
					Experimental Methods and Laboratory Work in Physics II(Note 4)	1					◎												
				2	General Chemistry	2	Compulsory elective						○										
					Experimental Methods and Laboratory Work in Chemistry I(Note 4)	1				○													
					Experimental Methods and Laboratory Work in Chemistry II(Note 4)	1					○												
	No. of credits required for graduation			46																			

Note 1: When students fail to acquire the credit during the term or semester marked with ◎, ○, △ in the boxes for the year in which the course is taken, they can take the course in subsequent terms or semesters. Depending on class subject, courses may be offered in semesters or terms different from those

Note 2: The credit obtained by mastery of "English-speaking Countries Field Research" or self-directed study of "Online Seminar in English A･B" cannot be counted towards the credit necessary for graduation. The credit obtained by Overseas Language Training can be recognized as Communication Ⅰor Ⅱ if application is made in advance. For more details, please refer to the article on English in Liberal Arts Education in the student handbook.

Note 3: We have a recognition of credit system for foreign language proficiency tests. For more details, please refer to the article on English in Liberal Arts Education in the student handbook.

Note 4: Students must take both「Experimental Methods and Laboratory WorkⅠ(1credit)」and「Experimental Methods and Laboratory WorkⅡ(1credit)」.

Cluster 1　Basic Specialized Subjects

◎ Required subject
○Compulsory elective subject
△Free elective subject

	Class Subjects	Credits	Type of course registration				Class Hours/Week																Note
			Mechanical Systems Engineering	Transportation Systems	Materials Processing	Energy Transform Engineering	1st grade				2nd grade				3rd grade				4th grade				
							Spring		Fall		Spring		Fall		Spring		Fall		Spring		Fall		
							1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	
1st group	Applied Mathematics I	2	◎	◎	◎	◎			4														
	Applied Mathematics II	2	◎	◎	◎	◎					4												
	Applied Mathematics III	2	◎	◎	◎	◎							4										
	Engineering Mathematics A	2	○		○	○									4								
	Engineering Mathematics C	2	○	◎	○	○								4									
	Probability and Statistics	2	◎	◎	◎	◎					4												
	Synthesis of Applied Mathematics	2	○		○	○											4						
	Practice of Mechanics	1	○	△	○	○			4														
	Engineering Mechanics	2	○	△	○	○				4													
	Introduction of Mechanical and Transportation Engineering	2	◎	◎	◎	◎			4														
	Technical English	1	◎	◎	◎	◎					4												
	Basic Engineering Computer Programming	2	◎	◎	◎	◎						4											
2nd group	Mechanics of Material I	2	◎	◎	◎	◎					4												
	Thermodynamics I	2	◎	◎	◎	◎					4												
	Fluid Dynamics I	2	◎	◎	◎	◎						4											
	Control Engineering I	2	◎	◎	◎	◎						4											
	An Introduction to Engineering Materials	2	◎	◎	◎	◎					4												
	Fundamentals of Materials Processing	2	◎	◎	◎	◎						4											
	Computer Programming	2	◎	◎	◎	◎										4							
	Machine Design and Drawing	1	◎	◎	◎	◎			3	3													
	Computer Aided Design	1	◎	◎	◎	◎					3	3											
	Machine Shop Training (a)	1	◎	◎	◎	◎			3	3													
	Machine Shop Training (b)	1	◎	◎	◎	◎					3	3											

※Students can select either Machine Shop Training (a) or Machine Shop Training (b)

Cluster 1 Specialized Subjects
(Program of Energy Transform Engineering)

◎ Required subject
○Compulsory elective subject
△Free elective subject

Class Subjects	Credits	Type of course registration	Class Hours/Week																Note
			1st grade				2nd grade				3ed grade				4th grade				
			Spring		Fall		Spring		Fall		Spring		Fall		Spring		Fall		
			1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	
Dynamics of Vibrations I	2	◎							4										
Experiments in Mechanical Engineering I	1	◎									3	3							
Experiments in Mechanical Engineering II	1	◎											3	3					
Mechanical Engineering Design and Production	1	◎											3	3					
Elementary Electromagnetism	2	◎							4										
Introduction to Quantum Physics	2	◎								4									
Introduction to chemical physics	2	○										4							
Fluid Dynamics II	2	◎								4									
Compressible Fluid Dynamics	2	○									4								
Computational Fluid Dynamics	2	○											4						
Fluid Machinery	2	○												4					
Thermodynamics II	2	○								4									
Statistical and Thermal Physics	2	○											4						
Heat Transfer I	2	◎							4										
Heat Transfer II	2	○									4								
Combustion Engineering Fundamentals	2	○									4								
Basic Chemical Kinetics	2	○										4							
Internal Combustion Engines	2	○											4						
Steam Power	2	○											4						
Plasma Engineering	2	○										4							
Data Processing and Numerical Analysis	2	○								4									
Radiation Engineering	2	○												4					
Nuclear Engineering	2	○												4					
Theory of Elasticity and Plasticity	2	○									4								
Computational Solid Mechanics	2	○												4					
Electrical and Electronic Engineering	2	○									4								
Instrumentation Engineering	2	◎							4										
Optical Measurement Techniques	2	○												4					
Machine Elements Design I	2	○							4										
Natural-Energy Utilization Engineering	2	○												4					
Internship	1	△											3	3					
Mechanism and Kinematics	2	△								4									
Systems Engineering	2	△								4									
Mechanics of Materials II	2	△							4										
Transportation	2	△							4										
Control Engineering II	2	△							4										
Materials Science	2	△								4									
Machine Elements Design II	2	△									4								
Mechanical Materials I	2	△										4							
Dynamics of Vibrations II	2	△									4								
Machining	2	△										4							
Reliability Engineering	2	△										4							
Manufacturing System	2	△										4							
Fusion and Solidification Processings I	2	△										4							
Plastic Working and Powder Metallurgy II	2	△											4						
Mechanical System Control	2	△									4								
Machine Design	2	△											4						
Mechanical Materials II	2	△												4					
Fracture Mechanics	2	△												4					
Mechatronics	2	△											4						
Graduation Thesis	5	◎																	

Academic Achievement in Educational Program for Energy Transform Engineer

The Relationship between Evaluation Items and Evaluation Criteria

Academic Achievements			Evaluation Criteria		
Evaluation Items			Excellent	Very Good	Good
Knowledge and Understanding	(1)	To develop the ability to work positively and independently on the development of local societies, international society, and business and industries.	To be able to be sufficiently engaged in the development of local societies, international society, and business and industry.	To be able to be engaged in the development of local societies, international society, and business and industry at the standard level.	To be able to be engaged in the development of local societies, international society, and business and industry at the minimum level.
	(2)	Acquiring necessary basic knowledge for an engineer and developing the ability to consider logically.	Acquiring necessary basic knowledge for an engineer and being able to sufficiently and logically consider it.	Acquiring necessary basic knowledge for an engineer and being able to logically consider it at the standard level.	Acquiring necessary basic knowledge for an engineer and being able to logically consider it at the minimum level.
Abilities and Skills	(1)	Acquring basis of mechanical system engineering steadily and developing the applied skill.	Acquring basis of mechanical system engineering steadily, and being able to apply it sufficiently.	Acquring basis of mechanical system engineering steadily, and being able to apply it at the standard level.	Acquring basis of mechanical system engineering steadily, and being able to apply it at the minimum level.
	(2)	Developing the ability of solving the technological issues with flexible ideas and creativity.	Based on flexible ideas and creativity, to be able to sufficiently solve problems related to engineering.	Based on flexible ideas and creativity, to be	To be able to communicate with others, collect and release information internationally at the standard level

To be abl
collect an
internatio

Placement of the Liberal Arts Education in the Major Program

We aim to cultivate a well-rounded character, backed up by a broad range of basic knowledge and an understanding of global environmental issues and problems in the social environment. Furthermore, we aim to cultivate the ability to consider ways to solve problems in the context of the multifaceted relations between people and society, and between nature and engineering. To that end, the following are offered: (1) The acquisition of the necessary abilities and attitudes to see various social issues multilaterally and to understand the complete picture (2) The acquisition of a broader perspective after being exposed to fields outside of one's area of expertise (3) Through sports, the acquisition of knowledge of health and physical strength that form basis of human living (4) The cultivation of the ability to

Relationships between the evaluation items and class subjects

Sheet 3

Subject type	Class subjects	credits	Type of course registration	Period	Evaluation items										Total weighted values of evaluation items in the subject
					Knowledge and Understanding				Abilities and Skills				Comprehensive Abilities		
					(1)		(2)		(1)		(2)		(1)		
					Weighted values of evaluation items in the subject	Weightsed values of evaluation items	Weighted values of evaluation items in the subject	Weightsed values of evaluation items	Weighted values of evaluation items in the subject	Weightsed values of evaluation items	Weighted values of evaluation items in the subject	Weightsed values of evaluation items	Weighted values of evaluation items in the subject	Weightsed values of evaluation items	
Liberal Arts Education	Introduction to University Education	2	Required	1semsester-1T	100	1									100
Liberal Arts Education	Introductory Seminar for First-Year Students	2	Required	1semsester							50	1	50	1	100
Liberal Arts Education	Peace Science Courses	2	Elective	1semsester-2T	100	1									100
Liberal Arts Education	Basic English UsageI	1	Required	1semsester									100	1	100
Liberal Arts Education	Basic English UsageII	1	Required	2semsester									100	1	100
Liberal Arts Education	CommunicationI	1	Required	1semsester									100	1	100
Liberal Arts Education	Communication I	1	Required	1semsester									100	1	100
Liberal Arts Education	Communication II	1	Required	2semsester									100	1	100
Liberal Arts Education	Communication II	1	Required	2semsester									100	1	100
Liberal Arts Education	Basic language I	1	Elective	1semsester-1T									100	1	100
Liberal Arts Education	Basic language II	1	Elective	1semsester-2T									100	1	100
Liberal Arts Education	Area Courses Courses in Arts and Humanities/Social Sc	4	Elective												
							100	1							100
Liberal Arts Education	Linear AlgebraI	2	Required	1semsester			100	1							100
Liberal Arts Education	Linear AlgebraII	2	Required	2semsester			100	1							100
Liberal Arts Education	Seminar in Basic Mathematics I	1	Required	1semsester			100	1							100
Liberal Arts Education															
		2	Required	2semsester			100	1							100
Liberal Arts Education	General Chemistry	2	Elective	3semsester			100	1							100
Liberal Arts Education	Experimental Methods and Laboratory Work in Chemistry I	2	Elective	2semsester			100	1							100
Specialized Education	Applied Mathematics I	2	Required	2semsester					100	1					100
Specialized Education	Applied Mathematics II	2	Required	3semsester					100	1					100
Specialized Education	Applied Mathematics III	2	Required	4semsester					100	1					100
Specialized Education	Engineering Mathematics A	2	Elective	5semsester					100	1					100
Specialized Education	Engineering Mathematics C	2	Elective	4semsester					100	1					100
Specialized Education	Probability and Statistics	2	Required	3semsester					100	1					100
Specialized Education	Synthesis of Applied Mathematics	2	Elective	6semsester					100	1					100
Specialized Education	Practice of Mechanics	1	Elective	2semsester					100	1					100
Specialized Education	Engineering Mechanics	2	Elective	2semsester					100	1					100
Specialized Education	Introduction of Mechanical and Transportation Engineering	2	Required	2semsester					100	1					100
Specialized Education	Technical English	1	Required	3semsester					100	1					100
Specialized Education	Basic Engineering Computer Programming	2	Required	3semsester			100	1							100
Specialized Education	Experiments in Mechanical Engineering I	1	Required	5semsester							80	1	20	1	100
Specialized Education	Experiments in Mechanical Engineering II	1	Required	6semsester							80	1	20	1	100
Specialized Education	Fundamentals of Materials Processing	2	Required	3semsester					100	1					100
Specialized Education	An Introduction to Engineering Materials	2	Required	3semsester					100	1					100
Specialized Education	Mechanics of Material I	2	Required	3semsester					100	1					100
Specialized Education	Dynamics of Vibrations I	2	Required	4semsester					100	1					100
Specialized Education	Control Engineering I	2	Required	3semsester					100	1					100
Specialized Education	Fluid Dynamics I	2	Required	3semsester					100	1					100
Specialized Education	Thermodynamics I	2	Required	3semsester-1T					100	1					100
Specialized Education	Machine Design and Drawing	1	Required	2semsester					100	1					100
Specialized Education	Computer Aided Design	1	Required	3semsester							100	1			100

Subject type	Class subjects	credits	Type of course registration	Period	Evaluation items										Total weighted values of evaluation items in the subject
					Knowledge and Understanding				Abilities and Skills				Comprehensive Abilities		
					(1)		(2)		(1)		(2)		(1)		
					Weighted values of evaluation items in the subject	Weightsed values of evaluation items	Weighted values of evaluation items in the subject	Weightsed values of evaluation items	Weighted values of evaluation items in the subject	Weightsed values of evaluation items	Weighted values of evaluation items in the subject	Weightsed values of evaluation items	Weighted values of evaluation items in the subject	Weightsed values of evaluation items	
Specialized Education	Mechanical Engineering Design and Production	1	Required	6semsester							100	1			100
Specialized Education	Computer Programming	2	Required	5semsester			100	1							100
Specialized Education	Machine Shop Training (a)	1	Required	2semsester							100	1			100
Specialized Education	Machine Shop Training (b)	1	Required	3semsester							100	1			100
Specialized Education	Mechanical Materials I	2	Elective	5semsester					100	1					100
Specialized Education	Mechanical Materials II	2	Elective	6semsester					100	1					100
Specialized Education	Fracture Mechanics	2	Elective	6semsester					100	1					100
Specialized Education	Fusion and Solidification Processings I	2	Elective	5semsester					100	1					100
Specialized Education	Plastic Working and Powder Metallurgy II	2	Elective	6semsester					100	1					100
Specialized Education	Materials Science	2	Elective	4semsester					100	1					100
Specialized Education	Machining	2	Elective	5semsester					100	1					100
Specialized Education	Fluid Dynamics II	2	Required	4semsester-4T					100	1					100
Specialized Education	Heat Transfer I	2	Required	4semsester-3T					100	1					100
Specialized Education	Combustion Engineering Fundamentals	2	Elective	5semsester					100	1					100
Specialized Education	Internal Combustion Engines	2	Elective	6semsester					100	1					100
Specialized Education	Data Processing and Numerical Analysis	2	Elective	4semsester					100	1					100
Specialized Education	Theory of Elasticity and Plasticity	2	Elective	5semsester					100	1					100
Specialized Education	Computational Solid Mechanics	2	Elective	6semsester					100	1					100
Specialized Education	Mechanics of Materials II	2	Elective	4semsester					100	1					100
Specialized Education	Mechanism and Kinematics	2	Elective	4semsester					100	1					100
Specialized Education	Dynamics of Vibrations II	2	Elective	5semsester					100	1					100
Specialized Education	Control Engineering II	2	Elective	4semsester					100	1					100
Specialized Education	Electrical and Electronic Engineering	2	Elective	5semsester					100	1					100
Specialized Education	Mechatronics	2	Elective	6semsester					100	1					100
Specialized Education	Instrumentation Engineering	2	Required	4semsester					100	1					100
Specialized Education	Mechanical System Control	2	Elective	5semsester					100	1					100
Specialized Education	Manufacturing System	2	Elective	5semsester					100	1					100
Specialized Education	Machine Elements Design II	2	Elective	5semsester					100	1					100
Specialized Education	Machine Design	2	Elective	6semsester					100	1					100
Specialized Education	Systems Engineering	2	Elective	4semsester					50	1	50	1			100
Specialized Education	Reliability Engineering	2	Elective	5semsester	10	1			90	1					100
Specialized Education	Machine Elements Design I	2	Elective	4semsester					100	1					100
Specialized Education	Internship	1	Elective	6semsester	40	1					30	1	30	1	100
Specialized Education	Elementary Electromagnetism	2	Required	4semsester					100	1					100
Specialized Education	Introduction to Quantum Physics	2	Required	4semsester					100	1					100
Specialized Education	Introduction to chemical physics	2	Elective	5semsester					100	1					100
Specialized Education	Compressible Fluid Dynamics	2	Elective	5semsester					100	1					100
Specialized Education	Computational Fluid Dynamics	2	Elective	6semsester					100						

Curriculum Map of Energy Transform Engineering

Sheet 4

Academic achievements		1st grade		2nd grade		3rd grade		4th grade	
Evaluation Items		Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
Knowledge and Understanding	To develop the ability to work positively and independently on the development of local societies, international society, and business and industries.	Introduction to University Education	Area Courses ○	Area Courses ○	Area Courses ○	Reliability Engineering	Internship		
		Peace Science Courses ○	Health and Sports Courses ○						
		Area Courses ○							
		Health and Sports Courses ○							
	Acquiring necessary basic knowledge for an engineer and developing the ability to consider logically.	Exercise in Information Literacy ○	CalculusII	Basic Electromagnetism		Computer Programming			
		Elements of Information Literacy ○	Linear AlgebraII	General Chemistry ○					
		CalculusI	Seminar in Basic Mathematics II	Basic Engineering Computer Programming					
		Linear AlgebraI	General Mechanics II						
		Seminar in Basic Mathematics I	Experimental Methods and Laboratory Work in Physics I						
		General Mechanics I	Experimental Methods and Laboratory Work in Chemistry I ○						
Abilities and Skills	Acquring basis of mechanical system engineering and materials processing steadily and developing the applied skill.		Applied Mathematics I	Applied Mathematics II	Applied Mathematics III	Engineering Mathematics A ○	Synthesis of Applied Mathematics ○		
			Practice of Mechani	Probability and Statistics	Engineering Mathematics C ○	Mechanical Materials I	Dynamics of Vibrations II		
			Engineering Mechanics	Mechanics of Material I	Dynamics of Vibrations I	Fusion and Solidification Processings I	Fracture Mechanics		
			Introduction of Mechanical and Transportation Engineering	Thermodynamics I	Materials Science	Machining	Plastic Working and Powder Metallurgy II		
			Machine Design and Drawing	Fluid Dynamics I	Elementary Electromagnetism	Introduction to chemical physics	Statistical and Thermal Physics		
				Control Engineering I	Introduction to Quantum Physics	Heat Transfer II	Internal Combustion Engines ○		
				An Introduction to Engineering Materials	Fluid Dynamics II	Combustion Engineering Fundamentals	Computational Solid Mechanics ○		
				Fundamentals of Materials Processing	Thermodynamics II	Plasma Engineering	Mechatronics		
					Heat Transfer I	Theory of Elasticity and Plasticity	Optical Measurement Techniques ○		
					Data Processing and Numerical Analysis ○	Dynamics of Vibrations II	Computational Fluid Dynamics		
					Mechanics of Materials II	Electrical and Electronic Engineering ○	Machine Design		
					Mechanism and Kinematics ○	Mechanical System Control	Fluid Machinery		
					Control Engineering II	Manufacturing System	Internal Combustion Engines		
					Instrumentation Engineering	Machine Elements Design II	Steam Power		
					Machine Elements Design I ○	Reliability Engineering	Radiation Engineering		
					Systems Engineering	Compressible Fluid Dynamics	Nuclear Engineering		
					Transportation	Basic Chemical Kinetics			
						Natural-Energy Utilization Engineering			
	Developing the ability of solving the technological issues with flexible ideas and creativity.	Introductory Seminar for First-Year Students	Machine Shop Training (a) ○	Machine Shop Training (b) ○	Systems Engineering	Experiments in Mechanical Engineering I	Experiments in Mechanical Engineering II	Graduation Thesis	Graduation Thesis
				Computer Aided Design			Mechanical Engineering Design and Production		
							Internship		
Comprehensive Abilities	Cultivating abilities of communication and of internationally collecting information and releasing it	Introductory Seminar for First-Year Students	Basic English UsageII			Experiments in Mechanical Engineering I	Experiments in Mechanical Engineering II	Graduation Thesis	Graduation Thesis
		Basic English UsageI	Communication II	Technical English			Internship		
		CommunicationI	Communication II						
		Communication I							
		Basic language I(○)							
		Basic language II ○							

Color-code: Common subjects | Foundation Courses | Basic Specialized Subjects The first group | Basic Specialized Subjects The second group | Specialized Subjects

Symbol: Required subject | ○ Compulsory elective subject | Free elective subject