April 2024

2024

Revisions to the Curriculum Table

Graduate School For students enrolled in/before 2024

Pages 1-29: For students who enrolled in AY 2022 to 2023

Pages 30-31: For students who enrolled before AY 2021

The English translation is solely for reference purpose and not a legally definiticve translation of the original Japanese text. Shoud any differences arise between two versions, the Japanese version will prevail as an official authoritative version.

No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Revisions改定区分	Subject name, Lecturer-in-Charge and Term etc. (Changes are shown as [Before revision] — [After revision].) 細かい改定内容	Measures to students在学生の 対応
Revision	of Com	non Rule	s (Master's Progra	m)					
1	curriculum table	Add a descrip S:Safety subje	tion of the "S" mark to the cu ect recommended to be taker	rricular chart,	except for the	System Safet	y Engineering.		
2	Common	Diploma Policy	Revise the Diploma Policy of I (New) In Nagaoka University of Tech researchers who are adept at facilitate the global expansion broad education through the 1. Acquisition of the ability to covering multiple specialized 3. Acquisition of the ability to development of the ability to global stage as leading intern A master's degree will be cor experiment/practical subject (Old) Nagaoka University of Techno information technology, and master's program has set the subjects, research guidance, i 1. Acquisition of the ability to involving multiple specialized 3. Acquisition of the ability to involving multiple specialized 3. Acquisition of the ability to involving multiple specialized 3. Acquisition of the ability to skills to discern and adapt to 4. Acquisition of the ability to skills to discern and adapt to 4. Acquisition of the ability to skills to discern and adapt to 4. Acquisition of the ability to skills to discern and adapt to 4. Acquisition of the ability to skills to discern and adapt to 4. Acquisition of the ability to skills to discern and adapt to 4. Acquisition of the ability to skills to discern and adapt to 4. Acquisition of the ability to skills to discern and adapt to 4. Acquisition of the ability to skills to discern and adapt to 4. Acquisition of the ability to skills to discern and adapt to 4. Acquisition of the ability to skills to discern and adapt to 4. Acquisition for the ability to skills to discern and adapt to 4. Acquisition for the ability to skills to discern and adapt to 4. Acquisition for the ability to skills to discern and adapt to 4. Acquisition for the ability to skills to discern and adapt to 4. Acquisition for the ability to skills to discern and adapt to 4. Acquisition for the ability to skills to discern and adapt to 4. Acquisition for the ability to skills to discern and adapt to 4. Acquisition for the ability to skills to discern and adapt to 4. Acquisition for the ability to skills to discern and adapt to 4. Acquisition for the ability to skills to discern and adapt to 4. Ac	Master's Prog noology's Mas using inform- n of technolog various major d specialized I disciplines; ar consider the demonstrate work collabo ational engine iferred on stur s offered to fa opsess advar following fou and extracurri fully utilize ar consider the global trends work collabo rs and research ferred on stur (which are all	ram in Enginee iter's Program ation technolo yy. To this end, r subjects, corr snowledge and life, humanity ad formation o impact of tech strategic tech ratively in a te eers and resea dents who hav cilitate the acc of human reso ced practical a r attributes as cular activities dvanced specia life, humanity s well as multil impact of tech in society and ratively in a te chers. dents who hav offered to faci	ering. in Engineering gy, have acqu the master's imon subjects d expertise in (, and society f multifacetec inology on the nology manag am with an in rchers. e acquired the quisition of the usition of the soth inside a alized knowled , and society f faceted and fl inology on saf industry. am with an in e acquired the litate the acqu	g, the vision of human resc ired a safety mindset, and program has set the follow , research guidance, and e each student's specialized irom a technological persp l and flexible thinking abilit environment and safety, gement skills. ternational perspective, ar e number of credits necess e above targets, and have bilities that can facilitate t udents to attain through a nd outside the university. dge and skills in various sci rom a technological persp exible cognitive abilities to ety, the environment, and ternational perspective, ar e number of credits necess uisition of the above target	purce development is the production of possess advanced practical and creative ving four attainment targets to enable s xtracurricular activities both inside and field, development of proficiency in info ective; gain an understanding of integra ties for advanced technology and scienc gain insight into global social and indust nd development of the capability to com sary for completion through lectures, see also passed the master's thesis review.	eading engineers and a bilities that can tudents to acquire a outside the university. rmation technology, ted technologies e. rial trends, and pete fairly on the minars, and ire adept at using chieve this vision, the ects, common is proficiency in red technologies logy. ogy management e global stage as minars, and hesis screening.

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3	Common	Curriculum Policy	Revise the Curriculum Policy of (New) Nagaoka University of Techno concept of an integrated und engineers and researchers wil s program offers a systematic 1. Specialized education is pro of their master's thesis throu 2. Through subject categories addressing interdisciplinary a technologies that cover multi 3. "Research Integrity" is a co and form a safety mindset th 4. Common subjects are offer implement technology in soci 6. Students will be provided v By engaging in research and co global level. 7. The curriculum organizatio (Policy for Academic Achiever The syllabus of each subject v is conducted in a fair, rigorou the screening criteria and me (Old) Nagaoka University of Techno possess advanced practical a the following four attributes t Ability to consider the impact adapt to global trends in soci Ability to work collaboratively in order to develop leading ent chact an facilitate leading ent chact an tacilitate leading ent that can facilitate leading ent the subject shal Student's performance v (Policy for Academic Achiever In order to develop leading ent the subject in lecture subject shal Student's who pass a subject shal Students who pass a subject shal Students who pass a subject shal Students who pass a subject shal	of Master's Pr ology, in accor ergraduate ar ho possess ad curriculum b ovided throug gh seminars a s and subject g reas. In additi iple specialized mpulsory sub at are closely red to student iety. Beginnin, ho fthe goals rses and other burse complet vith opportun development i nal diagram is ment Evaluati will clearly sta s, and objectiv thods are clear blogy aims to nd creative ab clogy aims to nd creative ab s a smultiface c of technolog ety and indusi y in a team wi will be assessed ment Evaluati is, as well as t is, as well as t blog assessed shall be award sening criteria	rogram in Englie rdance with its ind master's pro- vanced practic ased on the fo ind experimen groups offered on, students widdisciplines. igject for all majors g from the unc- discribed in t r courses are o ion if they take in other counti- t courses are o ion if they take in other counti- s provided to si on] te its purpose we evaluation of arly stated, and nurture the de pilities that can to the master' knowledge am r subjects and or the master' knowledge and ted and flexibly y on safety, th try. th an internati ed fairly and im on] researchorgs, stu hrough reports using a 5-poin ded the design and methods.	neering. Diploma Poli ogram educat al and creativ llowing polici typractical sul by each major. to support the dergraduate-lk he Diploma P ffered to facil e and comple- ence overseas ries, students upport studer and attainme of performand d pass/fail ded velopment of facilitate the common subj s thesis. d skills in varie technological e environmer onal perspect and are adept a s and oral exa t grading syst ated credits. I	cy, offers subjects required ion. Through these subject re abilities that can facilitat es. ed in each major. In additio bjects. or, the master's program p take subjects from other n on, students will take majo re development of expertis evel general studies subject olicy. litate more advanced and se can gain experience to be can gain experience to be nts' self-directed and indep et et a stipulated subjects r s practical research and de can gain experience to be the stipulated subjects r s practical research and de can gain experience to be the stipulated subjects r s practical research and de can gain experience to be the stipulated subjects r s practical research and de can gain experience to be the stipulated subjects r s practical research and de can gain experience to be the stipulated subjects r s practical research and the can gain experience to be the stipulated subjects r s practical research and the can gain experience to be the stipulated subjects r s practical research and the tage of the stipulated subjects r s practical research and the tage of the stipulated subjects r s to create new ideas at using information techne is and culture; as well as the s at using information techne is a stipulated based on their I minations in seminars and em (S, A, B, C, and D). Grac In addition, the research and s s stipulated subjects and s stipulated subjects and s s stipulated subjects and s s s s s s s s s s s s s s s s s s s	d in each specialized field of science and ts, the university will nurture the develo te the global expansion of technology. The on, students will receive research guidar rovides an education that deepens expe- najors, thereby enabling them to unders or subjects to develop proficiency in infor se from a broad perspective and increase tts, these subjects are rationally and syst systematic study. While enrolled in their required for each course. velopment activities related to their ma- come engineers and researchers who ca bendent study. earning/education goals based on the Di reded to those who pass the subjects. For creening and examination by multiple for elearchers who are adept at using inform ology. The master's program will enable i, seminars, and experiment/practical cla gical fields, as well as proficiency in infor understand integrated technologies invo in science and technology. he strategic technology management sk compete fairly on the global stage as lear ind criteria specified in the syllabus.	technology under the pment of leading o this end, the master' ace for the preparation ertise while also stand integrated rmation technology e their abilities to tematically organized r major, students can ster's research topics. In perform at the ploma Policy. Grading the master's thesis, aculty members. ation technology, and students to acquire asses; as well as rmation technology. olving multiple ills to discern and ding international directative abilities brough examinations performance in the ile D is a failing grade. red and assessed
5-year li	ntegrated	d Doctora	al Program (Science	e of Tech	nology Ir	nnovatio	n)		
4	Major	Elective	Cultural Intelligence (CQ)	2	1~5	1	Not Conducted in 2024	As shown in the left	N/A
5	IVIJOI Major	Elective	Social Innovation	2	1~5	2	Not Conducted in 2024	As snown in the left	N/A
b	iviajor	Elective	Social innovation	2	1~5	2	Not Conducted in 2024	As snown in the left	IN/A
7	Common	Elective	Advanced Safety and Information Security I	1	1 • 2	2	Newly-Established	Mıyoshi, XOgino & XIto(Kosuke)	Students who enrolled in and before AY 2023 can take this subject.
8	Common	Elective	Advanced Safety and Information Security II	1	1 • 2	2	Newly-Established	Miyoshi & XSakurai(Tsu)	Students who enrolled in and before AY 2023 can take this subject.
9	Common	Elective	Tecnhological English	2	1 • 2	1 • 2	Change of Term	1st & 2nd Term→2nd Term	N/A
10	Common	Elective	English Presentation Skills	2	1 • 2	1	Newly-Established	Nobuhara ★	Students who enrolled in and before AY 2023 can take this subject.

-2-

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Master's	s Prograr	n (Mecha	anical Engineering)						
11	Major	Diploma Policy	Add a Diploma Policy. [Diploma Policy] Mechanical Engineering Master's Program in Eng 1. Acquisition of the add information technology 2. Acquisition of the abi integrated technologies science; and formation 3. Possess a strong awa ability to demonstrate s 4. Acquisition of the abi to compete fairly on the Add a Curriculum Policy	has set the gineering. vanced spec such as dat lity to comp covering m of multiface reness of SI trategic tec lity to work e global stag	e following f cialized know ta science, a orehend life nultiple spec eted and fle DG attainme chnology ma collaborati ge as leading	our attainn wledge and ind formatii , humanity, ialized disc xible thinkii ent, gain ins inagement vely in a tea g internatio	eent targets for stude expertise in mechani on of a safety mindse and society from a tr plines including infor g abilities for advann ight into global socia skills. m with an internatio nal engineers and res	ents in accordance with the Dip ical engineering, development it. echnological perspective; gain rmation technology, artificial ir zed technology and science. I and industrial trends, and dev nal perspective, and developm searchers.	loma Policy of the of proficiency in an understanding of itelligence, and data relopment of the ient of the capability
12	Major	Curriculum Policy	[Curriculum Policy] Mechanical Engineering Curriculum Policy of the 1. 1. 3. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	Acquisition of Acquisition of I expertise in m proficiency in i ence, and forma Acquisition o manity, and spective; gain hnologies cove elligence, and litifaceted and ranced technolo	stematic cui Program in E Diploma Polii the advanced sp aechanical engin information tech tition of a safety f the ability of society from an understar ring multiple sp rumation tech data science; f flexible thin gy and science. g awareness of S al social and in he ability to d ement skills.	rriculum ba ingineering Cy secialized know acering, develop hnology such a mindset. to comprehend a a technol ading of inte pecialized disci- nology, art and formatic aking abilities SDG attainment adustrial trends lemonstrate str	sed on the following Cur ledge To provide student knowledge needed related subject and to the major subj Engineering course Environment and F take subjects from of to understand met multiple specialized life, The major offers ogical common subjects to trated life, humanity, an prespective. Semina ficial second years of th n of student' abilities to gather information practicals and master understanding of multiple specialized advanced technology gain The major offers div advanced technology abilities to ascertair trends in society a technology manages	policies in accordance with the rriculum Policy s with the advanced specialized to understand/analyze various discover new phenomena in ring, the major offers information- safety-related subjects in addition ect groups of the Mechatronics e, Smart Factory course, and integy course. Students may also ther majors, thereby enabling them ggrated technologies that cover disciplines. diverse and advanced groups of cultivate the ability to comprehend d society from a technological rs are held throughout the first and in English. Through special ar's research, students will gain an integrated technologies covering ed disciplines, and cultivate flexible thinking abilities for y and science. werse and advanced groups of major on subjects to foster the students' a and gain insight into the latest nd industry, demonstrate strategic duscity, the dust these with the	
			4. 4 a glo res	Acquisition of t team with a elopment of th bal stage as 1 earchers.	he ability to wo n internationa capability to c eading internat	ork collaborativ I perspective, compete faily c ional engineer	attainment of SDG special practicals an compiling their resu will expand their supervisors and ot strategic technology dy in The major offers div and subjects and commo n the perspective. Reseau and compulsory subject capability to compu- addition, an ove development course acquire the ability t with an international	is. In the process of conducting ad master's research, as well as by its into the master's thesis, students discussions with their academic her researchers while cultivating management skills. erse and advanced groups of major in subjects to foster an international red. Integrity is offered as a with the aim of cultivating the stef hirly on the global stage. In urseas practical research and is offered to enable students to to work collaboratively in a team perspective.	

-3-

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13	Major	Education Goals	Revise a part of the Edu (New) (B) Human Qualities (Hu (B1) Internationally Wi <u>industrial trends, and co</u> (Old) (B) Human Qualities (Hu (B1) Internationally Wi	cation Goal Imanities/S de Social Pr Insider peo Imanities/S de Social Pr	ls. ocial Scienc erspective: , ple's safety ocial Scienc erspective: ,	e Subjects, Ability and and welfard e Subjects, Ability and	Mechanical Engineeri training as leading eng e Mechanical Engineeri training as leading eng	ing Seminars <u>, Research Integrity</u> gineers to <u>provide insight on glol</u> ing Seminars) gineers to consider people's safe	<u>pal social and</u> ty and welfare
14	Major	Subject Organizatio n	Revise a part of the Subject Orga (New) 3.1 Subject Requirements The subjects are composed of ey- Experimental/practical trainings a will be conducted under each st conduct research following expe- and discussion (journal club) ses of the master's program. There for understanding the concept o All lecture subjects (elective) ar below shows the associated field facilitate deeper understanding, students to independently and s subjects after careful discussion: (Old) 3.1 Subject Requirements The subjects are composed of ey- Experimental/practical training s will be conducted under each st; conduct research following expe- and discussion (journal club) ses of the master's program. Howev essential for understanding, the challecture subjects are electived table below shows the associated facilitate deeper understanding; students to independently and s subjects after careful discussion:	perimental/pri ubjects, i.e., "A ubjects, i.e., and adent's acaden rimental/resea sions. In princip ado the lectures. ystematically si s with their aca of study for et of the lectures. ystematically si s with their aca and are condu- d field of study of the lectures. ystematically si sons in princip er, there may be sions. In princip er, there may be sions. In princip er, there may be soncept of fairr and are condu d field of study of the lectures. s with their aca	actical training s fechanical Engin ic supervisor in rch plans formu- ole, these semin hducting resear ased on each lea ach subject. The To avoid cases elect the subjec demic supervisor actical training s Acchanical Engin ic supervisor actical training s Acchanical Engin ic supervisor actical supervisor in ch plans form pole, these semin be cases where I esess in conducti in conducti in to avoid cases To avoid cases	ubjects (compu- heering Special their assigned ulated through of ars will be conc ars are jointly of e relationships to where students ts to take while ors. ubjects (compu- heering Special their assigned ulated through of ars will be conc the seminars ar g research as i each lecturer's t. The relations where students ts to take while ors.	Ilsory). lecture subjects (com Practicals 1 and 2" and "Med Irsearch laboratory. For "Me discussions with their acaden Jucted in the research labora onducted by two or more lab <u>e student.</u> study with a high degree of s netween these subjects and c develop a limited scope and considering their future pers ilsory) and lecture subjects (c Practicals 1 and 2" and "Med research laboratory. For "Me fucted in the research labora e jointly conducted by two or a graduate study with a high degn hips between these subjects id develop a limited scope and considering their future pers	<u>pulsory</u>) and lecture subjects (elective), hanical Engineering Seminars 1 to 4" are all chanical Engineering Special Practicals 1 an tic supervisor. "Mechanical Engineering Sen tory of each student's academic supervisor oratories with similar specialties. <u>"Research</u> pecialization. In addition to selecting the lec orresponding undergraduate-level subjects focus only on the subjects in their field, it is onal applicability. Students are encouraged <u>elective</u>). hanical Engineering Special Practicals 1 an tic supervisor. "Mechanical Engineering Sen tory of each student's academic supervisor more laboratories with similar specialties. ree of specialization. In addition to selecting focus only on the subjects in their field, it is onal applicability. Students are encouraged	compulsory subjects and 1 2", each student will sinars 1 to 4" are reading throughout the 2 years Integrity" is essential ture subjects, the table are also shown to important for the to select lecture compulsory subjects and 1 2", each student will sinars 1 to 4" are reading throughout the 2 years "Research Integrity" is the lecture subjects, the ojects are also shown to important for the to select lecture

No.	Classification 区分	Compulsory /Elective必 修選択	Subject I	Name≉	斗目名	Credits単位	Year開講年	Term期間	Revisions	收定区分	Lec [Befc	Subject name, cturer-in-Charge and Term etc. (Changes are shown as pre revision] → [After revision].) 細かい改定内容	Measures to students在学生の 対応
			Revise the (New)	subj	ect figur	e.							
			7	ig aive)	Mechatronio (Common/C Exercises Linear Al Integrated	es Engineering Co General Subjects] in Mathematics a Igebra, Electronic d Exercises for M	urse Smart and Dynamics, Ez Circuits, Fundam echanical Engine	Factory Course sercises in Compu- sentals of Mechate ering 4, Special L	Environment enviro	nt and Energy (, Applied Stati: Thermodynami mical Engineer	Course stics, ics, ing,		
				Bachelor's Program in Engineerin (Elective-Compulsory-General Elec	Fundame Processin (Elective-C Advanced (Materials, Machine D Design Enj Elements, Fundament Computatia Instrument Engineerin Dynamical	ntals of Safety En ug Technology Compulsory) Course in Strengt Mnamics, gineering of Mach ial Study of onal Mechanics, ation and Control g. Systems and Con	gineering, Engine (Elective-C Advanced Engineerin Mechanica Machine D Design Em, Elements, Smart facto	eering Materials, Compulsory) course in Materia g Materials, gineering of 1 Systems, lynamics, gineering of Macl astry	Materials Physics (Elective-Clis 1, Advanced Is 2, Applied Ti Applied Fi Fluid Engi Environme	, Materials Compulsory) course in Mate hermodynamic: uid Mechanics, neering, ent and Energy	rials 1, s,		
				Muster's Program in Engineering	(Common Advanced Innovation, Advanced C Advanced J Advanced J Advanced J Mathemati Precise me engineerin; Bioenginee	Subjects) I Mechanical Eng Advanced Lectur Yourse for Microsi faterials, Anisotro Automation, Study on cal Design, asurement E. ming	rineering, Inform re on Solid State fructure of Mater pic Engineering, Tribology, Advanced Machinery Fracture M Engineerin Ultrasonic Processing Advanced Physics of Physics of	ation Technologi Physics, Advance ials, Advanced n Research Integrit Construction Engineering, fechnics, g Ultrasound, machining, Technology on Single Crystals Laser Materials	es for Mechanica ed Instrumental A on-ferrous metal y Advanced Advanced Dynamics, Advanced Newton F1 Radiative 1 Solar Ener High Ener Engineerin	al Engineering, Analysis for Mr materials, Stre Thermal Engin Compressible I Course for Nor mid, Heat Transfer a gy Engineering gy Materials ig,	, Social aterials, angth of seesing Fluid n- md		
15	Major	subject figure	(Old)				Processing		Show and	ice recumoiogy	r		
				reering Elective)	Mechatronic [Common/C Exercises Linear Al Integrated Fundamen Processin	es Engineering Co General Subjects) in Mathematics a gebra, Electronic I Exercises for Mo ntals of Safety En g Technology	urse Smart nd Dynamics, Ex Circuits, Fundam schanical Enginee gineering, Engine	Factory Course ercises in Compu- entals of Mechata ering 4, Special L eering Materials, J	Environmer ter Programming onics, Materials ectures on Mecha Materials Physics	nt and Energy C , Applied Statis Thermodynami nical Engineers , Materials	Course stics, ics, ing,		
				Bachelor's Program in Engir (Elective-Compulsory-General	(Elective-C Instrument Engineerin, Fundament Computatio Dynamical Machime D Design Eng Elements (General) Electronic Fundament	iompulsory) ation and Control g, al Study of and Mechanics, Systems and Con ynamics, gineering of Mach Circuits, als of Mechatroni	(Elective-C Machine D Smart Fact Advanced Science 1, trol Advanced Science 2, Design Eng Mechanica Design Eng Elements cs (General) Materials F Technology	iompulsory) ynamics, ory, course in Materia course in Materia gineering of 1 Systems, gineering of Mach Yrocessing	(Elective-C Environme Applied Th Fluids Eng Applied Fl Materials, Advanced Science 1 inne (General) Materials T	Compulsory) nt and Energy, nermodynamics ineering, uid Mechanics, Course in Stren course in Mater Course in Mater	ngth of rials		
				Master's Program in Engineering	[Common Advanced innovation, Advanced C Advanced J Advanced J Mathematia Precise me- engineering Bioenginee	Subjects) Mechanical Eng Advanced Lectur Jourse for Microst faterials, Anisotro Automation, Study on cal Design, asurement 5, rring	insering, Inform. re on Solid State ructure of Mater pic Engineering Tribology, Advanced Machinery Fracture M Engineerin Ultrasonic Processing Advanced : Physics of Processing	ation Technologia Physics, Advanced no Construction Engineering, echanics, g Ultrasound, machining, Technology on Single Crystals Laser Materials	es for Mechanica ed Instrumental A on-ferrous metal s Advanced Dynamics, Advanced on Newton Fh Radiative F Solar Energ High Energ Engineerin Snow and D	l Engineering, analysis for Ma materials, Street Thermal Engin Course for Nor nid, feat Transfer at gy Engineering gy Materials g. fee Technology	Social sterials, ngth of eering Fluid 1- nd 5.		

-5-

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16	Major	Elective	Advanced Construction Machinery Engineering	2	1•2	2	Change in Notes Column	ок→ок ★	N/A
17	Major	Elective	Snow and Ice Technology	2	1 • 2	2	Change in Notes Column	A ★ K *Classes are held in English in the first term and Japanese in the second term. →A ★ K S *Classes are held in English in the first	N/A
			Revise the subject figur	e.			•	<u> </u>	
18	Major	subject figure	(New) O Mechanical En Mechanical Engin Mechanical - Course Na Mecharical Engineering Smart Facto Environmen Energy Engi (Old) O Mechanical E Recommended Mechanical En - Course Name Mechanical En	gineering reco eering - Reco ed major of I Engineering 1 ry 1 t and neering 4 I Engineering - F major of 1 gineering 4 In fingineering 4 In fingineering 4	ommends the fo mmended Subj Electrical, Elec information En Digital Image F Mathematical a Science Energy Conver Control Engine Energy Conver Control Engine etrical, Electron formation Engin dvanced Course age Processing	ects tronics and gineering se of rocessing nd Data sion and ering he following Subjects ics and eering of Digital	or subjects from other major Materials Science and Engineering/Bioengineering Advances in cell motility Electric Properties of Solids Advanced Molecular Electrics major subjects from other n Materials Science and Engineering/Bioengineering Advances in cell motility	s. Civil and Environmental Engineering Advanced Structural Analysis Advanced Hydraulics Advanced Environmental Information Survey Engineering Advanced Topics on Atmospheric and Hydrospheric Sciences 2 najors. Civil and Environmental Engineering Advanced Structural Engineering	
			Smart Factory Environment ar Engineering	M So ad Energy Er Co	athematical Met ience and Engin nergy Conversio ontrol Engineerii	hods in leering n and 1g	Electric Properties of Solids Advanced Molecular Genetics Electric Properties of Solids Advanced Molecular Genetics	Advanced Structural Analysis Advanced Structural Engineering Advanced Hydraulics Advanced Environmental Information Survey Engineering Advanced Topics on Atmospheric and Hydrospheric Sciences 2	
Master's	s Prograr	n (Electir	cal, Electronics an	d Inform	ation Eng	gineering	g)		
19	Major	Diploma Policy	Add a Diploma Policy. [Diploma Policy] Electrical, Electronics and the Diploma Policy of the 1. Acquisition of fundaren engineering; necessary 2. Acquisition of the abid disciplines from a broader 3. Acquisition of the pra- conditions and trends in 4. Possess an awareness domestically and internor 5. Gain an understandiri decisions.	nd Informat ne Master's nental know advanced e lities to asc d internatio actical deve n research a s of the inte ationally, a ng of the va	tion Enginee Program in expertise; ap exertain techr nal and cross lopmental c and develop ellectual pro nd the capa rious effects	ring has se Engineers angineers an plied skills nological tr s-disciplin apability f ment. perty aspecity to enh t that tech	et the following five att ng. Ind researchers in the fi in information techno rends and gather inforr ary perspective. or advancing original re ect of developed techn ance one's own abilitie nology can have on soo	ainment targets for students in a elds of electrical, electronics, an logy; and a safety mindset. nation in one's field of interest a esearch and development based ologies, the ability to communica es by flexibly incorporating new in ciety, and possess the ability to r	accordance with d information ind associated on social ate information information. make ethical

No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Revisions改定区分	Subject name, Lecturer-in-Charge and Term etc. (Changes are shown as [Before revision] → [After revision].) 細かい改定内容	Measures to students在学生の 対応
No.	Classification 区分 Major	Compulsory /Elective必 修選択 Curriculum Policy	Subject Name科目名 Add a Curriculum Policy [Curriculum Policy] Electrical, Electronics a policies in accordance w Diploma Polic 1. Acquisition o and researchers and information expertise; applie a safety mindset 2. Acquisition of trends and gathe and associated o and cross-disciple	Credits単位 /- nd Informativith the Cur cyc ² f fundament in the field a engineer d skills in in e ² f the abilitie r informatio disciplines : inary persp	Year開講年 ion Engineer riculum Pol tal knowled is of electric ing; neces nformation t formation t s to ascertai on in one's from a bro: ective.el	Term期間 ring offers icy of the M ge as engin cal, electron sary advar technology; technology; field of intr ad internati	Revisions改定区分 a systematic curriculu laster's Program in Er Curriculum eers By taking to and Informatic and fundamental b that form the in the fields of engineering. I elective subject the following Control Engin Wave Cont Telecommunic subjects, and students to fo levels of sp mathematics.; gical Students can university-wid onal can gain a c subjects from academic lite	Subject name, Lecturer-in-Charge and Term etc. (Changes are shown as [Before revision] -> [After revision].) 第前小小改定内容 um based on the following ngineering. Policy 4- the elective subjects and a objects offered by Electrical, El- on Engineering, students will ac cnowledge and experimental te foundation for engineers and re- of electrical, electronics, and inf in addition, students will take cts corresponding to each course g three courses: Electric Ene neering, Electronic Devices ar rol Engineering, or Info cation and Control), data science safety-related subjects. This wi orm a safety mindset and deve ecialized knowledge in each and data science. 4- cultivate global sensibilities b le common subjects. In addition, ross-disciplinary perspective by other majors. By reading and di erature on specialized content	Measures to students在学生の 対応 advanced ectronics quire the chniques searchers formation multiple e (one of rgy and id Light wimation, e-related II enable lop high course, y taking students y taking iscussing t during
			3. Acquisition of for advancing or	the practic:	al developm	ental capab	Electrical, El- seminars, st understanding advanced/integ in their ow disciplines. E information, s' of their own their master's ility By explaining ased development t	ectronics and Information Eng udents will gain a mul- of domestic and inter- grated technological trends/inf in fields of interest and and Based on the ascertained treat tudents will be able to describe to research and development actions thesis.cl it he progress of their own reservations of the prob- projects and discussing the prob-	ineering tifaceted mational brmation ssociated nds and the value ivities in arch and lems and
			on social cond development.라	itions and	trends in	elopment b research	and direction durin Engineering s solving skills t	nopects and discussing the prob ng Electrical, Electronics and Inf eminars, students will develop p that fully use their specialized kr	ormation problem- nowledge

No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Rev	visions改定区分	Subject name, Lecturer-in-Charge and Term etc. (Changes are shown as [Before revision] → [After revision].) 細かい改定内容	Measures to students在学生の 対応
20	Major	Curriculum Policy	 4. Possess an a aspect of device communicate internationally, a abilities by flexi 5. Gain an und technology can l to make ethical of the second second	erstanding ave on soc	f the intell incologies, on dome acity to enh rating new i of the vari- iety, and po	ectual prop the ability estically ance one's nformation	that that	and techniques also choose t further enhan international of Students will development : originality in trends, and wi their master's ' In Electrical, I seminars, stu importance of an understandi addition, stud from reading expand and d from a multifa will improve t subjects on tec communicate development internationally By taking Rei subject, stude actions that en the series of p research and students will society that is activities from students will with their ow during Elect Engineering so way, they will making ethical	a based on logical thinking. Stud to take overseas internship sul- tice their on-site practical abi- collaborative research and deve- ll conduct practical resear activities with a constant awar accordance with social condit- ill be able to summarize their r thesis.4 ² Electronics and Information Eng- idents will discuss the nove- their developed technologies to ing of their intellectual property ents will use the information and discussing academic liter eepen their own specialized kr acteded perspective. Furthermore, their English language abilities be- thnical English, thereby enabling the results of their resear efforts both domesticall te ⁴⁴ search Integrity, which is a con- ents will learn about the res- igneers and researchers must take processes from the start to the e development activities. In be able to understand the fair required from research and development is inclal perspective. Furth- be instructed on the fairness ar on research and development is trical, Electronics and Inf- eminars and experiment subjects be able to conduct these activit decisions.4 ⁴	ents may bjects to lities in lopment. ch and eness of ions and esults in gineering elty and promote value. In obtained rature to nowledge students by taking g them to rch and y and mpulsory sponsible ce during nd of all addition, imess to elopment hermore, associated activities ies while

No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Revisions改定区分	Subject name, Lecturer-in-Charge and Term etc. (Changes are shown as [Before revision] → [After revision].) 細かい改定内容	Measures to students在学生の 対応
21	Major	subject figure	Revise the subject figure (New)	2. ical, Electronics s Catol Induced Grap a classical and a second se	ad Information I Detroit Particular I Detr	Ingineering Prog	ram — Subject Organizational D Tapierity Tapierity Subject Organizational D Tapierity Advant Manuae and C Monoura and C Monou	Hagran Andrew A construction Sector Matter Construction	
			(Old) Electri Instance of the second secon	cni, Electronics : Costol Engineering Crow Theorem is a second	and Information	Engineering Proj Cycla Morel Agenesis Cycla	pram — Subject Organizational af Teghnering af Tegenering	Diagram weiche ad Carret To Comment Variet To Same T	

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No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Revisions改定区分	Subject name, Lecturer-in-Charge and Term etc. (Changes are shown as [Before revision] — [After revision].) 細かい改定内容	Measures to students在学生の 対応
22	Major	Elective	Power Electronics	2	1 • 2	1	Discontinuted		N/A
23	Major	Elective	Advanced Course for Mechatronics	2	1•2	2	Change in Notes Column	0 ★ K→0 ★ K S	N/A
24	Major	Elective	Advanced Medium Voltage Converters	2	1•2	1	Change in Notes Column	E ★→E ★ S	N/A
25	Major	Elective	Advanced Enginnering on Electrical Machine	2	1 • 2	2	Change in Notes Column	E ★ K→E ★ K S	N/A
26	Major	Elective	Ion Beam Engineering	2	1 • 2	2	Newly-Established	Takahashi(Kazumasa) E ★	Students who enrolled in and before AY 2023 can take this subject.
27	Major	Elective	Advanced Mathematical Informatics	2	1 • 2	2	Discontinuted		N/A
Master's	s Prograr	n (Inforn	nation and Manage	ement Sy	stems Er	gineerin	g)		
28	Major	Diploma Policy	Add a Diploma Policy. [Diploma Policy] Information and Manag the Diploma Policy of th 1. (Overall Abilities) Acq society, and a safety mi sustainable information 2. (Specialized Abilities) informatics, and manag or researcher within an 3. (Practical Abilities) Acd and management in proc researcher within an inf 4. (Communication Abil extensive and active rol	ement Syst e Master's uisition of t ndset that v society. Acquisition ement that information quisition of blem solvir ormation so tites) Acquis es both in J	ems Engine Program in the ability tr vill contribu of a safety are needec n society. f practical a ng in order t pociety. sition of cor apan and or	ering has si Engineerin o think scie ite to a hea mindset ar I to make b nd creative io make bro mmunicatic verseas as a	et the following four a g. ntifically and rationall lthy and comfortable nd specialized knowled road social contribution abilities to utilize one bad social contribution on abilities, internation an engineer and resea	attainment targets for students in y, the ability to insightfully obser lifestyle as well as the realization dge in the fields of data science, ons as a leading information tech s's expertise in data science, appl ns as a leading information techn hal sensibilities, and language ski rcher.	n accordance with rve people and n of a diverse and applied anology engineer lied informatics, lology engineer or lls that facilitate

No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Revisions改定区分	Subject name, Lecturer-in-Charge and Term etc. (Changes are shown as [Before revision] → [After revision].) 細かい改定内容	Measures to students在学生の 対応
No.	Classification 区分	Compulsory /Elective必 修選択 Curriculum Policy	Subject Name科目名 Add a Curriculum Policy [Curriculum Policy] Information and Manage policies in accordance v Diplo 1. (Ov scienti observ will co well a inform an info 3. (Pr creativ science proble contril engine 4. (() comm langua	Credits単位 '. gement Syst with the Cur ma Policy erall Abilities). fically and rati e people and s intribute to a he s the realization ation society. Pecialized Abili tt and specialized a, applied infor it to make broad lation technology remation society actical Abilities e abilities to e, applied infor m solving in vutions as a er or researcher Communication unication abiliti igg skills that fa in Japan and cher.	Year開講年 eems Engine riculum Pol Acquisition of ti onally, the abili ociety, and a si althy and comfe on of a diverse lities) Acquisit ed knowledge in matics, and mai i social contribu gy engineer or y. es) Acquisition utilize one's formatics, and order to mi leading inform r within an infos a Abilities) ies, internationa acilitate extensiv overseas as	Term期間 ering offers icy of the M he ability to thi ity to insightfu ifety mindset if ortable lifestyle a and sustainal ion of a saft i the fields of di nagement that : itions as a leadi researcher with of practical a expertise in d management take broad soct ination society. Acquisition al sensibilities, : re and active ro an engineer :	Revisions改定区分 a systematic curricul aster's Program in Er Curriculum Policy k Students will gain a ly knowledge as engine at common subjects (incl as security-related subject le majors. Through the of subject, students will is the social responsibil engineers and researche ty The major offers subject subject, students will be provid ag education on artificial in (advanced information human factors engineer information technology will also undergo management strategies important elements in an as well as on sustain which are more globals ad Seminars and advan th subjects are offered U in staff in charge of the lal al practical and creativ gy conduct the processes problems, formulating plans for solving these discussing the results. of Seminars and advan d subjects are offered to es knowledge, structure students will strengthe foreign language subj English jaugage subj	Subject name, Lecturer-in-Charge and Term etc. (Charges are shown as [Before revision] → [After revision].) 細功고 가改定内容 umbased on the following rgineering. uwide range of specialized ers and researchers through huding safety and information tt) and subjects from other computory Research Integrity increase their understanding of lites and ethics required of ets. per groups centered on data formatics, and management. ied with an in-depth specialized intelligence and data mining technology fields) as well as ing and user interfaces (applied r fields). Furthermore, students specialized instruction on and business models, which are n advanced information society; ability and energy economics, infety-related issues. eed design/practical training inder the guidance of academic boratories, students will develop e abilities to independently of exploring and discovering objectives and implementing problems, and interpreting and ceed design/practical training foster the abilities to organize logic, and present results. m their language skills through ects, English e-Learning, and by These dkills will be	Measures to students在学生の 対応
							English journal chu comprehensively develo the master's thesis. I provided with opport research and developme	bs. These skills will be sped through the preparation of In addition, students will be tunities to conduct practical ant overseas.	



No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Revisions改定区分	Subject name, Lecturer-in-Charge and Term etc. (Changes are shown as [Before revision] — [After revision].) 細かい 改定内容	Measures to students在学生の 対応
31	Major	Elective	Topics of Sport Engineering	2	1 • 2	2	Discontinuted		N/A
32	Major	Elective	Sustainable Development Theory	2	1 • 2	1	Change in Notes Column	0→0 S	N/A
33	Major	Elective	Energy Economics	2	1 • 2	1	Change in Notes Column	E A→E A S	N/A
Master's	s Program	n (Mater	ials Science and Bi	oenginee	ering)				
34	Major	Diploma Policy	Add a Diploma Policy. [Diploma Policy] Materials Science and B Policy of the Master's P 1. Students will develop to design and create ne advanced expertise to a consider safety issues. 2. By examining case str unknown biological phe 3. Students will develop materials science and b 4. Students will develop 5. Students will underst	ioengineeri rogram in E a grounder w substance nalyze the o udies, stude nomena we the practic joengineeri presentati and the var	ng has set t ingineering. d understar es and mate complex me ents will und ere discover al capabiliti ng with exte on skills to o ious effects	the followir ading of che erials based echanisms of derstand th red, thereb ies to advai ensive and communica that techn	g five attainment targ emistry and biology, le on atomic and molec of living organisms an e development proces y cultivating a heighte nce creative research active roles both in Ja te the results of one's ology can have on soo	gets for students in accordance we earn to utilize information techno cular concepts. In addition, stude d apply them to engineering, and ss of new materials/new process ened sense of innovation. as engineers and researchers in t pan and overseas. s research to a universal audience ciety, and be able to make ethica	vith the Diploma ology, and be able nts will acquire I be able to es and how the fields of e. I decisions.

No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Revisions改定区分	Subject name, Lecturer-in-Charge and Term etc. (Changes are shown as [Before revision] → [After revision]. 細かい改定内容	Measures to students在学生の 対応
			Add a Curriculum Policy	/.				170072 C GC ALL 1711	_
			[Curriculum Policy] Materials Science and E accordance with the Cu	3ioengineeri ırriculum Po	ing offers a solicy of the N	systematic Aaster's Pro	curriculum based on ogram in Engineering.	the following policies in	
			L L of in cr at st th ag sa sa sa cr bi cr	tiploma Policy Students will de ? chemistry ar formation techni- eate new subst omic and mol udents will acqui ie complex mech upply them to engi fiety issues. By examining inderstand the interials/new pr iological phenor iltivating a heigh	y rvelop a grounde ad biology, le ology, and be ab ances and mate lecular concept ire advanced exp hanisms of living interring, and be g case studies, development p rocesses and mena were disc brened sense of i	d understanding ann to utilize le to design anc erials based or 5. In addition ertise to analyze g organisms anc able to consider able to consider , students will rocess of new how unknown overed, thereby nnovation.	Curriculum Policy Students will acquire the needed to be engineers and of materials science and university-wide commo subjects in Materials Science information-related subject subjects. In addition, stuff levels of specialized know reading, journal clubs, are during Seminars on M Bioengineering. In Advanced Experiment and Bioengineering, advart conducted as needed on lecturer's field of exp experiments will also bo guidance of each student's their laboratory. In this w about the advanced and in their own fields of research in Japan and overseas. In Science and Bioengineerin specialized content thro journal clubs, research di	fundamental knowledge tresearchers in the fields bioengineering through in subjects, elective nice and Bioengineering, cts, and safety-related ents will acquire higher reledge through literature and research discussions daterials. Science and is of Materials Science aced experiments will be selected topics in each vertise, and advanced is conducted under the academic supervisor in vay, students will learn tegrated technologies in h and other related fields. Seminars on Materials g, students will examine ugh literature reading, issuusion, and debates, will develop problem-	
35	Major	Curriculum Policy	3. to te bi	Students will d advance creati searchers in the congineering w: wh in Japan and d Students will	evelop the pract ive research as fields of mater ith extensive a overseas. develop presen results of one ²	ical capabilities engineers and ials science and nd active roles tation skills to s research to a	solving skills that fully i knowledge and techniqu ihinking and gain a multif Throughout the entire du program, students will und from their academic sup tasked to summarize their master's thesis. Furthermore, opportunities for research interested students can development activities re research topics in oversee institutes, and companies (During the master's thesis students will present the	utilize their specialized ues based on logical Ensated understanding of uration of the master's lergo research guidance pervisors, and will be research results in the size, the major provides h internships in which conduct research and lated to their master's is universities, research research laboratories). s presentation sessions, ir master's thesis and	
			5. te m	Students will un chnology can h: ake ethical decis	aderstand the var ave on society, tions.	ious effects that and be able to	answer questions. In additi and discuss the novely a own research findings and during Seminars on M Bioengineering, thereby ex- their specialized knowl- multifaceted perspective presentation skills. Students will take Res compulsory subject to least actions that engineers and during the series of proces- end of all research and de- well as to understand the required for research and from an ethical perspective will receive guidance abor research and developm Seminars on Materials Scie so that they can conduct making ethical decisions.	on, students will present ma importance of their developed technologies faterials Science and spanding and deepening edge and developing es while cultivating earch Integrity as a m about the responsible it researchers must take set from the start to the velopment activities, as the fairness to society development activities re. In addition, students ut fairness in their own eart activities during ence and Bioengineering t these activities while	

No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Revisions改定区分	Subject name, Lecturer-in-Charge and Term etc. (Changes are shown as [Before revision] → [After revision].) 細かい 改定内容	Measures to students在学生の 対応
		修選択	Revise the subject figur (New) Mat Compuls Elective S upproved put and put and	e. terials Sciel ory Subject Neterials Science and cory Subject Research Ir ubject Chemistry Reactions	Ince and Bio Semin tegrity Physical Chemistry Advanced Course of Every Advanced Course of Advanced Advanced Course of Every Advanced Course of Eve	oengineeri ar on Materials Science ar Becrupreeting I Advance Eventing I Advance Eventing I Advance Eventing I Advance I Advan	ng - Subject Organ st Statut on Materials So st Chanton Somo and Advance E ance Chemistry ance Course of Advanced Electronics Advanced Advanced Advance	[Before revision] → [After revision].) 細力い改定内容 izational Diagram computed for the second se	sory
26	Maias		Cross-Sectional Subjects Materials Creation Endog Subjects for International Subjects Engineering Engineering Engineering Engineering Engineering Engineering Papauerery Papauery Papauery Papau	te Physics Solid State Amorphous Course of Social Innovation Social Innovation Anancel Inovation Water Environmental E Water Environmental E	Chemistry Chemistry Advanced Course or Sold State Thema Properties Organic Sold State Chemistry or Materials als agineering 1 ngineering 2	Advanced me Microbiology Bioengineer Advanced	Advances Advances Principle and Course of Synthetic and Course of Synthetic and Course of Synthetic and Course of Synthetic and Course of Synthetic Course of Synthetic Course of Synthetic Course of Synthetic Course of Synthetic Course of Synthetic Course of Synthetic Advances Principles Pr	Biological motily: Advanced course Research Project Seminar for Foreign Students Physical Chemistry of Advanced Material Seminar on Biologineering for Foreign Students Biologineering Journal Club	Master's Thesis
			(Old) Mate Compulso Seminar of Elective St Sold State	erials Scien ny Subject Maeriak Soance and explanding Ibject Demostry Resource Int Resource Int	Ice and Bic Sema certity (Chemistry Advanced Computation Chemistry Advanced Computation Chemistry Advanced Computation Chemistry	engineerin on Materials Science and Marance Experime Bace Science Sci Science Science Science	ng - Subject Organi: Bengreeng 3 a d Marris Soere and mic Chemistry nic Chemistry nic Maerials 1	Zational Diagram Comput Elective sean Semar on Materials Science and Biologinaemiq 4 Bioscience and Schemistry Bioscience (Cerentica and Part Bioschnology Releader Genetics (Cenome and Development)	sory
			Cross-Sectional Subjects Materials Creation Biological and Biological and Biological and Engineering E	tal Structure tal Structure Chensisty Physics Information Chensisty Chensist	Advanced Course of Examined Barg Coverson 1 Advanced Course of Nanobiomaterials Advanced Course of Solid State Therman Properties Pr	a) (Advance) (Ad	Bocatal Bocatal Caree Bocatal Care Bocatal Care Bocatal Care Conse of Point Physica of I Physica of I Consenty 1 Physica of I Consenty 1 Consenty 1 Physica Consenty 1 Consenty 1 Consenty 1 Physica Physica Consenty 1 Physica Consenty 1 Physica Physi	Research Project Seminar for Foreign Students Physical Chemistry of Advanced Materials Physical Chemistry of Advanced Materials Seminar on Bioengineering for Foreign Students Bioengineering Journal Club	Master's Thesis

No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Revisions改定区分	Subject name, Lecturer-in-Charge and Term etc. (Changes are shown as [Before revision] — [After revision].) 細小 改定内容	Measures to students在学生の 対応
37	Major	Elective	Advanced Computational Chemistry	1	1 • 2	1	Discontinuted		N/A
38	Major	Elective	Advanced Environmental Biomass Materials and Technology	1	1 • 2	1	Discontinuted		N/A
39	Major	Elective	Physics of Protein Molecule	2	1 • 2	1	Discontinuted		N/A
40	Major	Elective	Advanced Course of Structual Chemistry	2	1 • 2	1	Discontinuted		N/A
41	Major	Elective	Coordination Chemistry	2	1 • 2	1	Discontinuted		N/A
42	Major	Elective	Environmental Analytical Chemistry	2	1 • 2	1	Newly-Established	Takahashi(Y) O ★	Students who enrolled in and before AY 2023 can take this subject.
43	Major	Elective	Advanced Course of Polymer Chemistry 1	1	1 • 2	1	Discontinuted		N/A
44	Major	Elective	Principles in Drug Action	2	1 • 2	1	Change in Notes Column	* K→* K S	N/A
45	Major	Elective	Engineering for Wildlife Management	2	1 • 2	1	Discontinuted		N/A
46	Major	Elective	Advanced in Life Sciences I	2	1 • 2	1	Newly-Established	Takimoto, Kuwahara & Fujiwara ★	Students who enrolled in and before AY 2023 can take this subject.
47	Major	Elective	Advanced in Life Sciences II	2	1 • 2	1	Newly-Established	Kasai, Shida ★	Students who enrolled in and before AY 2023 can take this subject.
48	Major	Elective	Physical Chemistry of Advanced Materials 1	2	1 • 2	2	Discontinuted		N/A
49	Major	Elective	Physical Chemistry of Advanced Materials 2	2	1 • 2	2	Discontinuted		N/A
50	Major	Elective	Advanced Inorganic Materials 1	2	1 • 2	2	Discontinuted		N/A
51	Major	Elective	Advanced Inorganic Materials 2	2	1 • 2	2	Discontinuted		N/A
52	Major	Elective	Advanced Organic Materials 1	2	1 • 2	2	Discontinuted		N/A
53	Major	Elective	Advanced Organic Materials 2	2	1 • 2	2	Discontinuted		N/A
54	Major	Elective	Physical Chemistry of Advanced Materials	2	1 • 2	2	Newly-Established	Imakubo, Takahashi(Y), Tagaya, Funatsu & Shironita O ☆ ◆	Students who enrolled in and before AY 2023 can take this subject.
55	Major	Elective	Advanced Inorganic Materials	2	1 • 2	2	Newly-Established	Saitoh(H), Ishibashi, Tanaka(S), Homma(Tsu) & Nishikawa E ☆ ◆	Students who enrolled in and before AY 2023 can take this subject.
56	Major	Elective	Advanced Organic Materials	2	1 • 2	2	Newly-Established	Takenaka, Maekawa, Kawahara, Kuwabara & Shida E ☆ ◆	Students who enrolled in and before AY 2023 can take this subject.

No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Revisions 라	7定区分	Subject Lecturer-in-Charg (Changes ar [Before revision] — 細かい改	name, ge and Term etc. e shown as → [After revision].) g定内容	Measures to students在学生の 対応
			Revise the subject figure (New) O Materials Science	e and Bioen Mechanica	igineering re al E	ecommends Electrical, E	the followin lectronics	g major s Infoi	ubjects from othe mation and	r majors. Civil a	nd
			Engin	Engineerin eering Ultra	asound Di	and Infor Engine dvanced Cou igital Image	mation ering urse of Processing	Manag Er Computa Intelliger	ement Systems ngineering tional nce	Environm Enginee Advanced Envi Information Su Engineering Advanced Wat Environmental	ental <u>ring</u> ronmental rvey er and Soil
57	Major	subject figure									
			Materials Science	and Bioeng anical Engin	gineering re teering II	commends t ectrical, Elec iformation E	he following tronics and igineering	g major su Info Manag Fr	bjects from other rmation and ement Systems	majors. Civil and Envir Engineer	ronmental ring
			Enginee	ering Ultraso	ound Im	lvanced Cour age Processir	se of Digital Ig	Computat	ional Intelligence	Advanced Envir Information Surv Engineering	onmental rey
					Inf	formatics			12	Environmental E	ngineering
Master'	s Program	n (Civil a	nd Environmental	Engineer	ing)						
Master's	s Progran Major	n (Civil a Diploma Policy	nd Environmental Add a Diploma Policy. [Diploma Policy] Civil and Environmental with the Diploma Policy 1. Comprehensive abilit consider matters from a environment, humanity 2. Responsibility: Under awareness of the respon involved in the design a 3. Technical expertise: Of technology (such as info acquire the ability to ap 4. Problem-solving abiliti constraints, consolidate clear strategies, and add others to solve problem 5. Explanatory abilities: of a globally competent 6. Learning abilities: Acc advanced specialized te 7. Ability to take action: publish their results, and	Engineerin of the Mas ies: Acquire a multifacet 's cultural a stand the e nsibility to s nd building Gain knowle ormation ar ply these to ties: Acquire the special opt a multif s as needed Acquire the engineer a quire an atti chnologies Acquire the d apply the	ing) g has set the ster's Progra- te the abilitie d perspect and econome affects of infrastru- of infrastru- of infrastru- of of infrastru- of of infrastru- of of infrastru- d e logical des nd research- itude of act and acader e ability to m to actual	he following am in Engine es to compre- tive while al- nic activities, frastructure cy by using o ucture. cialized field ication tech olems. es to correc edge and sk ineering and scriptive abil- ner. ive and com- nic knowled systematica problems.	seven attair eering. ehensively th ways being and infrast technologie ne's skills ar s related to nology and tly identify t ills associate humanities ity, oral pre tinuous self- ge in the re-	hink abou aware of ructure te so n social nd acader social infi artificial i the proble ed with so s approac sentation -learning a al world.	gets for students t people's happin the relationships echnologies. ety and the natur nic knowledge as rastructure, know ntelligence), and ems being faced v ocial infrastructur h while maintain ability, commun and research in o nin existing const	in accordance bess and welfard between the na al environment s an engineer ar vledge related to a safety mindse while being awa e to explore the ing the ability to ication skills, an rder to stay cur raints, organize	e, as well as to atural , and gain id researcher o information et; as well as re of existing e issues, formulate o cooperate with id language skills rent on the latest and proactively

No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Revis	sions改定区分	Subject name, Lecturer-in-Charge and Term etc. (Changes are shown as [Before revision] → [After revision]. 細かい改定内容	Measures to students在学生の 対応
No.	Classification 区分	Compulsory /Elective必 修選択 Curriculum Policy	Subject Name科目名 Add a Curriculum Policy [Curriculum Policy] Civil and Environmental accordance with the Cu Di 1. con we mu the hun infi con we mu the hun infi con we mu the hun infi con we mu the hun infi con we mu the hun infi con we mu the hun infi con we mu the hun infi con we mu the hun infi con we mu the hun infi con we mu the hun infi con we hun infi con infi con we hun infi con infi i i i i i i i i i i i i i i i i i	Credits単位 Engineerin rriculum PC ploma Policy Comprehensively ifare, as well difaceted persp relationships manity's cultur iastructure techs Responsibilit iastructure techs isorre society I owledge as an design and buil Technical expe lds related to ated to informal d communica elligence), and ability to apply	Year開講年 Ig offers a sy- slicy of the P r e abilities: Act think about per as to consid sective while al between the s ral and econo nologies. y: Understand mologies on so gain awareness by using one's engineer and re- lding of infrastr rtise: Gain kno social infrastr tion technology tion technology these to solve p	Term期間 ystematic cr Vlaster's Pro quire the abilit ople's happines der matters fro ways being aw matural environ smic activities, d the effect ciefy and the n i of the respons skills and acae esearcher involv ucture. wledge in speci tructure, know ((such as inform ogy and art et; as well as a problems.	Revis	sions改定区分 um based on th in Engineering. <u>Curriculum Polic</u> By taking commo knowledge of the re technologies and ha activities. In addit abilities to consider 1 and think comprehe and welfare through 1 Students will take R subject to gain a c responsibilities borns taking major subje environmental engin the effects of infrast the natural environ comprehensively lea for their master's the Students will gain related to social inf information techn as well as a safety subjects that span environmental engir and common subj acquire the ability to to solve problems 1 Environmental Eng Civil and Environme	Subject name, Lecturer-in-Charge and Term etc. (Changes are shown as [Before revision] — [After revision]. 細カル 地位定行将容 n subjects, students will gain dationships between infrastructure umanity's cultural and economic ion, students will develop the matters from multiple perspectives msively about people's happiness planning-related subjects. lesearch Integrity as a compulsory deep understanding of the social e by engineers and researchers. By cts related to general civil and isering, students will learn about tructure technology on society and ment. In addition, students will in m these concepts through research tists. knowledge in specialized fields frastructure, knowledge related to logy (such as information and nology and artificial intelligence), mindset by taking applied major a multiple fields of civil and isering, subjects in other majors, ets. In addition, students will in theirs in other majors, ets. In addition, students will isering and Research Work of intal Engineering.	Measures to students在学生の 対応

No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Revisions改定区分	Subject name, Lecturer-in-Charge and Term etc. (Changes are shown as [Before revision] — [After revision].) 細心、改定内容	Measures to students在学生の 対応
59	Major	Curriculum Policy	4. cor and pre- find str. hur cor 5. de: cor cor cor and 7. syr cor res	Problem-solvin rectly identify t are of exist iscialized knowle instructure to ategies, and ad manifies approa operate with oth Explanatory criptive abil mmunication sk mpetent enginee Learning abilit atinuous self-lea rent on the late i academic know Ability to tal itematically a sistraints, organ ults, and apply t	ag abilities: Ac he problems be ing constraint edge and skills : constraint ers to solve prol abilities: A ity, oral p ills, and languaj r and researcher ies: Acquire an aming and rese st advanced spe vledge in the re-	quire the abili ing faced while ssociated with uses, consolidate uses, formulate ted engineerin taining the abi blems as needed cquire the 1 resentation as ge skills of a gl r. attitude of actir arch in order t cialized techno al world. quire the abil within es tively publish roblems.	hes to By taking major being specialized knowled specialized knowled infrastructure. Dur clear Civil and Environm g and engage in groupwo cooperate with oth Students will also co through research for ogical Students will cultive common subjects of Civil and Environm Work of Civil an Furthermore, in lab various nationalit international sensib while learning to co the same time, stu learn these abilities thesis. Furthermore, for students to eng activities overseas. The and Students will foster by rojects in Semina Engineering held students will comp through research for ist of Students will comp through research for ist of Students will comp through research for ist is systematically cond their conditions through Environmental Engi and Environmental I master's thesis. In : ability to proactively at conferences and is master's thesis.	subjects, students will acquire ge and skills associated with social ing Seminars on Civil and ineering and Research Work of bental Engineering, students will the that enables them to learn to ers in order to solve problems, mprehensively learn these abilities their master's thesis. The explanatory abilities by taking a foreign languages, Seminars on sental Engineering, and Research and Environmental Engineering, soratories comprising students of ies, students will cultivate lithies through research activities llaborate under diverse values. At dents will also comprehensively through research for their master's the major provides opportunities age in research and development of an attitude of continuous self- magging in individual research rs on Civil and Environmental at each laboratory. In addition, rehensively learn these abilities their master's thesis. mprehensively learn how to act planned research under given h Seminars on Civil and meering, Research Work of Civil Engineering, and research for their siddition, students will acquire the present their results by presenting at the interim presentation of their	
60	Major	Elective	Advanced course of disaster management	2	1 • 2	2	Change in Notes Column	★ K→★ K S	N/A
61	Major	Elective	Advanced Structural Analysis	2	1 • 2	1	Change of Term	1st Term→2nd Term	N/A
62	Major	Elective	Advanced Structural Engineering	2	1 • 2	2	Discontinuted	о \star к	N/A
63	Major	Elective	Advanced Structural	2	1 • 2	2	Discontinuted	E ☆ K	N/A

No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Revisions改定区分	Si Lecturer-in (Chan [Before revis 細;	ubject name, -Charge and Term etc ges are shown as ion] → [After revision かい改定内容	. Measures to students在学生の].) 対応
			Revise the subject figure	e.						
			(New) O Civil and Enviro	nmental En	gineering re	commends	the following major su	ibjects from	other majors.	
					Mechanica	l Engineerii	ng		Electrical, Ele Information	ectronics and Engineering
			Fracture Mechanics	ŝ	P	Advanced Course for Non-Newton Fluid				
			Advanced Course f Materials	or Microstr	ucture of A	dvanced Co	ompressible Fluid Dyı	namics	Advanced Course Image Processing	of Digital
			Advanced Lecture of Physics	on S <mark>ol</mark> id Sta	ite T	ribology				
			Advanced Automat	ion	A E	dvanced Co Engineering	onstruction Machinery	7		
					E	ingineering	Ultrasound			
64	Major	subject figure	(Old)	ental Enginee	ring recomme	nds the follow	ving major subjects from o	other majors.		
				Me	chanical Engin	eering		Electrical,	Electronics and	Materials Science
			Fracture Mechanics	1.000	Advance	d Course for N	ion-Newton Fhuid	intornatio	on Engineering	Computer Chemistry
			Advanced Course for M Materials	icrostru <mark>c</mark> ture o	f Advance	d Compressibl	e Fluid Dynamics	Advanced Cou Processing	rse of Digital Image	
			Advanced Lecture on Sc	olid State Physi	ics Tribolog	у		Advanced Mat	hematical Informatics	
			Advanced Automation		Advance	d Construction	n Machinery Engineering			
					Engineer	ing Ultrasound				

No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Revisions改定区分	Subject name, Lecturer-in-Charge and Term etc. (Changes are shown as [Before revision] [After revision].) 細かい改定内容	Measures to students在学生の 対応
No.	Classification 区分	Compulsory /Elective必 修選択 subject figure	Subject Name #4 🛛 2 Revise the subject figure (New) 1 ¹⁴ Year 2 ¹⁵ Year 2 ¹⁵ Year 2 ¹⁵ Year 2 ¹⁵ Year 2 ¹⁵ Year 2 ¹⁶ Year 2 ¹⁷ Terms 3 ¹⁶ Year 2 ¹⁶ Year 3 ¹⁶ Yea	Credits # dz 'C. Credits # dz 'C. Crvil a Mathematica Computer Computer Computer Steel Structural Computer Steel Structural Steel Structural Computer Steel Structural Steel Steel Stru	Year ()) is a constraint of the provide a constraint of th	Term ## III Iterm ## IIII Iterm ## IIIII Iterm ## IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Revisions改定区分	Subject name, Lecturer-in-Charge and Term etc. (Changes are shown as [Before revision] ~ [After revision].) ※ 제가사 시전定內容 Ibefore revision] ~ [After revision].) ※ 제가사 시전定內容 ************************************	Measures to students在学生の 对応 文材応
				and Dis Engin Advan Eng	ster Prevention reering II == 1 (reed Structural gineering == 1 In	tmospheric and Hydrosp Sciences 2 ⁽⁸¹⁾ Advanced Environment formation Survey Engine	sheric of Disaster Management Trans	is Concrete Engineering Asymptotic AdvanceRoad Advance	rotection Engineering ¹⁸⁷ oed Water Environmental Engineering 2 ⁸²¹ noed Environmental Risk Management

No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Revisions改定区分	Subject name, Lecturer-in-Charge and Term etc. (Changes are shown as [Before revision] [After revision].) 細かい改定内容	Measures to students在学生の 対応
Master'	s Prograr	n (Nuclea	ar Technology)						
66	Major	Diploma Policy	Add a Diploma Policy. [Diploma Policy] Nuclear Technology has Policy of the Master's P 1. Gain knowledge of nu accelerators/radiation, and integrated perspect 2. Acquire in-depth kno electrical power genera fields; as well as the abi 3. Foster individuals wh can contribute to global development of society 4. Acquire the ability to regarding this content a	set the foll rogram in E uclear energ or both; acc tives, the al wledge of r tion and tra lity to fully o possess in l society, as logically co is internatio	owing four ingineering. gy and nucle quire the ab bility to utili nuclear phys insformatio use one's sp nternationa well as rese nstruct rese nally active	attainment ear safety, k ility to com ze informat sics, radiatio n technolog becialized k I sensibilitie earch and d earch conte e leading en	targets for students is snowledge of next-gen prehend nuclear engi ion technology, and t on physics, materials s gies that are required nowledge and skills. evelopment capabilit nt and the communic gineers and researche	in accordance with the Diploma neration nuclear energy and neering and quantum engineerin he knowledge and skills needed science and chemistry, thermal fl for the nuclear industry and app porate in teams, practical and cre ies that can contribute to the sus ation skills to obtain understand ers.	ng from panoramic to do so. luids, and lied radiation sative abilities that stainable ing from others

No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Revisions改定区分	Subject name, Lecturer-in-Charge and Term (Changes are shown as [Before revision] → [After rev 細かい改定内容	n etc. s vision].)	Measures to students在学生の 対応
			Add a Curriculum Policy [Curriculum Policy] Nuclear Technology off Curriculum Policy of the	r. ers a systen ≥ Master's P	natic curricu Yrogram in E	Ilum based ingineering.	on the following polic	ties in accordance with the	e	
67	Maior	Curriculum	Diplo 1. Ga safety, and ac to cov engine perspe techno so.	ma Policy in knowledge of icelerators/radia mprehend nucl ering from ctives, the a logy, and the kr	of nuclear ene 'next-generation tion, or both; a lear engineerin panoramic ibility to uti nowledge and si	rgy and nuclea n nuclear energ cquire the abili ig and quantu and integrate lize informatic kills needed to d	Curriculum Policy Students will acquire skills by taking multiple Safety Engineering", " and "Advanced Radiat taking Nuclear Techno n comprehend nuclear lo engineering from perspectives, students majors and common sul knowledge. In addition information technology a safety mindset.	he necessary knowledge and t elective subjects on "Nuclear Nuclear System Engineering", ion Engineering"; as well as logy Laboratory. In order to engineering and quantum panoramic and integrated will take subjects from other bjects to gain a broad range of , students will learn to utilize such as data science, and form		
		Policy	 Ac radiati therma transfe nuclea the abi <u>skills.</u> Fe sensibi practic global capabi develo 	quire in-depth on physics, m il fluids, and e urmation technor r industry and a litity to fully use ster individua litites, the ab ial and creative society, as we lities that can punent of societ	knowledge of aterials science electrical powe ilogies that are pplied radiation one's specialize ils who posse ility to collab : abilities that (ill as research : contribute to y.	nuclear physic and chemistr r generation ar required for th fields; as well i ed knowledge ar ess internation orate in team can contribute ; and developme the sustainab	 students will enhance the students will enhance the students will enhance the practical skill enhance the students will gain and specialized knowledge acquired techniques. al Through Special Exects, students will develop to enable them to collabat Through literature reacter the students will develop to enable them to collabat Through students will aglobal society. In Nu students will conduct comprising students for fostering their ability research and development as well a global society. In Nu students will conduct comprising students for fostering their ability research and development by enga research, students will contributing to the sust while enhancing their subility foundation of practice addition, common subi foundation of practice students of practice addition, and the sust while enhancing their subility foundation of practice addition. 	er expertise through literature on Nuclear Technology, and is in Nuclear Technology in master's thesis research, a in-depth understanding of and be able to freely use their research language skills that orate in international teams. ling in Seminars on Nuclear rill enhance their abilities to at status of research and s the technologies required by clear Technology Laboratory, experiments as part of teams in Japan and overseas, thereby to collaboratively conduct int. Students will also develop Research Integrity subject. In gay Practical, students will al skills in research and zing in their master's thesis ill cultivate a mindset of anable development of society creative research skills. In sects are offered to foster the al and creative abilities in		

No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Revisions改定区分	Subject name, Lecturer-in-Charge and Term etc. (Changes are shown as [Before revision] → [After revision]. 細かい改定内容	Measures to students在学生の 対応
67	Major	Curriculum Policy	4. <i>A</i> com und inte rese	cquire the abilit ent and the c rstanding from nationally act rchers.	y to logically (ommunication others regardin others regardin vve leading	construct resear skills to obta g this content engineers a	ch Through Special Exerci in common subjects, stud- as language skills need dissemination of info reading and debates Technology, students wi enhance their communi understanding from Technology Laboratory, ability to logically expl experiments. Through to students will learn how Students will learn how Students will learn to research conclusions presentation, preliminary presentation. They will findings with clear lo Students are encouraged abilities by presenting meetings and conferen work to researchers of addition, the major prov to engage in research overseas.	ites in Technical English and ents will develop the English ded for the international ormation. Through literature in Seminars on Nuclear ill learn to construct logic and cation skills needed to obtain others. Through Nuclear , students will increase their lain the content and results of their master's thesis research, to construct logic in practice. to others at the interim y screening, and master's thesis also learn to summarize their egic in their master's thesis. d to improve their explanatory is their research at scientific coes, and by explaining their putside of the university. In rides opportunities for students a and development activities	

No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Revisions改定区分	Subject name, Lecturer-in-Charge and Term etc. (Charges are shown as [Before revision] → [After revision].) 細かい改定内容	Measures to students在学生の 対応
68	Major	Compulsory	Nuclear Technology Laboratory	1	1 • 2	1~3	Change of Term	1st to 3rd Term→1st Term	N/A
69	Major	Elective	Structural Engineering in Nuclear Reactors	1	1•2	2	Change in Notes Column	The class period for this course will be the same as the nuclear design lecture in the Specialized Course on Nuclear Reactor Design, which will be offered to students enrolling in or after AY 2024.	N/A
70	Major	Elective	Thermal Hydraulics in Nuclear Reactors	1	1 • 2	2	Change in Notes Column	The class period for this course will be the same as the thermal fluid engineering lecture in the Specialized Course on Nuclear Reactor Design, which will be offered to students enrolling in or after AY 2024	N/A
71	Major	Elective	Nuclear Power Reactor and Plant Systems	2	1 • 2	1	Change in Notes Column	K→K S	N/A
72	Major	Elective	Advanced Safety and Crisis Management	2	1•2	1	Change in Notes Column	K→K S	N/A
73	Major	Elective	Advanced Lecture on Nuclear	2	1 • 2	1	Change in Notes Column	★ → ★ S	N/A
74	Major	Elective	Advanced Seismic Safety Engineering and Community Disaster Management	2	1 • 2	2	Change in Notes Column	★ K→★ K S	N/A
75	Major	Elective	Nuclear Emergency Planning and Resilience Engineering	2	1 • 2	2	Change in Notes Column	s	N/A
Master'	s Program	n (Comn	non Subject)				•		
76	Common	Elective	Advanced Safety and Information Security 1	1	1 • 2	2	Newly-Established	Miyoshi, ※Ogino & Ito(Kosuke) Safety	Students who enrolled in and before AY 2023 can take this subject.
77	Common	Elective	Advanced Safety and Information Security 2	1	1 • 2	2	Newly-Established	Miyoshi & %Sakurai(Tsu) Safety	Students who enrolled in and before AY 2023 can take this subject.
78	Common	Elective	Tecnhological English	2	1 • 2	1 • 2	Change of Term Change in Notes Column	1st & 2nd Term→2nd Term 1st sem. ☆(Tue.) ★(Wed., 2nd sem.→★	N/A
79	Common	Elective	English Presentation Skills	2	1 • 2	1	Newly-Established	Nobuhara ① ★	Students who enrolled in and before AY 2023 can take this subject.
80	Major	Elective	Advanced Global Innovation 1		1 • 2	1~3	Discontinuted		N/A
81	Major	Elective	Advanced Global Innovation 2		1 • 2	1~3	Discontinuted		N/A
82	Major	Elective	Engineering Science		1 • 2	1~3	Discontinuted		N/A
83	Major	Elective	Study 1		1 • 2	1~3	Discontinuted		N/A
84	Major	Elective	Advanced GI Management Study 2		1 • 2	1~3	Discontinuted		N/A
Revisior	of Com	mon Rule	es (Master's Progra	m)					
85	curriculum table	Revise a deso (New) [Symbols in 1 • Subjects m (Old) [Symbols in 1 • Subjects m	ription of the subjects marked the Notes Column] arked with an "S" are offered a the Notes Column] arked with an "S" are offered a	d with an "S". as part of the a	Advanced Safe Safety Enginee	ety Engineerir ering Course	ng Course		
Doctora	I Program	n (Energ	y Engineering)	-		1	Discontinuted		
86	Major	Elective	Advanced Cource for Nuclear Energy Management	2	1~3	1	Discontinuted		N/A
87	Major	Elective	Advanced Safety on Fire and Explosion	2	1~3	1	Discontinuted		N/A
88	Common	Elective	Advanced Ion Beam Engineering	2	1~3	1	Newly-Established	Takahashi(Kazumasa)	Students who enrolled in and before AY 2023 can take this subject.
Doctora	l Program	n (Inforn	nation Science and	Control	Engineer	ing)			
89	Major	Elective	Advanced Business Strategy	2	1~3	1	Discontinuted		N/A
Doctora	i Prograr	n (CIVII E	ngineering and Bio	engineer	ing)		Discontinuted		
90	Major	Elective	Advanced Sports Engineering and Human Dynamics	2	1~3	2			N/A

No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Revisions改定区分	Subject name, Lecturer-in-Charge and Term etc. (Changes are shown as [Before revision] → [After revision].) 細かい改定内容	Measures to students在学生の 対応	
Nuclear	Nuclear System Safety Regulatory Course									
91	Major	Elective	Thermal Hydraulics in Nuclear Reactors	1	1~2	2	Change in Notes Column	The class period for this course will be the same as the thermal fluid engineering lecture in the Specialized Course on Nuclear Reactor Design, which will be offered to students enrolling in or after AY 2024	N/A	
WISE Pr	WISE Program (Course for the 5-year Integrated Doctoral Program)									
92	Major	Elective Compulsory	Cultural Intelligence (CQ)	2	1~5	1	Not Conducted in 2024	As shown in the left	N/A	
93	Major	Elective Compulsory	Cultural Leadership	2	1~5	2	Not Conducted in 2024	As shown in the left	N/A	
94	Major	Elective Compulsory	Social Innovation	2	1~5	2	Not Conducted in 2024	As shown in the left	N/A	
WISE Pr	ogram (C	Course fo	r the Master's Prog	gram and	l Doctora	Il Progra	m)			
95	Major	Elective Compulsory	Cultural Intelligence (CQ)	2	Master 1~2 Doctor 1~3	1	Not Conducted in 2024	As shown in the left	N/A	
96	Major	Elective Compulsory	Cultural Leadership	2	Master 1~2 Doctor 1~3	2	Not Conducted in 2024	As shown in the left	N/A	
97	Major	Elective Compulsory	Social Innovation	2	Master 1~2 Doctor 1~3	2	Not Conducted in 2024	As shown in the left	N/A	

No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Revisions改定区分	Subject name, Lecturer-in-Charge and Term etc. (Changes are shown as [Before revision] → [After revision].) 細かい改定内容	Measures to students在学生の 対応
[The following is for students enrolled before AY 2021.]									
Master's	s Prograr	n (Mech	anical Engineering)						
	Major	Elective	Advanced Construction	2	1 • 2	2	Change in Notes Column	ок→ок ★	N/A
Master's	s Prograr	n (Electri	ical, Electronics and	d Inform	ation Eng	ineering	.)		
	Major	Elective	Power Electronics	2	1 • 2	1	Discontinuted		N/A
	Major	Elective	Ion Beam Engineering	2	1•2	2	Newly-Established	Takahashi(Kazumasa) E ★	Students who enrolled in and before AY 2023 can take this subject.
	Major	Elective	Advanced Mathematical Informatics	2	1 • 2	2	Discontinuted		N/A
Master's	s Prograr	n (Mater	ials Science and Te	chnolog	y)				
	Major	Elective	Advanced Course of Structual Chemistry	2	1 • 2	1	Discontinuted		N/A
	Major	Elective	Advanced Environmental Biomass Materials and Technology	1	1 • 2	1	Discontinuted		N/A
	Major	Elective	Advanced Computational Chemistry	1	1 • 2	1	Discontinuted		N/A
	Major	Elective	Advanced Course of Polymer Chemistry 1	1	1 • 2	1	Discontinuted		N/A
	Major	Elective	Coordination Chemistry	2	1 • 2	1	Discontinuted		N/A
	Major	Elective	Physical Chemistry of Advanced Materials 1	2	1 • 2	2	Discontinuted		N/A
	Major	Elective	Physical Chemistry of Advanced Materials 2	2	1•2	2	Discontinuted		N/A
	Major	Elective	Advanced Inorganic Materials 1	2	1 • 2	2	Discontinuted		N/A
	Major	Elective	Advanced Inorganic Materials 2	2	1•2	2	Discontinuted		N/A
	Major	Elective	Advanced Organic Materials 1	2	1 • 2	2	Discontinuted		N/A
	Major	Elective	Advanced Organic Materials 2	2	1 • 2	2	Discontinuted		N/A
Master's	s Prograr	n (Civil a	nd Environmental	Engineer	ing)				r
-	Major	Elective	Advanced Structural Analysis	2	1 • 2	1	Change of Term	1st Term→2nd Term	N/A
	Major	Elective	Engineering	2	1 • 2	2	Discontinuted	0 * K	N/A
	Major	Elective	Advanced Structural Engineering	2	1 • 2	2	Discontinuted	E ☆ K	N/A
Master's	s Prograr	n (Bioen	gineering)						
	Major	Elective	Physics of Protein Molecule	2	1 • 2	1	Discontinuted		N/A
	Major	Elective	Engineering for Wildlife Management	2	1 • 2	1	Discontinuted		N/A
Master's	s Prograr	n (Inforn	nation and Manage	ement Sv	stems En	gineerin	g)		
	Major	Elective	Topics of Sport Engineering	2	1 • 2	2	Discontinuted		N/A
Master's	s Progran	n (Nucle	ar System Safety Er	ngineerir	ng)			•	
	Major	Compulsory	Nuclear Safety Laboratory	1	1 • 2	1~3	Change of Term	1st to 3rd Term→1st Term	N/A
	Major	Elective	Structural Engineering in Nuclear Reactors	1	1 • 2	2	Change in Notes Column	The class period for this course will be the same as the nuclear design lecture in the Specialized Course on Nuclear Reactor Design, which will be offered to students enrolling in or after AY 2024.	N/A
	Major	Elective	Thermal Hydraulics in Nuclear Reactors	1	1 • 2	2	Change in Notes Column	The class period for this course will be the same as the thermal fluid engineering lecture in the Specialized Course on Nuclear Reactor Design, which will be offered to students enrolling in or after AY 2024.	N/A
Master's	s Prograr	n (Syster	n Safety Engineerir	ng)					
	Major	Elective	Advanced Organization Management	2	1 • 2	2	Change of Term	2nd Term→1st & 2nd Term	N/A

-									
No.	Classification 区分	Compulsory /Elective必 修選択	Subject Name科目名	Credits単位	Year開講年	Term期間	Revisions改定区分	Subject name, Lecturer-in-Charge and Term etc. (Changes are shown as [Before revision] → [After revision].) 細かい 改定内容	Measures to students在学生の 対応
Master'	s Prograr	n (Comm	non Subject)						
	Common	Elective	Advanced Safety and Information Security 1	1	1 • 2	2	Newly-Established	Miyoshi, ※Ogino & Ito(Kosuke) Safety	Students who enrolled in and before AY 2023 can take this subject.
	Common	Elective	Advanced Safety and Information Security 2	1	1 • 2	2	Newly-Established	Miyoshi & ※Sakurai(Tsu) Safety	Students who enrolled in and before AY 2023 can take this subject.
	Common	Elective	Tecnhological English	2	1 • 2	1 • 2	Change of Term Change in Notes Column	1st & 2nd Term→2nd Term	N/A
	Common	Elective	English Presentation Skills	2	1•2	1	Newly-Established	Nobuhara © ★	Students who enrolled in and before AY 2023 can take this subject.
	Major	Elective	Advanced Global Innovation 1		1 • 2	0	Discontinuted		N/A
	Major	Elective	Advanced Global Innovation 2		1 • 2	0	Discontinuted		N/A
	Major	Elective	Advanced GI Computational Engineering Science		1 • 2	0	Discontinuted		N/A
	Major	Elective	Advanced GI Management Study 1		1•2	0	Discontinuted		N/A
	Major	Elective	Advanced GI Management Study 2		1•2	0	Discontinuted		N/A
Doctoral Program (Information Science and Control Engineering)									
	Major	Elective	Advanced Business Strategy	2	1~3	1	Discontinuted		N/A
	Major	Elective	Advanced Safety on Fire and Explosion	2	1~3	1	Discontinuted		N/A
Doctora	l Program	n (Energy	and Environment	Science				•	
	Major	Elective	Advanced Cource for Nuclear Energy Management	2	1~3	1	Discontinuted		N/A
	Common	Elective	Advanced Ion Beam Engineering	2	1~3	1	Newly-Established	Takahashi(Kazumasa)	Students who enrolled in and before AY 2023 can take this subject.
Doctora	I Program	n (Integr	ated Bioscience an	d Techno	ology)				
	Major	Elective	Advanced Sports Engineering and Human Dynamics	2	1~3	2	Discontinuted		N/A
Nuclear	System 9	Safety Re	gulatory Course						
	Major	Elective	Thermal Hydraulics in Nuclear Reactors	1	1~2	2	Change in Notes Column	The class period for this course will be the same as the thermal fluid engineering lecture in the Specialized Course on Nuclear Reactor Design, which will be offered to students enrolling in or after AY 2024	N/A

Applied Safety Engineering Course

(Course for All Master's Programs, including the

System Safety Engineering)

Applied Safety Engineering Course (Open to All Majors in the Master's Program Excluding System Safety Engineering)

1. Overview and Objectives

Safety has become more important than ever before due to increasingly sophisticated and complex technologies, large-scale business activities, and society's demands on the activities of organizations and corporations. The continued existence of organizations and corporations is contingent on ensuring safety in the workplace and providing safe goods and services to consumers. In this context, there is a societal need for universities to train individuals who have in-depth expertise that can be applied to safety-related issues and new technologies, logical thinking abilities and creative abilities, as well as excellent problem-solving capabilities for safety-related problems. In other words, there is a widespread need for education and research on safety engineering.

The Applied Safety Engineering Course aims to facilitate the acquisition of fundamental and applied knowledge of safety engineering. Course graduates should aim to obtain System Safety Sub-Engineer certification (System Safety Engineer Certification System).

2. Course Outline

(1) Course Requirements

Students must take the common subjects and specialized subjects offered in each major shown in the list

of subjects in Table 1. (2) Course Application

This course is open to students in the master's programs of all majors except System Safety Engineering. Students who wish to apply for this course must submit the *Application for the Applied Safety Engineering Course* to the Division of Academic Affairs during the stipulated registration period (scheduled to be the subject registration periods of the First Term and Second Term). When taking a subject, students should carefully check all distributed handouts and follow the procedures.

(3) Course Completion

To complete this course, students must earn a total of 8 credits from the subjects shown in **Table 1**: 4 credits from "Advanced Safety Engineering", "Advanced Safety and Information Security 1", and "Advanced Safety and Information Security 2" (course compulsory subjects); 2 credits from "Advanced Lecture on Risk Assessment" or "Construction of Safety System", which address the foundational knowledge for practical applications of safety engineering (course elective-compulsory subjects \bigcirc); and 2 credits from safety-related subjects offered in each of the majors (course elective-compulsory subjects \bigcirc).

Students who complete the course will be conferred a certificate of course completion upon graduation from the master's program.

◆ Applied Safety Engineering Course (Attached Table 1)

◆ Applied Salety Eligilieering CC						
Subject Name	Credits	Compulsory/Elective	Major/Subject Classification	Term		
Advanced Safety Engineering	2	Compulsory	Common Subjects	2 nd Term		
Advanced Safety and Information	1	Compulsory	Common Subjects	2 nd Term		
Security 1	-	compulsory		2 101111		
Advanced Safety and Information	1	Compulsory	Common Subjects	2 nd Term		
Security 2						
•Advanced lecture on risk	2	Elective	Major Subject of System Safety	1 st Term		
assessment		Compulsory	Engineering			
•Construction of Safety System	2	minimum of 2 credits from "•"	Major Subject of System Safety Engineering	2 nd Term		
		subjects)		1 st 1 Ond		
○Snow and Ice Technology	2		Major Subject of Mechanical	1 st and 2 nd		
		-	Engineering Maine Schiest of Electrical	Term		
OAdvanced Course for	2		Electronical and Information	2 nd Term		
Mechatronics	2		Engineering	2 101111		
			Major Subject of Electrical.			
OAdvanced Engineering	2		Electronical and Information	2 nd Term		
on Electrical Machine			Engineering			
A dyanged Medium Valtage			Major Subject of Electrical,			
Converters	2		Electronical and Information	1 st Term		
		-	Engineering			
			Major Subject of Information and	t at m		
OSustainable Development Theory	2		Management Systems	1° Term		
		Flactiva	Engineering Main Subject of Information and			
CEnergy Economics	2	Compulsory	Major Subject of Information and	1 st Term		
	2	(acquire a	Engineering			
		minimum of 2	Major Subject of Materials			
OPrinciples in Drug Action	2	credits from "O"	Science and Bioengineering	1 st Term		
		subjects)	6 6			
OAdvanced course of disaster	2		Major Subject of Civil and	and T		
management	2		Environmental Engineering	2 nd Term		
ONuclear Power Reactor and Plant	2		Major Subject of Nuclear	1.51 70		
Systems	2		Technology	1 st Term		
OAdvanced Safety and Crisis	2		Major Subject of Nuclear	1 st T-		
Management	2		Technology	1 st Term		
OAdvanced Lecture on Nuclear	2		Major Subject of Nuclear	1 st Tame		
Regulation	2		Technology	1- Term		
OAdvanced Seismic Safety			Major Subject of Nu-1			
Engineering and Community	2		Technology	^{of} Nuclear 2 nd Term		
Disaster Management			reemiology			
ONuclear Emergency Planning and	2		Major Subject of Nuclear	2nd Term		
Resilience Engineering	2		Technology	2 IeIIII		

*To count subjects indicated with \bullet and subjects from other majors indicated with \bigcirc as completion criteria for the master's program, approval must first be obtained from each student's academic supervisor. *For subjects indicated with \bullet , classes will mainly be held on Saturdays and Sundays. Students should only take these subjects after carefully checking the schedule and class methods in the syllabus and distributed handouts. If there are many applications for "Advanced Lecture on Risk Assessment", students may be required to undergo selection for registration. Please refer to the distributed handouts and other materials for details.

		Commulation						Subject name,	Moosuros to
No	Classification	Compulsory	Subject Name利日夕	Cradits甾位	Vear閉講在	Torm期間	Pewisions改定区分	Lecturer-in-Charge and Term etc.	iviedsures to
NO.	区分	/Elective必 修選択		Cleuits丰应	Teal 用晶件	16111 34][#]	Revisions of the M	(Changes are shown as	students在学生の 対応
-		12.2.11						[Before revision] \rightarrow [After	2011
[The following is for students enrolled before AY 2021.]									
Mastor'	c Drogram	n (Mach:	anical Engineering)						
IVIASLEI	SFIUgiai		Advanced Construction	· · · · · ·			Change in Notes Column	0 k→0 k +	
	Major	Elective	Machinery Engineering	2	1 • 2	2			N/A
Master'	s Prograr	n (Electri	cal, Electronics and	d Inform	ation Eng	ineering	s)		
	Major	Elective	Power Electronics	2	1 • 2	1	Discontinuted		N/A
							Newly-Established	Takahashi(Kazumasa)	Students who
	Major	Elective	Ion Beam Engineering	2	1 • 2	2		E *	enrolled in and
	-		0 0						take this subject
		-	Advanced Mathematical				Discontinuted		take this subject.
	Major	Elective	Informatics	2	1 • 2	2	Discontinuccu		N/A
Master'	s Prograr	n (Mater	ials Science and Te	chnolog	y)				
	Major	Elective	Advanced Course of Structual	2	1 • 2	1	Discontinuted		N/A
	-		Advanced Environmental				Discontinuted		
	Major	Elective	Biomass Materials and	1	1 • 2	1			N/A
			Technology Advanced Computational				Discontinuted		
	Major	Elective	Chemistry	1	1 • 2	1	Discontinuceu		N/A
	Major	Elective	Advanced Course of Polymer	1	1 • 2	1	Discontinuted		N/A
	Major	Elective	Coordination Chemistry	2	1 • 2	1	Discontinuted		N/A
	Maior	Flective	Physical Chemistry of Advanced	2	1.2	2	Discontinuted		N/A
	major	LICCUVC	Materials 1 Physical Chemistry of Advanced	-		-	Discontinuted		
	Major	Elective	Materials 2	2	1 • 2	2	Discontinuted		N/A
	Maior	Elective	Advanced Inorganic Materials 1	2	1 • 2	2	Discontinuted		N/A
				-		-			
	Major	Elective	Advanced Inorganic Materials 2	2	1 • 2	2	Discontinuted		N/A
	Maina	Floative	Advanced Operatio Meteoricle 4	2	1.2	2	Discontinuted		N/A
	Major	Elective	Advanced Organic Materials 1	2	1.2	2	Discontinuted		N/A
Mastar			Advanced Organic Materials 2	- Engineer	ing)	2	Discontinuced		N/A
IVIdSLEI	SPIUgiai			Engineer	iiig)		a) (7	1st Torm 2nd Torm	
	iviajor	Elective	Advanced Structural Analysis Advanced Structural	2	1 • 2	1	Change of Term		N/A
	Major	Elective	Engineering	2	1 • 2	2	Discontinuceu		N/A
	Major	Elective	Advanced Structural	2	1 • 2	2	Discontinuted	E ☆ K	N/A
Master's Program (Bioengineering)									
Waster	Major	Flective	Physics of Protein Molecule	2	1.2	1	Discontinuted		N/A
	iviajoi	Elective	Engineering for Wildlife	2		-	Discontinuted		11/4
	iviajor	Elective	Management	2	1.5	1			N/A
Master'	s Prograr	n (Inforn	nation and Manage	ement Sy	stems En	gineerin	<u>g)</u>	-	
	Major	Elective	Topics of Sport Engineering	2	1 • 2	2	Discontinuted		N/A
Master'	s Prograr	n (Nuclea	ar System Safety Ei	ngineerir	ng)				
	Major	Compulsory	Nuclear Safety Laboratory	1	1 • 2	1~3	Change of Term	1st to 3rd Term→1st Term	N/A
								The class period for this course will be the	
			Structural Engineering in					Specialized Course on Nuclear Reactor	
	Major	Elective	Nuclear Reactors	1	1 • 2	2	Change in Notes Column	Design, which will be offered to students	N/A
								enrolling in or after AY 2024.	
								The class period for this course will be the	
								same as the thermal fluid engineering	
	Major	Floctive	Thermal Hydraulics in Nuclear	1	1 • 2	2	Change in Notes Column	lecture in the Specialized Course on	N/A
		LICCUVE	Reactors	*		-		Nuclear Reactor Design, which will be	
								2024.	
Master'	s Program	n (Syster	n Safety Engineerin	ng)				• 	
		Floriture	Advanced Organization	-0/	1.2	3	Change of Term	2nd Term→1st & 2nd Term	N/A
	iviajor	Elective	Management	2	1 • 2	2	Ŭ		N/A

No. Classification 区分 Compulsory /Elective必 修選択 Subject Name科目名 Credits単位 Year開講年 Term期間 Revisions改定区分 Lecturer-in-Charge and Term etc. (Changes are shown as IRefore revision] → IAfter Master's Program (Common Subject) Advanced Safety and Information Security 1 1 1 · 2 2 Newly-Established Miyoshi, %Ogino & ito(Kosuke) Safety Common Elective Advanced Safety and Information Security 1 1 1 · 2 2 Newly-Established Miyoshi & %Sakurai(Tsu) Safety Common Elective Advanced Safety and Information Security 2 1 1 · 2 2 Newly-Established Miyoshi & %Sakurai(Tsu) Safety Common Elective Tecnhological English 2 1 · 2 1 · 2 1 · 2 1 · 2 Newly-Established Safety Common Elective Tecnhological English 2 1 · 2 1 · 2 1 · 2 Newly-Established Safety Safety Common Elective Tecnhological English 2 1 · 2 1 · 2 1 · 2 Newly-Established Nobuhara Nobuhara Common Elective English Presentation Skills 2 1 · 2 <th>Measures to students在学生の</th>	Measures to students在学生の									
No. 区分 /Elective必 修選択 Subject Name科目名 Credits单位 Year開講年 Term期間 Revisions改定区分 Changes are shown as (Changes are shown as IRefore revision) → IAfter Master's Program (Common Subject) Advanced Safety and Information Security 1 1 1・2 2 Newly-Established Miyoshi, ※Ogino & Ito(Kosuke) Safety Common Elective Advanced Safety and Information Security 1 1 1・2 2 Newly-Established Miyoshi & ※Sakurai(Tsu) Safety Common Elective Advanced Safety and Information Security 2 1 1・2 2 Newly-Established Miyoshi & ※Sakurai(Tsu) Safety Common Elective Tecnhological English 2 1・2 1・2 Change of Term Change in Notes Column Ist & 2nd Term → 2nd Term Common Elective English Presentation Skills 2 1・2 1 Newly-Established Nobuhara 0 ★	students在学生の									
Master's Program (Common Subject) Image: Common Subject (Common Subject) Image: Common Subject (Common Subject) Image: Common Subject (Common S										
Master's Program (Common Subject) Common Elective Advanced Safety and Information Security 1 1 1 · 2 2 Newly-Established Miyoshi, %Ogino & ito(Kosuke) Safety Common Elective Advanced Safety and Information Security 2 1 1 · 2 2 Newly-Established Miyoshi & %Sakurai(Tsu) Safety Common Elective Advanced Safety and Information Security 2 1 1 · 2 2 Newly-Established Miyoshi & %Sakurai(Tsu) Safety Common Elective Tecnhological English 2 1 · 2 1 · 2 Change of Term Change in Notes Column Ist & 2nd Term->2nd Term Ist sem, +(Tue) +(Wed.) 2nd sem+* Common Elective English Presentation Skills 2 1 · 2 1 Newly-Established Nobuhara	対応									
Common Elective Advanced Safety and Information Security 1 1 1 · 2 2 Newly-Established Miyoshi, %Ogino & Ito(Kosuke) Safety Common Elective Advanced Safety and Information Security 2 1 1 · 2 2 Newly-Established Miyoshi & %Sakurai(Tsu) Safety Common Elective Advanced Safety and Information Security 2 1 1 · 2 2 Newly-Established Miyoshi & %Sakurai(Tsu) Safety Common Elective Tecnhological English 2 1 · 2 1 · 2 Change of Term Change in Notes Column 1st & 2.nd Term->2.nd Term Ist sem, +(Tue) +(Wed.) 2.nd sem+ Common Elective English Presentation Skills 2 1 · 2 1 Newly-Established Nobuhara ① ★ English Presentation Skills 2 1 · 2 1 Newly-Established Nobuhara	Vaster's Program (Common Subject)									
Common Elective Advanced Safety and Information Security 1 1 1 · 2 2 Newly-Established Safety Common Elective Advanced Safety and Information Security 2 1 1 · 2 2 Newly-Established Miyoshi & %Sakurai(Tsu) Safety Common Elective Tecnhological English 2 1 · 2 2 Change of Term Change in Notes Column 1st & 2nd Term→2nd Term Ist sem. ☆(Tue.) ★(Wed.) 2nd sem.→★ Common Elective English Presentation Skills 2 1 · 2 1 Newly-Established Nobuhara © ★	Students who									
Common Elective Advanced safety and information Security 1 1 1 · 2 2 Newly-Established Miyoshi & ※Sakurai(Tsu) Safety Common Elective Advanced Safety and information Security 2 1 1 · 2 2 Newly-Established Miyoshi & ※Sakurai(Tsu) Safety Common Elective Tecnhological English 2 1 · 2 1 · 2 Change of Term Change in Notes Column 1st & 2nd Term→2nd Term 1st sem. ☆(Tue) ★(Wed.) 2nd sem.→★ Common Elective English Presentation Skills 2 1 · 2 1 Newly-Established Nobuhara ① ★ English Presentation Skills 2 1 · 2 1 Newly-Established Nobuhara	enrolled in and									
Common Elective Advanced Safety and Information Security 2 1 1 · 2 2 Newly-Established Miyoshi & ※Sakurai(Tsu) Safety Common Elective Tecnhological English 2 1 · 2 1 · 2 Change of Term Change in Notes Column Ist & 2nd Term → 2nd Term Ist sem. *(Tue.) ★(Wed) 2nd sem. → ★ Common Elective English Presentation Skills 2 1 · 2 1 Newly-Established Nobuhara ① ★	before AV 2023 can									
Common Elective Advanced Safety and Information Security 2 1 1 · 2 2 Newly-Established Miyoshi & ※ Sakurai(Tsu) Safety Common Elective Tecnhological English 2 1 · 2 2 Change of Term Change in Notes Column 1st & 2nd Term→2nd Term Ist sem. *(Tue.) *(Wed.) 2nd sem.→* Common Elective English Presentation Skills 2 1 · 2 1 Newly-Established Nobuhara ① ★	take this subject									
Common Elective Advanced Safety and Information Security 2 1 1 · 2 2 Newly-Established MiyoSin & x:sakurai(1Su) Safety Common Elective Tecnhological English 2 1 · 2 2 Change of Term Change in Notes Column 1st & 2nd Term → 2nd Term Ist sem. x(Tue.) x(Wed.) 2nd sem. → x Common Elective English Presentation Skills 2 1 · 2 1 Newly-Established Nobuhara 0 ★	take this subject.									
Common Elective Advanced Safety and Information Security 2 1 1 · 2 2 Safety Common Elective Tecnhological English 2 1 · 2 2 Change of Term Change in Notes Column 1st & 2nd Term → 2nd Term Common Elective Tecnhological English 2 1 · 2 1 · 2 Change of Term Change in Notes Column 1st & 2nd Term → 2nd Term Common Elective English Presentation Skills 2 1 · 2 1 Newly-Established Nobuhara ① ★	Students who									
Common Elective Tecnhological English 2 1 · 2 1 · 2 Change of Term Change in Notes Column 1st & 2nd Term → 2nd Term Common Elective English Presentation Skills 2 1 · 2 1 · 2 Newly-Established Nobuhara ① ★	enrolled in and									
Image: Common Elective Technological English 2 1 · 2 1 · 2 Change of Term Change in Notes Column 1st & 2nd Term → 2nd Term 1st sem. $right (Tue.) \star (Wed.)$ 2nd sem. → \star Common Elective English Presentation Skills 2 1 · 2 1 Newly-Established Nobuhara ① ★	before AY 2023 can									
Common Elective Tecnhological English 2 1 · 2 Change of Term Change in Notes Column Ist & 2nd Term→2nd Term Ist & 2nd Term→2nd Term Common Elective English Presentation Skills 2 1 · 2 1 Newly-Established Nobuhara 0 ★	take this subject.									
Common Elective English Presentation Skills 2 1 · 2 1 Newly-Established Nobuhara 0 ★	N/A									
Common Elective English Presentation Skills 2 1 · 2 1 Newly-Established • Nobuhara	,									
Common Elective English Presentation Skills 2 1 · 2 1	Students who									
	enrolled in and									
	before AY 2023 can									
	take this subject.									
Major Elective Advanced Global Innovation 1 1 · 2 0 Discontinuted	N/A									
Major Elective Advanced Global Innovation 2 1 · 2 0 Discontinuted	N/A									
Major Elective Educational 1 · 2 0 Discontinuted	N/A									
Advanced Gi Magement Discontinuted										
Major Elective Study 1 1 · 2 0 Discontinued	N/A									
Major Elective Advanced GI Management 1 + 2 0 Discontinuted	N/A									
	11/7									
Doctoral Program (Information Science and Control Engineering)										
Major Elective Advanced Business Strategy 2 1~3 1 Discontinuted	N/A									
Major Elective Advanced safety on Fire and 2 1~3 1 Discontinuted	N/A									
Doctoral Program (Energy and Environment Science)										
Major Floating Advanced Cource for Nuclear 2 1 2 1 Discontinuted	N/A									
Major Elective Energy Management 2 1~3 1	N/A									
Newly-Established Takahashi(Kazumasa)	Students who									
Advanced Ion Beam	enrolled in and									
Common Elective Engineering 2 $1 \sim 3$ 1	before AY 2023 can									
	take this subject.									
Doctoral Program (Integrated Bioscience and Technology)										
Major Elective Advanced Sports Engineering 2 1~3 2 Discontinuted	N/A									
and Human Dynamics	11/7									
Nuclear System Satety Regulatory Course										
The class period for this course will be the	1									
Same as the thermal Hudraulies in Nuclear	1									
Major Elective Reactors 1 1~2 2 Change in Notes Column Network Postance Course which will be	N/A									
Indicat reactive Design, which who are a constructed in a construction of the construc										
2024	1									