					Maste	er's Cou	ırse											
		Subject Number		[Diploma Policy] DP1. To acquire the expertise and skills to understand the broad basic concepts of advanced science and technology fields (information science and engineering, biological science, material science and engineering, and their interdisciplinary fields) from a holistic and comprehensive point of view to be able to pursue problem solving. DP2. To acquire the skills to set an agenda and topic in a specific field to conduct research or technical development, as well as the														
				ability to apply these to interdisciplinary research and development in other fields. DP3. To acquire global communication skills and a holistic perspective, and the ability to exercise leadership in research and development in advanced science and technology fields.														
				DP4.To	acquire	nigh ethic	al and sci	entific per	spectives									
	Category				DP5. The master's thesis, special extended essay, or extended essay written produces results that contribute to advanced science and technology academically or in application.													
Subject Type				CP1. Into technolo CP2. Sub science a CP3. Sub CP4. PBL and to fo CP5. Sub CP6. Thr	gy and ho ojects with and technojects to p subjects oster a ser ojects to in	subjects listic com balance loogy and rovide high to develop se of cha mprove the peration v	prehension d content I to develonghly special p the abilifullenge the present with indus	ng the ger on for studer op compre alized kno ty to grass tation and stry and go ocietal act	nts from on thensive unwiedge con to issues con communication	liverse ac inderstan incerning ompreher	ademic boding. advanceousively, to	d science discover	ds to provi and techr and solve active pro	de basic k nology problems ofession all	nowledge in cooper y in societ	of advance	ced n others,	
				CP7. Sub	ojects to i	nprove th	ie commu	unication :	skills requ				neers, En	glish com	municatio	n skills fo	r	
				CP8. Sub The lea	ojects to e arning ou	nhance t	he ethical each of t	thinking these subj	and the p	erspective	es of socie	tal trends						
				experiments, practical work, etc. CP9. Importance is placed on active engagement in research tasks that contribute to advanced science and technology academically or in application to write a master's thesis, a special extended essay, or an extended essay through seminars and														
					research guidance. Through this, the acquisition of research or technology development skills are achieved and the spirit of challenge, well-roundedness, interdisciplinary understanding, and ethics that will contribute to leading the next generation of													
								fostered.										
		1001	技術と倫理 Technology and Professional Ethics	DP1	DP2	DP3	DP4	DP5	CP1	CP2	CP3	CP4	CP5	CP6	CP7	CP8	CP9	
		1002	科学哲学 Philosophy of Science			0	0									0		
		1003	科学コミュニケーション Science Communication			0	0									0		
		1004	知的財産権 Intellectual Property Right			0	0							0			ļ	
		1019	知的財産権演習 Exercise for Intellectual Property Rights プロフェッショナルコミュニケーション I Professional			0	0							0				
		1010	Communication I			0									0			
ects		1011	プロフェッショナルコミュニケーションI Professional Communication II			0									0			
General Subjects	_	1012	アカデミックディスカッション Academic Discussion			0									0			
eral		1013	リサーチプレゼンテーション Research Presentation			0									0		ļ	
Ger		1014	リサーチライティング Research Writing アドバンスドリサーチライティング Advanced Research Writing			0									0			
		1016	日本文化 Japanese Culture			0									0			
		1035	インテンシブ日本語 I Intensive Japanese Course I			0									0			
		1036	インテンシブ日本語 I Intensive Japanese Course II			0									0			
		1018	日本語 II Japanese Course II			0									0		<u> </u>	
		1023 1024	アカデミックボランティア I Academic Volunteer I アカデミックボランティア II Academic Volunteer II		0	0							0					
	Introduction Subjects	2001	情報理工学序論 Introduction to Information Science and Engineering	0					0									
		2009	先端デジタル技術序論 Introduction to Advanced Digital Technologies	0					0									
	oducti	2003	バイオサイエンス序論 Introduction to Biological Science	0					0									
	Intro	2005	物質理工学序論 Introduction to Materials Science and Engineering	0					0									
		3031	情報科学基礎 I Fundamentals of Information Science I	0						0								
		3032	情報科学基礎 II Fundamentals of Information Science II	0						0								
		3002	プログラミング演習 Programming Course	0						0								
		3012	分子生物学 Molecular Biology 細胞膜と物質輸送 Call Mambranes and Transport	0						0		1	ļ				ļ	
		3013 3014	細胞膜と物質輸送 Cell Membranes and Transport 細胞の情報伝達 Cell Signaling	0						0	<u> </u>	-	-	-			₩	
		3015	微生物科学 Microbial Science	0						0							<u> </u>	
		3016	植物科学 Plant Science	0						0								
		3017	バイオメディカルサイエンス Biomedical Science	0						0								
		3018	細胞骨格と細胞周期 Cytoskeleton and Cell Cycle	0						0		1	1				ļ	
		3019	適伝学と幹細胞 Genetics and Stem Cell Biology 適伝子クローニングとDNA解析 Gene Cloning and DNA Analysis	0						0								
		3033	先端バイオサイエンス概論 Introduction to NAIST Bioscience	0						0								
		3046	遺伝子・ゲノム概論 Introduction to Genes and Genomes	0						0								
	ects	3021 3022	物質科学解析 Mathematical Analyses for Materials Science 量子力学 Quantum Mechanics	0						0		1	1				 	
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	Basic	3024	物質化学 Core Physical Chemistry I															
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3025 物理化学 Physical Chemistry 3026 現代固体物理学 Core Solid State Physics I 3027 現代半導体物性 Core Solid State Physics II 有機反応化学 Core Molecular Science I 3028 3029 反応解析化学 Core Molecular Science II ブリーンケミカル ―生体材料化学 Biomaterials Chemistry 3037 グリーンマテリアル 一半導体材料 Semiconductor Materials 3035 光電子工学 Optoelectronics 有機・高分子化学 Organic Synthesis and Polymer Science 3036 データサイエンス基礎 Fundamentals of Data Science 3039 0 0 人体の構造機能と疾病 Applying Chemistry to Society 3041 0 0 3042 化学と環境 Cell Biology by the number 0 0 数でとらえる細胞生物学(Programming for Digital Green 3043 Technology 0 0 デジタルグリーンプログラミング演習 Data Processing for Digital 3044 0 0 Green Technology 3045 デジタルグリーンデータ処理演習 Subject name 0 0 ソフトウェア工学 Software Engineering 4006 サイバーセキュリティ Cyber Security 伝送理論 Transmission Theory 4091 グリーンコンピューティング基盤 Green Computing Platforms 4136 0 0 4093 アルゴリズム設計論 Advanced Algorithm Design システム・リソース・マネージメント Systems Resource 4094 Management 4038 ハードウェアセキュリティ Hardware Security 4116 ロボット学習・制御 Robot Learning and Control 0 0 4096 ノフトウェアシステム構築論 Software Systems Development 4008 コンピュータ・ネットワーク Computer Network 4003 ユビキタスシステム Ubiquitous Systems 4034 系列データモデリング Sequential Data Modeling 4097 視覚メディア処理 I Visual Media Processing I 4098 視覚メディア処理 II Visual Media Processing II ニータマイニング Data Mining 多次元信号処理 Multidimensional signal processing 4100 4101 ロボティクス Robotics 4102 自然言語処理 Natural Language Processing 4103 人間情報処理 Human Information Processing 4104 数理生命科学 Mathematical Models in Biology 4117 ソーシャル・コンピューティング Social Computing 0 0 データサイエンス論 Data Science 4105 情報科学特別講義A Special Lecture in Information Science A 4029 4030 情報科学特別講義B Special Lecture in Information Science B 情報科学特別講義C Special Lecture in Information Science C 4031 4032 情報科学特別講義D Special Lecture in Information Science D システム要求工学 System Requirements Engineering 4086 4087 システム開発プロセス Systems Development Process 情報セキュリティ運用リテラシー I Lecture of Information 4042 Security Management Literacy I 情報セキュリティ運用リテラシーI Lecture of Information 4043 ecurity Management Literacy II Technology 情報セキュリティ演習A Exercise for Information Security A 4045 情報セキュリティ演習B Exercise for Information Security B and 情報セキュリティ演習C Exercise for Information Security C 4046 イノベーション創出基礎 Fundamentals of innovation 4118 Science イノベーション創出特論 I Advanced lecture on creation of 4119 0 innovation I イノベーション創出特論 I Advanced lecture on creation of 4120 0 0 0 0 nnovation II イノベーション創出特論Ⅲ Advanced lecture on creation of 0 0 0 0 4121 nnovation III イノベーション創出特論IV Advanced lecture on creation of 0 0 0 0 4122 イノベーション創出特論 V Advanced lecture on creation of 4123 0 0 0 0 nnovation V グローバル・イノベーション共創 Co-creation of Global Innovation 0 0 0 グリーン科学の産業展開 Development of Bioscience into 4125 Industry 0 0 lized Subje 4137 生命科学特別講義 Special Lecture on Life Sciences 0 0 バイオサイエンスの先端技法 Advanced Techniques in 4055 Rioscience 4056 植物発生生理学 Plant Developmental Physiology 動物発生学 Developmental Biology of Animals 4057 薬理・病態生化学 Pharmacology and Pathological Chemistry 4058 0 4059 免疫学 Immunology 4060 ゲノム・がん生物学 The Biology of Genome and Cancer サバイバル生物学-科学論文とのつきあい方- Survival Biology 4106 now to read scientific papers 国際バイオ特論A International Forefront in Bioscience A 4063 国際バイオ特論B International Forefront in Bioscience B データサイエンスによる生物学 Biology with data science 4134 0 0 4089 科学的発見の思考法 Logic in Scientific Discovery 応用生命科学 Applied Life Science 4107

		4110	バイオサイエンスにおける統計と数理 Statistics and Mathematics													
		4110	in Bioscience	0						0						i
		4126	バイオイメージング Bioimaging	0						0						
			バイオサイエンスにおける先進トピックスA Advanced Topics in													
		4111	Biological Science A	0						0						i
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	1		Biological Science B	0						0						
		4113	先端バイオゼミナール I Advanced Bioscience Seminar I	0						0						
		4114	先端バイオゼミナール II Advanced Bioscience Seminar II	0						0						
		4066	電子原子物性特論 Electronic Properties and Atomic Structures													i
		4000	of Solids and Surfaces Special	0						0						i
		4068	光・情報素子工学特論 Light and Information Devices Special	0						0						
		4070	生体分子科学特論 Biomolecular Science	0						0						
		4072	分子フォトサイエンス特論 Molecular Photo-science	0						0						
		4067	フォトニクス特論 Photonics Special	0						0						
			量子情報・エネルギー材料特論 Materials Science for Quantum													
		4069	Information and Energy Conversion	0						0						i
		4115	有機金属触媒化学特論 Organometallic Chemistry													-
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		4073	高分子化学特論 Polymer Chemistry	0	 	<u> </u>				0						—
		4074	マテリアルインフォマティクス特論 Materials Informatics	0	!	ļ	ļ			0						
		4076	物質科学特論A Materials Science Special A	0						0						
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		4127	物質科学特論E Materials Science Special E	0						0						
			先端科学技術のガバナンス Perspectives on Governing Emerging													
		4128	Technologies			0	0			0						
		4129	グリーン経営学 I Marketing for Social Change I	0						0						
		4130	グリーン経営学 II Marketing for Social Change II	0						0						
		4131	グリーン経済学 I Markets and the Environment I	0	1					0						
		4132	グリーン経済学II Markets and the Environment II	0	1					0						-
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		4133	グリーンイノベーションにおける倫理的・法的・社会的課題													
			Ethical, Legal and Social Implications of Green Innovation			0	0			0						
		4135	温暖化対策技術特論 Global Warming MitigationTechnology													
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		4138	哲学と社会正義 Philosophy and Social Justice		<u></u>		0	<u> </u>		0	L	L	<u> </u>	<u> </u>		L1
		4139	デジタルグリーンイノベーション特論 Special Lecture on Digital						_		-	-				
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		5005	バイオサイエンスPBLI Biological Sciences PBL I		0	0					0	-				
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arch	-	5014	修士論文研究 Research Thesis	0	0	<u> </u>	ļ	0					ļ			0
Sese		6008	特別課題研究 Specific Resarch Project	0	0	ļ	ļ	0								0
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Doctoral course Diploma Policy1 DP1. To acquire sophisticated expertise and skills to understand the broad theory and structures of advanced science and technology fields (information science and engineering, biological science, material science and engineering, and their interdisciplinary fields) from a holistic and omprehensive point of view to challenge solving difficult problems. DP2. To acquire the skills and the spirit of challenge to actively and independently promote the identification and resolution of problems in a specific field, as well as to lead new interdisciplinary research and development in other fields. DP3. To acquire sophisticated global communication skills and a holistic perspective, and the ability to exercise international leadership in a global environment in advanced science and technology field research and development. DP4. To acquire high ethical and scientific person tives in research and development in advanced science and technology fields. DP5. The doctoral thesis written produces particularly excellent research results that contribute to advanced science and technology academically or n application. CP1. Subjects teaching state-of-the-art expertise in information science, biological science, materials science, and their interdisciplinary fields. CP2. Subjects to foster the ability to actively envision relationships with society, including broad perspectives based on interdisciplinary knowledge, rehensive understanding, and career planning. CP3. Subjects to develop the ability to actively and independently plan and execute research projects, to solve problems, and pursue the boundaries science and technology. CP4. Subjects focused on the acquisition of the presentation and communication skills necessary for successful international activity The learning outcomes of each of these subjects shall be evaluated based on the results of written tests, reports, exercises, experiments, practical work, etc. CP5. Importance is placed on active engagement in sophisticated research tasks that contribute to advanced science and technology academically or n application to write a doctoral thesis through seminars and research guidance. Through this, the acquisition of the ability to actively and independently identify and resolve problems in a specific field are achieved and the spirit of challenge, well-roundedness, interdisciplinary nderstanding, and ethicality that will globally contribute to leading next generation advanced science and technology are fostered. Learning utcomes are evaluated by three or more supervising professors Subject Type Subject Name CP3 CP4 DP1 DP2 DP3 DP4 DP5 CP1 CP2 CP5 英語上級B Advanced English B 0 0 英語上級C Advanced English (英語上級D Advanced English D 0 0 英語上級E Advanced English E 0 0 インテンシブ日本語 I Intensive Japanese Course I 0 0 0 インテンシブ日本語 II Intensive Japanese Course II 日本語 II Japanese Course II 0 海外英語研修 I Overseas English Training I 0 海外英語研修 II Overseas English Training II 海外英語研修Ⅲ Overseas English Training III 0 0 国際研修 I International Training I 0 0 国際研修 II International Training II 0 0 国際研修Ⅲ International Training III 0 0 0 0 研究留学 I Study Abroad I 0 0 研究留学 II Study Abroad II 研究留学Ⅲ Study Abroad III Subjects for 国際ワークショップ企画演習 Seminar for International Workshop Planning 0 0 0 プロジェクトマネジメント I Project Management I 0 プロジェクトマネジメント II Project Management II 0 0 0 0 プロジェクトマネジメントIII Project Management III 情報理工学特別講義 Special Lectures in Information Science and Engineering 0 「イオサイエンス特別講義 Special Lectures in Biological Scien 物質理工学特別講義 Special Lectures in Materials Science and Engineering 0 データサイエンス特別講義 Special Lectures in Data Scie デジタルグリーンイノベーション特別講義 Special Lectures in Digital Green-0 0 innovation イノベーションマネジメントA Innovation Management A イノベーションマネジメントB Innovation Management B 0 キャリアマネジメント1 Career Management 1 0 0 キャリアマネジメント2 Career Management 2 0 0 0 0 0 0 0 0 yects for independent 先進ゼミナール Research Status Hearing research abilities 博士論文研究 I Doctoral Research I 博士論文研究 II Doctoral Research II 0 0 0 0 博士論文研究Ⅲ Doctoral Research III 0 博士論文研究IV Doctoral Research IV 0 0 0 0

博士論文研究 V Doctoral Research V