Study Guidelines

Academic Year 2024

Shimane University is Growing with its People and Community

Graduate School of Natural Science and Technology of Shimane University

Master's Degree Course

I. Study Guidelines

1. Basic Policy on Educational Guidance

The Master Course of the Graduate School of Natural Science and Technology facilitates a broad general education in the natural sciences, which was not previously possible with the two-graduate school system (the Interdisciplinary Graduate School of Science and Engineering and the Graduate School of Life and Environmental Science); utilizes the merits of wide-ranging academic fields including science, engineering and bioresource science, and cultivates human resources with high-level specialist knowledge and an interdisciplinary perspective who are abundantly creative, contributing to the development of regional society.

2. Academic Advisor

At the time of entering the Master Course, one main academic advisor will be appointed to each student. Academic advisors carry out guidance for students' registration of Class Subjects and research guidance. In addition, one or more co-advisors shall be appointed, and among these co-advisors, at least one shall be a faculty member from a different course within the same major, or from a different major.

3. Class Registration Criteria and Class Registration Method

Please register your Class Subjects in accordance with the following Registration Criteria, and complete 30 or more credits within two years. **Class Subjects and number of credits are as indicated in "II. Method of Credit Acquisition".**

○ Major in Science and Engineering

Cours / Subject Group	Minimum No. of Acquired Credits									
	Advanced Materials Science and Engineering Course		Mathematics Course		Information Systems Design and Data Science Course		Physics and Applied Physics Course		Mechanical, Electrical and Electronic Engineering Course	
	Required	Optional	Required	Optional	Required	Optional	Required	Optional	Required	Optional
Common Subject (Fundamentals of Natural Science and Technology)	2	—	2	—	2	—	2	—	2	—
Major Subject	—	16	—	16	—	16	—	16	—	16
Thesis Seminar	4	—	4	—	4	—	4	—	4	—
Thesis Research	8	—	8	—	8	—	8	—	8	—
Total	30		30		30		30		30	

○Major in Science of Environmental Systems

Subject Group \ Course	Minimum No. of Acquired Credits							
	Earth Science Course		Environmental and Sustainability Sciences Course		Chemistry Course		Architectural Design Course	
	Required	Optional	Required	Optional	Required	Optional	Required	Optional
Common Subject (Fundamentals of Natural Science and Technology)	2	—	2	—	2	—	2	—
Major Subject	—	16	—	16	—	16	—	16
Thesis Seminar	4	—	4	—	4	—	4	—
Thesis Research	8	—	8	—	8	—	8	—
Total	30		30		30		30	

○Major in Agricultural and Life Sciences

Subject Group \ Course	Minimum No. of Acquired Credits			
	Life Sciences Course		Agricultural and Forest Sciences Course	
	Required	Optional	Required	Optional
Common Subject (Fundamentals of Natural Science and Technology)	2	—	2	—
Major Subject	—	16	—	16
Thesis Seminar	4	—	4	—
Thesis Research	8	—	8	—
Total	30		30	

4. Semesters

The semesters of the Graduate School of Natural Science and Technology are as follows.

Semester 1 First half of first year
Semester 2 Second half of first year
Semester 3 First half of second year
Semester 4 Second half of second year

5. Class Registration Plan

Please formulate your own class registration plan for the entire four semesters by deciding on which Class Subjects you will take for each major and course, based on Appended Table 1.

Furthermore, please write a "Research Proposal" together your academic advisor and submit it to the Academic Affairs Division (Student Center) at the beginning of Semesters 1 and 3, and submit a "Progress Report" to the Academic Affairs Division at the end of Semesters 1, 2 and 3. Please engage in your research in accordance with your plans.

6. Class Registration Procedures

Please consult with your academic advisor to decide on the Class Subjects you will take from the "List of Courses" (https://www.natural.shimane-u.ac.jp/student/jyugyokamokuichiran.html), and carry out class registration procedures.

Furthermore, details of the class registration procedures will be published via bulletin, so please make sure to check. Additionally, you will not be able to register for any Class Subjects for which you have not carried out class registration procedures.

(1) Students who entered in Spring (April)

Class registration procedures are carried out online, from the opening day of online class registration. Please also carry out class registration confirmation and class change procedures within the online class registration time period. The Class Subjects for Semesters 1 and 2 are registered during Semester 1, and the Class Subjects for Semesters 3 and 4 are registered during Semester 3.

(2) Students who entered in Autumn (October)

For students who entered in Autumn (October), Semester 1 will start in October. Class registration procedures are carried out in Semesters 1, 2 and 4. The Class Subjects for Semester 1 are registered during Semester 1, the Class Subjects for Semesters 2 and 3 are registered during Semester 2, and the Class Subjects for Semester 4 are registered during Semester 4.

If you are unable to carry out class registration via the Academic Affairs Information System, please collect a Class Registration Form from the Academic Affairs Division (Student Center), and submit it before the specified date.

(3) Registration of Intensive Lectures

The implementation time and registration period of intensive lectures given by commissioned teachers, will be published via bulletin, so please carry out registration procedures at the Academic Affairs Division each time. Please note that you cannot register via the Academic Affairs Information System.

For intensive lectures given by teachers on campus, please register via the Academic Affairs Information System.

(4) Application of Article 14 of the Graduate School Establishment Standards

In cases where part-time students, who have entered the Graduate School under the application of Article 14 of the Graduate School Establishment Standards, desire classes to be held in evenings, etc., please consult with your academic advisor and the teacher of the class before carrying out registration procedures.

7. Certification of Course Completion.

In order to complete the Master Course, students must, in principle, have been enrolled in the Master Course for two years or more, have acquired 30 credits or more, and after having received the necessary research guidance, have passed the assessment and examinations for the Thesis (Master's Thesis), etc.

8. Thesis (Master's Thesis) and Degree

(1) For submission of the Thesis (Master's Thesis) or Research Results, please see the Degree Regulations of Shimane University: Detailed Regulations for the Graduate School of Natural Science and Technology, Master Course. For details, please receive instruction from your main academic advisor.

(2) Persons who have completed the Master Course shall be awarded a Master's Degree (in Science, Engineering, or Life and Environmental Science). Regarding the name of your degree (Science, Engineering, or Life and Environmental Science), please apply after confirming with your main academic advisor.

II. Method of Credit Acquisition

理工学専攻　英語による留学生プログラム
　先端材料工学コース Advanced Materials Science and Engineering Course

科目区分 Subject Group	授業科目 Subject	Credit Required	Credit Optional	備考 Remarks Column
研究科共通 Common Subject	Fundamentals of Natural Science and Technology 自然科学論	2		研究科共通2単位，セミナー4単位，特別研究8単位を修得し，合計30単位以上修得すること。 Students must acquire 2 credits from Common Subject, 4 credits from Thesis Seminar and 8 credits from Thesis Research, for a total of at least 30 credits.
	Introduction to the Responsible Conduct of Research 責任ある研究活動入門		1	
専門科目 Major Subject	Metallic Materials 金属材料学		2	
	Electronic Materials 電子材料学		2	
	Advanced Plasma Surface Interaction プラズマ・材料相互作用特論		2	
	Processing for Electronic Materials 電子材料プロセス概論		2	
	Properties of Superconducting Materials 超伝導概論		2	
	Semiconductor Quantum Physics 半導体量子物性工学		2	
	Advanced Electronic Materials Design 先端電子材料設計特論		2	
	Semiconductor Photonics Engineering 半導体フォトニクス工学		2	
	Thin-film Materials and Devices 薄膜材料デバイス工学		2	
	Applied Thermo-fluid Dynamics 応用熱流体工学		2	
	Practical Mechanical Design 実用機械設計		2	
	Mobile Network モバイルネットワーク		2	
	Advanced Topics on Knowledge Acquisition 知識獲得特論		2	
	Practical First-principles Calculation 実用第一原理計算特論		2	
	Introduction to semiconductor thin film technologies 半導体薄膜技術概論		2	
	Introduction to pair distribution function analysis 二体分布関数分析概論		2	
	Materials Science for Energy Technologies エネルギー材料科学		2	
	Advanced Applied Instrumental Analysis 応用機器分析特論		2	
	Advanced Organic Chemistry 有機化学特論		2	
	Polymeric Biomaterials 高分子バイオマテリアル特論		2	
	Advanced Bioengineering 生命工学特論		2	
	Introduction to Mathematics for Informatics 情報数学入門		2	
	Error Control Coding 誤り制御論		2	
	他専攻，及び専攻内他コースの留学生プログラム開講科目 Subjects offered in international student programs in other courses within the major and in other majors			

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
セミナー Thesis Seminar	Thesis Seminar Ⅰ-2 セミナーⅠ-2	1		
	Thesis Seminar Ⅰ-3 セミナーⅠ-3	1		
	Thesis Seminar Ⅰ-4 セミナーⅠ-4	1		
	Thesis Seminar Ⅰ-11 セミナーⅠ-11	1		
	Thesis Seminar Ⅱ-2 セミナーⅡ-2	1		
	Thesis Seminar Ⅱ-3 セミナーⅡ-3	1		
	Thesis Seminar Ⅱ-4 セミナーⅡ-4	1		
	Thesis Seminar Ⅱ-11 セミナーⅡ-11	1		
	Thesis Seminar Ⅲ-2 セミナーⅢ-2	1		
	Thesis Seminar Ⅲ-3 セミナーⅢ-3	1		
	Thesis Seminar Ⅲ-4 セミナーⅢ-4	1		
	Thesis Seminar Ⅲ-11 セミナーⅢ-11	1		
	Thesis Seminar Ⅳ-2 セミナーⅣ-2	1		
	Thesis Seminar Ⅳ-3 セミナーⅣ-3	1		
	Thesis Seminar Ⅳ-4 セミナーⅣ-4	1		
	Thesis Seminar Ⅳ-11 セミナーⅣ-11	1		
特別研究 Thesis Research	Thesis Research Ⅰ-2 特別研究Ⅰ-2	2		
	Thesis Research Ⅰ-3 特別研究Ⅰ-3	2		
	Thesis Research Ⅰ-4 特別研究Ⅰ-4	2		
	Thesis Research Ⅰ-11 特別研究Ⅰ-11	2		
	Thesis Research Ⅱ-2 特別研究Ⅱ-2	2		
	Thesis Research Ⅱ-3 特別研究Ⅱ-3	2		
	Thesis Research Ⅱ-4 特別研究Ⅱ-4	2		
	Thesis Research Ⅱ-11 特別研究Ⅱ-11	2		
	Thesis Research Ⅲ-2 特別研究Ⅲ-2	2		
	Thesis Research Ⅲ-3 特別研究Ⅲ-3	2		
	Thesis Research Ⅲ-4 特別研究Ⅲ-4	2		
	Thesis Research Ⅲ-11 特別研究Ⅲ-11	2		

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
特別研究 Thesis Research	Thesis Research Ⅳ-2 特別研究Ⅳ-2	2		
	Thesis Research Ⅳ-3 特別研究Ⅳ-3	2		
	Thesis Research Ⅳ-4 特別研究Ⅳ-4	2		
	Thesis Research Ⅳ-11 特別研究Ⅳ-11	2		

理工学専攻　英語による留学生プログラム
数理科学コース Mathematics Course

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
研究科共通 Common Subject	Fundamentals of Natural Science and Technology 自然科学論	2		研究科共通2単位，セミナー4単位，特別研究8単位を修得し，合計30単位以上修得すること。 Students must acquire 2 credits from Common Subject, 4 credits from Thesis Seminar and 8 credits from Thesis Research, for a total of at least 30 credits.
	Introduction to the Responsible Conduct of Research 責任ある研究活動入門		1	
専門科目 Major Subject	Functional Analysis 関数解析		2	
	Advanced Algebra 代数学		2	
	Algebraic Topology 代数位相幾何学		2	
	Riemannian Geometry リーマン幾何学		2	
	Theory of Statistical Science 統計科学論		2	
	Differential Topology 微分位相幾何学		2	
	Infinite Dimensional Topology 無限次元位相幾何学		2	
	Lie Algebra リー代数		2	
	Homological Algebra ホモロジー代数		2	
	Numerical Approximation Methods 数値近似法		2	
	Finite Difference Methods for Differential Equations 微分方程式と有限差分法		2	
	Qualitative Theory of Ordinary Differential Equations 定性的微分方程式論		2	
	Stability Theory of Ordinary Differential Equations 微分方程式の安定性理論		2	
	Delay Differential Equations with Applications 応用遅延微分方程式論		2	
	Algebraic Combinatorics 代数的組合せ論		2	
	Convex and Nonlinear Functional Analysis 凸解析非線形関数解析		2	
	Elliptic Partial Differential Equations 楕円型偏微分方程式論		2	
	Hyperbolic Partial Differential Equations 双曲型偏微分方程式論		2	
	Parabolic Partial Differential Equations 放物型偏微分方程式論		2	
	Complex Analysis 複素関数論		2	
	Galois Cohomology ガロアコホモロジー		2	
	Numerical Calculation for Signal Processing 信号処理と数値解析		2	
	Mathematical Finance 金融数学		2	
	Mathematical Biology 数理生物学		2	
	他専攻，及び専攻内他コースの留学生プログラム開講科目 Subjects offered in international student programs in other courses within the major and in other majors			

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
セミナー Thesis Seminar	Seminar Ⅰ-1 セミナーⅠ-1	1		
	Seminar Ⅱ-1 セミナーⅡ-1	1		
	Seminar Ⅲ-1 セミナーⅢ-1	1		
	Seminar Ⅳ-1 セミナーⅣ-1	1		
特別研究 Thesis Research	Thesis Research Ⅰ-1 特別研究Ⅰ-1	2		
	Thesis Research Ⅱ-1 特別研究Ⅱ-1	2		
	Thesis Research Ⅲ-1 特別研究Ⅲ-1	2		
	Thesis Research Ⅳ-1 特別研究Ⅳ-1	2		

理工学専攻　英語による留学生プログラム
知能情報デザイン学コース Information Systems Design and Data Science Course

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
研究科共通 Common Subject	Fundamentals of Natural Science and Technology 自然科学論	2		研究科共通2単位，セミナー4単位，特別研究8単位を修得し，合計30単位以上修得すること。 Students must acquire 2 credits from Common Subject, 4 credits from Thesis Seminar and 8 credits from Thesis Research, for a total of at least 30 credits.
	Introduction to the Responsible Conduct of Research 責任ある研究活動入門		1	
専門科目 Major Subject	Mobile Network モバイルネットワーク		2	
	ICT Helping Individuals with Special Needs 障がい者・高齢者とICT		2	
	Knowledge Discovery and Data Mining 知識発見とデータマイニング		2	
	Program Analysis Methods プログラム解析技術		2	
	Advanced Topics on Knowledge Acquisition 知識獲得特論		2	
	Statistical Pattern Recognition 統計的パターン認識論		2	
	Information Logic 情報論理学		2	
	Advance Computer Arithmetic		2	
	Structural Equation Modeling in Statistics		2	
	Fundamentals of Multimedia Signal Processing マルチメディア信号処理概論		2	
	Informatics of Neuroethology 情報神経行動学		2	
	他専攻，及び専攻内他コースの留学生プログラム開講科目 Subjects offered in international student programs in other courses within the major and in other majors			
セミナー Thesis Seminar	Thesis Seminar Ⅰ-2 セミナーⅠ-2	1		
	Thesis Seminar Ⅱ-2 セミナーⅡ-2	1		
	Thesis Seminar Ⅲ-2 セミナーⅢ-2	1		
	Thesis Seminar Ⅳ-2 セミナーⅣ-2	1		
特別研究 Thesis Research	Thesis Research Ⅰ-2 特別研究Ⅰ-2	2		
	Thesis Research Ⅱ-2 特別研究Ⅱ-2	2		
	Thesis Research Ⅲ-2 特別研究Ⅲ-2	2		
	Thesis Research Ⅳ-2 特別研究Ⅳ-2	2		

理工学専攻　英語による留学生プログラム
物理・応用物理学コース Physics and Applied Physics Course

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
研究科共通 Common Subject	Fundamentals of Natural Science and Technology 自然科学論	2		研究科共通2単位，セミナー4単位，特別研究8単位を修得し，合計30単位以上修得すること。 Students must acquire 2 credits from Common Subject, 4 credits from Thesis Seminar and 8 credits from Thesis Research, for a total of at least 30 credits.
	Introduction to the Responsible Conduct of Research 責任ある研究活動入門		1	
専門科目 Major Subject	Metallic Materials 金属材料学		2	
	Electronic Materials 電子材料学		2	
	Advanced Plasma Surface Interaction プラズマ・材料相互作用特論		2	
	Processing for Electronic Materials 電子材料プロセス概論		2	
	Low Temperature Physics 低温物理学		2	
	Physics on Magnetic Materials 磁性物理学		2	
	Magnetism in Metals 金属化合物の磁性		2	
	Properties of Superconducting Materials 超伝導概論		2	
	Advanced Lectures on Electronic States in Solid State Physics 電子物性特論		2	
	Theory of Electrons in Solids 固体電子論		2	
	Statistical Field Theory 統計場の理論		2	
	Advanced Electronic Materials Design 先端電子材料設計特論		2	
	Semiconductor Photonics Engineering 半導体フォトニクス工学		2	
	Thin-film Materials and Devices 薄膜材料デバイス工学		2	
	Vibrational Spectroscopy 振動分光学		2	
	Practical First-principles Calculation 実用第一原理計算特論		2	
	Introduction to semiconductor thin film technologies 半導体薄膜技術概論		2	
	Intoroduction to physical property measurements 物性測定技術概論		2	
	Many body theory in Condensed matter physics 多体電子特論		2	
	他専攻，及び専攻内他コースの留学生プログラム開講科目 Subjects offered in international student programs in other courses within the major and in other majors			
セミナー Thesis Seminar	Thesis Seminar Ⅰ-3 セミナーⅠ-3	1		
	Thesis Seminar Ⅱ-3 セミナーⅡ-3	1		
	Thesis Seminar Ⅲ-3 セミナーⅢ-3	1		
	Thesis Seminar Ⅳ-3 セミナーⅣ-3	1		

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
特別研究 Thesis Research	Thesis Research Ⅰ-3 特別研究Ⅰ-3	2		
	Thesis Research Ⅱ-3 特別研究Ⅱ-3	2		
	Thesis Research Ⅲ-3 特別研究Ⅲ-3	2		
	Thesis Research Ⅳ-3 特別研究Ⅳ-3	2		

理工学専攻　英語による留学生プログラム
機械・電気電子工学コース Mechanical, Electrical and Electronic Engineering Course

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
研究科共通 Common Subject	Fundamentals of Natural Science and Technology 自然科学論	2		研究科共通2単位，セミナー4単位，特別研究8単位を修得し，合計30単位以上修得すること。 Students must acquire 2 credits from Common Subject, 4 credits from Thesis Seminar and 8 credits from Thesis Research, for a total of at least 30 credits.
	Introduction to the Responsible Conduct of Research 責任ある研究活動入門		1	
専門科目 Major Subject	Practical Mechanical Design 実用機械設計		2	
	Robotics ロボット工学特論		2	
	Solid Mechanics 固体力学特論		2	
	Advanced Dynamics of Machinery 機械力学特論		2	
	Special Lecture on Human Interface ヒューマンインタフェース特論		2	
	Acoustical Engineering 音響工学		2	
	Atmospheric Remote Sensing 電磁波大気計測論		2	
	Optical Metrology 光応用計測論		2	
	Fundamentals of Photonics フォトニクス基礎		2	
	Coherent Optical Engineering コヒーレント光工学		2	
	Statistical Signal Processing 統計的信号処理		2	
	Applied Thermo-fluid Dynamics 応用熱流体工学		2	
	Power Converters and Control for Renewable Energy Systems 再生可能エネルギーシステム用の電力変換器と制御		2	
	Coherent Optics and Holography コヒーレント光学とホログラフィ		2	
	他専攻，及び専攻内他コースの留学生プログラム開講科目 Subjects offered in international student programs in other courses within the major and in other majors			
セミナー Thesis Seminar	Thesis Seminar Ⅰ-4 セミナーⅠ-4	1		
	Thesis Seminar Ⅱ-4 セミナーⅡ-4	1		
	Thesis Seminar Ⅲ-4 セミナーⅢ-4	1		
	Thesis Seminar Ⅳ-4 セミナーⅣ-4	1		
特別研究 Thesis Research	Thesis Research Ⅰ-4 特別研究Ⅰ-4	2		
	Thesis Research Ⅱ-4 特別研究Ⅱ-4	2		
	Thesis Research Ⅲ-4 特別研究Ⅲ-4	2		
	Thesis Research Ⅳ-4 特別研究Ⅳ-4	2		

環境システム科学専攻　英語による留学生プログラム
地球科学コース　Earth Science Course

科目区分 Subject Group	授業科目 Subject	Credit Required	Credit Optional	備考 Remarks Column
研究科共通 Common Subject	Fundamentals of Natural Science and Technology 自然科学論	2		研究科共通2単位，セミナー4単位，特別研究8単位を修得し，合計30単位以上修得すること。 Students must acquire 2 credits from Common Subject, 4 credits from Thesis Seminar and 8 credits from Thesis Research, for a total of at least 30 credits.
	Introduction to the Responsible Conduct of Research 責任ある研究活動入門		1	
専門科目 Major Subject	Metamorphic Petrology 変成岩岩石学特論		2	
	Mineral Science of Transition Elements-bearing Minerals 鉱物学特論		2	
	Advanced Structural Geology 構造地質学特論		2	
	Advanced Petrochemistry 岩石化学特論		2	
	Environmental Paleontology 環境古生物学		2	
	Sedimentary Geology 堆積地質学		2	
	Biostratigraphy 生層序学		2	
	Theory of Global Environmental Change 地球環境変動論		2	
	Groundwater Hydraulics 地殻流体工学		2	
	Geotechnical Analysis 地盤解析学		2	
	Science of Fossil Fuel 有機地球化学特論		2	
	Resource Geology 資源地質学特論		2	
	Advanced Volcanology 火山学特論		2	
	Marine Environmental Science 海洋環境科学特論		2	
	Coastal Geoenvironmental Science 海岸・沿岸地質環境学		2	
	Quaternary Environmental Science 第四紀環境学		2	
	Global tectonics グローバルテクトニクス特論		2	
	Special Lecture in Earth and Geoenvironmental Science Ⅰ 地球・地球環境科学特別講義Ⅰ		2	
	Special Lecture in Earth and Geoenvironmental Science Ⅱ 地球・地球環境科学特別講義Ⅱ		4	
	Excursions in Earth and Geoenvironmental Science 地球・地球環境学エクスカーション		2	
	Seminars on Current Topics and Methods Ⅰ 英語による発表Ⅰ		2	
	Seminars on Current Topics and Methods Ⅱ 英語による発表Ⅱ		2	
	Special Practice Ⅰ 特別実習Ⅰ		1	

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
専門科目 Major Subject	Special Practice Ⅱ 特別実習Ⅱ		2	
	他専攻，及び専攻内他コースの留学生プログラム開講科目 Subjects offered in international student programs in other courses within the major and in other majors			
セミナー Thesis Seminar	Thesis Seminar Ⅰ-5-1 セミナーⅠ-5-1（火成岩岩石学）	1		
	Thesis Seminar Ⅰ-5-2 セミナーⅠ-5-2（石油地質学・有機地球化学）	1		
	Thesis Seminar Ⅰ-5-3 セミナーⅠ-5-3（層位・古生物学）	1		
	Thesis Seminar Ⅰ-5-6 セミナーⅠ-5-6（堆積学）	1		
	Thesis Seminar Ⅰ-5-7 セミナーⅠ-5-7（資源地質学・地質年代学）	1		
	Thesis Seminar Ⅰ-5-8 セミナーⅠ-5-8（生層序学）	1		
	Thesis Seminar Ⅰ-5-9 セミナーⅠ-5-9（水文地質学）	1		
	Thesis Seminar Ⅰ-5-10 セミナーⅠ-5-10（水域環境地質学）	1		
	Thesis Seminar Ⅰ-5-11 セミナーⅠ-5-11（変成岩岩石学）	1		
	Thesis Seminar Ⅰ-5-12 セミナーⅠ-5-12（岩石鉱物学）	1		
	Thesis Seminar Ⅰ-5-13 セミナーⅠ-5-13（火山学）	1		
	Thesis Seminar Ⅰ-5-14 セミナーⅠ-5-14（古環境・古生態学）	1		
	Thesis Seminar Ⅰ-5-15 セミナーⅠ-5-15（構造地質学）	1		
	Thesis Seminar Ⅰ-5-17 セミナーⅠ-5-17（土質力学）	1		
	Thesis Seminar Ⅰ-5-18 セミナーⅠ-5-18（環境微古生物学）	1		
	Thesis Seminar Ⅰ-5-20 セミナーⅠ-5-20（グローバルテクトニクス）	1		
	Thesis Seminar Ⅱ-5-1 セミナーⅡ-5-1（火成岩岩石学）	1		
	Thesis Seminar Ⅱ-5-2 セミナーⅡ-5-2（石油地質学・有機地球化学）	1		
	Thesis Seminar Ⅱ-5-3 セミナーⅡ-5-3（層位・古生物学）	1		
	Thesis Seminar Ⅱ-5-6 セミナーⅡ-5-6（堆積学）	1		
	Thesis Seminar Ⅱ-5-7 セミナーⅡ-5-7（資源地質学・地質年代学）	1		
	Thesis Seminar Ⅱ-5-8 セミナーⅡ-5-8（生層序学）	1		
	Thesis Seminar Ⅱ-5-9 セミナーⅡ-5-9（水文地質学）	1		
	Thesis Seminar Ⅱ-5-10 セミナーⅡ-5-10（水域環境地質学）	1		

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
セミナー Thesis Seminar	Thesis SeminarⅡ-5-11 セミナーⅡ-5-11（変成岩岩石学）	1		
	Thesis SeminarⅡ-5-12 セミナーⅡ-5-12（岩石鉱物学）	1		
	Thesis SeminarⅡ-5-13 セミナーⅡ-5-13（火山学）	1		
	Thesis SeminarⅡ-5-14 セミナーⅡ-5-14（古環境・古生態学）	1		
	Thesis SeminarⅡ-5-15 セミナーⅡ-5-15（構造地質学）	1		
	Thesis SeminarⅡ-5-17 セミナーⅡ-5-17（土質力学）	1		
	Thesis SeminarⅡ-5-18 セミナーⅡ-5-18（環境微古生物学）	1		
	Thesis SeminarⅡ-5-20 セミナーⅡ-5-20（グローバルテクトニクス）	1		
	Thesis SeminarⅢ-5-1 セミナーⅢ-5-1（火成岩岩石学）	1		
	Thesis SeminarⅢ-5-2 セミナーⅢ-5-2（石油地質学・有機地球化学）	1		
	Thesis SeminarⅢ-5-3 セミナーⅢ-5-3（層位・古生物学）	1		
	Thesis SeminarⅢ-5-7 セミナーⅢ-5-7（資源地質学・地質年代学）	1		
	Thesis SeminarⅢ-5-8 セミナーⅢ-5-8（生層序学）	1		
	Thesis SeminarⅢ-5-9 セミナーⅢ-5-9（水文地質学）	1		
	Thesis SeminarⅢ-5-10 セミナーⅢ-5-10（水域環境地質学）	1		
	Thesis SeminarⅢ-5-11 セミナーⅢ-5-11（変成岩岩石学）	1		
	Thesis SeminarⅢ-5-12 セミナーⅢ-5-12（岩石鉱物学）	1		
	Thesis SeminarⅢ-5-13 セミナーⅢ-5-13（火山学）	1		
	Thesis SeminarⅢ-5-14 セミナーⅢ-5-14（古環境・古生態学）	1		
	Thesis SeminarⅢ-5-15 セミナーⅢ-5-15（構造地質学）	1		
	Thesis SeminarⅢ-5-16 セミナーⅢ-5-16（応用地質学）	1		
	Thesis SeminarⅢ-5-17 セミナーⅢ-5-17（土質力学）	1		
	Thesis SeminarⅢ-5-18 セミナーⅢ-5-18（環境微古生物学）	1		
	Thesis SeminarⅢ-5-20 セミナーⅢ-5-20（グローバルテクトニクス）	1		
	Thesis SeminarⅣ-5-1 セミナーⅣ-5-1（火成岩岩石学）	1		
	Thesis SeminarⅣ-5-2 セミナーⅣ-5-2（石油地質学・有機地球化学）	1		

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
セミナー Thesis Seminar	Thesis SeminarⅣ-5-3 セミナーⅣ-5-3（層位・古生物学）	1		
	Thesis SeminarⅣ-5-7 セミナーⅣ-5-7（資源地質学・地質年代学）	1		
	Thesis SeminarⅣ-5-8 セミナーⅣ-5-8（生層序学）	1		
	Thesis SeminarⅣ-5-9 セミナーⅣ-5-9（水文地質学）	1		
	Thesis SeminarⅣ-5-10 セミナーⅣ-5-10（水域環境地質学）	1		
	Thesis SeminarⅣ-5-11 セミナーⅣ-5-11（変成岩岩石学）	1		
	Thesis SeminarⅣ-5-12 セミナーⅣ-5-12（岩石鉱物学）	1		
	Thesis SeminarⅣ-5-13 セミナーⅣ-5-13（火山学）	1		
	Thesis SeminarⅣ-5-14 セミナーⅣ-5-14（古環境・古生態学）	1		
	Thesis SeminarⅣ-5-15 セミナーⅣ-5-15（構造地質学）	1		
	Thesis SeminarⅣ-5-16 セミナーⅣ-5-16（応用地質学）	1		
	Thesis SeminarⅣ-5-17 セミナーⅣ-5-17（土質力学）	1		
	Thesis SeminarⅣ-5-18 セミナーⅣ-5-18（環境微古生物学）	1		
	Thesis SeminarⅣ-5-20 セミナーⅣ-5-20（グローバルテクトニクス）	1		
特別研究 Thesis Research	Thesis Research Ⅰ-5 特別研究Ⅰ-5	2		
	Thesis ResearchⅡ-5 特別研究Ⅱ-5	2		
	Thesis Research Ⅲ-5 特別研究Ⅲ-5	2		
	Thesis Research Ⅳ-5 特別研究Ⅳ-5	2		

環境システム科学専攻　英語による留学生プログラム
　環境共生科学コース Environmental and Sustainability Sciences Course

科目区分 Subject Group	授業科目 Subject	Credit Required	Credit Optional	備考 Remarks Column
研究科共通 Common Subject	Fundamentals of Natural Science and Technology 自然科学論	2		研究科共通2単位，セミナー4単位，特別研究8単位を修得し，合計30単位以上修得すること。 Students must acquire 2 credits from Common Subject, 4 credits from Thesis Seminar and 8 credits from Thesis Research, for a total of at least 30 credits.
	Introduction to the Responsible Conduct of Research 責任ある研究活動入門		1	
専門科目 Major Subject	Advanced Nonpoint Sources and Hydrology 面源汚濁および流域水文解析		2	
	Fluid Dynamics on Land Surface and in Soil 地表と土中の流体力学		2	
	Advanced Structural Analysis and Design 構造解析学特論		2	
	Advanced Bio-environmental Measurement 生物環境計測特論		2	
	Advanced Forest Ecology 森林生態学特論		2	
	Advanced Plant Pathology 植物病理学		2	
	Environmental Microbiology 環境微生物学		2	
	Insect Ecology 昆虫生態学		2	
	Fish Ecology 魚類生態学		2	
	Marine Ecology 海洋生態学		2	
	Soil Science 土壌学		2	
	Soil Ecological Engineering 土壌圏生態工学		2	
	Aquatic Environment and Ecology 水圏環境生態学		2	
	Advanced Environmental Eco-Engineering 環境生態工学特論		2	
	Lake and Reservoir Management Engineering ダム湖沼管理工学		2	
	他専攻，及び専攻内他コースの留学生プログラム開講科目 Subjects offered in international student programs in other courses within the major and in other majors			
セミナー Thesis Seminar	Thesis Seminar Ⅰ-6 セミナーⅠ-6	1		
	Thesis Seminar Ⅱ-6 セミナーⅡ-6	1		
	Thesis Seminar Ⅲ-6 セミナーⅢ-6	1		
	Thesis Seminar Ⅳ-6 セミナーⅣ-6	1		
特別研究 Thesis Research	Thesis Research Ⅰ-6 特別研究Ⅰ-6	2		
	Thesis Research Ⅱ-6 特別研究Ⅱ-6	2		
	Thesis Research Ⅲ-6 特別研究Ⅲ-6	2		
	Thesis Research Ⅳ-6 特別研究Ⅳ-6	2		

環境システム科学専攻　英語による留学生プログラム
物質化学コース Chemistry Course

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
研究科共通 Common Subject	Fundamentals of Natural Science and Technology 自然科学論	2		研究科共通2単位，セミナー4単位，特別研究8単位を修得し，合計30単位以上修得すること。 Students must acquire 2 credits from Common Subject, 4 credits from Thesis Seminar and 8 credits from Thesis Research, for a total of at least 30 credits.
	Introduction to the Responsible Conduct of Research 責任ある研究活動入門		1	
専門科目 Major Subject	Advanced Inorganic Chemistry I 無機化学特論 I		2	
	Advanced Inorganic Chemistry II 無機化学特論 II		2	
	Advanced Organic Chemistry I 有機化学特論 I		2	
	Advanced Organic Chemistry II 有機化学特論 II		2	
	Advanced Organic Chemistry III 有機化学特論 III		2	
	Advanced Catalyst Science 高機能触媒特論		2	
	Advanced Functional Polymers I 機能性高分子特論 I		2	
	Advanced Functional Polymers II 機能性高分子特論 II		2	
	Advanced Ceramic Materials 機能性セラミックス特論		2	
	Advanced Physical Chemistry 物理化学特論		2	
	Advanced Environmental Analytical Chemistry 環境分析化学特論		2	
	Advanced Inorganic Material Science and Engineering I 無機材料物性工学特論 I		2	
	Advanced Inorganic Material Science and Engineering II 無機材料物性工学特論 II		2	
	Advanced Lecture on Fiber Materials 繊維材料学特論		2	
	Advanced Surface and Interface Chemistry 表面・界面化学特論		2	
	Advanced Biomaterial Physics 生物材料物理学特論		2	
	Advanced Recycling Technology of Polymeric Materials 資源循環化学特論		2	
	Advanced Molecular Biology 分子生物学特論		2	
	Advanced Coordination Chemistry 配位化学特論		2	
	Advanced Solid State Chemistry 物性化学特論		2	
	他専攻，及び専攻内他コースの留学生プログラム開講科目 Subjects offered in international student programs in other courses within the major and in other majors			

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
セミナー Thesis Seminar	Thesis Seminar Ⅰ-7 セミナーⅠ-7	1		
	Thesis Seminar Ⅱ-7 セミナーⅡ-7	1		
	Thesis Seminar Ⅲ-7 セミナーⅢ-7	1		
	Thesis Seminar Ⅳ-7 セミナーⅣ-7	1		
特別研究 Thesis Research	Thesis Research Ⅰ-7 特別研究Ⅰ-7	2		
	Thesis Research Ⅱ-7 特別研究Ⅱ-7	2		
	Thesis Research Ⅲ-7 特別研究Ⅲ-7	2		
	Thesis Research Ⅳ-7 特別研究Ⅳ-7	2		

環境システム科学専攻　英語による留学生プログラム
建築デザイン学コース Architectural Design Course

科目区分 Subject Group	授業科目 Subject	Credit Required	Credit Optional	備考 Remarks Column
研究科共通 Common Subject	Fundamentals of Natural Science and Technology 自然科学論	2		研究科共通2単位，セミナー4単位，特別研究8単位を修得し，合計30単位以上修得すること。 Students must acquire 2 credits from Common Subject, 4 credits from Thesis Seminar and 8 credits from Thesis Research, for a total of at least 30 credits.
	Introduction to the Responsible Conduct of Research 責任ある研究活動入門		1	
専門科目 Major Subject	Atelier Practice of Architectural Design I 建築設計特別演習 I		2	
	Atelier Practice of Architectural Design II 建築設計特別演習 II		2	
	Atelier Practice of Architectural Design III 建築設計特別演習Ⅲ		2	
	Advanced Course of Building Structures I 建築構造学特論 I		2	
	Advanced Course of Building Structures II 建築構造学特論 II		2	
	Advanced Course of Building Structures and Living Environment 建築構造・住環境学特論		2	
	Advanced Course of Architectural Environment Engineering 建築環境学特論		2	
	Seminar of Practice in Building Structure and Environmental Engineering 建築構造・住環境演習		2	
	Advanced Course of Architectural Planning and Design 建築計画設計特論		2	
	Advanced Course of Architectural History and Design 建築史・意匠設計特論		2	
	Advanced Course of Urban Design 建築・都市デザイン特論		2	
	Advanced Course of Wooden Construction 木造構法特論		2	
	Atelier Practice of Architectural Design 建築計画デザイン演習		2	
	他専攻，及び専攻内他コースの留学生プログラム開講科目 Subjects offered in international student programs in other courses within the major and in other majors			
セミナー Thesis Seminar	Thesis Seminar Ⅰ-8 セミナーⅠ-8	1		
	Thesis Seminar Ⅱ-8 セミナーⅡ-8	1		
	Thesis Seminar Ⅲ-8 セミナーⅢ-8	1		
	Thesis Seminar Ⅳ-8 セミナーⅣ-8	1		
特別研究 Thesis Research	Thesis Research Ⅰ-8 特別研究Ⅰ-8	2		
	Thesis Research Ⅱ-8 特別研究Ⅱ-8	2		
	Thesis Research Ⅲ-8 特別研究Ⅲ-8	2		
	Thesis Research Ⅳ-8 特別研究Ⅳ-8	2		

農生命科学専攻　英語による留学生プログラム
生命科学コース Life Sciences Course

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
研究科共通 Common Subject	Fundamentals of Natural Science and Technology 自然科学論	2		研究科共通2単位，セミナー4単位，特別研究8単位を修得し，合計30単位以上修得すること。 Students must acquire 2 credits from Common Subject, 4 credits from Thesis Seminar and 8 credits from Thesis Research, for a total of at least 30 credits.
	Introduction to the Responsible Conduct of Research 責任ある研究活動入門		1	
専門科目 Major Subject	Biology of Skin 皮膚の生物学		2	
	Theoretical Ecology 理論生態学特論		2	
	Methodology of Plant Transformation 植物形質転換の方法論		2	
	Biology of Endosymbiosis 細胞内共生生物学		2	
	Behavioral Ecology 行動生態学		2	
	Biology of Reproduction 生殖の生物学		2	
	Advanced Molecular Biology 分子生物学特論		2	
	Advanced Plant Molecular Genetics 植物分子遺伝学特論		2	
	Advanced Biophysical Chemistry 生物物理化学特論		2	
	Biochemistry for Food and Health Science 食品健康科学分野のための生化学		2	
	Pathophysiology 病態生理学		2	
	Plant Molecular Physiology 植物分子生理学		2	
	Plant Stress Biology 植物ストレス生物学		2	
	Molecular Recognition 分子認識		2	
	Advanced Organic Synthesis 有機合成特論		2	
	Methodological Principle of Molecular Biology 分子生物学の方法論的原理		2	
	Marine Ecogenetics 水圏遺伝学特論		2	
	他専攻，及び専攻内他コースの留学生プログラム開講科目 Subjects offered in international student programs in other courses within the major and in other majors			
セミナー Thesis Seminar	Thesis Seminar Ⅰ-9 セミナーⅠ-9	1		
	Thesis Seminar Ⅱ-9 セミナーⅡ-9	1		
	Thesis Seminar Ⅲ-9 セミナーⅢ-9	1		
	Thesis Seminar Ⅳ-9 セミナーⅣ-9	1		

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
特別研究 Thesis Research	Thesis Research Ⅰ-9 特別研究Ⅰ-9	2		
	Thesis Research Ⅱ-9 特別研究Ⅱ-9	2		
	Thesis Research Ⅲ-9 特別研究Ⅲ-9	2		
	Thesis Research Ⅳ-9 特別研究Ⅳ-9	2		

農生命科学専攻　英語による留学生プログラム
農林生産学コース Agricultural and Forest Sciences Course

科目区分 Subject Group	授業科目 Subject	Credit Required	Credit Optional	備考 Remarks Column
研究科共通 Common Subject	Fundamentals of Natural Science and Technology 自然科学論	2		研究科共通2単位，セミナー4単位，特別研究8単位を修得し，合計30単位以上修得すること。 Students must acquire 2 credits from Common Subject, 4 credits from Thesis Seminar and 8 credits from Thesis Research, for a total of at least 30 credits.
	Introduction to the Responsible Conduct of Research 責任ある研究活動入門		1	
専門科目 Major Subject	Functional Morphology in Rice 作物機能的形態学		2	
	Advanced Plant Breeding 植物育種学特論		2	
	Conservation and Management of Plant Genetic Resources 植物遺伝資源管理学		2	
	Biochemistry of Soil Fertility 土壌肥沃度論		2	
	Plant Molecular Breeding 植物分子育種学		2	
	Advanced Livestock Production 動物生産学特論		2	
	Horticultural Crop Physiology 園芸生理学		2	
	Advanced Technology for Protected Horticulture 施設園芸学特論		2	
	Plant Production Physiology 植物生産生理学		2	
	Advanced Forest Utilization 森林利用学特論		2	
	Regional Economic Analysis 農業経済・地域経済分析		2	
	Advanced Rural Planning 農村計画学特論		2	
	Environmental Stress and Crop Production 環境作物学		2	
	Fieldwork for Agricultural Economics 農業経済フィールドワーク		2	
	Advanced Agribiobusiness アグリバイオビジネス学特論		2	
	他専攻，及び専攻内他コースの留学生プログラム開講科目 Subjects offered in international student programs in other courses within the major and in other majors			
セミナー Thesis Seminar	Thesis Seminar Ⅰ-10 セミナーⅠ-10	1		
	Thesis Seminar Ⅱ-10 セミナーⅡ-10	1		
	Thesis Seminar Ⅲ-10 セミナーⅢ-10	1		
	Thesis Seminar Ⅳ-10 セミナーⅣ-10	1		

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
特別研究 Thesis Research	Thesis Research Ⅰ-10 特別研究Ⅰ-10	2		
	Thesis Research Ⅱ-10 特別研究Ⅱ-10	2		
	Thesis Research Ⅲ-10 特別研究Ⅲ-10	2		
	Thesis Research Ⅳ-10 特別研究Ⅳ-10	2		

英語による「地球」教育研究特別プログラム Special Program in Earth Science and Geoenvironmental Science
物理・応用物理学コース、機械・電気電子工学コース、地球科学コース、物質化学コース対象

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
研究科共通 Common Subject	Fundamentals of Natural Science and Technology 自然科学論	2		研究科共通2単位，セミナー4単位，特別研究8単位を修得し，合計30単位以上修得すること。 Students must acquire 2 credits from Common Subject, 4 credits from Thesis Seminar and 8 credits from Thesis Research, for a total of at least 30 credits.
	Introduction to the Responsible Conduct of Research 責任ある研究活動入門		1	
専門科目 Major Subject	Metamorphic Petrology 変成岩岩石学特論		2	
	Mineral Science of Transition Elements-bearing Minerals 鉱物学特論		2	
	Advanced Structural Geology 構造地質学特論		2	
	Advanced Petrochemistry 岩石化学特論		2	
	Environmental Paleontology 環境古生物学		2	
	Sedimentary Geology 堆積地質学		2	
	Biostratigraphy 生層序学		2	
	Theory of Global Environmental Change 地球環境変動論		2	
	Groundwater Hydraulics 地殻流体工学		2	
	Geotechnical Analysis 地盤解析学		2	
	Science of Fossil Fuel 有機地球化学特論		2	
	Resource Geology 資源地質学特論		2	
	Advanced Volcanology 火山学特論		2	
	Marine Environmental Science 海洋環境科学特論		2	
	Coastal Geoenvironmental Science 海岸・沿岸地質環境学		2	
	Quaternary Environmental Science 第四紀環境学		2	
	Global tectonics グローバルテクトニクス特論		2	
	Topics for Mechanical Machining 機械加工学特論		2	
	Atmospheric Remote Sensing 電磁波大気計測論		2	
	Advanced Biomaterial Physics 生物材料物理学特論		2	
	Advanced Recycling Technology of Polymeric Materials 資源循環化学特論		2	
	Advanced Molecular Biology 分子生物学特論		2	
	Special Lecture in Earth and Geoenvironmental Science Ⅰ 地球・地球環境科学特別講義Ⅰ		2	
	Special Lecture in Earth and Geoenvironmental Science Ⅱ 地球・地球環境科学特別講義Ⅱ		4	

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
専門科目 Major Subject	Excursions in Earth and Geoenvironmental Science 地球・地球環境学エクスカーション		2	
	Seminars on Current Topics and Methods Ⅰ 英語による発表Ⅰ		2	
	Seminars on Current Topics and Methods Ⅱ 英語による発表Ⅱ		2	
	Special Practice Ⅰ 特別実習Ⅰ		1	
	Special Practice Ⅱ 特別実習Ⅱ		2	
	他専攻，及び専攻内他コースの留学生プログラム開講科目 Subjects offered in international student programs in other courses within the major and in other majors			
セミナー Thesis Seminar	Thesis Seminar Ⅰ-3 セミナーⅠ-3	1		
	Thesis Seminar Ⅰ-4 セミナーⅠ-4	1		
	Thesis Seminar Ⅰ-5-1 セミナーⅠ-5-1（火成岩岩石学）	1		
	Thesis Seminar Ⅰ-5-2 セミナーⅠ-5-2（石油地質学・有機地球化学）	1		
	Thesis Seminar Ⅰ-5-3 セミナーⅠ-5-3（層位・古生物学）	1		
	Thesis Seminar Ⅰ-5-6 セミナーⅠ-5-6（堆積学）	1		
	Thesis Seminar Ⅰ-5-7 セミナーⅠ-5-7（資源地質学・地質年代学）	1		
	Thesis Seminar Ⅰ-5-8 セミナーⅠ-5-8（生層序学）	1		
	Thesis Seminar Ⅰ-5-9 セミナーⅠ-5-9（水文地質学）	1		
	Thesis Seminar Ⅰ-5-10 セミナーⅠ-5-10（水域環境地質学）	1		
	Thesis Seminar Ⅰ-5-11 セミナーⅠ-5-11（変成岩岩石学）	1		
	Thesis Seminar Ⅰ-5-12 セミナーⅠ-5-12（岩石鉱物学）	1		
	Thesis Seminar Ⅰ-5-13 セミナーⅠ-5-13（火山学）	1		
	Thesis Seminar Ⅰ-5-14 セミナーⅠ-5-14（古環境・古生態学）	1		
	Thesis Seminar Ⅰ-5-15 セミナーⅠ-5-15（構造地質学）	1		
	Thesis Seminar Ⅰ-5-17 セミナーⅠ-5-17（土質力学）	1		
	Thesis Seminar Ⅰ-5-18 セミナーⅠ-5-18（環境微古生物学）	1		
	Thesis Seminar Ⅰ-5-20 セミナーⅠ-5-20（グローバルテクトニクス）	1		
	Thesis Seminar Ⅰ-7 セミナーⅠ-7	1		
	Thesis Seminar Ⅱ-3 セミナーⅡ-3	1		
	Thesis Seminar Ⅱ-4 セミナーⅡ-4	1		

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
セミナー Thesis Seminar	Thesis SeminarⅡ-5-1 セミナーⅡ-5-1（火成岩岩石学）	1		
	Thesis SeminarⅡ-5-2 セミナーⅡ-5-2（石油地質学・有機地球化学）	1		
	Thesis SeminarⅡ-5-3 セミナーⅡ-5-3（層位・古生物学）	1		
	Thesis SeminarⅡ-5-6 セミナーⅡ-5-6（堆積学）	1		
	Thesis SeminarⅡ-5-7 セミナーⅡ-5-7（資源地質学・地質年代学）	1		
	Thesis SeminarⅡ-5-8 セミナーⅡ-5-8（生層序学）	1		
	Thesis SeminarⅡ-5-9 セミナーⅡ-5-9（水文地質学）	1		
	Thesis SeminarⅡ-5-10 セミナーⅡ-5-10（水域環境地質学）	1		
	Thesis SeminarⅡ-5-11 セミナーⅡ-5-11（変成岩岩石学）	1		
	Thesis SeminarⅡ-5-12 セミナーⅡ-5-12（岩石鉱物学）	1		
	Thesis SeminarⅡ-5-13 セミナーⅡ-5-13（火山学）	1		
	Thesis SeminarⅡ-5-14 セミナーⅡ-5-14（古環境・古生態学）	1		
	Thesis SeminarⅡ-5-15 セミナーⅡ-5-15（構造地質学）	1		
	Thesis SeminarⅡ-5-17 セミナーⅡ-5-17（土質力学）	1		
	Thesis SeminarⅡ-5-18 セミナーⅡ-5-18（環境微古生物学）	1		
	Thesis SeminarⅡ-5-20 セミナーⅡ-5-20（グローバルテクトニクス）	1		
	Thesis SeminarⅡ-7 セミナーⅡ-7	1		
	Thesis Seminar Ⅲ-3 セミナーⅢ-3	1		
	Thesis Seminar Ⅲ-4 セミナーⅢ-4	1		
	Thesis SeminarⅢ-5-1 セミナーⅢ-5-1（火成岩岩石学）	1		
	Thesis SeminarⅢ-5-2 セミナーⅢ-5-2（石油地質学・有機地球化学）	1		
	Thesis SeminarⅢ-5-3 セミナーⅢ-5-3（層位・古生物学）	1		
	Thesis SeminarⅢ-5-6 セミナーⅢ-5-6（堆積学）	1		
	Thesis SeminarⅢ-5-7 セミナーⅢ-5-7（資源地質学・地質年代学）	1		
	Thesis SeminarⅢ-5-8 セミナーⅢ-5-8（生層序学）	1		
	Thesis SeminarⅢ-5-9 セミナーⅢ-5-9（水文地質学）	1		
	Thesis SeminarⅢ-5-10 セミナーⅢ-5-10（水域環境地質学）	1		

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
セミナー Thesis Seminar	Thesis SeminarⅢ-5-11 セミナーⅢ-5-11（変成岩岩石学）	1		
	Thesis SeminarⅢ-5-12 セミナーⅢ-5-12（岩石鉱物学）	1		
	Thesis SeminarⅢ-5-13 セミナーⅢ-5-13（火山学）	1		
	Thesis SeminarⅢ-5-14 セミナーⅢ-5-14（古環境・古生態学）	1		
	Thesis SeminarⅢ-5-15 セミナーⅢ-5-15（構造地質学）	1		
	Thesis SeminarⅢ-5-17 セミナーⅢ-5-17（土質力学）	1		
	Thesis SeminarⅢ-5-18 セミナーⅢ-5-18（環境微古生物学）	1		
	Thesis SeminarⅢ-5-20 セミナーⅢ-5-20（グローバルテクトニクス）	1		
	Thesis Seminar Ⅲ-7 セミナーⅢ-7	1		
	Thesis Seminar Ⅳ-3 セミナーⅣ-3	1		
	Thesis Seminar Ⅳ-4 セミナーⅣ-4	1		
	Thesis SeminarⅣ-5-1 セミナーⅣ-5-1（火成岩岩石学）	1		
	Thesis SeminarⅣ-5-2 セミナーⅣ-5-2（石油地質学・有機地球化学）	1		
	Thesis SeminarⅣ-5-3 セミナーⅣ-5-3（層位・古生物学）	1		
	Thesis SeminarⅣ-5-6 セミナーⅣ-5-6（堆積学）	1		
	Thesis SeminarⅣ-5-7 セミナーⅣ-5-7（資源地質学・地質年代学）	1		
	Thesis SeminarⅣ-5-8 セミナーⅣ-5-8（生層序学）	1		
	Thesis SeminarⅣ-5-9 セミナーⅣ-5-9（水文地質学）	1		
	Thesis SeminarⅣ-5-10 セミナーⅣ-5-10（水域環境地質学）	1		
	Thesis SeminarⅣ-5-11 セミナーⅣ-5-11（変成岩岩石学）	1		
	Thesis SeminarⅣ-5-12 セミナーⅣ-5-12（岩石鉱物学）	1		
	Thesis SeminarⅣ-5-13 セミナーⅣ-5-13（火山学）	1		
	Thesis SeminarⅢ-5-14 セミナーⅢ-5-14（古環境・古生態学）	1		
	Thesis SeminarⅢ-5-15 セミナーⅢ-5-15（構造地質学）	1		
	Thesis SeminarⅣ-5-17 セミナーⅣ-5-17（土質力学）	1		
	Thesis SeminarⅣ-5-18 セミナーⅣ-5-18（環境微古生物学）	1		
	Thesis SeminarⅣ-5-19 セミナーⅣ-5-19（第四紀学・堆積学・沿岸環境学）	1		

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
セミナー Thesis Seminar	Thesis SeminarⅣ-5-20 セミナーⅣ-5-20（グローバルテクトニクス）	1		
	Thesis Seminar Ⅳ-7 セミナーⅣ-7	1		
特別研究 Thesis Research	Thesis Research Ⅰ-3 特別研究Ⅰ-3	2		
	Thesis Research Ⅰ-4 特別研究Ⅰ-4	2		
	Thesis Research Ⅰ-5 特別研究Ⅰ-5	2		
	Thesis Research Ⅰ-7 特別研究Ⅰ-7	2		
	Thesis ResearchⅡ-3 特別研究Ⅱ-3	2		
	Thesis ResearchⅡ-4 特別研究Ⅱ-4	2		
	Thesis ResearchⅡ-5 特別研究Ⅱ-5	2		
	Thesis ResearchⅡ-7 特別研究Ⅱ-7	2		
	Thesis Research Ⅲ-3 特別研究Ⅲ-3	2		
	Thesis Research Ⅲ-4 特別研究Ⅲ-4	2		
	Thesis Research Ⅲ-5 特別研究Ⅲ-5	2		
	Thesis Research Ⅲ-7 特別研究Ⅲ-7	2		
	Thesis Research Ⅳ-3 特別研究Ⅳ-3	2		
	Thesis Research Ⅳ-4 特別研究Ⅳ-4	2		
	Thesis Research Ⅳ-5 特別研究Ⅳ-5	2		
	Thesis Research Ⅳ-7 特別研究Ⅳ-7	2		

Doctor's Degree Course

I. Study Guidelines

1. Basic Policy on Educational Guidance

The Doctor Course aims to cultivate researchers and engineers who possess advanced specialized scholarly abilities and creative research and development abilities. In order to foster practical skills and perspectives that apply to a wide range of fields, the Doctor Course adopts a system of multiple academic advisors, and aims to achieve outstanding educational results.

2. Academic Advisor

At the time of entering the Doctor Course, one main academic advisor, and three or more co-advisors (among these co-advisors, at least one shall be a faculty member from a different Education and Research Department) will be appointed to each student. Academic advisors carry out guidance for students' registration of Class Subjects and guidance on the writing of students' Doctoral Thesis. Please consult with your main academic advisor before making decisions regarding other Education and Research Departments.

3. Class Subjects

The Class Subjects and number of credits are as indicated in "II. Method of Credit Acquisition" of the Regulations of the Graduate School of Natural Science and Technology, Appended Tables 3 and 4.

4. Class Registration Criteria

○Major in Science and Engineering for Innovation

Course / Subject Group	Minimum No. of Acquired Credits					
	Science and Engineering Course			Science of Natural Environment Systems Course		
	Required	Optional	Free Choice	Required	Optional	Free Choice
Practical Education Subjects	—	2	2	—	2	2
Major Subjects	—	2		—	2	
Thesis Research	4	—	—	4	—	—
Special Seminar	2	—	—	2	—	—
Total	12			12		

○ Special Education Programs (Materials Engineering Special Program, Collaborative Program of Medicine, Science, Engineering and Agriculture)

Program / Subject Group	Minimum No. of Acquired Credits					
	Materials Engineering Special Program			Collaborative Program of Medicine, Science, Engineering and Agriculture		
	Required	Optional	Free Choice	Required	Optional	Free Choice
Practical Education Subjects	—	—	2	—	2	2
Major Subjects	—	4	—	—	2	
Thesis Research	4	—	—	4	—	—
Special Seminar	2	—	—	2	—	—
Total	12			12		

○ Special Education Programs (Double Degree Program,Special Program in Earth Science and Geoenvironmental Science)

Program / Subject Group	Minimum No. of Acquired Credits					
	Double Degree Program			Special Program in Earth Science and Geoenvironmental Science		
	Required	Optional	Free Choice	Required	Optional	Free Choice
Practical Education Subjects	—	2	2	—	2	2
Major Subjects	—	2		—	2	
Thesis Research	4	—	—	4	—	—
Special Seminar	2	—	—	2	—	—
Total	12			12		

(1) In each Education Course, students can register for Major Subjects from courses other than their own affiliated course.

(2) If you are taking the Special Program in Earth Science and Geoenvironmental Science, please register for the Class Subjects within that program.

5. Class Registration Procedures

At the beginning of the semester, please consult with your academic advisor to decide on the Class Subjects you wish to take during the academic year, and carry out class registration procedures during the class registration period.

Furthermore, details of the class registration procedures will be published via bulletin, so please make sure to check. Additionally, you will not be able to register for any Class Subjects for which you have not carried out class registration procedures.

(1) Check the Class Subject codes in the List of Courses for Semesters 1 and 2, and register using the Academic Affairs Information System "Campus Square".
List of Courses: https://www.natural.shimane-u.ac.jp/doctor/student/jyugyokamokuichiran.html
Campus Square: https://gkm2019-web2.shimane-u.ac.jp/campusweb/campusportal.do

(2) If you are unable to carry out class registration via the Academic Affairs Information System, please collect a Class Registration Form from the Academic Affairs Division (Student Center), and submit it before the specified date.

(3) The implementation time and registration period of intensive lectures will be published via bulletin, so please carry out registration procedures at the Academic Affairs Division (Student Center) each time. Please note that you cannot register via the Academic Affairs Information System.

(4) In cases where part-time students, who have entered the Graduate School under the application of Article 14 of the Graduate School Establishment Standards, desire classes to be held in evenings, etc., please consult with your academic advisor and the teacher of the class before carrying out registration procedures.

6. Certification of Course Completion

In order to complete the Doctor Course, students must, in principle, have been enrolled in the Doctor Course for three years or more, have acquired the prescribed number of credits, and after having received the necessary research guidance, have passed the assessment and examination for the Doctoral Thesis.

7. Degree Conferment

Persons who have completed the Doctor Course shall be awarded a Doctor of Philosophy in Science or Engineering.

II. Method of Credit Acquisition

大学院自然科学研究科規則別表第３
創成理工学専攻
　理工学コース Science and Engineering Course

科目区分 Subject Group	授業科目 Subject		Credit Required	Credit Optional	備考 Remarks Column
実践教育科目 Practical Education Subjects	英語アカデミックリーディングセミナー English Academic Reading Seminar			2	実践教育科目2単位，理工学コース専門科目2単位，論文研究4単位，特別セミナー2単位，実践教育科目,理工学コース専門科目又は自然環境システム科学コース専門科目の中から2単位，合計12単位以上修得すること。 Students must acquire 2 credits from Practical Education Subjects, 2 credits from Major Subjects of Science and Engineering Course, 4 credits of Thesis Research and 2 credits of Special Seminar. The remaining 2 credits must be selected from Practical Education Subjects and Major Subject, for a total of at least 12
	英語プラクティカルスキルアップセミナー English Practical Skill Up Seminar			2	
	社会人実践研究（企業滞在型実践研究） Social Practicing Program			2	
	知的財産と社会連携（研究開発マネジメント科目） Intellectual properties and Social contribution			2	
	Sustainability science and SDGs			2	
	Science for a sustainable society and future Earth			1	
	特別実践研究（ＰＢＬ型授業） Special Practice Research (PBL)			2	
	国際実践演習 Practice for International presentations			2	
	教育指導特別実習Ａ（実験・演習指導） Special Practice for Academic mentoring Ａ			2	
	教育指導特別実習Ｂ（発表指導） Special Practice for Academic mentoring Ｂ			2	
	ジョブ型研究インターンシップ Cooperative Education through Research Internships			2	
専門科目 Major Subjects	Mathematics	凸解析・非線形解析学特論 Advanced Convex and Nonlinear Analysis		2	
		生物数学特論 Mathematics in Mathematical Biology		2	
		複素幾何学特論 Complex Geometry		2	
		代数学特論 Special Lecture on Algebra		2	
		偏微分方程式特論 Advanced Partial Differential Equations		2	
		連続体理論とトポロジー Continuum Theory and Topology		2	
		調和写像論 Theory of Harmonic Map		2	
		ホモロジー代数学特論 Advanced Homological Algebra		2	
		多変量解析法の推測論 Inference Theory of Multivariate analysis		2	
		遅延方程式特論 Delay Equations		2	

科目区分 Subject Group		授業科目 Subject	Credit Required	Credit Optional	備考 Remarks Column
専門科目 Major Subjects	Information Systems Design and Data Science	プログラム解析技術特論 Doctoral Seminar in Program Analysis Methods		2	
		書換えシステム特論 Rewriting Systems		2	
		適応型ユーザインターフェース論 Adaptive User Interface		2	
		先進ネットワーク論 Advanced Network		2	
		情報科学ゼミナール Information Science Seminar		2	
		高信頼通信制御論 High Reliable Communication		2	
	Physics and Materials Science	超伝導物性特論 Special Topics in Superconductivity		2	
		量子理論物性学 Quantum theory of condensed matters		2	
		応用結晶成長学特論 Practical crystal growth theory of bulk and thin film		2	
		量子物理学特論 Advanced Theoretical Quantum Physics		2	
		強相関電子系物質学 Material science of strongly correlated electron systems		2	
		量子物性学特論 Advanced Lectures on Quantum Condensed-Matter Physics		2	
		結晶材料解析学 Crystallographical analysis of materials		2	
		焼結材料学 Advanced sintered materials		2	
		強誘電体物理学 Phyics on Ferroelectricity		2	
		ナノフォトニクス工学 Nanophotonics Engineering		2	
		薄膜材料デバイス Thin film materials and devices		2	
		先端電子材料設計学 Advanced electronic materials design theory		2	
		核融合炉材料 Fusion Reactor Materials		2	
		低温物理学特論 Advanced Low Temperature Physics		2	
		電子顕微鏡学 Transmission Electron Microscopy		2	
		半導体薄膜技術 Semiconductor thin film technologies		2	

科目区分 Subject Group	授業科目 Subject		Credit		備考 Remarks Column
			Required	Optional	
専門科目 Major Subjects	Mechanical, Electrical and Electronic Engineering	光通信論 Optical Communication Technology		2	
		光波計測論 Optical Metrology		2	
		知能移動ロボット論 Intelligent mobile robotics		2	
		大気計測論 Atmospheric remote sensing		2	
		光ファイバ工学論 Fiber optics and related applications		2	
		機械要素設計特論 Advanced Design of Machine Elements		2	
		振動解析学特論 Advanced Theory of Vibration Analysis		2	
		複雑系熱流体工学特論 Complex thermo-fluid dynamics		2	
		連続体力学特論 Continuum Mechanics		2	
	他コース開講科目 Subjects offered in other courses				
必修科目 Required Subjects	論文研究 Thesis Research		4		
	特別セミナー Special Seminar		2		

創成理工学専攻
自然環境システム科学コース Science of Natural Environment Systems Course

科目区分 Subject Group	授業科目 Subject		Credit Required	Credit Optional	備考 Remarks Column
実践教育科目 Practical Education Subjects	英語アカデミックリーディングセミナー English Academic Reading Seminar			2	実践教育科目2単位，理工学コース専門科目2単位，論文研究4単位，特別セミナー2単位，実践教育科目,理工学コース専門科目又は自然環境システム科学コース専門科目の中から2単位，合計12単位以上修得すること。 Students must acquire 2 credits from Practical Education Subjects, 2 credits from Major Subjects of Science of Natural Environment Systems Course, 4 credits of Thesis Research and 2 credits of Special Seminar. The remaining 2 credits must be selected from Practical Education Subjects and Major Subject,
	英語プラクティカルスキルアップセミナー English Practical Skill Up Seminar			2	
	社会人実践研究（企業滞在型実践研究） Social Practicing Program			2	
	知的財産と社会連携（研究開発マネジメント科目） Intellectual properties and Social contribution			2	
	Sustainability science and SDGs			2	
	Science for a sustainable society and future Earth			1	
	特別実践研究（ＰＢＬ型授業） Special Practice Research (PBL)			2	
	国際実践演習 Practice for International presentations			2	
	教育指導特別実習Ａ（実験・演習指導） Special Practice for Academic mentoring Ａ			2	
	教育指導特別実習Ｂ（発表指導） Special Practice for Academic mentoring Ｂ			2	
	ジョブ型研究インターンシップ Cooperative Education through Research Internships			2	
専門科目 Major Subjects	Earth Science	変成岩岩石学 Metamorphic petrology		2	
		有機資源地球物質科学 Mineral Science of Organic Natural Resources		2	
		微古生物学 Micropaleontology		2	
		地下流体解析学 Subsurface fluid flow modeling		2	
		堆積地質学特論 Advanced Sedimentary Geology		2	
		古環境・古生態学 Paleoenvironmentology and Paleoecology		2	
		火成岩岩石学特論 Advanced Igneous Petrology		2	
		生層序学特論 Advanced Biostratigraphy		2	
		火山学特論 Advanced Volcanology		2	
		汽水域環境変動論 Theory of Estuary Environmental Change		2	
		構造地質学 Structural Geology		2	

科目区分 Subject Group	授業科目 Subject		Credit		備考 Remarks Column
			Required	Optional	
専門科目 Major Subjects	Environmental and Sustainability Sciences	沿岸地質環境学 Coastal Geoenvironmental Science		2	
		水質水文学特論 Advanced Water Quality and Hydrology		2	
		環境水理学特論 Advanced Environmental Hydraulics		2	
		水環境保全学特論 Advanced Water Environmental Management		2	
		汽水域生態学特別演習 Special Seminar on Estuarine Ecology		2	
	Chemistry	錯体化学特論 Special Seminar on Coordination Chemistry		2	
		有機合成化学特論 Advanced Synthetic Organic Chemistry		2	
		有機材料科学特論 Advanced Organic Materials		2	
		高機能触媒表面化学 Advanced catalyst surface chemistry		2	
		粉体材料工学特論 Special Seminar on Powder Materials		2	
		生物無機化学 Bioinorganic Chemistry		2	
		有機反応化学特論 Advanced Organic Reaction Chemistry		2	
		光材料プロセス工学 Photophysical and photochemical processing of materials		2	
		分子機能化学特論 Functional Molecular Chemistry		2	
		調光セラミックス特論 Advanced light transmittance controlling ceramics		2	
		無機環境材料工学特論 Advanced Inorganic Environmental Materials Engineering		2	
		構造有機化学特論 Advanced Structural Organic Chemistry		2	
		健康衣料素材学特論 Advanced lecture on Clothing Material Science for Health		2	
		陸水化学特論 Advanced Limnological Chemistry		2	
		固体表面・界面物性学 Surface and Interface Science for Solid		2	
		木質材料特性評価学特論 Experimental characterization of wood-based materials		2	
		木質分子工学 Woody-Plant Molecular Engineering		2	
		機能性配位化学特論 Advanced Functional Coordination Chemistry		2	

科目区分 Subject Group	授業科目 Subject		Credit		備考 Remarks Column
			Required	Optional	
専門科目 Major Subjects	Chemistry	ランダム系構造学特論 Advanced course for structurally disordered functional		2	
		固体イオニクス特論 Advanced Solid State Ionics		2	
		錯体の材料科学特論 Advanced Coordination Chemistry for Material Science		2	
		ポリマーコロイド特論 Polymer Colloids and the Applications		2	
専門科目	Architectural Design	建築構造・住環境学 Building structures and living environment		2	
		居住文化特論 Advanced dwelling culture		2	
		建築計画デザイン学 Architectural Planning and Design		2	
		建築振動制御学 Response control methods for buildings		2	
		建築論特論 Advanced Architectural Theory		2	
		建築音響工学特論 Advanced Architectural Acoustic Engineering		2	
	Life Sciences	植物分子細胞生物学特論 Advanced Plant Molecular Biology		2	
		動物発生生物学特論 Advanced Animal Developmental Biology		2	
		動物組織再生学特論 Special Lecture on Animal Tissue Regeneration		2	
		生殖発生学特論 Advanced course in reproductive development		2	
		共生生物学特論 Advanced Biology of Endosymbiosis		2	
		理論生態学特論 Theoretical Ecology		2	
		分子細胞構造学特論 Advanced Molecular and Cell Structure		2	
		海洋生物科学特論 Advanced course for Marine Biology		2	
		行動生態学特論 Advanced Behavioral Ecology		2	
	他コース開講科目 Subjects offered in other courses				
必修科目 Required Subjects	論文研究 Thesis Research		4		
	特別セミナー Special Seminar		2		

大学院自然科学研究科規則別表第４

マテリアル創成工学特別プログラム Materials Engineering Special Program

全コース対象

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
実践教育科目 Practical Education Subjects	英語アカデミックリーディングセミナー English Academic Reading Seminar		2	実践教育科目2単位，専門科目4単位〔（ ）を付した15科目から2科目4単位を修得すること〕，論文研究4単位，特別セミナー2単位，合計12単位以上修得すること。 Students must acquire 2 credits from Practical Education Subjects, 4 credits from Major Subjects〔To acquire 4 credits in 2 subjects from the 15 subjects marked with ( )〕, 4 credits of Thesis Research and 2 credits of Special Seminar for a total of at least 12 credits.
	英語プラクティカルスキルアップセミナー English Practical Skill Up Seminar		2	
	社会人実践研究（企業滞在型実践研究） Social Practicing Program		2	
	知的財産と社会連携（研究開発マネジメント科目） Intellectual properties and Social contribution		2	
	Sustainability science and SDGs		2	
	Science for a sustainable society and future Earth		1	
	特別実践研究（ＰＢＬ型授業） Special Practice Research (PBL)		2	
	国際実践演習 Practice for International presentations		2	
	教育指導特別実習Ａ（実験・演習指導） Special Practice for Academic mentoring Ａ		2	
	教育指導特別実習Ｂ（発表指導） Special Practice for Academic mentoring Ｂ		2	
	ジョブ型研究インターンシップ Cooperative Education through Research Internships		2	
専門科目 Major Subjects	応用結晶成長学特論 Practical crystal growth theory of bulk and thin film	(2)		
	結晶材料解析学 Crystallographical analysis of materials	(2)		
	焼結材料学 Advanced sintered materials	(2)		
	ナノフォトニクス工学 Nanophotonics Engineering	(2)		
	薄膜材料デバイス Thin film materials and devices	(2)		
	先端電子材料設計学 Advanced electronic materials design theory	(2)		
	核融合炉材料 Fusion Reactor Materials	(2)		
	電子顕微鏡学 Transmission Electron Microscopy	(2)		
	高機能触媒表面化学 Advanced catalyst surface chemistry	(2)		

科目区分 Subject Group	授業科目 Subject	Credit		備　考 Remarks Column
		Required	Optional	
専門科目 Major Subjects	粉体材料工学特論 Special Seminar on Powder Materials	(2)		
	光材料プロセス工学 Photophysical and photochemical processing of materials	(2)		
	調光セラミックス特論 Advanced light transmittance controlling ceramics	(2)		
	無機環境材料工学特論 Advanced Inorganic Environmental Materials Engineering	(2)		
	固体表面・界面物性学 Surface and Interface Science for Solid	(2)		
	所属コースの開講科目 Subjects offered in your course			
	他コース開講科目 Subjects offered in other courses			
必修科目 Required Subjects	所属コースの論文研究 Thesis Research in your course	4		
	所属コースの特別セミナー Special Seminar in your course	2		

医理工農連携プログラム Collaborative Program of Medicine, Science, Engineering and Agriculture
全コース対象

科目区分 Subject Group	授業科目 Subject	Credit Required	Credit Optional	備考 Remarks Column
実践教育科目 Practical Education Subjects	英語アカデミックリーディングセミナー English Academic Reading Seminar		2	実践教育科目2単位，専門科目4単位〔（ ）を付した4科目から1科目2単位を修得すること〕，論文研究4単位，特別セミナー2単位，合計12単位以上修得すること。 Students must acquire 2 credits from Practical Education Subjects, 4 credits from Major Subjects〔To acquire 2 credits in 1 subjects from the 4 subjects marked with ( )〕, 4 credits of Thesis Research and 2 credits of Special Seminar for a total of at least 12 credits.
	英語プラクティカルスキルアップセミナー English Practical Skill Up Seminar		2	
	社会人実践研究（企業滞在型実践研究） Social Practicing Program		2	
	知的財産と社会連携（研究開発マネジメント科目） Intellectual properties and Social contribution		2	
	Sustainability science and SDGs		2	
	Science for a sustainable society and future Earth		1	
	特別実践研究（ＰＢＬ型授業） Special Practice Research (PBL)		2	
	国際実践演習 Practice for International presentations		2	
	教育指導特別実習Ａ（実験・演習指導） Special Practice for Academic mentoring Ａ		2	
	教育指導特別実習Ｂ（発表指導） Special Practice for Academic mentoring Ｂ		2	
	ジョブ型研究インターンシップ Cooperative Education through Research Internships		2	
専門科目 Major Subjects	理工医学のための生物材料学及び放射線 Biomaterials Science and Radiation	(2)		
	機能性物質・食品の医療応用と環境影響 Environmental Effects and Medical Applications of Functional Materials and Foods	(2)		
	臨床医学と社会・環境医学への高度情報学・数学の応用 Application of Advanced Informatics and Mathematical to Clinical and Social Medicine	(2)		
	医療のための光工学 Advanced Optical Engineering for Medical Application	(2)		
	所属コースの開講科目 Subjects offered in your course			
	他コース開講科目 Subjects offered in other courses			
必修科目 Required Subjects	所属コースの論文研究 Thesis Research in your course	4		
	所属コースの特別セミナー Special Seminar in your course	2		

科目区分 Subject Group	授業科目 Subject		Credit Required	Credit Optional	備考 Remarks Column
実践教育科目 Practical Education Subjects	英語アカデミックリーディングセミナー English Academic Reading Seminar			2	実践教育科目2単位，理工学コース専門科目2単位，論文研究4単位，特別セミナー2単位，実践教育科目,理工学コース専門科目又は自然環境システム科学コース専門科目の中から2単位，合計12単位以上修得すること。 Students must acquire 2 credits from Practical Education Subjects, 2 credits from Major Subjects of Science and Engineering Course, 4 credits of Thesis Research and 2 credits of Special Seminar. The remaining 2 credits must be selected from Practical Education Subjects and Major Subject, for a total of at least 12
	英語プラクティカルスキルアップセミナー English Practical Skill Up Seminar			2	
	社会人実践研究（企業滞在型実践研究） Social Practicing Program			2	
	知的財産と社会連携（研究開発マネジメント科目） Intellectual properties and Social contribution			2	
	Sustainability science and SDGs			2	
	Science for a sustainable society and future Earth			1	
	特別実践研究（ＰＢＬ型授業） Special Practice Research (PBL)			2	
	国際実践演習 Practice for International presentations			2	
	教育指導特別実習Ａ（実験・演習指導） Special Practice for Academic mentoring Ａ			2	
	教育指導特別実習Ｂ（発表指導） Special Practice for Academic mentoring Ｂ			2	
	ジョブ型研究インターンシップ Cooperative Education through Research Internships			2	
専門科目 Major Subjects	Mathematics	凸解析・非線形解析学特論 Advanced Convex and Nonlinear Analysis		2	
		生物数学特論 Mathematics in Mathematical Biology		2	
		複素幾何学特論 Complex Geometry		2	
		代数学特論 Special Lecture on Algebra		2	
		偏微分方程式特論 Advanced Partial Differential Equations		2	
		連続体理論とトポロジー Continuum Theory and Topology		2	
		調和写像論 Theory of Harmonic Map		2	
		ホモロジー代数学特論 Advanced Homological Algebra		2	
		多変量解析法の推測論 Inference Theory of Multivariate analysis		2	
		遅延方程式特論 Delay Equations		2	

科目区分 Subject Group		授業科目 Subject	Credit Required	Credit Optional	備考 Remarks Column
専門科目 Major Subjects	Information Systems Design and Data Science	プログラム解析技術特論 Doctoral Seminar in Program Analysis Methods		2	
		書換えシステム特論 Rewriting Systems		2	
		適応型ユーザインターフェース論 Adaptive User Interface		2	
		先進ネットワーク論 Advanced Network		2	
		情報科学ゼミナール Information Science Seminar		2	
		高信頼通信制御論 High Reliable Communication		2	
	Physics and Materials Science	超伝導物性特論 Special Topics in Superconductivity		2	
		量子理論物性学 Quantum theory of condensed matters		2	
		応用結晶成長学特論 Practical crystal growth theory of bulk and thin film		2	
		量子物理学特論 Advanced Theoretical Quantum Physics		2	
		強相関電子系物質学 Material science of strongly correlated electron systems		2	
		量子物性学特論 Advanced Lectures on Quantum Condensed-Matter Physics		2	
		結晶材料解析学 Crystallographical analysis of materials		2	
		焼結材料学 Advanced sintered materials		2	
		強誘電体物理学 Phyics on Ferroelectricity		2	
		ナノフォトニクス工学 Nanophotonics Engineering		2	
		薄膜材料デバイス Thin film materials and devices		2	
		先端電子材料設計学 Advanced electronic materials design theory		2	
		核融合炉材料 Fusion Reactor Materials		2	
		低温物理学特論 Advanced Low Temperature Physics		2	
		電子顕微鏡学 Transmission Electron Microscopy		2	
		半導体薄膜技術 Semiconductor thin film technologies		2	

科目区分 Subject Group	授業科目 Subject		Credit		備考 Remarks Column
			Required	Optional	
専門科目 Major Subjects	Mechanical, Electrical and Electronic Engineering	光通信論 Optical Communication Technology		2	
		光波計測論 Optical Metrology		2	
		知能移動ロボット論 Intelligent mobile robotics		2	
		大気計測論 Atmospheric remote sensing		2	
		光ファイバ工学論 Fiber optics and related applications		2	
		機械要素設計特論 Advanced Design of Machine Elements		2	
		振動解析学特論 Advanced Theory of Vibration Analysis		2	
		複雑系熱流体工学特論 Complex thermo-fluid dynamics		2	
		連続体力学特論 Continuum Mechanics		2	
	他コース開講科目 Subjects offered in other courses				
必修科目 Required Subjects	論文研究 Thesis Research		4		
	特別セミナー Special Seminar		2		

科目区分 Subject Group	授業科目 Subject		Credit Required	Credit Optional	備考 Remarks Column
実践教育科目 Practical Education Subjects	英語アカデミックリーディングセミナー English Academic Reading Seminar			2	実践教育科目2単位，理工学コース専門科目2単位，論文研究4単位，特別セミナー2単位，実践教育科目,理工学コース専門科目又は自然環境システム科学コース専門科目の中から2単位，合計12単位以上修得すること。 Students must acquire 2 credits from Practical Education Subjects, 2 credits from Major Subjects of Science of Natural Environment Systems Course, 4 credits of Thesis Research and 2 credits of Special Seminar. The remaining 2 credits must be selected from Practical Education Subjects and Major Subject,
	英語プラクティカルスキルアップセミナー English Practical Skill Up Seminar			2	
	社会人実践研究（企業滞在型実践研究） Social Practicing Program			2	
	知的財産と社会連携（研究開発マネジメント科目） Intellectual properties and Social contribution			2	
	Sustainability science and SDGs			2	
	Science for a sustainable society and future Earth			1	
	特別実践研究（ＰＢＬ型授業） Special Practice Research (PBL)			2	
	国際実践演習 Practice for International presentations			2	
	教育指導特別実習Ａ（実験・演習指導） Special Practice for Academic mentoring Ａ			2	
	教育指導特別実習Ｂ（発表指導） Special Practice for Academic mentoring Ｂ			2	
	ジョブ型研究インターンシップ Cooperative Education through Research Internships			2	
専門科目 Major Subjects	Earth Science	変成岩岩石学 Metamorphic petrology		2	
		有機資源地球物質科学 Mineral Science of Organic Natural Resources		2	
		微古生物学 Micropaleontology		2	
		地下流体解析学 Subsurface fluid flow modeling		2	
		堆積地質学特論 Advanced Sedimentary Geology		2	
		古環境・古生態学 Paleoenvironmentology and Paleoecology		2	
		火成岩岩石学特論 Advanced Igneous Petrology		2	
		生層序学特論 Advanced Biostratigraphy		2	
		火山学特論 Advanced Volcanology		2	
		汽水域環境変動論 Theory of Estuary Environmental Change		2	
		構造地質学 Structural Geology		2	

科目区分 Subject Group	授業科目 Subject		Credit		備考 Remarks Column
			Required	Optional	
専門科目 Major Subjects	Environmental and Sustainability Sciences	沿岸地質環境学 Coastal Geoenvironmental Science		2	
		水質水文学特論 Advanced Water Quality and Hydrology		2	
		環境水理学特論 Advanced Environmental Hydraulics		2	
		水環境保全学特論 Advanced Water Environmental Management		2	
		汽水域生態学特別演習 Special Seminar on Estuarine Ecology		2	
	Chemistry	錯体化学特論 Special Seminar on Coordination Chemistry		2	
		有機合成化学特論 Advanced Synthetic Organic Chemistry		2	
		有機材料科学特論 Advanced Organic Materials		2	
		高機能触媒表面化学 Advanced catalyst surface chemistry		2	
		粉体材料工学特論 Special Seminar on Powder Materials		2	
		生物無機化学 Bioinorganic Chemistry		2	
		有機反応化学特論 Advanced Organic Reaction Chemistry		2	
		光材料プロセス工学 Photophysical and photochemical processing of materials		2	
		分子機能化学特論 Functional Molecular Chemistry		2	
		調光セラミックス特論 Advanced light transmittance controlling ceramics		2	
		無機環境材料工学特論 Advanced Inorganic Environmental Materials Engineering		2	
		構造有機化学特論 Advanced Structural Organic Chemistry		2	
		健康衣料素材学特論 Advanced lecture on Clothing Material Science for Health		2	
		陸水化学特論 Advanced Limnological Chemistry		2	
		固体表面・界面物性学 Surface and Interface Science for Solid		2	
		木質材料特性評価学特論 Experimental characterization of wood-based materials		2	
		木質分子工学 Woody-Plant Molecular Engineering		2	
		機能性配位化学特論 Advanced Functional Coordination Chemistry		2	

科目区分 Subject Group	授業科目 Subject		Credit		備考 Remarks Column
			Required	Optional	
専門科目 Major Subjects	Chemistry	ランダム系構造学特論 Advanced course for structurally disordered functional		2	
		固体イオニクス特論 Advanced Solid State Ionics		2	
		錯体の材料科学特論 Advanced Coordination Chemistry for Material Science		2	
		ポリマーコロイド特論 Polymer Colloids and the Applications		2	
専門科目	Architectural Design	建築構造・住環境学 Building structures and living environment		2	
		居住文化特論 Advanced dwelling culture		2	
		建築計画デザイン学 Architectural Planning and Design		2	
		建築振動制御学 Response control methods for buildings		2	
		建築論特論 Advanced Architectural Theory		2	
		建築音響工学特論 Advanced Architectural Acoustic Engineering		2	
	Life Sciences	植物分子細胞生物学特論 Advanced Plant Molecular Biology		2	
		動物発生生物学特論 Advanced Animal Developmental Biology		2	
		動物組織再生学特論 Special Lecture on Animal Tissue Regeneration		2	
		生殖発生学特論 Advanced course in reproductive development		2	
		共生生物学特論 Advanced Biology of Endosymbiosis		2	
		理論生態学特論 Theoretical Ecology		2	
		分子細胞構造学特論 Advanced Molecular and Cell Structure		2	
		海洋生物科学特論 Advanced course for Marine Biology		2	
		行動生態学特論 Advanced Behavioral Ecology		2	
	他コース開講科目 Subjects offered in other courses				
必修科目 Required Subjects	論文研究 Thesis Research		4		
	特別セミナー Special Seminar		2		

英語による「地球」教育研究特別プログラム Special Program in Earth Science and Geoenvironmental Science
全コース対象

科目区分 Subject Group	授業科目 Subject		Credit Required	Credit Optional	備考 Remarks Column
実践教育科目 Practical Education Subjects	Sustainability science and SDGs			2	実践教育科目2単位，所属する専修分野の専門科目の中から2単位，実践教育科目又は専門科目の中から2単位，論文研究4単位，特別セミナー2単位，合計12単位以上修得すること。 Students must acquire 2 credits from Practical Education Subjects, 2 credits from Major Subjects of your department, 2 credits from Practical Education Subjects or Major Subjects, 4 credits of Thesis Research and 2 credits of Special Seminar, for a total of at least 12 credits.
	Science for a sustainable society and future Earth			1	
	特別実践研究（ＰＢＬ型授業） Special Practice Research (PBL)			2	
	国際実践演習 Practice for International presentations			2	
	教育指導特別実習Ａ（実験・演習指導） Special Practice for Academic mentoring Ａ			2	
	教育指導特別実習Ｂ（発表指導） Special Practice for Academic mentoring Ｂ			2	
	ジョブ型研究インターンシップ Cooperative Education through Research Internships			2	
専門科目 Major Subjects	Advanced Earth Science	Metamorphic Petrology 変成岩岩石学		2	
		Advanced Organic Geochemistry 有機地球化学特論		2	
		Micropaleontology 微古生物学		2	
		Advanced Sedimentology 堆積学特論		2	
		Advanced Igneous Petrology 火成岩岩石学特論		2	
		Advanced Biostratigraphy 生層序学特論		2	
		Advanced Volcanology 火山学特論		2	
	Earth Resource Science and Technology	Mineral Science of Organic Natural Resources 有機資源地球物質科学		2	
		Groundwater Modeling 地下水モデリング		2	
		Ultization Engeneering of Forest Resources 森林資源利用工学		2	
	Geoenvironment and Natural Hazards	Paleoenvironmentology and Paleoecology 古環境・古生態学		2	
		Coastal Geoenvironmental Science 沿岸地質環境学		2	
		Structural Geology 構造地質学		2	
	COMMON FIELD	Effective Manuscript Preparation A 論文執筆計画Ａ		2	
		Effective Manuscript Preparation B 論文執筆計画Ｂ		2	

科目区分 Subject Group	授業科目 Subject	Credit		備考 Remarks Column
		Required	Optional	
必修科目 Required Subjects	所属コースの論文研究 Thesis Research in your course	4		
	所属コースの特別セミナー Special Seminar in your course	2		

Regulations,etc.

Regulations of the Graduate School of Natural Science and Technology

(Item 1 of the Regulations of the Graduate School of Natural Science and Technology of Shimane University, 2018)
(Enacted on April 1, 2018)
(Last revised on March 13, 2024)

(Purpose)

Article 1. Matters related to the Graduate School of Natural Science and Technology (hereinafter, the "Graduate School") shall be governed by the provisions of these Regulations, except for those matters stipulated in the Regulations of the Graduate School of Shimane University (Item 3 of the Regulations of Shimane University, 2004) and special provisions based on the latter.

(Purpose of Education and Research)

Article 2. The purpose of the Master Course of the Graduate School shall be to foster abundantly creative, advanced engineers and researchers who can contribute to the development of science and technology and the realization of a sustainable society from a comprehensive and integrated perspective, and human resources with a global outlook who can contribute to regional society.

2. The purpose of the Doctor Course of the Graduate School shall be, as a Graduate School with deep roots in the regional community that is open to the world, to foster human resources in the fields of science and engineering with rich personal qualities and extremely high specialization, who have also acquired global sensitivities and contribute to society with advanced abilities to discover new research topics and solve problems.

(Majors and Educational Courses)

Article 3. The major fields of study and educational courses established in the Master Course of the Graduate School shall be as follows.

Major in Science and Engineering
Advanced Materials Science and Engineering Course, Mathematics Course, Information Systems Design and Data Science Course, Physics and Applied Physics Course, Mechanical, Electrical and Electronic Engineering Course

Major in Science of Environmental Systems
Earth Science Course, Environmental and Sustainability Sciences Course, Chemistry Course, Architectural Design Course

Major in Agricultural and Life Sciences
Life Sciences Course, Agricultural and Forest Sciences Course

2. The major fields of study and educational courses established in the Doctor Course of the Graduate School shall be as follows.

Major in Science and Engineering for Innovation
Science and Engineering Course, Science of Natural Environment Systems Course

(Education and Research Departments)

Article 3-2. The education and research departments established in the educational courses of the Doctor Course of the Graduate School shall be as follows.

Science and Engineering Course
Mathematics Department, Information Systems Design and Data Science Department, Physics and Materials Science Department, Mechanical, Electrical and Electronic Engineering Department

Science of Natural Environment Systems Course
Earth Science Department, Environmental and Sustainability Sciences Department, Chemistry Department, Architectural Design Department, Life Sciences Department

(Attached Educational Facilities)

Article 4. The attached educational facilities of the Graduate School shall be as follows.

Attached Center for the Promotion of Industry-Government-Academia Education

2. Matters related to the Attached Center for the Promotion of Industry-Government-Academia Education shall be stipulated separately.

(Organization of Educational Structure)

Article 5. The Master Course of the Graduate School shall be organized consisting of persons who are qualified to supervise education and Research Guidance within the Master Course, from among the University's professors, associate professors, lecturers and research associates.

2. The Doctor Course of the Graduate School shall be organized consisting of persons who are qualified to supervise education and Research Guidance within the Doctor Course, from among the University's professors, associate professors, and lecturers.

(Period of Entrance)

Article 6. The period of entrance to the Graduate School shall be April or October.

(Term of Study for Reentrant Students and Transfer Students)

Article 7. In accordance with the provisions of Articles 12 and 13 of the Regulations of the Graduate School, the term of study for persons who have been permitted to reenter or transfer to the Graduate School shall be determined after deliberation at the Graduate School Faculty Meeting, at the time of deciding on the acceptance or rejection of the relevant applicant.

(Term of Enrollment of Reentrant Students and Transfer Students)

Article 8. In accordance with the provisions of Articles 12 and 13 of the Regulations of the Graduate School, the term of enrollment for persons who have been permitted to reenter or transfer to the Graduate School shall be stipulated separately.

(Method of Education)

Article 9. Education at the Graduate School shall be conducted by means of classes taught on Class Subjects and guidance (hereinafter, "Research Guidance") pertaining to the creation of a Thesis, etc.

(Special Provisions for Method of Education for Part-time Students)

Article 10. If special educational requirements are deemed to exist by the Graduate School Faculty Meeting, it shall be possible to conduct classes or Research Guidance at night, or at other specific times or periods.

2. Students for whom the provisions of the preceding paragraph apply shall, at the time of entrance, be given prior notice of plans to hold such Class Subjects across the two years of the Master Course, or three years of the Doctor Course, and shall be required to formulate a Class Registration Plan covering the two-year period or the three-year period.

(Special Education Programs)

Article 11. The Medicine-Science-Engineering-Agriculture Coordination Program, the Double Degree Program, the English-Medium Program for International Students, and the English-Medium "Earth" Education Special Research Program shall be established in the Master Course of the Graduate School (hereinafter, the four programs shall be collectively referred to as the "Master Course Special Education Programs".).

2. The Materials Engineering Special Program, the Collaborative Program of Medicine, Science, Engineering and Agriculture, the Double Degree Program, and the Special Program in Earth Science and Geoenvironmental Science shall be established in the Doctor Course of the Graduate School (hereinafter, the four programs shall be collectively referred to as the "Doctor Course Special Education Programs").

(Undergraduate and Master Course Integrated Program)

Article 12. The Undergraduate and Master Course Integrated Program shall be established at the Graduate School.

2. The necessary matters related to the Undergraduate and Master Course Integrated Program shall be stipulated separately.

(Method of Credit Calculation for Thesis Research)

Article 13. Thesis Research in the Master Course shall be in accordance with the form of guidance in each established Educational Course, shall be treated as seminars or experiments, and shall be calculated according to the respective following criteria for each Educational Course.

i.For the Advanced Materials Science and Engineering Course Thesis Research, Research Guidance of 30 hours of Seminars, 30 or 45 hours of Experiments, shall constitute one credit.

ii.For the Mathematics Course Thesis Research, Research Guidance of 30 hours of Seminars shall constitute one credit.

iii.For the Information Systems Design and Data Science Course Thesis Research, Research Guidance of 30 hours of Seminars shall constitute one credit.

iv. For the Physics and Applied Physics Course Thesis Research, Research Guidance of 30 hours of Seminars or Experiments shall constitute one credit.

v. For the Mechanical, Electrical and Electronic Engineering Course Thesis Research Experiment, Research Guidance of 45 hours of Experiments shall constitute one credit.

vi. For the Earth Science Course Thesis Research, Research Guidance of 30 hours of Seminars, or 45 hours

of Experiments, shall constitute one credit.

vii. For the Environmental and Sustainability Sciences Course Thesis Research, Research Guidance of 30 hours of Seminars, or 45 hours of Experiments, shall constitute one credit.

viii. For the Chemistry Course Thesis Research, Research Guidance of 30 hours of Experiments shall constitute one credit.

ix. For the Architectural Design Course Thesis Research, Research Guidance of 30 hours of Seminars or Experiments shall constitute one credit.

x. For the Life Sciences Course Thesis Research, Research Guidance of 30 hours of Seminars, or 45 hours of Experiments, shall constitute one credit.

xi. For the Agricultural and Forest Sciences Course Thesis Research, Research Guidance of 30 hours of Seminars, or 45 hours of Experiments, shall constitute one credit.

(Method of Credit Calculation for Thesis Research)

Article 13-2. Thesis Research in the Doctor Course shall be in accordance with the form of guidance in each established Education and Research Department, shall be treated as seminars or experiments, and shall be calculated according to the respective following criteria for each Education and Research Department.

i. For the Mathematics Department Thesis Research, Research Guidance of 30 hours of Seminars shall constitute one credit.

ii. For the Information Systems Design and Data Science Department Thesis Research, Research Guidance of 30 hours of Seminars shall constitute one credit.

iii. For the Physics and Materials Science Department Thesis Research, Research Guidance of 30 hours of Seminars or Experiments shall constitute one credit.

iv. For the Mechanical, Electrical and Electronic Engineering Department Thesis Research, Research Guidance of 45 hours of Experiments shall constitute one credit.

v. For the Earth Science Department Thesis Research, Research Guidance of 30 hours of Seminars, or 45 hours of Experiments, shall constitute one credit.

vi. For the Environmental and Sustainability Sciences Department Thesis Research, Research Guidance of 30 hours of Seminars, or 45 hours of Experiments, shall constitute one credit.

vii. For the Chemistry Department Thesis Research, Research Guidance of 30 hours of Experiments shall constitute one credit.

viii. For the Architectural Design Department Thesis Research, Research Guidance of 30 hours of Seminars or Experiments shall constitute one credit.

ix. For the Life Sciences Department Thesis Research, Research Guidance of 30 hours of Seminars, or 45 hours of Experiments, shall constitute one credit.

(Class Subjects, Number of Credits, etc.)

Article 14. The Class Subjects and number of credits in the Graduate School for the Master Course shall be as stated in Appended Tables 1 and 2, and those for the Doctor Course shall be as stated in Appended Tables 3 and 4.

2. If special educational or research requirements are deemed to exist by the Graduate School Faculty Meeting, it shall be possible to establish Class Subjects by special appointment.

(Academic Advisor)

Article 15. In order to provide Class Registration Guidance and Research Guidance to students, academic advisors shall be appointed.

2. One main academic advisor shall be appointed to each student of the Master Course.

3. In addition to the main academic advisor stipulated in the preceding paragraph, one or more co-advisor shall be appointed. However, among these co-advisors at least one shall be a faculty member from a different course within the same major, or from a different major.

4. The main academic advisor stipulated in Paragraph 2 and the co-advisors stipulated in the preceding paragraph shall be designated from among the faculty members responsible for the Master Course, after deliberation at the Graduate School Faculty Meeting.

5. A professor (including Full-time Contract professor) responsible for the Master Course shall serve as the main academic advisor stipulated in Paragraph 2. However, an associate professor or lecturer may be appointed, if deemed necessary by the Graduate School Faculty Meeting.

6. One main academic advisor shall be appointed to each student of the Doctor Course.

7. In addition to the main academic advisor stipulated in the preceding paragraph, three or more co-advisors shall be appointed. However, among these co-advisors at least one shall be a faculty member from a different Education and Research Department.

8. The main academic advisor stipulated in Paragraph 6 and the co-advisors stipulated in the preceding paragraph shall be designated from among the faculty members responsible for the Doctor Course, after deliberation at the Graduate School Faculty Meeting.
9. A professor (including Full-time Contract professor) responsible for the Doctor Course shall serve as the main academic advisor stipulated in Paragraph 6. However, an associate professor or lecturer may be appointed, if deemed necessary by the Graduate School Faculty Meeting.

(Research Guidance Plan)

Article 16. The main academic advisor stipulated in Paragraph 2 of the preceding Article shall write a Research Guidance Plan for each student regarding the writing of their Thesis or Research Results on a specific project (hereinafter, "Thesis, etc."), and shall clearly indicate the plan for that year's Research Guidance to students beforehand.
2. Other necessary matters related to the method and contents of Research Guidance that are not stipulated in the preceding paragraph shall be stipulated separately.
3. The main academic advisor stipulated in Paragraph 6 of the preceding Article shall write a Research Guidance Plan for each student regarding the writing of their Thesis, and shall clearly indicate the plan for that year's Research Guidance to students beforehand.
4. Other necessary matters related to the method and contents of Research Guidance that are not stipulated in the preceding paragraph shall be stipulated separately.

(Method of Class Registration)

Article 17. Students of the Master Course must acquire a total of thirty or more credits from among the Class Subjects of their affiliated Educational Course and other Educational Courses, and undertake Research Guidance. Students of the Doctor Course must acquire a total of twelve or more credits from among the Class Subjects of their affiliated Educational Course and other Educational Courses, and undertake Research Guidance.
2. When students wish to take Class Subjects, they must decide upon the Class Subjects they wish to take in accordance with the prior instructions of their main academic advisor, and register the said classes by the appointed date.
3. Other necessary matters related to the method of Class Registration that are not stipulated in the preceding paragraph shall be stipulated separately.

(Taking Class Subjects at Graduate Schools of Other Universities, etc.)

Article 18. In accordance with the provisions of Article 20 of the Regulations of the Graduate School, it shall be possible for students to take Class Subjects at Graduate Schools of other Universities or Graduate Schools in other countries (hereinafter, "Graduate Schools of other Universities") as specified separately by the Graduate School.
2. When students wish to take Class Subjects at Graduate Schools of other universities, in accordance with the provisions of the preceding paragraph, permission must be obtained from the President after receiving permission from the Dean of the Graduate School.
3. Credits acquired in accordance with the provisions of Paragraph 1 shall be limited to a total of ten, and can be included in the number of credits mentioned in Article 17, Paragraph 1.
4. Other necessary matters related to taking Class Subjects at Graduate Schools of other universities that are not stipulated in the preceding three paragraphs shall be stipulated separately.

(Research Guidance at Graduate Schools of Other Universities, etc.)

Article 19. In accordance with the provisions of Article 21 of the Regulations of the Graduate School, it shall be possible for students to undertake necessary Research Guidance at Graduate Schools of other Universities or research institutes, etc. However, the period of undertaking such Research Guidance shall not exceed one year for students of the Master Course.
2. When students wish to receive Research Guidance at Graduate Schools of other Universities or research institutes, etc., in accordance with the provisions of the preceding paragraph, permission must be obtained from the President after receiving permission from the Dean of the Graduate School.
3. Other necessary matters related to receiving Research Guidance at Graduate Schools of other Universities or research institutes, etc., that are not stipulated in the preceding two paragraphs shall be stipulated separately.

(Conferment of Credits)

Article 20. Credits shall be granted in relation to Class Subjects taken by the student, when the student passes an examination conducted by the class teacher.

2. Examinations under the provisions of the preceding paragraph shall be conducted at the end of the semester, the end of the academic year, or in the middle of the semester, by means of a written examination, an oral examination or a research report, etc.

(Supplementary Examinations)

Article 21. If a student is unable to take an examination as stated in Paragraph 1 of the preceding Article due to illness or other unavoidable reasons, it shall be possible to take a supplementary examination after applying to the Dean of the Graduate School and obtaining the approval of the class teacher.

(Thesis, etc.)

Article 22. Students must submit a Thesis, etc., to the Dean of the Graduate School by the appointed date, after obtaining the approval of their main academic advisor.

2. Other necessary matters related to the assessment and examination of the Thesis, etc., that are not stipulated in the preceding paragraph shall be stipulated separately.

(Special Audit Students)

Article 23. The necessary matters related to the acceptance, etc., of Special Audit Students shall be stipulated separately.

(Special Research Students)

Article 24. The necessary matters related to the acceptance, etc., of Special Research Students shall be stipulated separately.

(Teacher's License)

Article 25. The types of Teacher's License for which the required qualifications can be acquired at the Graduate School shall be as follows.

Type/ Curriculum / Major	Type of License/Curriculum	
	Junior High School Education Specialization License	High School Education Specialization License
Master Course Major in Science and Engineering	Science, Mathematics	Science, Mathematics, Information, Technical
Master Course Major in Science of Environmental Systems	Science	Science, Agriculture
Master Course Major in Agricultural and Life Sciences	Science	Science, Agriculture

(Organized Training, etc.)

Article 26. The Graduate School shall implement organized training and research in order to plan improvements to the contents and method of classes and Research Guidance at the Graduate School.

2. The Graduate School shall establish opportunities to for students of the Doctor Course to foster the necessary abilities for teaching the knowledge they possess after the completion of their degree, and shall also provide information related to such opportunities.

Supplementary Provisions

These Regulations shall be enforced from April 1, 2018.

Supplementary Provisions (partially revised on February 20, 2019)

1. These Regulations shall be enforced from April 1, 2019.
2. Regarding students who entered prior to the academic year 2018, and students who re-entered or transferred during the said year, treatment shall be made in accordance with previous examples, regardless of the provisions of the Regulations of the Graduate School of Life and Environmental Science of Shimane University after the amendments made by these Regulations.

Supplementary Provisions (partially revised on February 19, 2020)

1. These Regulations shall be enforced from April 1, 2020.
2. Regarding students who entered prior to the academic year 2019, and students who re-entered or transferred during the said year, treatment shall be made in accordance with previous examples, regardless

of the provisions of the Regulations of the Graduate School of Life and Environmental Science of Shimane University after the amendments made by these Regulations.

Supplementary Provisions (partially revised on December 23, 2020)

These Regulations shall be enforced from January 1, 2021.

Supplementary Provisions (partially revised on February 17, 2021)

1. These Regulations shall be enforced from April 1, 2021.
2. Regarding students who entered prior to the academic year 2020, and students who re-entered or transferred during the said year, treatment shall be made in accordance with previous examples, regardless of the provisions of the Regulations of the Graduate School of Life and Environmental Science of Shimane University after the amendments made by these Regulations.

Supplementary Provisions (partially revised on March 16, 2022)

1. These Regulations shall be enforced from April 1, 2022.
2. Regarding students who entered prior to the academic year 2021, and students who re-entered or transferred during the said year, treatment shall be made in accordance with previous examples, regardless of the provisions of the Regulations of the Graduate School of Life and Environmental Science of Shimane University after the amendments made by these Regulations. However, "Sustainability science and SDGs" listed in Appendix 1, "Sustainability science and SDGs" listed in Appendix 2, "Sustainability science and SDGs", "Science for a sustainable society and future Earth", "Semiconductor thin film technologies" and "Advanced Behavioral Ecology" listed in Appendix 3 and "Sustainability science and SDGs" and "Science for a sustainable society and future Earth" listed in Appendix 4 are also apply to students who entered prior to the academic year 2021 (including those who re-entered or transferred during the said year).

Supplementary Provisions (partially revised on June 22, 2022)

1. These Regulations shall be enforced from June 22, 2022.

Supplementary Provisions (partially revised on October 26, 2022)

1. These Regulations shall be enforced from October 26, 2022.
2. Regarding students who entered prior to the academic year 2021, and students who re-entered or transferred during the said year, treatment shall be made in accordance with previous examples, regardless of the provisions of the Regulations of the Graduate School of Life and Environmental Science of Shimane University after the amendments made by these Regulations. However, "Statistical Pattern Recognition" and "Information Logic" listed in Appendix 2 are also apply to students who entered prior to the academic year 2021 (including those who re-entered or transferred during the said year).

Supplementary Provisions (partially revised on February 22, 2023)

1. These Regulations shall be enforced from April 1, 2023.
2. Regarding students who entered prior to the academic year 2022, and students who re-entered or transferred during the said year, treatment shall be made in accordance with previous examples, regardless of the provisions of the Regulations of the Graduate School of Life and Environmental Science of Shimane University after the amendments made by these Regulations.
3. Notwithstanding the provisions of the two preceding paragraphs, the revised coursework may be taken if deemed necessary for educational purposes.

Supplementary Provisions (partially revised on April 26, 2023)

1. These Regulations shall be enforced from April 26, 2023, and shall apply as from April 1, 2023.

Supplementary Provisions (partially revised on March 13, 2024)

1. These Regulations shall be enforced from April 1, 2024.
2. Regarding students who entered prior to the academic year 2023, and students who re-entered or transferred during the said year, treatment shall be made in accordance with previous examples, regardless of the provisions of the Regulations of the Graduate School of Life and Environmental Science of Shimane University after the amendments made by these Regulations. However, "Introduction to the Responsible Conduct of Research" listed in Appendix 1 and "Introduction to the Responsible Conduct of Research" listed in Appendix 2 are also apply to students who entered prior to the academic year 2023 (including those who re-entered or transferred during the said year).

Degree Regulations of Shimane University: Detailed Regulations for the Master Course of the Graduate School of Natural Science and Technology

(Item 1 of the Detailed Regulations of the Graduate School of Natural Science and Technology of Shimane University, 2018)
(Enacted on April 1, 2018)
(Last revised on March 22, 2022)

(Purpose)

Article 1. These Detailed Regulations stipulate the necessary matters related to the conferment of degrees in the Master Course of the Graduate School of Natural Science and Technology of Shimane University, based on Article 22 of the Degree Regulations of Shimane University (Item 95 of the Regulations of Shimane University, 2004), and Article 22, Paragraph 2 of the Regulations of the Graduate School of Natural Science and Technology of Shimane University (Item 1 of the Regulations of the Graduate School of Natural Science and Technology of Shimane University, 2018).

(Submission of Thesis)

Article 2. Students who have acquired, or are anticipated to acquire, thirty or more credits in relation to appointed Class Subjects shall be able to submit a Thesis.

2. Students who wish to receive assessment of their Thesis shall submit a Thesis Assessment Request (Appended Form No. 1), together with their Thesis (Appended Form No. 2) and a Thesis Abstract (Appended Form No. 3) to the Dean of the Graduate School, after obtaining the approval of the main academic advisor.

3. The submission deadline for Thesis shall be February 20th for students completing their degree in March, and August 20th for students completing their degree in September. Furthermore, the submission date of the manuscript for the Thesis Assessment shall be determined for each Educational Course.

(Research Results for Specific Projects)

Article 3. Students who have acquired, or are anticipated to acquire, thirty or more credits shall be able to submit research results on a specific project (hereinafter, original articles, review articles, technical documentation, and development of teaching materials, etc., shall be referred to collectively as "Research Results").

2. Students who wish to receive assessment of their Research Results shall submit a Research Results Assessment Request (Appended Form No. 4), together with their Research Results (Appended Form No. 5) and a Research Results Abstract (Appended Form No. 6) to the Dean of the Graduate School, after obtaining the approval of the main academic advisor.

3. The submission deadline for Research Results shall be February 20th for students completing their degree in March, and August 20th for students completing their degree in September. Furthermore, the submission date of the Research Results for Assessment shall be determined for each Educational Course.

(Selection of Assessment Committee for Thesis, etc.)

Article 4. Each major shall select candidates for an assessment committee for Thesis or Research Results (hereinafter, "Thesis, etc.") of students of the said major, with one chief examiner and two or more vice-examiners per submission; and shall recommend these candidates to the Graduate School Faculty Meeting by means of a List of Candidates for the Assessment Committee for Thesis, etc. (Appended Form No. 7), by December 25 for students completing their degree in March, or by the end of June for students completing their degree in September.

2. It shall be possible for each major to add teaching staff from other Graduate Schools or research institutes, etc. to the Assessment Committee for Thesis, etc. (hereinafter, the "Assessment Committee") of the preceding paragraph as vice-examiners.

3. The Graduate School Faculty Meeting shall decide on the Assessment Committee, based on the recommendation stipulated in Paragraphs 1 and 2.

(Assessment and Examination of Thesis, etc.)

Article 5. The Assessment Committee shall conduct assessment and examination of Thesis, etc., based on a summarization by the chief examiner.

2. The Assessment Committee shall decide on the method and date of the examination, and notify the student of the said major at least one week prior to holding the examination.

3. Evaluation of the results of the assessment and examination of Thesis, etc. shall be either Accept or Reject.

4. The evaluation criteria of Thesis, etc., shall be stipulated separately.
5. The Assessment Committee shall report the results of the assessment and examination of Thesis, etc. to the Graduate School Faculty Meeting by means of a Report of the Results of Assessment and Examination of Thesis, etc. (Appended Form No. 8), by the end of February for students completing their degree in March, or by the end of August for students completing their degree in September.

(Deliberation and Decision on Conferment of Degrees)

Article 6. The Graduate School Faculty Meeting shall deliberate and decide whether to confer a degree to the applicant, on the basis of the reported results of Thesis assessment, etc.,

2. The decision mentioned in the preceding paragraph shall be made by the agreement of at least two thirds of the attending members of the Graduate School Faculty Meeting.

(Storage of Thesis and Thesis Abstracts)

Article 7. Thesis shall be stored by the relevant Course, and Thesis abstracts shall be stored by the administrative office.

2. The storage period for Thesis and Thesis abstracts stipulated in the preceding paragraph shall be five years.

(Storage of Research Results and Research Results Abstracts)

Article 8. Research Results shall be stored by the relevant Course, and Research Results abstracts shall be stored by the Academic Affairs Division, Matsue Faculties Administration Department.

2. The storage period for Research Results and Research Results abstracts mentioned in the preceding paragraph shall be five years.

(Special Provisions for Submission Deadlines, etc.)

Article 9. Pursuant to the provisions of Article 2, Paragraph 3; Article 3, Paragraph 3; Article 4, Paragraph 1; and Article 5, Paragraph 5, if the said date falls on a Saturday, Sunday or National Holiday, the date shall be revised to the date two days later (if the revised date falls on a Saturday, Sunday or National Holiday, the date shall be one day prior to the revised date).

Supplementary Provisions

These Detailed Regulations shall be enforced from April 1, 2018.

Supplementary Provisions (partially revised on February 19, 2020)

These Detailed Regulations shall be enforced from February 19, 2020.

Supplementary Provisions (partially revised on February 17, 2021)

These Detailed Regulations shall be enforced from February 17, 2021.

Supplementary Provisions (partially revised on March 22, 2022)

These Detailed Regulations shall be enforced from April 1, 2022.

(Appended Form No. 1)

Academic Advisor (Stamp)	

Date (Month/ Day/ Year):

To the Dean of the Graduate School of Natural Science and Technology of Shimane University

Entered in (Year) Graduate School of Natural Science and Technology

Major

Course

Student Number

Name Stamp (Sign)

Master's Thesis Assessment Request

I hereby submit a Master's thesis and a Master's thesis abstract of the following title, and request assessment, in accordance with the Degree Regulations of Shimane University and the Degree Regulations of Shimane University: Detailed Regulations for the Master Course of the Graduate School of Natural Science and Technology.

1. Thesis Title

2. Applied Degree for

Master *(Science, Engineering, Life and Environmental Science)

*Select one according to the Cautions Regarding Applied Degree Description.

(Appended Form No. 2)

Format of Master's Thesis

1. The paper size shall be A4 as standard.

2. A clean copy of the thesis shall be transcribed in either Japanese or English, and in principle one copy of the thesis that is horizontally written and bound on the left side shall be submitted.

3. The following items shall be written on the front cover of the thesis.

Master's Thesis

Thesis Title

Graduate School of Natural Science and Technology, Shimane University

Major

Course

Student Number

Name:

(Appended Form No. 3)

Master's Thesis Abstract				
Applicant	Student Number Name		Major Course	
Thesis Title				

(Note) 1. The paper size shall be A4 as standard.

2. Write in about two hundred words.

(Appended Form No. 4)

Academic Advisor (Stamp)	

Date (Month/ Day/ Year):

To the Dean of the Graduate School of Natural Science and Technology of Shimane University

Entered in (Year) Graduate School of Natural Science and Technology

Major

Course

Student Number

Name Stamp (Sign)

Research Results Assessment Request

I hereby submit research results and a research results abstract of the following title, and request assessment, in accordance with the Degree Regulations of Shimane University and the Degree Regulations of Shimane University: Detailed Regulations for the Master Course of the Graduate School of Natural Science and Technology.

1. Thesis Title

2. Applied Degree for

Master *(Science, Engineering, Life and Environmental Science)

*Select one according to the Cautions Regarding Applied Degree Description.

(Appended Form No. 5)

Format of Research Results

1. The paper size shall be A4 as standard.

2. A clean copy of the research results shall be transcribed in either Japanese or English, and in principle one copy of the research results that is horizontally written and bound on the left side shall be submitted.

3. The following items shall be written on the front cover of the thesis.

Research Results

Title

Graduate School of Natural Science and Technology, Shimane University

Major

Course

Student Number

Name:

(Appended Form No. 6)

Research Results Abstract				
Applicant	Student Number Name		Major Course	
Title				

(Note) 1. The paper size shall be A4 as standard.

2. Write in about two hundred words.

Cautions Regarding Applied Degree Description

Please write your application with confirmation from your academic advisor.
The points of caution for each course are as follows.

Major in Science and Engineering

Advanced Materials Science and Engineering Course

The degree you can apply for is “Master (Science)” or “Master (Engineering)”.

The type of degree you will be awarded will be determined via an assessment based on your field of research and completed Class Subjects. Therefore, in some cases you may not be awarded the degree that you applied for. When discussing your research with your academic advisor, please confirm in advance which degree is appropriate for your research.

Mathematics Course

The degree you can apply for is “Master (Mathematics)” only.

Information Systems Design and Data Science Course

The degree you can apply for is “Master (Engineering)” only.

Physics and Applied Physics Course

The degree you can apply for is “Master (Science)” or “Master (Engineering)”.

The type of degree you will be awarded will be determined via an assessment based on your field of research and completed Class Subjects. Therefore, in some cases you may not be awarded the degree that you applied for. The research fields that correspond to each degree are approximately as follows.

Research fields corresponding to “Master (Science)”: Fundamental Physics field

Research fields corresponding to “Master (Engineering)”: Materials Science and Engineering field, Electronic Device Engineering field

Mechanical, Electrical and Electronic Engineering Course

The degree you can apply for is “Master (Engineering)” only.

Major in Science of Environmental Systems

Earth Science Course

The degree you can apply for is “Master (Science)” or “Master (Engineering)”.

The type of degree you will be awarded will be determined via an assessment based on your field of research and completed Class Subjects. Therefore, in some cases you may not be

awarded the degree that you applied for. The research fields that correspond to each degree are approximately as follows.

Research fields or research contents corresponding to “Master (Science)”:

Geoscience field, Geoenvironmental Science field,
and within the Geo-disaster Science field, research related to elucidation of the mechanism of natural disasters

Research fields or research contents corresponding to “Master (Engineering)”:

Within the Geo-disaster Science field, research related to anti-disaster construction methods or design,
and Geological Engineering/Geotechnology fields

Environmental and Sustainability Sciences Course

The degree you can apply for is “Master (Life and Environmental Science)” only.

Chemistry Course

The degree you can apply for is “Master (Science)” or “Master (Engineering)”.

The type of degree you will be awarded will be determined via an assessment based on your field of research and completed Class Subjects. Therefore, in some cases you may not be awarded the degree that you applied for. The research fields that correspond to each degree are approximately as follows.

Research fields corresponding to “Master (Science)”: Basic Chemistry field, Environmental Chemistry field

Research fields corresponding to “Master (Engineering)”: Functional Materials Chemistry field

Architectural Design Course

The degree you can apply for is “Master (Engineering)” only.

<u>Major in Agricultural and Life Sciences</u>

Life Sciences Course

The degree you can apply for is “Master (Life and Environmental Science)” only.

Agricultural and Forest Sciences Course

The degree you can apply for is “Master (Life and Environmental Science)” only.

Guide to Handling Student Exchange at the Graduate School of Natural Science and Technology

(Enacted on April 1, 2018)
(Last revised on December 23, 2020)

1. Handling of studying abroad, taking Class Subjects at other Graduate Schools and receiving Research Guidance at other Graduate Schools or research institutes, etc. (hereinafter, "other Graduate Schools, etc.), by students of the Graduate School of Natural Science and Technology of Shimane University (hereinafter, the "Graduate School"), in addition to handling of Special Audit Students and Special Research Students shall be governed by the provisions of this Guide, except for those matters stipulated in the Regulations of the Graduate School of Shimane University (Item 3 of the Regulations of Shimane University, 2004) and the Regulations of the Graduate School of Natural Science and Technology of Shimane University (Item 1 of the Regulations of the Graduate School of Natural Science and Technology of Shimane University, 2018).
2. Students who wish to study abroad must apply to the Dean of the Graduate School by submitting the documents listed below, and receive the permission of the President.
   i. Study Abroad Application (Appended Form 1)
   ii. Health Certificate
   iii. Academic Transcript
   iv. Written Approval for Study Abroad (Appended Form 2)
   v. Written consent from the overseas Graduate School or other institution
   vi. Any other documents required by this Graduate School and the overseas Graduate School or other institution
3. Students who wish to take Class Subjects at other Graduate Schools, etc., must apply to the Dean of the Graduate School by submitting the documents listed below, and receive the permission of the President.
   i. Application to Take Class Subjects at Other Graduate Schools (Appended Form 3)
   ii. Written Approval to Take Class Subjects at Other Graduate Schools (Appended Form 4)
   iii. Any other documents required by this Graduate School and the other Graduate School
4. Students who wish to receive Research Guidance at other Graduate Schools, etc., must apply to the Dean of the Graduate School by submitting the documents listed below at least two months prior to the date on which they wish to start receiving Research Guidance, and receive the permission of the President.
   i. Application to Receive Research Guidance at Other Graduate Schools (Appended Form 5)
   ii. Written Approval to Receive Research Guidance at Other Graduate Schools (Appended Form 6)
   iii. Any other documents required by this Graduate School and the other Graduate School
5. Students who wish to take Class Subjects at this Graduate School as Special Audit Students must apply to the Dean of the Graduate School by submitting the documents listed below at least two months prior to the start of the relevant Class Subject (four months in the case of overseas Graduate Schools), and receive the permission of the President, after receiving the approval of the said student's affiliated Graduate School.
   i. Special Audit Student Application (Appended Form 7)
   ii. Written recommendation by the Dean of their Graduate School, etc.

iii. Academic Transcript
iv. Health Certificate
v. Any other documents required by this Graduate School

6. Students who wish to receive Research Guidance at this Graduate School as Special Research Students must apply to the Dean of the Graduate School by submitting the documents listed below at least two months prior to the start of the semester in which they wish to receive Research Guidance, and receive the permission of the President, after receiving the approval of the said student's affiliated Graduate School.
   i. Special Research Student Application (Appended Form 8)
   ii. Written recommendation by the Dean of their Graduate School, etc.
   iii. Academic Transcript
   iv. Health Certificate
   v. Any other documents required by this Graduate School
7. Accreditation of credits acquired during Study Abroad, or by taking Class Subjects at other Graduate Schools, etc., shall be conducted after deliberation at the Graduate School Faculty Meeting.

Supplementary Provisions

This Guide shall be enforced from April 1, 2018.

Supplementary Provisions (partially revised on December 23, 2020)

This Guide shall be enforced from January 1, 2021.

Guide to Handling Complaints Regarding Academic Assessment at the Graduate School of Natural Science and Technology

(Enacted on April 1, 2018)
(Last revised on December 21, 2022)

1. This Guide stipulates the necessary matters related to the handling of disputes about academic assessment at the Graduate School of Natural Science and Technology of Shimane University (hereinafter, the "Graduate School"), based on the provisions of Shimane University's Guide to Handling Academic Assessment.
2. Inquiries related to academic assessment shall be handled as stipulated in Paragraph 6, Item 2 of Guide to Handling Academic Assessment (approved by the President on April 1, 2004).
3. The procedure for filing complaints in relation to the Graduate School's Class Subjects shall be as follows.

(1) Students shall fill in the necessary items on the Petition for Appeal Related to Academic Assessment (Appended Form No.1) (hereinafter, the "Petition") and present the Petition to the Academic Affairs Division of Matsue Faculties Administration Department (hereinafter, the "Administration Department").

(2) The Administration Department shall confirm the written contents of the Petition presented by the student, and instruct the student to submit the Petition to the Graduate School of Natural Science and Technology Master Course School Board Chairperson (in the case of Doctor Course students, the Doctor Course School Board Chairperson) (hereinafter, the "School Board Chairperson").

(3) The School Board Chairperson shall establish an investigative committee consisting of the School Board Chairperson and a small number of members of the Master Course School Board (in the case of Doctor Course students, members of the Doctor Course School Board) (hereinafter, the "School Board Members").

(4) The investigative committee shall take the following measures in response to the submission of the Petition. However, if the School Board Chairperson or a member of the School Board is the teacher of the relevant Class Subject (hereinafter, the "Teacher"), an investigative committee consisting of School Board members, a small number of other members and an acting proxy Chairperson designated by the School Board Chairperson, with the exception of the Teacher, shall respond to the Petition.

The investigative committee shall:

1.1. Interview the relevant student and confirm the contents of the Petition.
1.2. Interview the Teacher, and confirm the facts of the Petition.
1.3. Write a Response to the Petition for Appeal Related to Academic Assessment (Appended Form No. 2) (hereinafter, the "Response Form"), and present it to the Teacher.

If the Teacher accepts the proposed solution (Response Form):

1.4. Request the Administration Department to send the relevant student to meet with the School Board Chairperson.
1.5. The School Board Chairperson shall respond to the student.

If the Teacher does not accept the proposed solution (Response Form):

1.6. Interview the head of the Teacher's affiliated Major, or head of Course (in the case of Doctor Course students, the head of Department), and explain the progression of events. In addition, request initiation of an investigation within the Educational Course or Education and Research Department, and submission of a report on the investigation results (free format) to the School Board Chairperson.
1.7. After receiving the report on the investigation results, hold a consultation at the next meeting of the Master Course School Board, the Doctor Course School Board, and the Graduate School Faculty Meeting.
1.8. Undertaking the results of the above-mentioned meetings, the School Board Chairperson shall convey the results of the meetings and other matters to the relevant student.

4. The period in which a student can file a complaint shall be within twenty days from the notification of assessment, starting on the day of notification.
5. Regarding complaints filed in relation to academic assessment of students during their semester of expected completion, notwithstanding the preceding paragraph, the period shall in principle be within three days from the day of hearing the class Teacher's explanation.
6. After measures have been taken, Petitions shall be destroyed following a period of ten year's retention, starting on the day of measures, at the Administration Department.
7. Complaints regarding academic assessment may only be made once per relevant Class Subject in the relevant period.

8. This Guide shall apply to the procedure for complaints regarding the assessment and final examination of the Thesis, etc., of students in the Master Course and the Doctor Course.

Supplementary Provisions
This Guide shall be enforced from April 1, 2018.
Supplementary Provisions (partially revised on February 19, 2020)
This Guide shall be enforced from April 1, 2020.
Supplementary Provisions (partially revised on December 23, 2020)
This Guide shall be enforced from January 1, 2021.
Supplementary Provisions (partially revised on March 22, 2022)
This Guide shall be enforced from April 1, 2022.
Supplementary Provisions (partially revised on June 22, 2022)
This Guide shall be enforced from June 22, 2022.
Supplementary Provisions (partially revised on December 21, 2022)
This Guide shall be enforced from December 21, 2022.

Appended Form No. 1

Date:

Petition for Appeal Related to Academic Assessment

To the Dean of the Graduate School of Natural Science and Technology of Shimane University

Petitioner:
Major Course

Student Number:
Name:
Phone Number: - -

I hereby appeal as follows, on the basis of Item 3-1 of the Guide to Handling Complaints Regarding Academic Assessment at the Graduate School of Natural Science and Technology.

1. Name of class teacher:
2. Class subject group, etc.
   Subject group: Class name:
3. Date of inquiry into academic assessment:
4. Contents of appeal (please write the details of your complaint.)

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Appended Form No. 2

Date:

Response to the Petition for Appeal Related to Academic Assessment

Petitioner:
Major Course
Student's Name:

Dean of the Graduate School of Natural Science and Technology of Shimane University
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I hereby respond with the following results of an investigation into the facts of the situation, on the basis of Item 3-4 of the Guide to Handling Complaints Regarding Academic Assessment at the Graduate School of Natural Science and Technology.

1. Name of class teacher:
2. Class subject group, etc.
   Subject group: Class name:
3. Contents of appeal

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4. Results of investigation

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Guide to Handling Accreditation of Credits Acquired Prior to Entering the Graduate School of Natural Science and Technology

(Enacted on April 1, 2018)
(Last revised on February 17, 2021)

Article 1. This Guide stipulates the necessary matters related to the handling of cases of accreditation of credits acquired by students prior to entering the Graduate School of Natural Science and Technology of Shimane University (hereinafter, the "Graduate School") as credits acquired at the Graduate School, based on the provisions of Article 24, Paragraph 4 of the Regulations of the Graduate School (Item 3 of the Regulations of Shimane University, 2004).

Article 2. It shall be possible for credits previously acquired by students who entered the Graduate School in the first year of study, that are deemed to be identical to the class contents of Class Subjects established by the Graduate School, to be accredited, limited to a total of 15 credits, after deliberation by the Graduate School Faculty Meeting.

Article 3. Accreditation of credits previously acquired by students who have transferred to the Graduate School, and credits by students in accordance with the Guide to Registration of Class Subjects of the Graduate School of Natural Science and Technology by Students of the Interdisciplinary Faculty of Science and Engineering (enacted on April 1, 2018), or the Guide to Registration of Class Subjects of the Graduate School of Natural Science and Technology by Students of the Faculty of Life and Environmental Science (enacted on April 1, 2018), shall be stipulated separately.

Article 4. Students who wish to receive accreditation of previously acquired credits must apply to the Dean of the Graduate School by the appointed date by submitting the documents listed below, after obtaining the approval of their main academic advisor.

i. Application for Accreditation of Previously Acquired Credits (Appended Form No. 1)
ii. Academic Transcript or Certificate of Credits Acquired
iii. Certificate of Completion or Certificate of Enrollment Period
iv. Syllabus or Statement of course content, etc.
v. Any other documents deemed necessary by the Graduate School

Article 5. The Dean of the Graduate School, after receiving the application stipulated in the preceding Article, shall request the head of the Course that holds the relevant Class Subject (including persons designated by the Dean of the Graduate School for Class Subjects common to the Graduate School and Class Subjects held in the Medicine-Science-Engineering-Agriculture Coordination Program) or the head of the Department (including persons designated by the Dean of the Graduate School for Practical Education Class Subjects) to assess whether or not the class contents are identical.

Article 6. It shall be possible to conduct an interview, oral examination etc., for the assessment mentioned in the preceding Article.

Article 7. When accreditation of previously acquired credits is carried out, a Certificate of Accreditation (Appended Form No. 2) shall be issued to the said student, and guidance shall be conducted with the aim of enrichment of study contents, such as taking another Class Subject in substitution of the credits of the Class Subject that was accredited, etc.

Supplementary Provisions
This Guide shall be enforced from April 1, 2018.
Supplementary Provisions (partially revised on February 19, 2020)
This Guide shall be enforced from April 1, 2020.
Supplementary Provisions (partially revised on December 23, 2020)
This Guide shall be enforced from January 1, 2021.
Supplementary Provisions (partially revised on February 17, 2021)
1 This Guide shall be enforced from February 17, 2021.
2 Notwithstanding the provisions of the preceding paragraph, the provisions of Article 2 shall apply from June 30, 2020.

Guide to Handling Accreditation of Credits Previously Acquired by Students who have Transferred to the Graduate School of Natural Science and Technology

(Enacted on April 1, 2018)
(Last revised on December 23, 2020)

Article 1. This Guide stipulates the necessary matters related to the handling of cases of accreditation of credits previously acquired by students who have transferred to the Graduate School of Natural Science and Technology of Shimane University (hereinafter, the "Graduate School") as credits acquired at the Graduate School, based on the provisions of Article 3 of the Guide to Handling Accreditation of Credits Acquired Prior to Entering the Graduate School of Natural Science and Technology (enacted on April 1, 2018).

Article 2. It shall be possible for credits previously acquired by students who have transferred to the Graduate School, that are deemed to be identical to the class contents of Class Subjects established by the Graduate School, to be accredited, after deliberation by the Graduate School Faculty Meeting.

Article 3. Students who wish to receive accreditation of previously acquired credits must apply to the Dean of the Graduate School by the appointed date by submitting the documents listed below, after obtaining the approval of their main academic advisor.

i. Application for Accreditation of Previously Acquired Credits (Appended Form No. 1)
ii. The class registration regulations of the previously attended Graduate School, etc. (including indication of the number of class hours per one credit)
iii. Academic Transcript (and, if any classes are currently being taken at the time of submission, a written record to this effect)
iv. Syllabus, or document stating the class contents, etc.
v. Any other documents deemed necessary by the Graduate School

Article 4. The Dean of the Graduate School, after receiving the application stipulated in the preceding Article, shall request the head of the Course that holds the relevant Class Subject (including persons designated by the Dean of the Graduate School for Class Subjects common to the Graduate School and Class Subjects held in the Medicine-Science-Engineering-Agriculture Coordination Program) or the head of the Department (including persons designated by the Dean of the Graduate School for Practical Education Class Subjects) to assess whether or not the class contents are identical.

Article 5. It shall be possible to conduct an interview, oral examination etc., for the assessment mentioned in the preceding Article.

Article 6. When accreditation of previously acquired credits is carried out, a Certificate of Accreditation (Appended Form No. 2) shall be issued to the said student.

Supplementary Provisions
This Guide shall be enforced from April 1, 2018.
Supplementary Provisions (partially revised on February 19, 2020)
This Guide shall be enforced from April 1, 2020.
Supplementary Provisions (partially revised on December 23, 2020)
This Guide shall be enforced from January 1, 2021.

Arrangement of Accreditation of Credits Acquired by Students in Accordance with the Guide to Registration of Credits of Class Subjects of the Graduate School of Natural Science and Technology by Students of the Interdisciplinary Faculty of Science and Engineering and the Faculty of Life and Environmental Science

(Enacted on April 1, 2018)
(Last revised on December 23, 2020)

Accreditation of credits acquired by students in accordance with the Guide to Registration of Class Subjects of the Graduate School of Natural Science and Technology by Students of the Interdisciplinary Faculty of Science and Engineering (enacted on April 1, 2018), or the Guide to Registration of Class Subjects of the Graduate School of Natural Science and Technology by Students of the Faculty of Life and Environmental Science (enacted on April 1, 2018), shall be arranged as follows.

1. Students who wish to receive accreditation of credits must, after entering the Graduate School of Natural Science and Technology of Shimane University (hereinafter, the "Graduate School"), apply to the Dean of the Graduate School by the appointed date by submitting the documents listed below, after obtaining the approval of their main academic advisor.

   i. Application for Accreditation of Credits of Class Subjects of the Graduate School of Natural Science and Technology (Appended Form)
   ii. Academic Transcript
   iii. Any other documents deemed necessary by the Graduate School

2. Accreditation of credits shall, in principle, certify a credit to be identical to a Class Subject held at the Graduate School of Natural Science and Technology after entering the Graduate School. However, if this causes any difficulty, it shall be possible to certify a credit to be a Class Subject that is deemed to be equivalent, after assessment of the class contents.

3. Class Subjects that have received accreditation shall not be accredited if taken after entering the Graduate School.

4. For other necessary matters related to accreditation, the Guide to Handling Accreditation of Credits Acquired Prior to Entering the Graduate School of Natural Science and Technology (enacted on April 1, 2018) shall apply.

Supplementary Provisions
This Arrangement shall be enforced from April 1, 2018.
Supplementary Provisions (partially revised on December 23, 2020)
This Guide shall be enforced from January 1, 2021.

Guide to Handling Research Guidance Methods and Contents in the Master Course of the Graduate School of Natural Science and Technology of Shimane University

(Enacted on April 1, 2018)
(Last revised on June 22, 2022)

Article 1. This Guide stipulates the necessary matters related to the handling of research guidance methods and contents in the Master Course of the Graduate School of Natural Science and Technology of Shimane University (hereinafter, the "Graduate School"), based on the provisions of Article 16, Paragraph 2 of the Regulations of the Graduate School of Natural Science and Technology of Shimane University (Item 1 of the Regulations of the Graduate School of Natural Science and Technology of Shimane University, 2018).

Article 2. Students who have entered the Graduate School shall formulate a "Research Proposal" (Annual Plan) (Appended Form 1), and submit it to the Academic Affairs Division of the Graduate School at the beginning of the first and third semesters. Additionally, students shall promptly formulate a "Progress Report" (Appended Form 2) and submit it to the Academic Affairs Division of the Graduate School after the end of the class period in the first, second and third semesters. Furthermore, students shall make copies of the “Research Proposal” and “Progress Report” prior to submission, which shall be stored by their main academic advisor, co-advisor(s), and the student, respectively.

2. To complete the “Research Proposal” stipulated in the preceding paragraph, the main academic advisor shall prepare the section of the "Research Guidance Plan," and the student shall prepare the sections of the "Research Prospect" and the "Monthly Research Schedule" after full consultation regarding the research contents, research method, and the student's career plan.

3. The “Research Proposal” stipulated in Paragraph 1 shall be formulated for the promotion of independent and creative research activities by the student, and in order to clearly indicate the main academic advisor’s research guidance plan to the student beforehand; and shall not impede changes to the research project or contents, in accordance with the development of research activities.

Article 3. The co-advisor(s) shall manage and utilize the “Research Proposal” and “Progress Report” respectively as a research record for each student, and in coordination with the main academic advisor, shall conduct systematic and organized research guidance of the student.

Article 4. Grading of the subject “Thesis Research” shall be discussed and conducted by the main academic advisor and the co-advisor(s), based on the “Progress Report” and the status of the student’s research activities in the relevant semester.

Article 5. A mid-term presentation shall be set by the main academic advisor and co-advisor(s), or the course meeting. The student shall give a presentation on research activities.

2. The format of the mid-term presentation shall be an oral presentation or a poster session, and students shall distribute the abstract to participants at the time of the presentation.

Article 6. For students who had planned to give a presentation at the mid-term presentation stipulated in Paragraph 1 of the preceding Article, but were approved to be absent due to unavoidable circumstances such as sudden illness, the mid-term presentation shall be set for a later date.

Article 7. Other necessary matters related to research guidance methods and contents that are not stipulated in this Guide shall be stipulated separately.

Supplementary Provisions
This Guide shall be enforced from April 1, 2018.
Supplementary Provisions (partially revised on February 19, 2020)
This Guide shall be enforced from April 1, 2020.
Supplementary Provisions (partially revised on June 22, 2022)
This Guide shall be enforced from June 22, 2022.

Appended Form 1

Research Proposal (Annual Plan starting from AY___ First/Second Semester)

Date (Month/Day/Year):

To Dean of Graduate School of Natural Science and Technology, Shimane University

Graduate School of Natural Science and Technology, Shimane University
Major:
Course:
Student Number:_____
Name:_____seal
Main academic advisor: seal
Co-advisor:

Research Project Title:

Research Guidance Plan (To be completed by major academic advisor)

1. Research Prospect (Describe your research prospects and what you are going to clarify.)
(To be completed by student)

2. Monthly Research Schedule (To be completed by student)

*Submit this form to the Academic Affairs Division
(Reception Counter No.4 on 1st floor of Student Center)

Appended Form 2

Progress Report (1st/2nd/3rd Semester)

Date (Month/Day/Year):

To Dean of Graduate School of Natural Science and Technology, Shimane University

Graduate School of Natural Science and Technology, Shimane University
Major:
Course:
Student Number:
Name: seal
Main academic advisor:
Co-advisor:

Research Project Title:

1. Describe your achievements and difficulties during your research activities in the semester.

2. Describe your research plan for the next semester.

*Submit this form to the Academic Affairs Division
(Reception Counter No.4 on 1st floor of Student Center)

Degree Regulations of Shimane University: Detailed Regulations for Doctor Course of Graduate School of Natural Science and Technology

(Item 1 of the Detailed Regulations of the Graduate School of Natural Science and Technology of Shimane University, 2020)
(Enacted on February 19, 2020)
(Last Revised on March 22, 2022)

Section 1: General Provisions

(Purpose)
Article 1. These Detailed Regulations stipulate the necessary matters related to the conferment of doctoral degrees in the Doctor Course of the Graduate School of Natural Science and Technology of Shimane University (hereinafter, the "Doctor Course"), based on Article 22 of the Degree Regulations of Shimane University (Item 95 of the Regulations of Shimane University, 2004; hereinafter, the "Degree Regulations"), and Article 22, Paragraph 2 of the Regulations of the Graduate School of Natural Science and Technology of Shimane University (Item 1 of the Regulations of the Graduate School of Natural Science and Technology of Shimane University, 2018; hereinafter, the "Regulations of the Graduate School").

(Definitions)
Article 2. In these Detailed Regulations, "Course Doctorate" shall refer to doctoral degrees that are conferred based on the provisions of Article 3, Paragraph 3 of the Degree Regulations, and "Thesis Doctorate" shall refer to doctoral degrees that are conferred based on the provisions of Article 3, Paragraph 4 of the Degree Regulations.

(Evaluation Criteria)
Article 3. The evaluation criteria of doctoral theses shall be stipulated separately.

Section 2: Course Doctorate

(Preliminary Assessment)
Article 4. Students who wish to acquire a Course Doctorate must undergo a preliminary assessment prior to the submission of their doctoral thesis, as provided in Article 5, Paragraph 2 of the Degree Regulations.

(Eligibility for Preliminary Assessment)
Article 5. Students who can apply for preliminary assessment shall be those who fall under either one of the following descriptions.

i. Students who are currently enrolled in the Doctor Course, and have earned the number of credits stipulated in Article 14, Paragraph 1 of the Regulations of the Graduate School (hereinafter, the "Prescribed Credits"), or students who are reliably anticipated to earn the Prescribed Credits and have received the necessary research guidance.
ii. Students who have been enrolled for at least one year in the Doctor Course (in the case of students who completed the Master's Course of the Graduate School after enrollment of one year or more, this shall be three years, including the period of enrollment in the said course), who have received the necessary research guidance, and who are recommended by their main academic advisor as having produced particularly outstanding research achievements

(Application Documents for Preliminary Assessment)
Article 6. Students who apply for preliminary assessment (hereinafter, "Preliminary Assessment Applicants") shall submit each of the documents listed below to the Dean of the Graduate School, after obtaining the approval of their main academic advisor.

i. Preliminary Assessment Application (Appended Form No. 1)	1 copy
ii. Doctoral Thesis Draft	3 copies
iii. Doctoral Thesis Abstract (Appended Form No. 2)	3 copies
iv. List of Publications (Appended Form No. 3)	3 copies
v. Related Publications	3 copies
vi. Curriculum Vitae (Appended Form No. 4)	1 copy

(Application Period for Preliminary Assessment)

Article 7. The prescribed period of application for preliminary assessment shall, in principle, be November of the academic year in which the student is anticipated to complete the course (for students who are anticipated to complete the course in September, the period of application shall be May).

(Referral of Preliminary Assessment)

Article 8. When an application for preliminary assessment is made, the Dean of the Graduate School shall organize a Preliminary Assessment Committee based on deliberation by the Graduate School Faculty Meeting in order to decide whether the application is worthy of a doctoral thesis assessment, and shall refer the preliminary assessment to the said committee.

(Preliminary Assessment Committee)

Article 9. The Preliminary Assessment Committee shall be composed of the following members, for each Preliminary Assessment Applicant.

i. Three or more members from among the faculty members responsible for the Doctor Course, including the Preliminary Assessment Applicant's main academic advisor

ii. When necessary, a maximum of two faculty members responsible for other graduate schools of Shimane University, or faculty members/researchers from other universities or research institutes

2. The members of the Preliminary Assessment Committee stipulated in the preceding paragraph (hereinafter, the "Preliminary Assessment Committee Members") shall be determined by the Graduate School Faculty Meeting, using the List of Candidates for Preliminary Assessment Committee (Appended Form No. 5). When adding a faculty member responsible for other graduate schools, other universities and/or research institutes to the Committee in accordance with Item ii of the preceding paragraph, the Short Curriculum Vitae (Appended Form No. 6) of the said Candidate, including his/her research career, shall be appended to the said List.

3. The Preliminary Assessment Committee shall appoint a chairperson, who shall be selected from the members of the Committee other than the Preliminary Assessment Applicant's main academic advisor, by the mutual election of the Preliminary Assessment Committee Members stipulated in Item 1 of Paragraph 1. The chairperson shall coordinate the Committee.

4. The Preliminary Assessment Committee shall, in principle, complete the preliminary assessment within a period of four weeks from the day on which the preliminary assessment was referred to the Committee, and the chairperson shall promptly report the results of the preliminary assessment to the Dean of the Graduate School using the Preliminary Assessment Results Report (Appended Form No. 7).

(Notification of Preliminary Assessment Results)

Article 10. The Dean of the Graduate School shall notify the Preliminary Assessment Applicant of the results stipulated in Paragraph 4 of the preceding Article using the Preliminary Assessment Results Notification (Appended Form No. 8), and additionally report the said results to the Graduate School Faculty Meeting.

(Application for Assessment)

Article 11. Preliminary Assessment Applicants whose application was approved as a result of the Preliminary Assessment shall apply for doctoral thesis assessment.

2. Preliminary Assessment Applicants whose application was deemed unworthy of a doctoral thesis assessment as a result of the Preliminary Assessment shall be able to reapply for preliminary assessment after improving the contents of their thesis.

(Application Forms for Doctoral Thesis Assessment)

Article 12. Students who apply for doctoral thesis assessment (hereinafter, "Applicants") shall submit each of the documents listed below to the Dean of the Graduate School, after obtaining the approval of their main academic advisor.

i. Doctoral Thesis Assessment Request Form (Appended Form No. 9)	1 copy
ii. Doctoral Thesis (1 volume)	5 copies
iii. Doctoral Thesis Abstract (Appended Form No. 2)	5 copies
iv. List of Publications (Appended Form No. 3)	5 copies
v. Related Publications	5 copies

(Application Period for Doctoral Thesis Assessment)

Article 13. The prescribed period of application for doctoral thesis assessment shall, in principle, be January of the academic year in which the student is anticipated to complete the course (for students who are anticipated to complete the course in September, the period of application shall be July).

(Referral to Thesis Assessment)

Article 14. When an application for doctoral thesis assessment is made, the Dean of the Graduate School shall refer the assessment to the Graduate School Faculty Meeting.

(Assessment Committee)

Article 15. The Graduate School Faculty Meeting shall, when an assessment is referred in accordance with the preceding Article, organize an Assessment Committee composed of the following members, for each Applicant.

i. Three or more members from among the faculty members responsible for the Doctor Course. They must include the Applicant's main academic advisor and three professors.

ii. When necessary, a maximum of two faculty members responsible for other graduate schools of Shimane University, or faculty members/researchers from other universities or research institutes.

2. The members of the Assessment Committee stipulated in the preceding paragraph (hereinafter, the "Assessment Committee Members") shall be determined by the Graduate School Faculty Meeting, using the List of Candidates for Assessment Committee (Appended Form No. 10). When adding a faculty member responsible for other graduate schools, other universities and/or research institutes to the Committee in accordance with Item ii of the preceding paragraph, the Short Curriculum Vitae (Appended Form No. 6) of the said Candidate, including his/her research career, shall be appended to the said List.
3. The Assessment Committee shall appoint a chief examiner (hereinafter, the "Chief Examiner"), who shall be selected from the members of the Committee other than the Applicant's main academic advisor, by the mutual election of the Assessment Committee Members stipulated in Item 1 of Paragraph 1. The Chief Examiner shall coordinate the Assessment Committee.

(Doctoral Thesis Defense)

Article 16. The Assessment Committee shall hold a doctoral thesis defense at the stage of the thesis assessment.
2. The Chief Examiner shall notify the Applicant of the details of the doctoral thesis defense, in principle at least one week in advance of the date of the defense, using the Thesis Defense Notification (Appended Form No. 11), and make a public announcement.

(Execution of Thesis Assessment and Final Examination)

Article 17. The Assessment Committee shall carry out the thesis assessment and the final examination.
2. The Chief Examiner shall notify the Applicant of the necessary matters related to the final examination using the Final Examination Notification (Appended Form No. 12).
3. The final examination shall be conducted either orally or as a written response, principally regarding the contents of the thesis and related subjects.

(Deliberation of Thesis Assessment Results)

Article 18. The Assessment Committee shall deliberate and decide whether the thesis is worthy of conferment of a degree, based on the results of the thesis assessment and the final examination.
2. The decision mentioned in the preceding paragraph shall be made by the agreement of at least two-thirds of the members of the Assessment Committee.
3. The verdict of evaluation of the thesis assessment and the final examination shall be either Pass or Fail.

(Report of Thesis Assessment Results)

Article 19. The Assessment Committee shall report the results of the thesis assessment to the Graduate School Faculty Meeting, with an appended opinion on whether the thesis is worthy of conferment of a degree, in principle within a period of four weeks from the day on which the assessment was referred to the Committee.
2. The report mentioned in the preceding paragraph shall be made using the documents listed below.

i. Report of Thesis Assessment Results and Final Examination Results (Appended Form No. 13)

ii. Summary of Thesis Assessment Results (Appended Form No. 14)

(Degree Conferment Adjudication Meeting)

Article 20. The Graduate School Faculty Meeting shall, when the report mentioned in the preceding Article is received, organize a Degree Conferment Adjudication Meeting composed of professors responsible for the Doctor Course.
2. The Degree Conferment Adjudication Meeting shall be convened by the Dean of the Graduate School, and the Dean of the Graduate School shall serve as the chairperson. However, if the Dean of the Graduate School is absent due to unavoidable circumstances, a person designated in advance by the Dean of the Graduate School shall serve as a replacement.
3. The Degree Conferment Adjudication Meeting cannot commence proceedings unless a minimum of two-thirds of the constituent members are in attendance.
4. Persons to whom any of the following is applicable shall not be included in the number of constituent members calculated for the quorum in the preceding paragraph.

i. Persons on a business trip

ii. Persons who are absent to participate in a training program

iii. Persons on sick leave for 30 days or more
iv. Persons on administrative leave

Article 21. The Degree Conferment Adjudication Meeting shall deliberate and decide whether the thesis is worthy of conferment of a degree, based on the report of the Assessment Committee.

2. The decision mentioned in the preceding paragraph shall be made by a majority of at least two-thirds of the attending members.

3. The Degree Conferment Adjudication Meeting may, when deemed particularly necessary by the Graduate School Faculty Meeting, request that person(s) other than the professors stipulated in Paragraph 1 of the preceding Article attend the Meeting and hear the opinion of the said person(s).

(Report)

Article 22. The results of the deliberation of the Degree Conferment Adjudication Meeting shall be reported to the Graduate School Faculty Meeting.

(Deliberation and Decision on Degree Conferment)

Article 23. The Graduate School Faculty Meeting shall deliberate and decide whether a degree should be conferred on the Applicant, based on the report of the Degree Conferment Adjudication Meeting.

2. The decision mentioned in the preceding paragraph shall be made by the agreement of at least two-thirds of the attending members.

(Special Measures)

Article 24. If a person who has withdrawn from the Graduate School after being enrolled in the Doctor Course for three years or more, who has earned the Prescribed Credits, and who has received the necessary research guidance, submits a thesis within three years of withdrawal, the said person shall be treated as a person who is eligible under Article 3, Paragraph 3 of the Degree Regulations. In such cases, the period of application for preliminary assessment shall be either May or November.

Section 3: Thesis Doctorate

(Eligibility to Apply for Degree Conferment by Thesis Submission)

Article 25. Persons who can apply for conferment of a doctoral degree by submission of a thesis (hereinafter, "Thesis Doctorate Applicants"), based on the provisions of Article 3, Paragraph 4 of the Degree Regulations, shall be those who fall under any one of the following descriptions.

i. Persons who have withdrawn from a graduate school after being enrolled in a doctor course for the prescribed standard term of study or longer, who have earned the Prescribed Credits, and who have received the necessary research guidance
ii. Persons who have completed a master's course in a graduate school, and who have a research career of four or more years
iii. Persons who have graduated from a university, and who have a research career of six or more years
iv. Persons other than those listed above, who have a research career of ten or more years

(Supervisor)

Article 26. The Thesis Doctorate Applicant shall designate a supervisor from the research field with a close to the contents of the thesis.

(Preliminary Assessment by Thesis Submission)

Article 27. Persons who wish to acquire a Thesis Doctorate must undergo a preliminary assessment of their doctoral thesis, prior to applying for assessment of the said thesis.

(Application Forms for Preliminary Assessment by Thesis Submission)

Article 28. Persons who apply for preliminary assessment of their thesis (hereinafter, "Thesis Preliminary Assessment Applicants") shall submit each of the documents listed below to the Dean of the Graduate School, after obtaining the approval of their research supervisor.

i. Doctoral Thesis Preliminary Assessment Application Form (Appended Form No. 15)	1 copy
ii. Doctoral Thesis Draft	3 copies
iii. Doctoral Thesis Abstract (Appended Form No. 16)	3 copies
iv. List of Publications (Appended Form No. 17)	3 copies
v. Related Publications	3 copies
vi. Curriculum Vitae (Appended Form No. 4)	1 copy
vii. Certificate of Graduation from the last educational institute attended	1 copy

(Application Period for Preliminary Assessment by Thesis Submission)

Article 29. The prescribed period of application for preliminary assessment by thesis submission shall, in principle, be either November or May.

(Referral to Preliminary Assessment by Thesis Submission)

Article 30. When an application for preliminary assessment by thesis submission is made, the Dean of the Graduate School shall organize a Thesis Preliminary Assessment Committee based on deliberation by the Graduate School Faculty Meeting in order to decide whether the application is worthy of a doctoral thesis assessment and shall refer the preliminary assessment to the said Committee.

(Thesis Preliminary Assessment Committee)

Article 31. The Thesis Preliminary Assessment Committee shall be composed of the following members, for each Thesis Preliminary Assessment Applicant.

i. Three or more members from among the faculty members responsible for the Doctor Course, including the Thesis Preliminary Assessment Applicant's research supervisor

ii. When necessary, a maximum of two faculty members responsible for other graduate schools of Shimane University, or faculty members/researchers from other universities or research institutes

2. The members of the Thesis Preliminary Assessment Committee stipulated in the preceding paragraph (hereinafter, the "Thesis Preliminary Assessment Committee Members") shall be determined by the Graduate School Faculty Meeting, using the List of Candidates for Thesis Preliminary Assessment Committee (Appended Form No. 18). When adding a faculty member responsible for other graduate schools, other universities and/or research institutes to the Committee in accordance with Item ii of the preceding paragraph, the Short Curriculum Vitae (Appended Form No. 6) of the said Candidate, including his/her research career, shall be appended to the said List.

3. The Thesis Preliminary Assessment Committee shall appoint a chairperson, who shall be selected from the members of the Committee by the mutual election of the Thesis Preliminary Assessment Committee Members stipulated in Item 1 of Paragraph 1. The chairperson shall coordinate the Thesis Preliminary Assessment Committee.

4. The Thesis Preliminary Assessment Committee shall, in principle, decide whether the application is worthy of a doctoral thesis assessment within a period of four weeks from the day on which the preliminary assessment was referred to the Committee, and the chairperson shall promptly report the results of the preliminary assessment to the Dean of the Graduate School using the Thesis Preliminary Assessment Results Report (Appended Form No. 19).

(Notification of Results of Preliminary Assessment by Thesis Submission)

Article 32. The Dean of the Graduate School shall notify the Thesis Preliminary Assessment Applicant of the results stipulated in Paragraph 4 of the preceding Article using the Thesis Preliminary Assessment Results Notification (Appended Form No. 20), and additionally report the said results to the Graduate School Faculty Meeting.

Article 33. Thesis Preliminary Assessment Applicants whose application was approved as a result of the Thesis Preliminary Assessment shall apply for doctoral thesis assessment.

(Application Forms for Assessment by Thesis Submission)

Article 34. Thesis Doctorate Applicants shall submit each of the documents listed below to the President of Shimane University via the Dean of the Graduate School, after obtaining the approval of their research supervisor, with an appended payment of the thesis assessment fee.

i. Degree Conferment Application Form (Appended Form No. 21)	1 copy
ii. Doctoral Thesis (1 volume)	5 copies
iii. Doctoral Thesis Abstract (Appended Form No. 16)	5 copies
iv. List of Publications (Appended Form No. 17)	5 copies
v. Related Publications	5 copies

(Application Period for Assessment by Thesis Submission)

Article 35. The prescribed period of application for Thesis Doctorate Applicants shall, in principle, be either January or July.

(Thesis Assessment Committee)

Article 36. The Dean of the Graduate School shall, when a doctoral thesis assessment is referred from the President of Shimane University, organize a Thesis Assessment Committee composed of the following members, for each Thesis Doctorate Applicant.

i. Three or more members from among the faculty members responsible for the Doctor Course. They must include the Thesis Doctorate Applicant's research supervisor and three professors.

ii. When necessary, a maximum of two faculty members responsible for other graduate schools of Shimane University, or faculty members/researchers from other universities or research institutes

2. The members of the Thesis Assessment Committee stipulated in the preceding paragraph (hereinafter, the "Thesis Assessment Committee Members") shall be determined by the Graduate School Faculty Meeting,

using the List of Candidates for Thesis Assessment Committee (Appended Form No. 22). When adding a faculty member responsible for other graduate schools, other universities and/or research institutes to the Committee in accordance with Item ii of the preceding paragraph, the Short Curriculum Vitae (Appended Form No. 6) of the said Candidate, including his/her research career, shall be appended to the said List.

3. The Thesis Assessment Committee shall appoint a chief examiner (hereinafter, the "Chief Examiner"), who shall be selected from the members of the Committee by the mutual election of the Thesis Assessment Committee Members stipulated in Item 1 of Paragraph 1. The Chief Examiner shall coordinate the Thesis Assessment Committee.

(Doctoral Thesis Defense by Thesis Submission)

Article 37. The Thesis Assessment Committee shall hold a doctoral thesis defense at the stage of the thesis assessment.

2. The Chief Examiner shall notify the Thesis Doctorate Applicant of the details of the doctoral thesis defense, in principle at least one week in advance of the date of the defense, using the Thesis Defense Notification (Appended Form No. 11), and make a public announcement.

(Execution of Thesis Assessment by Thesis Submission)

Article 38. The Thesis Assessment Committee shall carry out the thesis assessment and verify the Thesis Doctorate Applicant's scholarly ability.

2. The Chief Examiner shall notify the Thesis Doctorate Applicant of the necessary matters concerning the execution of the verification of scholarly ability, using the Final Examination Notification (Appended Form No. 12).

3. The verification of scholarly ability shall be executed either orally or as a written response, principally regarding the contents of the thesis, as well as on related research fields and the Thesis Doctorate Applicant's foreign language ability.

(Deliberation of Thesis Assessment by Thesis Submission Results)

Article 39. The Thesis Assessment Committee shall deliberate and decide whether the thesis is worthy of conferment of a degree, based on the results of the thesis assessment and the verification of scholarly ability.

2. The decision mentioned in the preceding paragraph shall be made by the agreement of at least two-thirds of the members of the Thesis Assessment Committee.

3. The verdict of evaluation of the thesis assessment and the verification of scholarly ability shall be either Pass or Fail.

(Report of Thesis Assessment by Thesis Submission Results)

Article 40. The Thesis Assessment Committee shall report the results of the thesis assessment to the Graduate School Faculty Meeting, with an appended opinion on whether the thesis is worthy of conferment of a degree, in principle within a period of four weeks from the day on which the assessment was referred to the Committee.

2. The report mentioned in the preceding paragraph shall be made using the documents listed below.
   i. Report of Thesis Assessment Results and Verification of Scholarly Ability Results (Appended Form No. 23)
   ii. Summary of Thesis Assessment Results (Appended Form No. 24)

(Degree Conferment Adjudication Meeting)

Article 20. The Graduate School Faculty Meeting shall, when the report mentioned in the preceding Article is received, organize a Degree Conferment Adjudication Meeting composed of professors responsible for the Doctor Course.

2. The Degree Conferment Adjudication Meeting shall be convened by the Dean of the Graduate School, and the Dean of the Graduate School shall serve as the chairperson. However, in the event that the Dean of the Graduate School is absent due to unavoidable circumstances, a person designated in advance by the Dean of the Graduate School shall serve as a replacement.

3. The Degree Conferment Adjudication Meeting cannot commence proceedings unless a minimum of two-thirds of the constituent members are in attendance.

4. Persons to whom any of the following is applicable shall not be included in the number of constituent members calculated for the quorum in the preceding paragraph.
   i. Persons on a business trip
   ii. Persons who are absent to participate in a training program
   iii. Persons on sick leave for 30 days or more
   iv. Persons on administrative leave

Article 42. The Degree Conferment Adjudication Meeting shall deliberate and decide whether the thesis is worthy of conferment of a degree, based on the report of the Thesis Assessment Committee.
2. The decision mentioned in the preceding paragraph shall be made by a majority of at least two-thirds of the attending members.
3. The Degree Conferment Adjudication Meeting may, when deemed particularly necessary by the Graduate School Faculty Meeting, request that person(s) other than the professors stipulated in Paragraph 1 of the preceding Article attend the Meeting, and hear the opinion of the said person(s).

(Report)

Article 43. The results of the deliberation of the Degree Conferment Adjudication Meeting shall be reported to the Graduate School Faculty Meeting.

(Deliberation and Decision on Degree Conferment by Thesis Submission)

Article 44. The Graduate School Faculty Meeting shall deliberate and decide whether a degree should be conferred on the Thesis Doctorate Applicant, based on the report of the Degree Conferment Adjudication Meeting.
2. The decision mentioned in the preceding paragraph shall be made by the agreement of at least two-thirds of the attending members.

Section 4: Miscellaneous Provisions

(Report)

Article 45. The Dean of the Graduate School shall promptly report the results of the deliberation mentioned in Article 23 and the preceding Article to the President of Shimane University.

(Storage of Doctoral Theses)

Article 46. Doctoral theses shall be stored by the relevant department, and submitted Doctoral Thesis Abstracts and Lists of Publications shall be stored by the Academic Affairs Division, Matsue Faculties Administration Department.
2. The storage period for Doctoral theses, Doctoral Thesis Abstracts, and Lists of Publications stipulated in the preceding paragraph shall be ten years.

(Miscellaneous Provisions)

Article 47. Other necessary matters related to the assessment of the doctoral thesis that are not stipulated in these Detailed Regulations shall be stipulated separately by the Dean of the Graduate School.

Supplementary Provisions

These Detailed Regulations shall be enforced from April 1, 2020.

Supplementary Provisions (partially revised on December 23, 2020)

These Detailed Regulations shall be enforced from January 1, 2021.

Supplementary Provisions (partially revised on March 22, 2022)

These Detailed Regulations shall be enforced from April 1, 2022.

Guide to Handling Research Guidance Methods and Contents in the Doctor Course of the Graduate School of Natural Science and Technology of Shimane University

(Enacted on February 19, 2020)
(Last revised on June 22, 2022)

Article 1. This Guide stipulates the necessary matters related to the handling of research guidance methods and contents in the Doctor Course of the Graduate School of Natural Science and Technology of Shimane University (hereinafter, the "Graduate School"), based on the provisions of Article 16, Paragraph 4 of the Regulations of the Graduate School of Natural Science and Technology of Shimane University (Item 1 of the Regulations of the Graduate School of Natural Science and Technology of Shimane University, 2018).

Article 2. Students who have entered the Graduate School shall formulate a "Research Proposal" (Annual Plan) (Appended Form 1) at the beginning of the school year, and shall also formulate a "Research Progress Status Report" (Appended Form 2) promptly after the end of the period of classes has finished every year, and submit both documents to the dean of the Graduate School. Furthermore, students shall make copies of the “Research Proposal” and “Research Progress Status Report” prior to submission, which shall be stored by their main academic advisor, co-advisor(s), and the student, respectively.

2. To complete the “Research Proposal” stipulated in the preceding paragraph, the main academic advisor shall prepare the section of the "Research Guidance Plan," and the student shall prepare the section of the "Research Prospect and Research Schedule" after full consultation regarding the research contents, research method, and the student's career plan.

3. The “Research Proposal” stipulated in Paragraph 1 shall be formulated in order to achieve prior mutual understanding of the research prospects considered by the student, the student's research plans, and the main academic advisor’s research guidance plan; and shall not impede changes to the research project or contents, in accordance with the development of research activities.

Article 3. The co-advisor(s) shall manage and utilize the “Research Proposal” and “Research Progress Status Report” respectively as a research record for the student, and in coordination with the main academic advisor, shall conduct systematic and organized research guidance of the said student.

Article 4. Grading of the subject “Thesis Research” shall be discussed and conducted by the main academic advisor and the co-advisor(s), based on the “Research Progress Status Report” and the status of the student’s research activities in the relevant year.

Article 5. The student shall make presentations at academic conferences, in principle at least once per year.

Article 6. Other necessary matters related to research guidance methods and contents that are not stipulated in this Guide shall be stipulated separately.

Supplementary Provisions

This Guide shall be enforced from April 1, 2020

Supplementary Provisions (partially revised on June 22, 2022)

This Guide shall be enforced from June 22, 2022.

Appended Form 1

Research Proposal

(Annual Plan starting from AY____ First/Second Semester)

Date:

To: Dean of Graduate School of Natural Science and Technology, Shimane University

Major in Science and Engineering for Innovation, Graduate School of Natural Science and Technology, Shimane University
Course: _____
Student Number:
Name (Seal)
Main Academic Advisor (Seal)
Co-advisor(s)

Research Project Title: _____

(Section to be completed by main academic advisor)
Research Guidance Plan

(Section to be completed by student)
Research Prospect and Research Schedule

*Please submit this form to the Academic Affairs Division
(Reception Counter No.4 on 1st floor of Student Center)

Appended Form 2

Research Progress Status Report

(Annual Plan starting from AY___First/Second Semester)

Date:

To: Dean of Graduate School of Natural Science and Technology, Shimane University

Major in Science and Engineering for Innovation, Graduate School of Natural Science and Technology, Shimane University
Course: _____
Student Number:
Name (Seal)
Main Academic Advisor
Co-advisor(s)

Research Project Title: _____

1. Progress of your research in the current school year

2. Research plan for the following school year

*Please submit this form to the Academic Affairs Division
(Reception Counter No.4 on 1st floor of Student Center)