Registration Regulations for the Graduate School of Science and Technology at the Nara Institute of Science and Technology

Article 1 (Purpose)

These regulations stipulate matters necessary for registration by students of the Graduate School of Science and Technology in accordance with Article 34 of the Regulations of Nara Institute of Science and Technology (Regulations No. 1, 2004) (Hereinafter referred to as "NAIST Regulations").

Article 2 (Research instructors)

1. Two or more research instructors of different courses, etc. shall be designated for each student to provide guidance on choosing subjects and preparing a degree thesis, etc. (hereinafter referred to as "research guidance").

2. One of such research instructors shall be designated as the main research instructor.

3. Research instructors may be changed if needed in the course of studying or research guidance.

Article 3 (Research guidance)

The details of research guidance shall be defined for respective students.

Article 4 (Subject categories)

1. Subject categories and the number of credits required for completion for the master's course shall be as shown in Appendix chart 1.

2. Subject categories and the number of credits required for completion for the doctoral course shall be as shown in Appendix chart 2.

3. The subjects, number of credits, and registration methods for the master's course and doctoral course shall be stipulated separately.

Article 5 (Registration procedures)

1. Students must, under guidance offered by the main research instructor, choose the subjects they will take.

2. In principle, taking multiple subjects held at the same time is not permitted.

Article 6 (Awarding of credits)

1. Credits shall be awarded by means of an examination or a research report. Credits may be awarded based on an evaluation of day-to-day study activities, instead of such examination.

2. Academic performance based on an examination or a research report shall be evaluated by points (full score: 100 points); 60 points or more is deemed as a "pass", and less than 60 points is deemed as a "fail". For evaluation purposes, academic performance may be represented with the evaluation grade prescribed in accordance with the categories below.

(1) 90 points or more	Excellent
(2) 80 points or more	Very good
(3) 70 points or more	Good
(4) 60 Points or more	Fair
(5) less than 60 points	Fail

3. In the event that it is difficult to evaluate academic performance based on points as described in the preceding paragraph, "pass" or "fail" may be used instead of such points.

4. Prescribed credits shall be awarded to students whose academic performance is "pass" in accordance with the two preceding paragraphs.

5. Subjects whose credits have been earned cannot be taken again.

Article 7 (Approval of research guidance)
Research guidance shall be approved by the main research instructor and reported to the Dean.

Article 8 (Theme of the degree thesis)
Students shall be required to report the theme of their degree thesis by the specified date, with the approval of the main research instructor.

Article 9 (Submission of the degree thesis)
1. Students are required to submit a degree thesis by the specified date, with the approval of the main research instructor.

2. A degree thesis can be submitted by students who (i) have earned or who are expected to earn credits necessary for completion of the course and (ii) have completed the necessary research guidance offered by research instructors.

Article 10 (Disqualification of credits for students who have been expelled due to unpaid tuition)
Credits accrued during the period of unpaid tuition will be disqualified when the student has been expelled from school, pursuant to Article 53-2 (4) of Regulation.

Article 11 (Index indicating the academic performance)
An objective index indicating the academic performance related a certain period or cumulative period can be calculated and evaluated, based on the evaluation performed pursuant to Article 6-2.

Article 12 (Miscellaneous provision)
Other matters relating to registration by students shall be stipulated separately.

Supplementary provisions
(Effective date)
1. These Regulations shall come into effect on April 1, 2018.
(Abolition)
2. The Registration Regulations for the Graduate School of Information Science at the Nara Institute of Science and Technology, The Registration Regulations for the Graduate School of Biological Sciences at the Nara Institute of Science and Technology and The Registration Regulations for the Graduate School of Materials Science at the Nara Institute of Science and Technology (hereinafter referred to as "the former Registration Regulations") are abolished.
(Transitional measures)
3. For students who were admitted in the 2017 academic year or earlier (hereinafter referred to as "enrolled students") to take subjects, the previous Registration Regulations shall remain in effect even after these Regulations come into effect. In the event that enrolled students take subjects within the scope of these Regulations, such subjects shall be deemed to be replaced with former subjects as set forth separately.

Appendix chart 1 (supplement to Article 4, Paragraph 1)

Subject Category		Number of credits required for completion
Courses	Category	
General Subjects	—	4
Science and Technology Subjects	Introduction Subjects	3
	Basic Subjects	1 2
	Specialized Subjects	
	PBL Subjects	2
Research-based Subjects	—	9
Total		3 0

Appendix chart 2 (supplement to Article 4, Paragraph 2)

Subject Category	Number of credits required for completion
Courses for research skills	3
Courses for independent research abilities	7
Total	1 0

Registration Policies for the Graduate School of Science and Technology at the Nara Institute of Science and Technology

<div align="right">March 27, 2018
Policy No. 1</div>

Article 1 (Purpose)

These Policies stipulate matters necessary for the subjects, number of credits, and registration methods in accordance with Article 34 of the Registration Regulations for the Graduate School of Science and Technology at the Nara Institute of Science and Technology (Regulations No. 1, 2018) (Hereinafter referred to as "Registration Regulations").

Article 2 (Subjects)

1. The subjects, number of credits, and registration methods for the Master's Course shall be as shown in Schedule 1.

2. The subjects, number of credits, and registration methods for the Doctoral Course shall be as shown in Schedule 2.

Supplementary provisions
(Effective date)
1. These Policies shall come into effect on April 1, 2018.

Curriculum table of the Graduate School of Science and Technology (Master's Course)

(1) Subject name, etc.

Courses	Category	Subject name	Subject Number	Number of credits	Credits required for completion	Information Science and Engineering	Computational Biology	Biological Science	Bionanotechnology	Materials Science and Engineering	Intelligent Cyber-Physical Systems	Data Science	Remarks
General Subjects		Techonology and Professional Ethics	1001	1		◎	◎	◎	◎	◎	◎	◎	
		Philosophy of Science	1002	1		○	○	○	○	○	○	○	
		Science Communication	1003	1		○	○	○	○	○	○	○	
		Intellectual Property Right	1004	1		○	○	○	○	○	○	○	
		Global Entrepreneur I	1005	1		○	○	○	○	○	○	○	
		Global Entrepreneur II	1006	1		○	○	○	○	○	○	○	
		Global Entrepreneur III	1007	1		○	○	○	○	○	○	○	
		Global Entrepreneur IV	1008	1	4	○	○	○	○	○	○	○	
		Global Entrepreneur V	1009	1		○	○	○	○	○	○	○	
		Professional Communication I	1010	1		□	□	□	□	□	□	□	two of the six subjects as elective subjects
		Professional Communication II	1011	1		□	□	□	□	□	□	□	
		Academic Discussion	1012	1		□	□	□	□	□	□	□	
		Research Presentation	1013	1		□	□	□	□	□	□	□	
		Research Writing	1014	1		□	□	□	□	□	□	□	
		Advanced Research Writing	1015	1		□	□	□	□	□	□	□	
		Japanese Culture	1016	2		○	○	○	○	○	○	○	International students have priority
		Japanese Course I	1017	2		△	△	△	△	△	△	△	For international students
		Japanese Course II	1018	2		△	△	△	△	△	△	△	For international students
Science and Technology Subjects	Introduction Subjects	Introduction to Information Science and Engineering	2001	1		○	○	○	○	○	○	○	
		Introduction to Computational Biology	2002	1		○	○	○	○	○	○	○	
		Introduction to Biological Science	2003	1		○	○	○	○	○	○	○	
		Introduction to Bionanotechnology	2004	1	3	○	○	○	○	○	○	○	
		Introduction to Materials Science and Engineering	2005	1		○	○	○	○	○	○	○	
		Introduction to Intelligent Cyber-Physical Systems	2006	1		○	○	○	○	○	○	○	
		Introduction to Data Science	2007	1		○	○	○	○	○	○	○	
	Basic Subjects	Formal Language Theory	3001	1		□C	△	△	△	△	○	○	
		Programming Course	3002	1		□C	○	△	△	△	○	○	
		Principles of Signal Processing	3003	1		○	○	△	△	△	○	○	
		Applied Analysis	3004	1		○	○	△	△	△	○	○	
		Data Engineering	3005	1		○	△	△	△	△	○	□C	
		Machine Learning	3006	1		○	△	△	△	△	○	□C	
		Optics	3007	1		○	○	△	△	△	□C	△	
		High Performance Computing Platforms	3008	1		□C	△	△	△	△	□C	○	
		Software Design	3009	1		□C	△	△	△	△	○	△	
		Artificial Intelligence	3010	1		□C	△	△	△	△	△	○	
		Cell Biology	3011	1		△	○	○	○	△	△	△	
		Molecular Biology	3012	1	at least 12 credits from the basic and specialized subjects required for each educational program	△	○	○	○	△	△	△	
		Cell Membranes and Transport	3013	1		△	○	○	○	△	△	△	
		Cell Signaling	3014	1		△	○	○	○	△	△	△	
		Microbial Science	3015	1		△	○	□C	○	△	△	△	select one
		Plant Science	3016	1		△	○	□C	○	△	△	△	
		Biomedical Science	3017	1		△	○	□C	○	△	△	△	
		Cytoskeleton and Cell Cycle	3018	1		△	○	□C	○	△	△	△	
		Genetics and Stem Cell Biology	3019	1		△	○	□C	○	△	△	△	
		Gene Cloning and DNA Analysis	3020	1		△	○	○	○	△	△	△	For international students
		Mathematical Analyses for Materials Science	3021	1		△	△	△	○	○	○	△	
		Quantum Mechanics	3022	1		△	△	△	○	○	□C	○	
		Core Quantum Mechanics II	3023	1		△	△	△	○	○	○	○	
		Core Physical Chemistry I	3024	1		△	△	△	○	○	□C	○	
		Physical Chemistry	3025	1		△	△	△	○	○	○	○	
		Core Solid State Physics I	3026	1		△	△	△	○	□C	○	○	combination
		Core Solid State Physics II	3027	1		△	△	△	○	□C	○	○	
		Core Molecular Science I	3028	1		△	△	△	○	□C	○	○	combination
		Core Molecular Science II	3029	1		△	△	△	□C	□C	○	○	
		Biomaterials Chemistry	3030	1		△	△	△	□C	□C	○	○	
	Specialized Subjects	Distributed Computing	4001	1		○	△	△	△	△	○	△	
		Advanced Algorithm Design	4002	1		○	△	△	△	△	○	△	
		Ubiquitous Systems	4003	1		○	○	△	△	△	□C	△	
		Mobile Computing	4004	1		○	△	△	△	△	○	△	
		Virtual Systems Infrastructure	4005	1		○	△	△	△	△	○	△	
		Software Engineering	4006	1		○	△	△	△	△	○	△	
		Internet Engineering	4007	1		○	△	△	△	△	○	○	
		Computer Network	4008	1		○	△	△	△	△	○	○	
		Ambient Intelligence	4009	1		○	○	△	△	△	○	○	
		Natural Language Processing	4010	1		○	○	△	△	△	△	○	
		Virtual Reality	4011	1		○	△	△	△	△	○	△	
		Computer Vision	4012	1		○	△	△	△	△	○	△	
		Computer Graphics	4013	1		○	△	△	△	△	○	△	
		Media Information Processing	4014	1		○	△	△	△	△	○	○	
		Wireless Communication Systems	4015	1		○	○	△	△	△	○	△	
		Signal Detection Theory	4016	1		○	○	△	△	△	○	○	

Courses	Category	Subject name	Subject Number	Number of credits	Number of credits required for completion	Information Science and Engineering	Computational Biology	Biological Science	Bionanotechnology	Materials Science and Engineering	Intelligent Cyber-Physical Systems	Data Science	Remarks
Science and Technology Subjects	Specialized Subjects	Human Computer Interaction	4017	1	at least 12 credits from the basic and specialized subjects required for each educational program	○	△	△	△	△	□C	○	
		Pattern Recognition	4018	1		○	○	△	△	△	○	○	
		Social System Theory	4019	1		○	△	△	△	△	○	△	
		Machine Learning and Intelligent Control	4020	1		○	○	△	△	△	□C	○	
		Model-based Control	4021	1		○	○	△	△	△	○	○	
		Human Robot Informatics	4022	1		○	○	△	△	△	○	△	
		Mathematical Modeling	4023	1		○	○	△	△	△	△	○	
		Systems Biology	4024	1		○	□C	○	△	△	○	○	
		Data Mining	4025	1		○	○	△	△	△	○	□C	
		Medical Imaging Analysis	4026	1		○	□C	△	△	△	○	△	
		Biomedical Media Informatics	4027	1		○	□C	△	△	△	○	△	
		Data Science	4028	2		○	○	△	△	△	△	◎	
		Special Lecture in Information Science A	4029	1		○	○	△	△	△	○	○	
		Special Lecture in Information Science B	4030	1		○	○	△	△	△	○	○	
		Special Lecture in Information Science C	4031	1		○	○	△	△	△	○	○	
		Special Lecture in Information Science D	4032	1		○	○	△	△	△	○	○	
		Speech Processing	4033	1		○	△	△	△	△	△	○	
		Sequential Data Modeling	4034	1		○	○	△	△	△	△	○	
		Robotics	4035	1		○	○	△	△	△	□C	△	
		Information Security & Our Society	4036	1		○	○	△	△	△	○	○	
		Information Theory	4037	1		○	○	△	△	△	○	○	
		Hardware Security	4038	1		○	△	△	△	△	○	△	
		Coding Theory	4039	1		○	○	△	△	△	○	○	
		Stochastic Processes	4040	1		○	△	△	△	△	○	△	
		Computational Neuroscience	4041	1		○	○	△	△	△	△	○	
		Lecture of Information Security Management Literacy I	4042	1		○	○	△	△	△	○	○	
		Lecture of Information Security Management Literacy II	4043	1		○	○	△	△	△	○	○	
		Exercise for Information Security A	4044	1		○	○	△	△	△	○	○	
		Exercise for Information Security B	4045	1		○	○	△	△	△	○	○	
		Exercise for Information Security C	4046	1		○	○	△	△	△	○	○	
		Mathematics for Optimization	4047	1		○	○	△	△	△	○	○	
		Data Analysis	4048	1		○	○	△	△	△	○	○	
		Applied Life Sciences・Microbial Science	4049	1		△	□C (select one)	○	□C (select one)	△	△	△	
		Applied Life Sciences・Plant Science	4050	1		△	□C	○	□C	△	△	△	
		Applied Life Sciences・Biomedical Science	4051	1		△	□C	○	□C	△	△	△	
		Development of Bioscience into Industry Ⅰ	4052	1		△	□C	○	□C	△	△	△	
		Development of Bioscience into Industry Ⅱ	4053	1		△	○	○	○	△	△	△	
		Advanced Lecture in Developmental Biology	4054	1		△	○	○	○	△	△	△	
		Advanced Techniques in Bioscience	4055	1		△	○	□C	○	△	△	△	
		Plant Developmental Physiology	4056	1		△	○	○	○	△	△	△	
		Developmental Biology of Animals	4057	1		△	○	○	○	△	△	△	
		Pharmacology and Pathological Chemistry	4058	1		△	○	○	○	△	△	△	
		Immunology	4059	1		△	○	○	○	△	△	△	
		The Biology of Genome and Cancer	4060	1		△	○	○	○	△	△	△	
		Biological Interactions	4061	1		△	○	○	○	△	△	△	
		International Forefront in Bioscience A	4062	1		△	△	○	△	△	△	△	
		International Forefront in Bioscience B	4063	1		△	△	○	△	△	△	△	
		Big data in Bioscience	4064	1		△	○	○	○	△	△	□C	
		Advanced Topics in Biological Science	4065	1		△	○	○	○	△	△	△	For international students
		Electronic Properties and Atomic Structures of Solids and Surfaces Special	4066	1		△	△	△	△	○	○	○	
		Photonics Special	4067	1		△	△	△	△	○	○	○	
		Light and Information Devices Special	4068	1		△	△	△	△	○	○	○	
		Materials Science for Quantum Information and Energy Conversion	4069	1		△	△	△	○	○	○	○	
		Biomolecular Science	4070	1		△	△	△	□C	○	△	○	
		Advanced Synthetic Organic and Polymer Chemistry	4071	1		△	△	△	○	○	△	○	
		Molecular Photo-science	4072	1		△	△	△	○	○	△	◎	
		Polymer Chemistry	4073	1		△	△	△	○	○	△	◎	
		Materials Informatics	4074	1		△	△	△	○	○	□C	□C	
		Industrial Science and Technology Special	4075	1		△	△	△	○	○	○	○	
		Materials Science Special A	4076	1		△	△	△	○	○	○	○	
		Materials Science Special B	4077	1		△	△	△	○	○	○	○	
		Materials Science Special C	4078	1		△	△	△	○	○	○	○	
		Materials Science Special D	4079	1		△	△	△	○	○	○	○	
		Semiconductor Materials	4080	1		△	△	△	○	□C	○	○	
		Optoelectronics	4081	1		△	△	△	○	□C	○	○	
		Organic Synthesis and Polymer Science	4082	1		△	△	△	○	□C	○	○	
		Project Practice	4083	1		○	○	○	○	○	○	○	

Courses	Category	Subject name	Subject Number	Number of credits	Number of credits required for completion	Information Science and Engineering	Computational Biology	Biological Science	Bionanotechnology	Materials Science and Engineering	Intelligent Cyber-Physical Systems	Data Science	Remarks
Science and Technology Subjects	PBL Subjects	Information Science and Engineering PBL I	5001	1		◎							Only PBL subjects related to the selected Educational Program can be taken
		Information Science and Engineering PBL II	5002	1		◎							
		Computational Biology PBL I	5003	1			◎						
		Computational Biology PBL II	5004	1			◎						
		Biological Sciences PBL I	5005	1	2			◎					
		Biological Sciences PBL II	5006	1				◎					
		Bionanotechnology PBL I	5007	1					◎				
		Bionanotechnology PBL II	5008	1					◎				
		Materials Science and Engineering PBL I	5009	1						◎			
		Materials Science and Engineering PBL II	5010	1						◎			
		Intelligent Cyber-Physical Systems PBL I	5011	1							◎		
		Intelligent Cyber-Physical Systems PBL II	5012	1							◎		
		Data Science PBL I	5013	1								◎	
		Data Science PBL II	5014	1								◎	
Research-based Subjects	-	Seminar I	6001	1		◎	◎	◎	◎	◎	◎	◎	
		Seminar II	6002	1		◎	◎	◎	◎	◎	◎	◎	
		Colloquium A	6003	1	9	◎	□	□	□	□	□	□	
		Colloquium B	6004	1		◎	□	□	□	□	□	□	
		Research Experiments I	6005	2			□	□	□	□	□	□	
		Research Experiments II	6006	2			□	□	□	□	□	□	
		Research Thesis	6007	5		◎	◎	◎	◎	◎	◎	◎	
Number of credits required for completion					30								

In the "Required/elective" column, ◎, □, ○, and △ represent required subjects, required elective subjects, and elective subjects, respectively. Subjects marked △ do not count as credits toward the completion requirements. C mark represent the core subjects for each educational program.

(2) Registration requirements

A. Students are required to earn 30 credits or more in total. The total credits must include at least 4 credits from "General Subjects," at least 3 credits from introductory subjects in "Science and Technology Subjects," at least 12 credits from the basic and specialized subjects required for each educational program (※), at least 2 credits from PBL subjects, and at least 9 credits from "Research-based Subjects".

B. Of the basic subjects, subjects that can be judged to be have earned from the undergraduate department curriculum may not be included as a unit required for the student to complete.

C. The courses indicated by (※) are required or elective subjects which are core subjects to gain specialized knowledge required by each educational program.

・ In the Program of Information Science and Engineering, students are required to study at least two of the following five subjects as elective subjects. ①Formal Language Theory, ②Programming Course, ③High Performance Computing Platforms, ④Software Design, ⑤Artificial Intelligence.

・ In the Program of Computational Biology, students are required to study at least three of the following seven subjects as elective subjects. However, you can only choose one of ④, ⑤, or ⑥. ①Systems Biology, ②Medical Imaging Analysis, ③Biomedical Media Informatics, ④Applied Life Sciences・Microbial Science, ⑤Applied Life Sciences・Plant Science, ⑥Applied Life Sciences・Biomedical Science, ⑦Development of Bioscience into Industry Ⅰ.

・ In the Program of Biological Science, students are required to study at least three of the following six subjects as elective subjects. However, you can only select one of ①, ②, or ③. ①Microbial Science, ②Plant Science, ③Biomedical Science, ④Cytoskeleton and Cell Cycle, ⑤Genetics and Stem Cell Biology, ⑥Advanced Techniques in Bioscience.

・ In the Program of Bionanotechnology, students are required to study at least three of the following seven subjects as elective subjects. However, you can only select one of ③, ④, or ⑤. ①Core Molecular Science Ⅱ, ②Biomaterials Chemistry, ③Applied Life Sciences・Microbial Science, ④Applied Life Sciences・Plant Science, ⑤Applied Life Sciences・Biomedical Science, ⑥Development of Bioscience into Industry Ⅰ, ⑦Biomolecular Science.

・ In the Program of Materials Science and Engineering, students are required to study of the following four subjects, you must study either a two-subject combination of ①and ② or ③and ④ as elective subjects. ①Core Solid State Physics Ⅰ, ②Core Solid State Physics Ⅱ, ③Core Molecular Science I, ④Core Molecular Science Ⅱ.
  Furthermore, you must study at least two of the following four subjects as elective subjects. ⑤Biomaterials Chemistry, ⑥Semiconductor Materials, ⑦Optoelectronics, ⑧Organic Synthesis and Polymer Science.

・ In the Program of Intelligent Cyber-Physical Systems, students are required to study at least three of the following nine subjects as elective subjects. ①Optics, ②High Performance Computing Platforms, ③Quantum Mechanics, ④Core Physical Chemistry I, ⑤Ubiquitous Systems, ⑥Human Computer Interaction, ⑦Machine Learning and Intelligent Control, ⑧Robotics, ⑨Materials Informatics.

・ In the Program of Data Science, students are required to study ①Data Science.
  Furthermore, you must study at least one of the following three subjects as elective subjects. ②Data Engineering, ③Machine Learning, ④Data Mining.
  Furthermore, you must study at least one of the following two subjects as elective subjects. ⑤Big data in Bioscience, ⑥Materials Informatics.

(3) Numbering Information
  Subject numbers consist of 4-digit numbers based on levels of courses.

  First digit：The first digit in the 6-digit numbers indicates levels of subjects:
    1XXX = General Subjects （For master's course）
    2XXX = Introduction Subjects （For master's course）
    3XXX = Basic Subjects （For master's course）
    4XXX = Specialized Subjects （For master's course）
    5XXX = PBL Subjects （For master's course）
    6XXX = Research-based Subjects （For master's course）
    7XXX = Courses for research skills （For doctoral course）
    8XXX = Courses for independent research abilities （For doctoral course）

  From second to fourth digits：The from second to fourth digits in the 6-digit numbers indicate serial
    XXXX = Serial numbers (ranging from 01 to 99)

Appendix chart 2 (supplement to Article 2, Paragraph 2)

Curriculum table of the Graduate School of Science and Technology (Doctoral Course)

(1) Subject name, etc.

Category	Subject name	Subject Number	Number of credits	Number of credits required for completion	Required/ elective	Remarks
Courses for research skills	Advanced English A	7001	1		○	English lectures at NAIST
	Advanced English B	7002	1		○	
	Advanced English C	7003	1		○	
	Advanced English D	7004	1		○	
	Overseas English Training I	7005	2		○	English training overseas (About 3 weeks or more)
	Overseas English Training II	7006	2		○	
	Overseas English Training III	7007	2		○	
	International Training I	7008	1		○	Presentations at a international conference
	International Training II	7009	1		○	
	International Training III	7010	1		○	
	Study Abroad I	7011	2	3	○	* Registration requirements B · Internship at an overseas corporation to perform research (About 3 weeks or more) · Research activities at a overseas partner laboratory or research institution (About 3 weeks or more) · Overseas research
	Study Abroad II	7012	2		○	
	Study Abroad III	7013	2		○	
	Seminar for International Workshop Planning	7014	1		○	Plan an international student workshop, etc.
	Project Management I	7015	1		○	Management of research project, etc
	Project Management II	7016	1		○	
	Project Management III	7017	1		○	
	Special Lectures in Information Science and Engineering	7018	1		○	Special lectures corresponding to seven educational programs in the Master's course
	Special Lectures in Computational Biology	7019	1		○	
	Special Lectures in Biological Science	7020	1		○	
	Special Lectures in Bionanotechnology	7021	1		○	
	Special Lectures in Materials Science and Engineering	7022	1		○	
	Special Lectures in Intelligent Cyber-Physical Systems	7023	1		○	
	Special Lectures in Data Science	7024	1		○	
	Innovation Management A	7025	1		○	* Registration requirements B
	Innovation Management B	7026	1		○	
	Career Management A	7027	1		△	
	Career Management B	7028	1		△	
Courses for independent research abilities	Research Status Hearing	8001	1	7	◎	Research status hearing (A mid-term report)
	Doctoral Research I	8002	3		○	(The first half-year)
	Doctoral Research II	8003	3		○	(The second half-year)
	Doctoral Research III	8004	3		○	(The third half-year)
	Doctoral Research IV	8005	3		○	(The fourth half-year)
	Doctoral Research V	8006	3		○	(The fifth half-year)
	Doctoral Research VI	8007	3		○	(The sixth half-year)
Number of credits required for completion				10		

In the "Required/elective" column, ◎, □, ○, and △ represent required subjects, required elective subjects, and elective subjects, respectively. Subjects marked △ do not count as credits toward the completion requirements.

* This curriculum is also used for double degree program students.

(2) Registration requirements

    A. Students are required to earn 10 credits or more in total. The total credits must include at least 3 credits from "Courses for research skills" and at least 7 credits from "Courses for independent research abilities" (including earning 1 credit of "Research Status Hearing").

    B. Students are required to actively take two subjects, "Study Abroad Ⅰ " and "Innovation ManagementA".

(3) Numbering Information

Subject numbers consist of 4-digit numbers based on levels of courses.

    First digit：The first digit in the 4-digit numbers indicates levels of subjects:
        1XXX = General Subjects（For master's course）
        2XXX = Introduction Subjects（For master's course）
        3XXX = Basic Subjects（For master's course）
        4XXX = Specialized Subjects（For master's course）
        5XXX = PBL Subjects（For master's course）
        6XXX = Research-based Subjects（For master's course）
        7XXX = Courses for research skills（For doctoral course）
        8XXX = Courses for independent research abilities （For doctoral course）

    From second to fourth digits：The from second to fourth digits in the 4-digit numbers indicate serial
        X**XXX** = Serial numbers (ranging from 01 to 99)