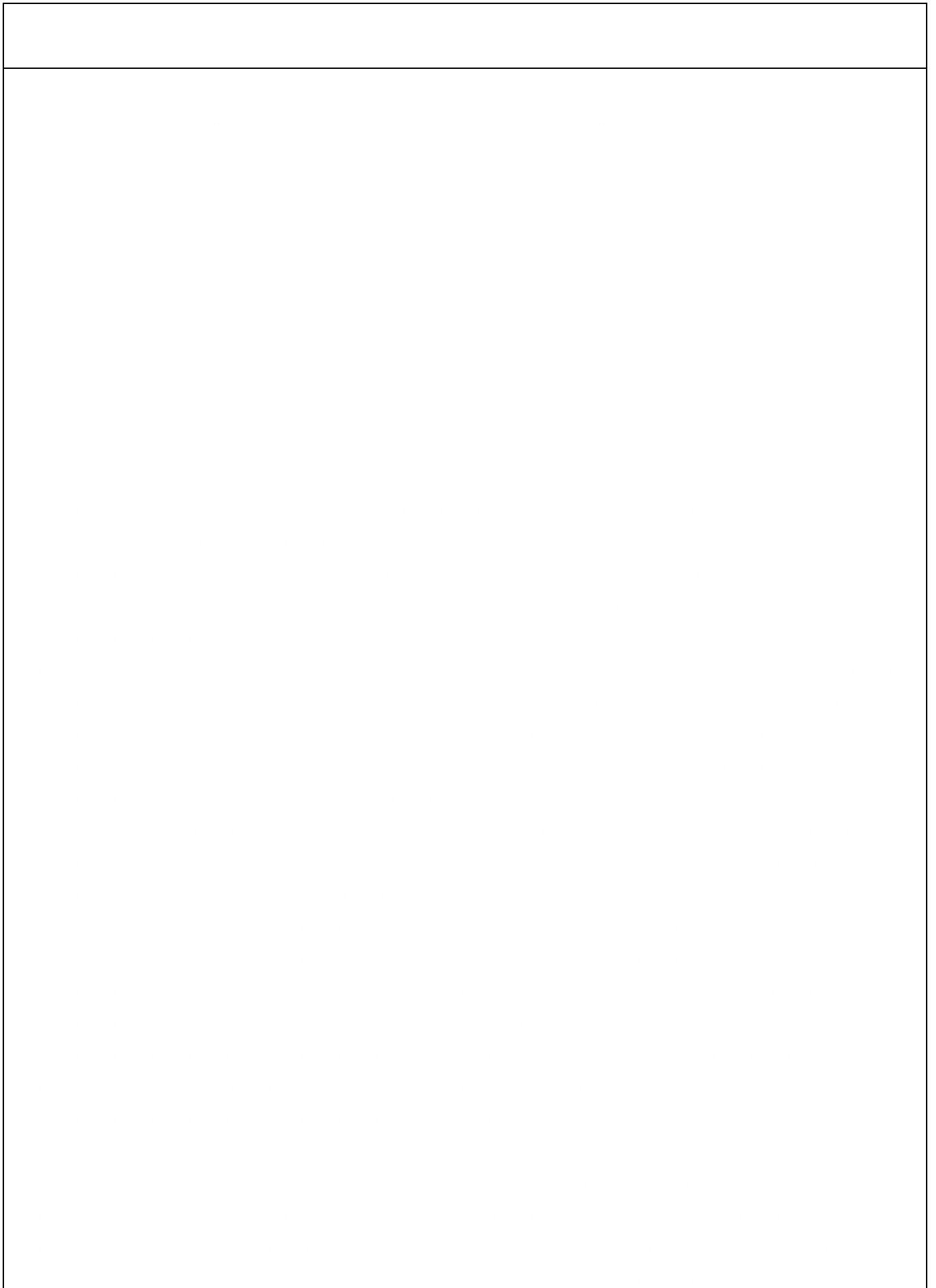


For entrants in FY 2019

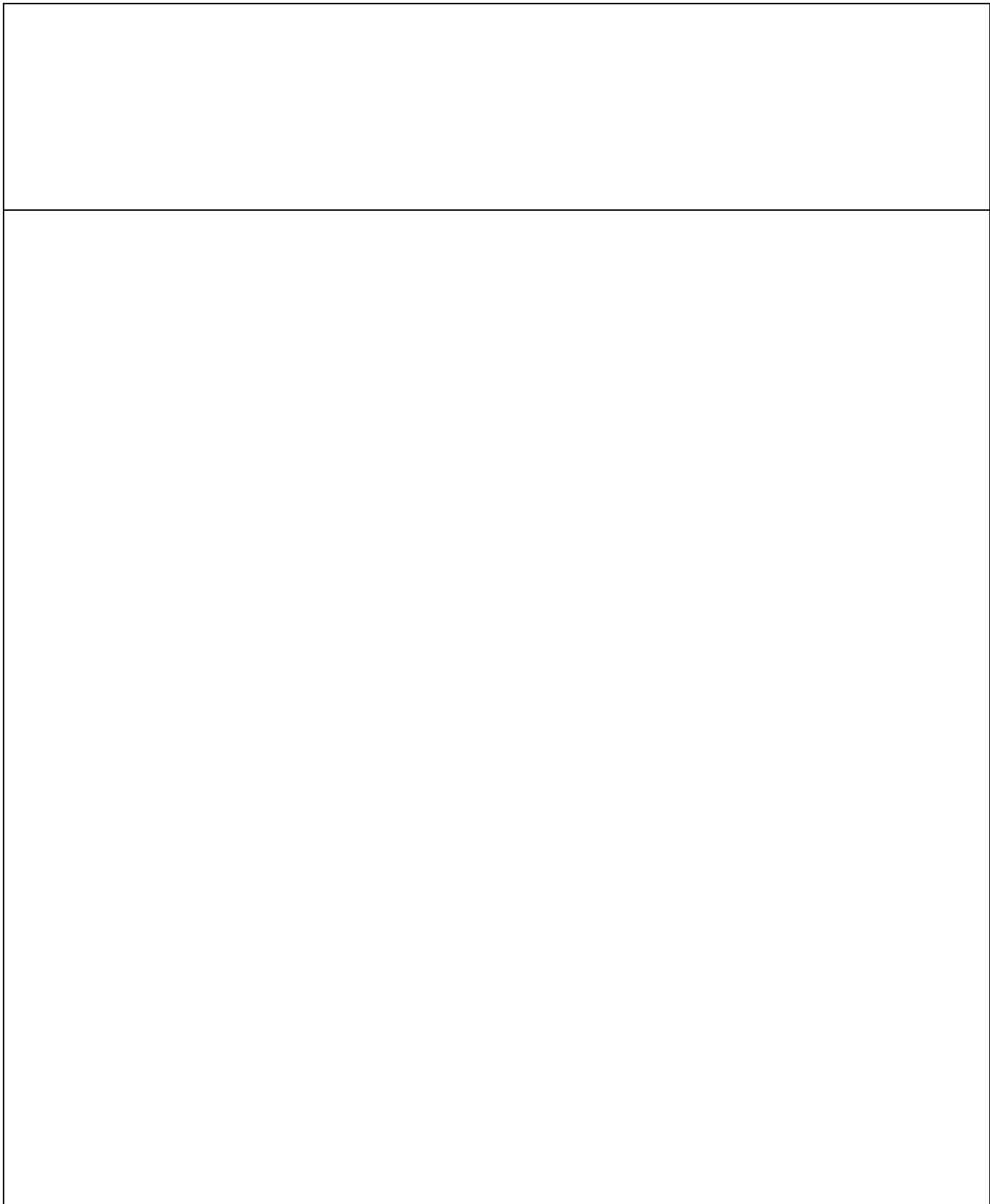
Through liberal arts education subjects:

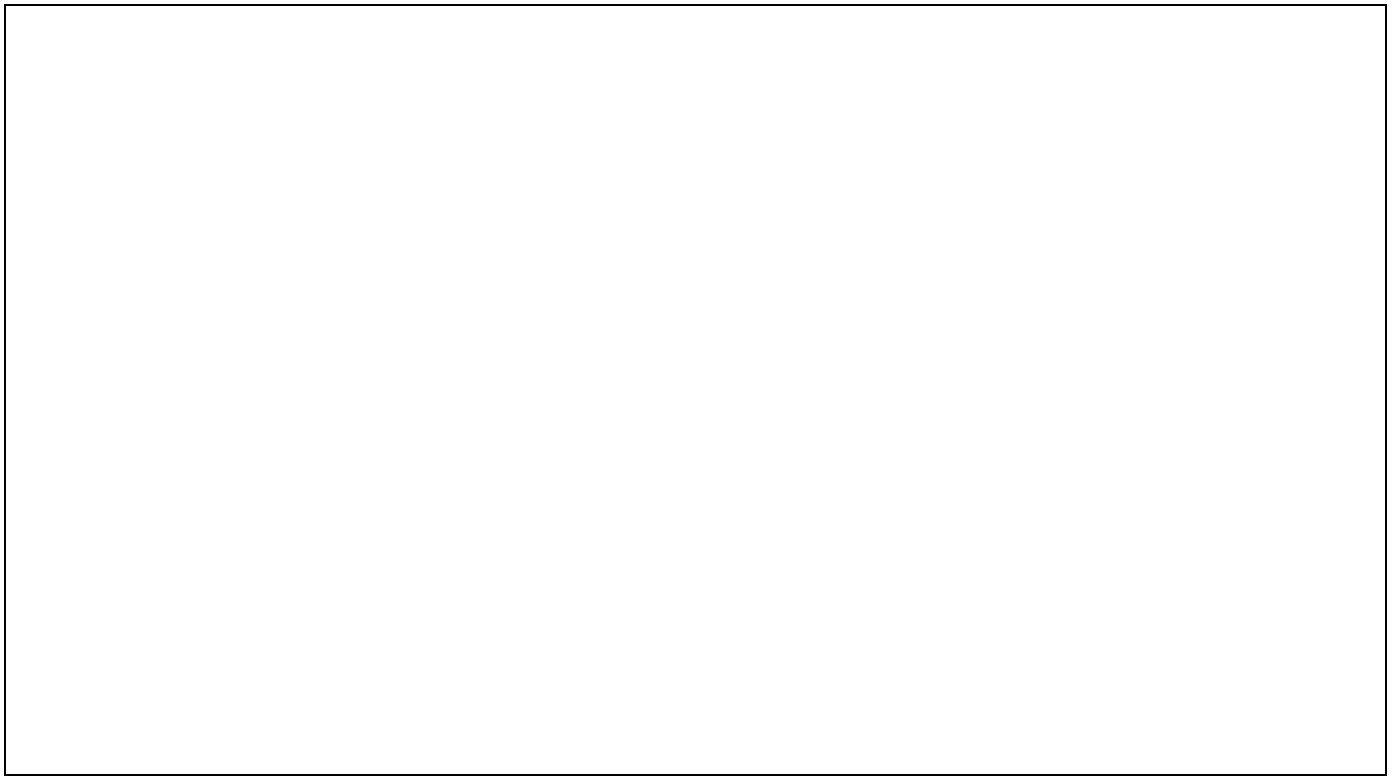
Through the specialized fundamental subjects for specialized education, the student is required

Through the specialized education in this program, the student is required to acquire:



	<table border="1" style="border-collapse: collapse;"><tr><td style="width: 80%; height: 30px;"></td><td style="width: 20%;"></td></tr><tr><td style="height: 30px;"></td><td></td></tr><tr><td style="height: 30px;"></td><td></td></tr><tr><td style="height: 30px;"></td><td></td></tr><tr><td style="height: 30px;"></td><td></td></tr></table>										
<table border="1" style="border-collapse: collapse;"><tr><td style="width: 80%; height: 30px;"></td><td style="width: 20%;"></td></tr><tr><td style="height: 30px;"></td><td></td></tr><tr><td style="height: 30px;"></td><td></td></tr><tr><td style="height: 30px;"></td><td></td></tr></table>											





		General Chemistry	2										
			1 for each subject	Elective Required									
	Total	44											

○ Instruction regarding credits

Note 1: The year indicated with a circle mark represents that in which students typically take the subject. The year with a double circle mark indicates the year in which students are highly recommended to take the subject. Students are allowed to take the subject in any year after that indicated with a circle or double circle mark. It is required to confirm the semester in which the subject is provided in the class schedule for liberal arts education subjects in the Students' Handbook because some subjects might be provided in different semester from that which is provided in this document.

Note 2: It is required to first take subjects that are provided in English.

Note 3: It is required to take more than 4 subjects from the fields of Arts and Humanities/Social Sciences and more than 4 subjects from Natural Sciences.

Note 4: Students who studied Mathematics III in high school are required to take the subject "Basic Calculus." Students who did not study Mathematics III in high school are required to take the subject "Elements of Calculus."

Note 5: It is required to select two combinations of subjects from the following to earn credits for them: "Experimental Methods and Laboratory Work in Physics I" and "Experimental Methods and Laboratory Work in Physics II"; "Experimental Methods and Laboratory Work in Chemistry I" and "Experimental Methods and Laboratory Work in Chemistry II"; and "Experimental Methods and Laboratory Work in Biology I" and "Experimental Methods and Laboratory Work in Biology II."

Type	Subject type	Required No. of credits	Class subjects	No. of credits	Year in which the subject is taken											
					1 st grade				1 st grade							
					Springs	Fall	Springs	Fall	Springs	Fall	Springs	Fall				
Specialized Subjects	Specialized Subjects	56	Packaged subjects provided in overseas partner university (Note1)	12												
			Specialized subjects packaged for each area (Note2)	10												
			Graduate Thesis I	2												
			Graduate Thesis II	2												
			Graduate Thesis III	2												
			Graduate Thesis IV	2												
			30credits													
			Specialized English subject group (Note3)	Global Environmental Issues and Managements	3											
				Modern Food Science	3											
				Insect Science	3											
Fish Production	3															
Plankton Biology	3															
Animal Science and Technology	3															
Physiology of Field Crop Production	3															
Introduction Physiology of Domestic Animals	3															
Molecular-level Understanding of Functionality of Foods	3															
Resource Management	3															
Elective Required Subjects				18credits												
Elective Subjects				8credits(Note4 7)												

		<p>(Note 1) For the "Packaged subjects provided in overseas partner university," students are required to select a specific subject by themselves to earn the credit in the destination university.</p> <p>(Note 2) "Specialized subjects packaged for each area" are composed as a subject group that consists of subjects selected from core disciplines for each of the 4 major programs (Integrated Hydrosphere Science, Applied Animal & Plant Sciences, Food Science, and Molecular Agricultural and Life Science) according to the study plan prepared by the mentor. Subject groups consist of different subjects for each student.</p> <p>(Note 3) For "Specialized English subject group," it is required to take 3 unit subjects that include the exercise class for foreign students in AIMS program and earn 18 credits for 6 subjects or more. Note that the classes of the subject are provided from the last 10 days of September to the end of December.</p> <p>(Note 4) Any credit for a specialized subject for the four other major programs is accepted as a credit for elective subject.</p> <p>(Note 5) Any credit for an elective required subject among specialized fundamental subjects is accepted as a credit for elective subject.</p> <p>(Note 6) Any credit for a subject in the specialized English subjects group that is earned beyond the requirement of 18 credits is accepted as a credit for elective subject.</p> <p>(Note 7) It is not allowed to include liberal arts subjects and subjects in the teacher training courses.</p>
Total	124	

[Credits required for graduation] 124 credits (44 credits for liberal arts education subjects + 24 credits for specialized fundamental subjects + 56 credits for specialized subjects)



					Weighting for evaluation item for the subject	Weighting for evaluation item	Weighting for evaluation item for the subject	Weighting for evaluation item	Weighting for evaluation item for the subject	Weighting for evaluation item	Weighting for evaluation item for the subject	Weighting for evaluation item	Weighting for evaluation item for the subject	Weighting for evaluation item	Weighting for evaluation item for the subject	Weighting for evaluation item	Weighting for evaluation item for the subject	Weighting for evaluation item	Weighting for evaluation item for the subject	Weighting for evaluation item	Weighting for evaluation item for the subject	Weighting for evaluation item	Weighting for evaluation item for the subject					
Liberal arts education subjects	Peace Science Courses	2	Required	1st semester	100	1																	100					
Liberal arts education subjects	Introductory Seminar for First-Year Students	2	Required	1st semester	100	1																	100					
Liberal arts education subjects	Introduction to University Education	2	Required	1st semester	100	1																	100					
Liberal arts education subjects	Foreign Languages	11	Required / Elective required	1st - 4th semesters					60	1					40	1							100					
Liberal arts education subjects	Information Courses	2	Required	1st semester					100	1													100					
Liberal arts education subjects	Area Courses	9	Elective required	1st - 6th semesters	100	1																	100					
Liberal arts education subjects	Health and Sports Courses	2	Elective required	1st - 2nd semesters					100	1													100					
Liberal arts education subjects	Basic Calculus or Elements of Calculus	2	Required	1st semester			100	1															100					
Liberal arts education subjects	Organic Chemistry	2	Required	2nd semester			100	1															100					
Liberal arts education subjects	Species Biology	2	Required	2nd semester			100	1															100					
Liberal arts education subjects	Cell Scien008	EM<</3(ect4(s)]TJ	ET	EMC ..9601 Tm	[(ed)-1MC 2T4(i)4(o)6(n)]TJ	ET	q	34.56	146.88	51.72	25.32	re	W	n	BT	/TT0	1	Tf	7.c738Tw	7.08	-0	0	7.08	194/TT0	1	Tf	-(4)18(S)4(ci)(4)1	156.uired

Specialized subjects	Overseas Exercise of Applied Biological Science I	2	Elective required	3rd semester			50	1								50	1					100
Specialized subjects	Overseas Exercise of Applied Biological Science II	2	Elective required	3rd semester			50	1								50	1					100
Specialized subjects	Overseas Exercise of Applied Biological Science III	1 - 2	Elective required	3rd semester			50	1								50	1					100
Specialized subjects	Introduction to Physiology	2	Elective required	3rd semester			100	1														100
Specialized subjects	Public Health	2	Elective required	6th semester			100	1														100
Specialized subjects	Global Environmental Issues and Managements	3	Elective required	4th semester					100	1												100
Specialized subjects	Modern Food Science	3	Elective required	4th semester					100	1												100
Specialized subjects	Insect Science	3	Elective required	4th semester					100	1												100
Specialized subjects	Fish Production	3	Elective required	4th semester					100	1												100
Specialized subjects	Plankton Biology	3	Elective required	4th semester					100	1												100
Specialized subjects	Animal Science and Technology	3	Elective required	4th semester					100	1												100
Specialized subjects	Physiology of Field Crop Production	3	Elective required	4th semester					100	1												100
Specialized subjects	Introduction physiology of Domestic Animals	3	Elective required	4th semester					100	1												100
Specialized subjects	Molecular-level Understanding of Functionality of Foods	3	Elective required	4th semester					100	1												100
Specialized subjects	Packaged subjects provided in overseas partner university	12	Required	4th, 6th, and 8th semesters												80	1			20	1	100
Specialized subjects	Specialized subjects packaged for each area	10	Required	5th - 8th semesters									100	1								100
Specialized subjects	Graduate Thesis I	2	Required	5th semester														20	1	80	1	100
Specialized subjects	Graduate Thesis II	2	Required	6th semester														20	1	80	1	100
Specialized subjects	Graduate Thesis III	2	Required	7th semester														20	1	80	1	100
Specialized subjects	Graduate Thesis IV	2	Required	8th semester														20	1	80	1	100

Curriculum map for Applied Biological Science Program

Study achievement Study achievement		1st year		2nd year		3rd year		4th year	
		1st semester	2nd semester	3rd semester	4th semester	5th semester	6th semester	7th semester	8th semester
Knowledge & understanding	Knowledge and understanding required to see a phenomenon from a broad, top-down perspective and for action based on comprehensive and cross-disciplinary thinking	Peace Science Courses ()	Research Front of Applied Biological Sciences ()						
		Seminar for developing intelligence ()							
		Introduction to University Education ()							
		Area Courses subjects ()							
	Basic knowledge and understandings required for acquiring expertise	Basic Calculus / Elements of Calculus ()	Organic Chemistry ()	Statistics in Biology ()				Public Health ()	
		General Chemistry ()	Cell Science ()	Environmental Sciences for Bioproduction ()					
		Introduction to Applied Biological Science I ()	Species Biology ()						
		Introduction to Microbiology ()	Introduction to Molecular Biochemistry ()	Introduction to Physiology ()					
			Agricultural Production Resources ()	Overseas Exercise of Applied Biological Science I ()					
			Physics for Applied Biological Science ()	Overseas Exercise of Applied Biological Science II ()					
	Introduction to Applied Biological Science II ()	Overseas Exercise of Applied Biological Science III ()							

Knowledge & understandingKnc		Ethics of Science and Technology ()							
		Introduction to Molecular Biochemistry ()							
		Seminar in Field Science ()							
	Knowledge and understanding regarding applied biological sciences				Global Environmental Issues and Managements ()				
					Modern Food Science ()				
					Insect Science ()				
					Fish Production ()				
					Plankton Biology ()				
					Animal Science and Technology ()				
					Physiology of Field Crop Production ()				
				Introduction physiology of Domestic Animals ()					
			Molecular-level Understanding of Functionality of Foods ()						

Ability & skills	Basic communication, information processing, and physical activities	Foreign Languages () ()							
		Information Courses ()							
		Health and Sports Courses ()							
	Basic experiment abilities and skills required for acquiring expertise	"Experimental Methods and Laboratory Work in Physics I"							
		"Experimental Methods and Laboratory Work in Chemistry I"							
		"Experimental Methods and Laboratory Work in Biology I" and							
				Laboratory Work in General Biology I & II ()					
				Laboratory Work in General Chemistry ()					
			Laboratory Work in General Physics ()						
	Intellectual ability and skills for research areas regarding applied biological sciences	Specialized subjects packaged for each area ()							
	Scientific English ability required for reading specialized treatises and providing presentations in English			Overseas Exercise of Applied Biological Science I ()	Packaged subjects provided in overseas partner university ()		Packaged subjects provided in overseas partner university ()		Packaged subjects provided in overseas partner university ()
				Overseas Exercise of Applied Biological Science II ()					
				Overseas Exercise of Applied Biological Science III ()					
Foreign Languages () ()									

Comprehensive capability	Ability to collect information related to peripheral disciplines to complement the knowledge regarding the specialized area and consider issues regarding applied biological science from diversified points of view		Research Front of Applied Biological Sciences ()			Graduate Thesis I ()	Graduate Thesis II ()	Graduate Thesis III ()	Graduate Thesis IV ()
	Ability to organize own ideas, demonstrate an apprehension based on those ideas, logically represent own conclusion orally or in writing, and exchange ideas in English regarding areas of applied biological sciences in which themes in integrated hydrosphere science, applied animal & plant science, food science, and molecular agricultural and life science are discussed from diverse points of view.					Graduate Thesis I ()	Graduate Thesis II ()	Graduate Thesis III ()	Graduate Thesis IV ()
				Packaged subjects provided in overseas partner university ()		Packaged subjects provided in overseas partner university ()		Packaged subjects provided in overseas partner university ()	

(Example) Liberal arts subjects Specialized fundame Specialized subjects Graduation thesis () Required subjec () Elective require () Elective subjects

List of Faculty Members of the Applied Biological Science Program

Name of faculty	Name of program and position	Extension number	Laboratory	Mail address
	Chief tutor			
	Chief of Integrated Hydrosphere Science Program			
	Chief of Applied Animal & Plant Sciences Program			
	Chief of Food Science Program			