Curriculum Map of ISI

Learning Objectives — by year and quarter

Category	1st year (Spring / Summer / Fall / Winter)	2nd year (Spring / Summer / Fall / Winter)	3rd year (Spring / Summer / Fall / Winter)	4th year (Spring / Summer / Fall / Winter)

Use of knowledge and understanding in practical situations (Practice)

- D.(Interdisciplinary Innovative Skills) Students can effectively challenge and solve issues by utilizing International Communication Skills, Active Learning Skills, Deep Analytical Skills, Backcast Thinking Skills for the Future, and Practical Collaborative Skills.

- Degree Project 3 (4th year, Winter quarter)
- Degree Project 1 (3rd year, Fall quarter); Degree Project 2 (4th year)
- ISI Advanced Seminar 1; ISI Advanced Seminar 2 (4th year)

Creation of new knowledge (Evaluation and Creation)

- C-2-3. (Practical Collaborative Skills) Students can establish effective and feasible ways of solving issues and modifying them through collaboration and discussion with people from diverse backgrounds.
  - Basic Project for ISI; Project for ISI
  - Cross-Cultural Adjustment 1 (1st year Spring)
  - Cross-Cultural Adjustment 2
  - International Experience A
  - International Experience B
  - *Students may take Experiential courses in a different year or at a different time from that indicated in their learning plan.

- C-2-2.(Backcast Thinking Skills for the Future) Students can make effective road maps for solving issues through backcast thinking from an ideal future, creating social value and innovation.
  - Issue-based Research (Human and Life Area)
  - Issue-based Research (People and Society Area)
  - Issue-based Research (States and Region Area)
  - Issue-based Research (Earth and Environment Area)
  - Issue-based Research (Area Integrated)

- C-2-1.(DeepAnalytical Skills) Students can analyze the root causes and solutions of issues by utilizing different disciplines and perspectives.

2nd year Fall	2nd year Winter	3rd year Spring	3rd year Summer	3rd year Fall
				[HS]Anthropology A
			[ID]Archaeology B	
[HS]Ethics and Philosophy C	[HS]Literature A	[HS]Ethics and Philosophy B	[ID]Science and Technology A	
[HS]Anthropology B	[HS]Archaeology B	[ID]Archaeology A		
[HS]Politics B	[NS]Engineering B	[ID]Geography A		
[HS]Economics C	[ID]Ethics and Philosophy B	[ID]Geography D		
[HS]Economics D	[ID]Engineering A	[ID]Area Studies A		
[NS]Area Studies A	[ID]Design Studies A	[ID]Informatics D		
[NS]Engineering A	[ID]Ecology A			
[ID]Ethics and Philosophy A				
[ID]Geography B				
[ID]Geography C				
[ID]Mathematics A				
[ID]Mathematics B				
[ID]Design Studies B				

- ISI Basic Seminar
- Lecture series
- *The Lecture Series operates on the basis of a stamp system. Students must collect at least 15 stamps by the time they graduate and are required to submit a final report.

Application of knowledge and understanding (Application and Analysis)

- C-1-2. (Practical Active Learning Skills) Students can explore and acquire the knowledge and abilities necessary for considering and solving issues by themselves.
  - [HS]Language and Communication B
  - [NS]Biology D
  - [HS]Language and Communication A
  - [NS]Earth Sciences B
  - [ID]Language and Communication A
  - [ID]Language and Communication B
  - Historical Perspective of the World
  - World Philosophies
  - Basic Academic Research
  - Issue and Innovation

- C-1-1. (International Communication Skills) Students can communicate and cooperate with people from diverse backgrounds and disciplines.
  - Global Online A
  - Global Online B
  - *Students may take Global Online courses in a different year or at a different time from that indicated in their learning plan.
  - Intensive English
  - Academic English
  - *Students must earn 10 credits for Intensive English in their first year.
  - Foreign Language Studies
  - *Students must earn 4 credits for Second Foreign Language in their first year.

Learning of knowledge and understanding (Knowledge and Understanding)

- B-2.(Information Literacy) Students acquire the knowledge and literacy of mathematical and data sciences and can properly analyze, integrate, and utilize various types of data and information for considering and solving problems.
  - [ID]Informatics B
  - [ID]Informatics A; [ID]Informatics C
  - [ID]Informatics E; [ID]Informatics F
  - [ID]Informatics G
  - Computer Programming Exercise
  - Information Science

- B-1.(Knowledge and Understanding) Students have adequate knowledge of academic disciplines and the skills necessary for analyzing and solving issues. Students can clearly explain the relations between disciplines and issues.

2nd year Fall	2nd year Winter
[HS]Ethics and Philosophy A	[HS]Politics A
[HS]Literature B	[HS]International Relations B
[HS]History A	[NS]Area Studies A
[HS]Archaeology C	[NS]Area Studies B
[HS]International Relations A	[NS]Biology H
[HS]Economics A	[NS]Earth Sciences C
[HS]Economics B	[NS]Informatics A
[NS]Ethics and Philosophy A	
[NS]Mathematics A	
[NS]Biology A	
[NS]Biology F	
[NS]Biology G	
[NS]Physics A	
[NS]Physics B	
[NS]Earth Sciences A	
[NS]Biology E	

Also (3rd year):
- [HS]Archaeology A
- [NS]Biology B
- [NS]Biology C

- Basic System Science; Math for ISI
- Data Collection and Analysis
- KIKAN Education Courses for Students in the Second Year and above
- *KIKAN Education Courses for Students in the 2nd year and above can be taken in any semester, starting from the second year.

Basic Active Learning Skills and Basic Collaborative Skills

- A-2. (Basic Collaborative Skills) Students can tackle problems by collaborating and communicating with people from diverse backgrounds and disciplines.
  - Interdisciplinary Collaborative Learning of Social Issues
  - KIKAN Education Seminar

- A-1. (Basic Active Learning Skills) Students can actively consider and analyze problems constructively and critically with various knowledge from the liberal arts and sciences.
  - Courses in Humanities and Social Sciences, Other Courses in Sciences
  - General Courses

Stage in Undergraduate Program

1st year	2nd year	3rd year	4th year
Introductory Level	Basic Level	Applied Level	Interdisciplinary Level

Assessment plan

Evaluation of Level of Achievement (each year)

- **1st year:** Grades for KIKAN Education Courses and ISI Fundamental Courses, and the results of class questionnaires from KIKAN Education.
- **2nd year:** Grades for ISI Fundamental Courses, Framing and Analytical Courses (Approach Subjects), and Collaborative Courses (Basic Project for Interdisciplinary Science and Innovation).
- **3rd year:** Grades for Interdisciplinary Innovative Courses (Issue-based Subjects and Degree Project 1), Collaborative Courses (Project for Interdisciplinary Science and Innovation), and International Learning Courses.
- **4th year:** Grades for Interdisciplinary Innovative Courses (Degree Projects 2 and 3), and the content of the final presentation at Degree Project 3.

Correlation between the attainment targets and the courses (The School of Interdisciplinary Science and Innovation)

[The School of Interdisciplinary Science and Innovation]
・ Correlation between the attainment targets listed in the Diploma Policy and the curriculum (courses)
・ ◎ indicates the main relevant attainment target for each course, while ○ indicates others of minor relevance.

Course Category	Courses	A-1	A-2	B-1	B-2	C-1-1	C-1-2	C-2-1	C-2-2	C-2-3	D
KIKAN Education Courses	KIKAN Education Seminars	○	◎					○			
	Interdisciplinary Collaborative Learning of Social Issues	○	◎					○			
	Humanities and Social Sciences	◎		○							
Science	Information Science			○	◎						
	Computer Programming Exercise			○	◎						
	Other Science Courses	◎		○							
General Courses		◎	○								
	KIKAN Education Courses for Students in the Second Year and above			◎			○				
Languages and Cultures	Intensive English		○			◎					
	Academic English		○			◎					
	Secound Foreign Langage		○			◎					
ISI Fundamental Courses	Basic Academic Research			○			◎				
	Issue and Innovation						◎	○			
	Math for ISI			◎			○				
	Basic System Science			◎	○						
	Data Collection and Analysis			◎	○						
	World Philosophies			○			◎				
	Historical Perspective of the World			○			◎				
Approach Subjects	[HS]Ethics and Philosophy A			◎				○			
	[HS]Ethics and Philosophy B			○				◎			
	[HS]Ethics and Philosophy C			○				◎			
	[HS]Literature A			○				◎			
	[HS]Literature B			◎				○			
	[HS]Language and Communication A					○	◎				
	[HS]Language and Communication B					○	◎				
	[HS]History A			◎				○			
	[HS]Archaeology A			◎				○			
	[HS]Archaeology B			○				◎			
	[HS]Archaeology C			◎				○			
	[HS]Anthropology A			○				◎			
	[HS]Anthropology B			○				◎			
	[HS]Politics A			◎				○			
	[HS]Politics B			○				◎			
	[HS]International Relations A			◎				○			
	[HS]International Relations B			◎				○			
	[HS]Economics A			◎				○			
	[HS]Economics B			◎				○			
	[HS]Economics C			○				◎			
	[HS]Economics D			○				◎			
	[HS]Area Studies A			◎				○			
	[HS]Area Studies B			◎				○			
	[NS]Ethics and Philosophy A			◎				○			
	[NS]Area Studies A			○				◎			
	[NS]Mathematics A			◎				○			
	[NS]Engineering A			○				◎			
	[NS]Engineering B			○				◎			
	[NS]Biology A			◎				○			
	[NS]Biology B			◎				○			
	[NS]Biology C			◎				○			
	[NS]Biology D					◎		○			
	[NS]Biology E			◎				○			
	[NS]Biology F			◎				○			
	[NS]Biology G			◎				○			
	[NS]Biology H			◎				○			
	[NS]Physics A			◎				○			
	[NS]Physics B			◎				○			
	[NS]Earth Sciences A			◎				○			
	[NS]Earth Sciences B						◎	○			
	[NS]Earth Sciences C			◎				○			
	[NS]Informatics A			◎				○			
	[ID]Ethics and Philosophy A			○				◎			
	[ID]Ethics and Philosophy B			○				◎			
	[ID]Language and Communication A					○	◎				
	[ID]Language and Communication B					○	◎				
	[ID]Archaeology A			○				◎			
	[ID]Archaeology B			○				◎			
	[ID]Geography A			○				◎			
	[ID]Geography B			○				◎			
	[ID]Geography C			○				◎			
	[ID]Geography D			○				◎			
	[ID]Area Studies A			○				◎			
	[ID]Mathematics A			○				◎			
	[ID]Mathematics B			○				◎			
	[ID]Engineering A			○				◎			
	[ID]Informatics A				◎			○			
	[ID]Informatics B				◎			○			
	[ID]Informatics C				◎			○			
	[ID]Informatics D			○				◎			
	[ID]Informatics E				◎			○			
	[ID]Informatics F				◎			○			
	[ID]Informatics G				◎			○			
	[ID]Science and Technology A			○				◎			
	[ID]Design Studies A			○				◎			
	[ID]Design Studies B			○				◎			
	[ID]Ecology A			○				◎			
	ISI Basic Seminar						○	◎			
	Lecture series					○		◎			○
Collaborative Courses	Basic Project for ISI						○				◎
	Project for ISI						○		○		◎
International Learning Courses	Cross-Cultural Adjustment 1			○							◎
	Cross-Cultural Adjustment 2					○	○				◎
	International Experience A					○	○				◎
	International Experience B					○	○				◎
	Global Online A					◎			○	○	
	Global Online B					◎			○	○	
Issue-based Subjects	Issue-based Research (Human and Life Area)							○	◎	○	
	Issue-based Research (People and Society Area)							○	◎	○	
	Issue-based Research (States and Region Area)							○	◎	○	
	Issue-based Research (Earth and Environment Area)							○	◎	○	
	Issue-based Research (Area integrated)							○	◎	○	
ISI Advanced Seminar	ISI Advanced Seminar 1								○	○	◎
	ISI Advanced Seminar 2								○	○	◎
Degree Project Subjects	Degree Project 1			○		○	○	○	○	○	◎
	Degree Project 2					○	○	○	○	○	◎
	Degree Project 3					○	○	○	○	○	◎

Attainment targets for KIKAN Education courses

- A-1. (Basic Active Learning Skills) Students can actively consider and analyze problems constructively and critically with various knowledge from the liberal arts and sciences.
- A-2. (Basic Collaborative Skills) Students can tackle problems by collaborating and communicating with people from diverse backgrounds and disciplines.
- B-1.(Knowledge and Understanding) Students have adequate knowledge of academic disciplines and the skills necessary for analyzing and solving issues. Students can clearly explain the relations between disciplines and issues.
- B-2.(Information Literacy) Students acquire the knowledge and literacy of mathematical and data sciences and can properly analyze, integrate, and utilize various types of data and information for considering and solving problems.

Attainment targets for Specialized Courses

- C-1-1. (International Communication Skills) Students can communicate and cooperate with people from diverse backgrounds and disciplines.
- C-1-2. (Practical Active Learning Skills) Students can explore and acquire the knowledge and abilities necessary for considering and solving issues by themselves.
- C-2-1.(Deep Analytical Skills) Students can analyze the root causes and solutions of issues by utilizing different disciplines and perspectives.
- C-2-2.(Backcast Thinking Skills for the Future) Students can make effective road maps for solving issues through backcast thinking from an ideal future, creating social value and innovation.
- C-2-3. (Practical Collaborative Skills) Students can establish effective and feasible ways of solving issues and modifying them through collaboration and discussion with people from diverse backgrounds.
- D.(Interdisciplinary Innovative Skills) Students can effectively challenge and solve issues by utilizing International Communication Skills, Active Learning Skills, Deep Analytical Skills, Backcast Thinking Skills for the Future, and Practical Collaborative Skills.