

# For entrants in AY 2024

Appended Form 1

## Specifications for Major Program

Name of School (Program) [School of Education,  
Cluster 2(Science, Technology and Society Education) Program in Technology and Information Education]

Program name (Japanese) (English)	Secondary School Technology and Information Education
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1. Academic Degree to be Acquired: Bachelor's Degree (Education)

### 2. Overview

The Secondary School Technology and Information Education Program aims to develop junior high school technology teachers and high school information and technical studies teachers (together referred to as 'secondary school technology and information teachers').

This program aims to foster practical educational abilities. Students are encouraged to take technology and information-related special subjects, including manufacturing technologies (wood-processing, metal-processing, machinery, electricity, and cultivation) and information technologies (hardware, software, information networks, information systems), which are required for delivering technology and information education at secondary schools, and which also provide the basic and fundamental knowledge, abilities, skills, and attitudes in relation to such education. Eventually, graduates of this program will go on to deliver technology and information lessons, attract pupils' attention and interest, and organize a new developmental study based on the pupils' stages of development and learning. This program also pays careful attention to fostering basic and fundamental knowledge, abilities, and skills so that the students can progress to graduate school studies related to technology and information education, and to specialized courses required in order to work as academic researchers or professional personnel in business and public organizations.

### 3. Diploma Policy (Policy of Awarding Degrees & Goal of the Program)

The Secondary School Technology and Information Education Program develops the following professionals, junior high school technology teachers, high school information and technology teachers, engineers in businesses and public organizations, education specialists in businesses, and researchers going on to the graduate school to study the areas of specialized science related to technology and information education. Therefore, this program awards a bachelor's degree (education) to students who, in addition to obtaining the standard number of credits set forth in the education curriculum, have acquired the following abilities:

- 1 The basic and practical knowledge and skills related to technology and information.
- 2 The basic and practical knowledge and skills related to technology and information education.
- 3 The ability to find and realize problems in technology, information, and related subjects from a global perspective, and to generalize from knowledge and skills in order to think, judge and express them for finding solutions.

The abilities listed in (1) and (2) are evaluated based on the academic evaluation of every subject according to the syllabus and the degree of attainment of the goal set by each education program. The abilities listed in (3) are evaluated based on the contents of the manufactured and produced items and the presentation of the graduation thesis, as well as on the student's attitude towards learning.

### 4. Curriculum Policy (Policy for Curriculum Organization and Implementation)

The Secondary School Technology and Information Education Program systematically organizes and implements a curriculum based on the following policies in order to realize the goal set forth in the



Students decide on the tutor for their graduation thesis in the first semester of the third year, while also selecting a major research area. Their wishes are taken into account in assignment, which is finalized by the group of teachers in charge of program.

#### System of Responsibility

##### (1) System of PDCA (Plan, Do, Check, Action)

This program is implemented mainly by the staff members belonging to the Technology and Information Education Program, School of Education. The program head (head of the Technology and Information Education Program) is responsible for its implementation. The group of teachers of this program will make a plan, implement that plan, evaluate it, and take action.

##### (2) Evaluation of the Program

###### \* Evaluation Perspectives for the Program

This program encompasses the evaluation perspectives of educational and social benefits. As for the educational benefits, the degree of attainment by the students will be identified after the implementation of the program, while as for the social benefits, the social effectiveness of taking the program will be evaluated.

###### \* How to implement evaluation (Describing the relationship to class evaluation.)

In principle, the effect of this program itself will be evaluated in the academic year four years after entrance to the university, based on the perspectives above.

Firstly, the educational benefits will be evaluated based on the degree of achievement by the students who have studied in this program (the achievement of the graduation requirements and the acquisition of qualification as secondary school technology and information teachers) and the overall evaluation made by the group of teachers in charge of this program. Along with the degree of achievement of credits by students, the program checks if the degree of achievement is 75% or more by examining the level of achievement of each student, and of the students as a whole, based on the teachers' comprehensive evaluation.

Secondly, the social benefits will be evaluated through questionnaires completed by the schools and the businesses that employed the graduates.

###### \* Position on feedback, and method of feedback to the students

Based on the evaluation results of this program, the group of teachers in charge review and improve the contents of the program and examine the effectiveness of the students' guidance and the various subjects, ensuring their findings are reflected in program management and implementation in the following years.

### Table of Registration Standards for the Subjects of Liberal Education

## Cluster 2: Program in Technology and Information Education

Type	Subject type		Required Credits	Class subjects, etc.	Credits	Type of course registration	Semester for the subject to be taken (Note 1)							
							1st year		2nd year		3rd year		4th year	
	1	2	3	4	5	6	7	8						
Subjects of Liberal Education  Common Subjects  Foreign Languages English ( Note2 )	Peace Science Courses		2		2	Elective/required	0							
	Basic Courses University Education	Introduction to University Education	2	Introduction to University Education	2	Required	0							
		Introductory Seminar for First-Year Students	2	Introductory Seminar for First-Year Students	2	Required	0							
		Advanced Seminar	(0)		1	Free elective	0							
	Area Courses	Courses in Arts and Humanities/Social Sciences	4	(Note4)	1or2	Elective/required	0	0	0	0				
		Courses in Natural Sciences	4		1or2	Elective/required	0	0	0	0				
	Basic English Usage		(0)	Basic English Usage I	1	Free elective	0							

## Registration standards for Schools.

### Cluster 2: Science, Technology and Society Education Program in Technology and Information Education

Subject type, etc.				No. of credits required for graduation	
	Peace Science Courses			2	
	Basic Courses in University Education	Introduction to University Education		2	
		Introductory Seminar for First-Year Students		2	
Liberal Arts Education				4	38
			Courses in Natural Sciences	4	
		Foreign Languages	English	4	
			Non-English Foreign Languages	(0)	
		Information and Data Science Courses		4	
		Health and Sports Courses		2	
		Social Cooperation Courses		(0)	
	Foundation Courses			(0)	
	Free Elective subjects			14	
	Specialized Education	Basic Specialized subjects			
Specialized subjects			16		
Specialized Elective subjects			30		
Free Elective subjects					
Graduation Research			6		
Total				128	

**Registration standards for Specialized Education Subjects**  
**Cluster 2: Program in Technology and Information Education**

Class Subject		No. of credits required for graduation		School(s)
Basic Specialized subjects	Introduction to Technology Education I	2	38	Program in Technology and Information Education
	Introduction to Computer Education I	2		
	Introduction to Woodworking	2		
	Introduction to Practical Learn of Material	2		
	Introduction to Machine Application	2		
	Introduction to Electrical and Electronic Applications I	2		
	Introduction to Information Applications I	2		
	Introduction to Information Applications II	2		
	Practicum in Mechatronics	2		
	Basic Specialized Elective subjects	20		
Specialized subjects		16		School of Education, etc.
Specialized Elective subjects		30		
Free Elective subjects				
Graduation Research		6		Program in Technology and Information Education

**Matters to note when taking subjects**

1. The number of credits in Free Elective Subjects acquired in minor courses and specific programs will be up to 30 credits.
2. In order to study the Practical Seminar for the Teaching Profession (Junior and High School) (8<sup>th</sup> Semester), in principle, students must obtain the credits in Practical Study at the Junior and High School I or II at the end of the 7<sup>th</sup> semester. If, however, they cannot obtain the credits in Practical Study by the semester in which they take the Practical Seminar for the Teaching Profession, their registration will be accepted on the condition of their obtaining them during the same semester.

**Cluster 2: Program in Technology and Information Education**

Subjects with a circle in the "No. of credits to obtain" column are required subjects.

The semester marked with ○ is the standard semester for taking the related subject

Type	Class Subject	Credits	Semester in which the subject is taken								Remarks
			1	2	3	4	5	6	7	8	
Basic Specialized subjects	Introduction to Technology Education I				○						
	Introduction to Computer Education I				○						
	Introduction to Woodworking			○							
	Introduction to Practical Learn of Material			○							
	Introduction to Machine Application				○						
	Introduction to Electrical and Electronic Applications I				○						
	Introduction to Information Applications I		○								
	Introduction to Information Applications II		○								
	Practicum in Mechatronics						○				
	Basic Practicum in Mechatronics	2				○					
	Introduction to Hardware	2				○					
	Practice in Teaching Materials for Woodworking I	1			○						
	Material Working I	1			○						
	Seminar on Teaching Materials for Mechatronic Applications	1	○								
	Introduction to Electrical and Electronic Applications II	2				○					
	Seminar on Teaching Materials for Hardware	1		○							
	Introduction to Technology Education II	2				○					
	Introduction to Computer Education II	2					○				
	Introduction to Information Systems	2			○						
	Introduction to Network Systems	2				○					
	Multimedia Applications	2						○			

	Introduction to Programming	2				○					
	Data Utilization and Data Science for Solving Problems in Educational Scenes	2				○					
	Introduction to Information Applications III	2				○					



Specialized Elective subjects

Type	Class Subject	Credits	Semester in which the subject is taken								Remarks
			1	2	3	4	5	6	7	8	
	Guidance on the Teaching Profession	2			o						
	Principles of Education	2			o						
	Developmental Psychology of Children and Adolescents	2					o				
	Education and Society and Systems	2				o					