University of Tsukuba
筑波大学

TSUKUBA STANDARDs

for Undergraduate Schools and Colleges

TSUKUBA
STANDARDs

Tsukuba Standards for Undergraduate Schools and Colleges

Discover Your Human Potential at TSUKUBA, a Hub of Knowledge

Based on our founding philosophy, we clarify our educational framework, including educational purpose and methods for achieving them in our bachelor programs and measures for improvement of educational content, and widely publicize it to society as the educational declaration of the University, which aims to guarantee and continuously improve the quality of degrees.

Concept

The University of Tsukuba aims to establish free exchange and close relationships in both basic and applied sciences with educational and research organizations and academic communities in Japan and overseas. While developing these relationships, we intend to pursue education and research to cultivate men and women with creative intelligence and rich human qualities.

The University of Tsukuba endeavors to contribute to the progress of science and culture. Formerly, Japanese universities tended to remain cloistered in their own narrow, specialized fields, creating polarization, stagnation in education and research and alienation from their communities.

The University of Tsukuba has decided to function as a university which is open to all within and outside of Japan. Toward this end, the university has made it its goal to develop an organization better suiting the functions and administration with a new concept of education and research highly international in character, rich in diversity and flexibility and capable of dealing sensitively with the changes occurring in contemporary society.

To realize this, it has vested in its staff and administrative authorities the powers necessary to carry out these responsibilities.

IMAGINE THE FUTURE.

The University of Tsukuba was established as a "university with a new vision" and functions as an open university.
The identity of the university is based on these tenets as well as the initial intent behind the reforms aiming towards interdisciplinary studies and internationalization. Looking at the current trends, we can say with confidence that the foresight of such thinking was ahead of its time. As is well known, interdisciplinary studies, liberal arts education, industry-university cooperation, international exchange and acceptance of international students are all trends that are in step with the times. We take pride in our forward-looking foresight.

The university therefore chose to be an "advanced university" rather than "traditional university" or "prestigious university." Although we are proud of our history as the Tokyo Higher School of Teachers and Tokyo University of Education, we became committed to the ideals of "reform" and "new challenges" when the university relocated to Tsukuba. "Tsukuba", for us is not a mere geographical location, but a symbol for the ideals we uphold. We will continue to reinvent and break new ground, for this is the essence of an "open university." For us, being "number one" means that we must be open, continue reinventing ourselves, and be a future-oriented university and a hub of Tsukuba City that looks toward the world and our future. As a true university that includes departments from medicine through physical education and arts, we aim to facilitate comprehensive human understanding as well as nurture human talent.

Reaffirming our role as a leading university, we wish to continuously pass on the mantle of new traditions from one generation to the next.

What are Tsukuba Standards?

The Tsukuba Standards are the educational declarations of the University. There are two types of standards, one for Undergraduate Schools and Colleges (announced in March 2008) and the other for graduate Schools and Programs (announced in June 2011). These standards clarify the aims of the University of Tsukuba in each course and how to achieve those aims, and announce to the general public the quality of education guaranteed by the University. As a tool to not only maintain quality, but also to constantly improve and continuously elevate it, the Tsukuba Standards play an important role within the university.

Definition of "degree program"

The degree program is an educational program that specifies the abilities to be achieved according to the level of the degree (bachelor, master, doctoral, etc.) and the academic field, and is systematically designed to enable students to acquire these abilities. In the traditional system where faculty members were fixed in educational organizations such as departments, and because programs were organized as the sum of classes offered by individual faculty members, the circumstances of the faculty members tended to take precedence over the demands of society and the needs of students. In contrast to this, a degree program is designed to provide educational content from the student's perspective, with faculty members gathered across the boundaries of internal and external organizations to create a program that is appropriate for a degree, with the degree positioned as proof of the student's internationally compatible abilities. By having an education system centered on degree programs, it becomes easier for students and society to see the educational objectives, content, and outcomes of the university.

Tsukuba Standards and degree programs

Since its inception, the University has implemented bachelor program education under a system that separates the education of students from the research of faculty members by establishing "Schools and Colleges" that differ from traditional departments. With this educational system, it is possible to deploy teachers from throughout the university according to educational needs without being closed within a single organization. It can be said that this is an educational system that embodies the idea of a degree program. In the 2011 academic year, we carried out organizational reforms to establish a new faculty member organization (Faculty), and in the 2020 academic year, we reorganized and restructured the graduate school and established a university-wide educational management system and framework, making a full transition to an educational system centered on degree programs. In the Tsukuba Standards, it clearly states the "Diploma Policy" and "Curriculum Policy" for each degree, as well as the measures to guarantee the quality of these policies for all educational organizations. These are consistent measures based on the founding philosophy of the University. Our entire faculty and staff are determined to push forward with educational reforms in order to establish our degree program system as an education system with international compatibility and collaborative capabilities and to pursue further improvements in the quality of education.

NAGATA Kyosuke President of the University of Tsukuba

Educational purpose of Bachelor Programs

The following are the educational purpose for nurturing global human resources with world-class intelligence, humanity, and resilience

- To cultivate creativity backed by solid fundamental skills and a flexible mindset to understand the essence

- To foster a rich education and communication skills that will become the cornerstone of international activities

- To cultivate the ability to appreciate art and sports, and to be moved by outstanding cultural activities

- To develop an attitude of compassion for nature and humanity, and to actively contribute to society

- To cultivate the ability to continuously learn and develop oneself independently throughout one's life

Policy 1

Guaranteeing the quality of degrees through a student-centered education system

We guarantee the quality of degrees through degree programs, appropriate academic work processes, and responsible educational implementation

Degree program development

The University of Tsukuba has established five educational purpose aimed at fostering human resources who can play an active role in the global society, as well as six Generic Competences as specific knowledge and abilities that all undergraduate students in Bachelor Programs should acquire in order to achieve the educational purpose. (Table 1)

The University of Tsukuba's Bachelor Programs have established an educational system that organically links common education and specialized education in each School and College as a university-wide educational framework to facilitate the acquisition of such knowledge and abilities by students.

In addition, each School and College has three policies, based on a concrete vision of where and how students will be active following graduation: what specialized knowledge and abilities will be cultivated in addition to Generic Competences (Diploma Policy), how the curriculum will be organized and implemented to achieve these goals (Curriculum Policy), and what qualities and aspirations will be desired in students who are suitable for such education (Admission Policy). In addition to the three policies, we clarify the mechanism for constant educational improvement and implement systematic education.

This approach of clarifying the three policies as a path to the awarding of degrees is extremely important in guaranteeing the quality of degrees, and degree programs are an educational system that further promotes this. The University of Tsukuba establishes degree programs that guarantee student academic achievement from a student-centric perspective.

Appropriate academic work processes

In order to guarantee the quality of degrees, it is necessary to guide students to undergo appropriate academic work processes through the practical application of the credit system and rigorous grading, as well as the development of systematic programs.

Each School and College and organization offering Common Foundation Subjects will clearly indicate to students the knowledge and abilities to be acquired in each class, as well as the process of acquisition (including academic work before and after the class), and will develop classes in a planned manner. In judging the attainment level of students in each class, strict grading will be conducted based on clear grading standards.

By enriching the syllabus (course schedule), utilizing a grade point average (GPA), and effectively allocating graduate student teaching assistants, we will bring the student academic work process in line with international standards.

Educational implementation system with responsibility

With regard to the formulation of basic education policies and basic plans for educational reform, liberal arts education, student life support, disabled student support, career support, etc., we have established a university-wide organization that oversees planning and implementation.

Each School and College has also established a system for systematically carrying out various tasks related to education and student support, and is responsible for their implementation.

In addition, thanks to the university-wide student organization and the small class size of approximately 20 students, we ensure that students' opinions are reflected and that they receive detailed guidance regarding their overall academic studies.

Generic Competences (Undergraduate Schools and Colleges)

Communication ability	Communication ability to use the mother tongue and foreign languages properly and make presentations, etc. using various media
Ability for critical and creative thinking	Ability to think critically and creatively based on systematic understanding of general and specialized knowledge
Data and information literacy	Ability to properly analyze and process various events and information using quantitative methods, computers, etc.
Broad perspective and international character	Ability to broadly understand culture, society, nature, and materials and understand and respect different cultures and be not only involved in one's own expertise
Mental and physical health, humanity, and ethics	Ability to maintain mental and physical health through the understanding, practice, etc. of arts and sports and be conscious of one's responsibility and put it into practice as a citizen with humanity and ethics
Cooperative, independent, and autonomous attitudes	Ability to keep learning and act autonomously while dealing with a situation through team work and leadership and practicing self-management

Table1. Generic Competences (Undergraduate Schools and Colleges)

Policy 2

Developing global human resources through the TSUKUBA method

We nurture world-class intelligence, humanity, and resilience from a "student-centric perspective," an "international perspective," and a "future perspective."

Student-centric Perspective

The University of Tsukuba Bachelor Program curriculum cultivates solid expertise and a rich culture to support it throughout the entire academic period. To achieve this, we do not divide liberal arts education and professional education into two, but organize and implement a curriculum which combines the two from the perspective of student achievement. We have established a degree program system as an educational system that guarantees student academic achievement in line with their degrees.

As for the implementation of education, we emphasize active learning, in which faculty members, students, and fellow students interact with each other, and encourage students to actively and independently do academic work. In terms of extracurricular activities, in addition to supporting various extracurricular activity groups, we support students' voluntary activities through our proprietary "T-ACT" system. In addition, through the university-wide student organization, students and faculty members collaborate and work to enrich and improve education and student life.

International Perspective

We vigorously promote the development of schemes and environments for students to become globally-minded and acquire the qualities to play an active role in global society in all aspects.

In addition to implementing rich internationally-oriented, high-quality education in each specialized field, we have established "global courses" to cultivate the fundamentals needed to become global human resources, and have enriched and strengthened measures to support overseas study, thereby creating an academic work environment in which "the world is a place of learning."

We are also creating a campus environment that embodies the University's motto, "Internationalization in everyday life," by arranging academic work spaces where international students from various countries around the world and Japanese students can interact and collaborate on a daily basis without distinction of nationality, culture, or field of specialization, and also by providing cafes where students can interact in multiple languages.

Furthermore, in order to ensure the quality of education beyond national borders, we are taking the lead in building an education system that is internationally accepted and compatible.

Future Perspective

In order to foster the ability to carve out the future in a rapidly changing global society, we proactively implement education in cooperation with industry. Through lectures by leaders in various industries and practical subjects such as practical training and internships in diverse fields, students cultivate the ability to grasp the essence of social issues and gain insight into the future.

Student career development support begins from the time of admittance. We systematically support students' career development through career-specific Foundation Subjects and the University's proprietary "Tsukuba Career Portfolio" to help students consider the connection between their future and their academic work at the University.

In this manner, students develop the ability to proactively contribute to society with individuality and self-reliance as the cornerstone, by overlapping the future of society with their own future and pursuing their academic work with an awareness of the issues and high motivation.

Global human resources with world-class intelligence, humanity, and resilience

International Perspective	Student-centric Perspective	Future Perspective
An academic work environment in which "the world is a place of learning"	Establishment of a degree program system that guarantees students' academic work achievement	Collaboration with industry and other areas to cultivate the ability to carve out the future in a global society
A campus environment that embodies "Internationalization in everyday life"	Students' independent and active academic work	Career development that overlaps the future of society and the student's own future
An education system that is internationally compatible	Collaboration between students and faculty members	

Developing global human resources through the TSUKUBA method

Policy 3

New Educational Philosophy for Bachelor Programs

Vertical development for learning in specialized fields and horizontal development in order to cultivate culture

Philosophy

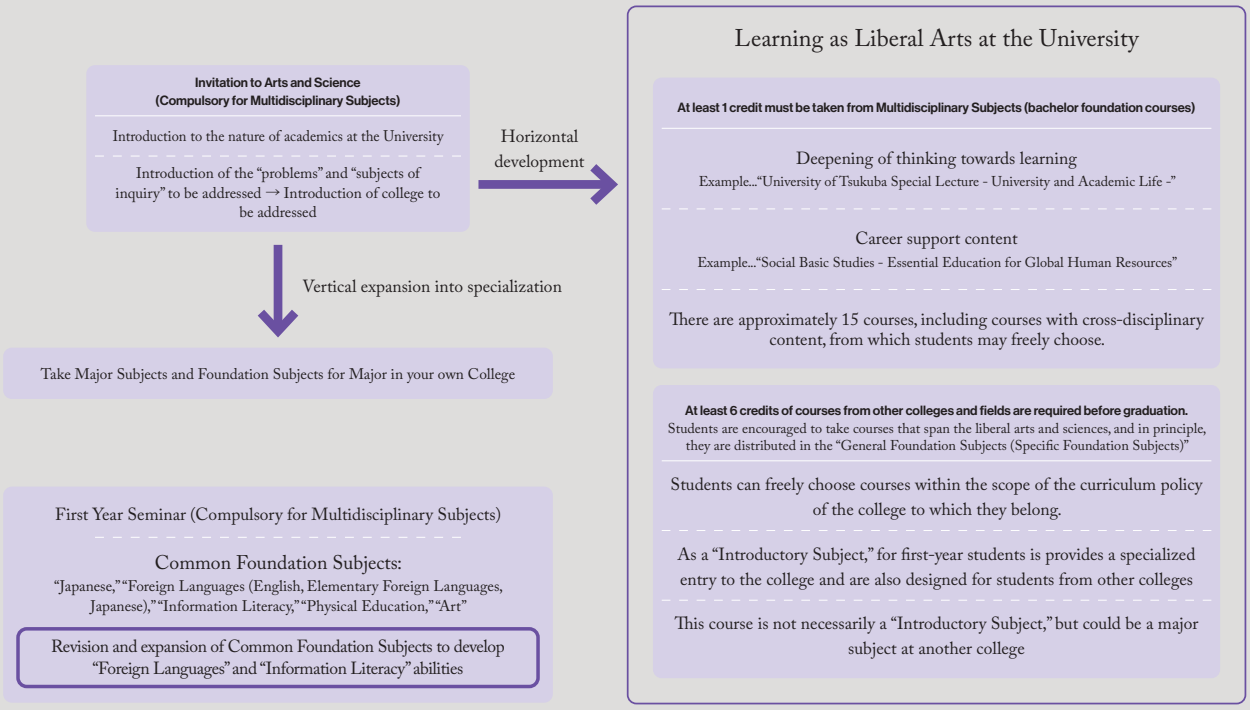
Our university, since its founding, has fostered students with advanced problem-solving skills based on a broad academic perspective through a liberal arts education that integrates the expertise of other Schools and Colleges by offering "Specific Foundation Subjects" in which students can take Major Subjects offered by other Schools and Colleges in addition to "Common Foundation Subjects."

Based on this spirit, we have developed an educational system based on the principle that students can acquire creative wisdom by cultivating both specialized knowledge and skills and general knowledge and skills. As shown in the diagram, we consider learning to deepen one's own expertise to be a vertical learning process, while learning as a liberal arts course at the University is considered to be a horizontal learning process. It is our philosophy that we can achieve an educational system that can put both of these into practice.

To realize our philosophy

At the heart of this horizontal and vertical structure, we have established "Invitation to Arts and Science" as Multidisciplinary Subjects (compulsory), through which our students first learn about the nature of learning at the university, the problems to be addressed, and the subjects of inquiry. On the other hand, students are able to understand the connection between a variety of society`s subjects of inquiry and academic disciplines by freely selecting and taking Multidisciplinary Subjects (bachelor's foundation courses), including cross-disciplinary content or courses essential for global human resources that deepen their thinking about academics. Also, the "Introductory Subjects" offered by each college and major school are structured in such a way that students belonging to the organization where the course is offered can learn the fundamentals of their specialization, while other students learn about fields different from their own area of specialization. By encouraging systematic studies, both horizontally and vertically, based on the curriculum policy of each educational organization, the Bachelor Programs will provide a well-rounded and consistent liberal arts education and advanced and in-depth specialized education. In this way, the programs cultivate the ability of each student to discover his or her own specialty from among multiple fields of study, and furthermore, to foster human resources with a broad perspective who can explain the position of his or her main field of specialty among various academic disciplines.

To further promote the implementation of this philosophy, we established the "School of Comprehensive Studies" in the 2021 academic year. In the School of Comprehensive Studies, following admittance, after one year of exposure to a variety of academic disciplines, students are able to select the undergraduate course to which they wish to belong.



Policy 4

Realization of university-wide quality management for teaching and learning

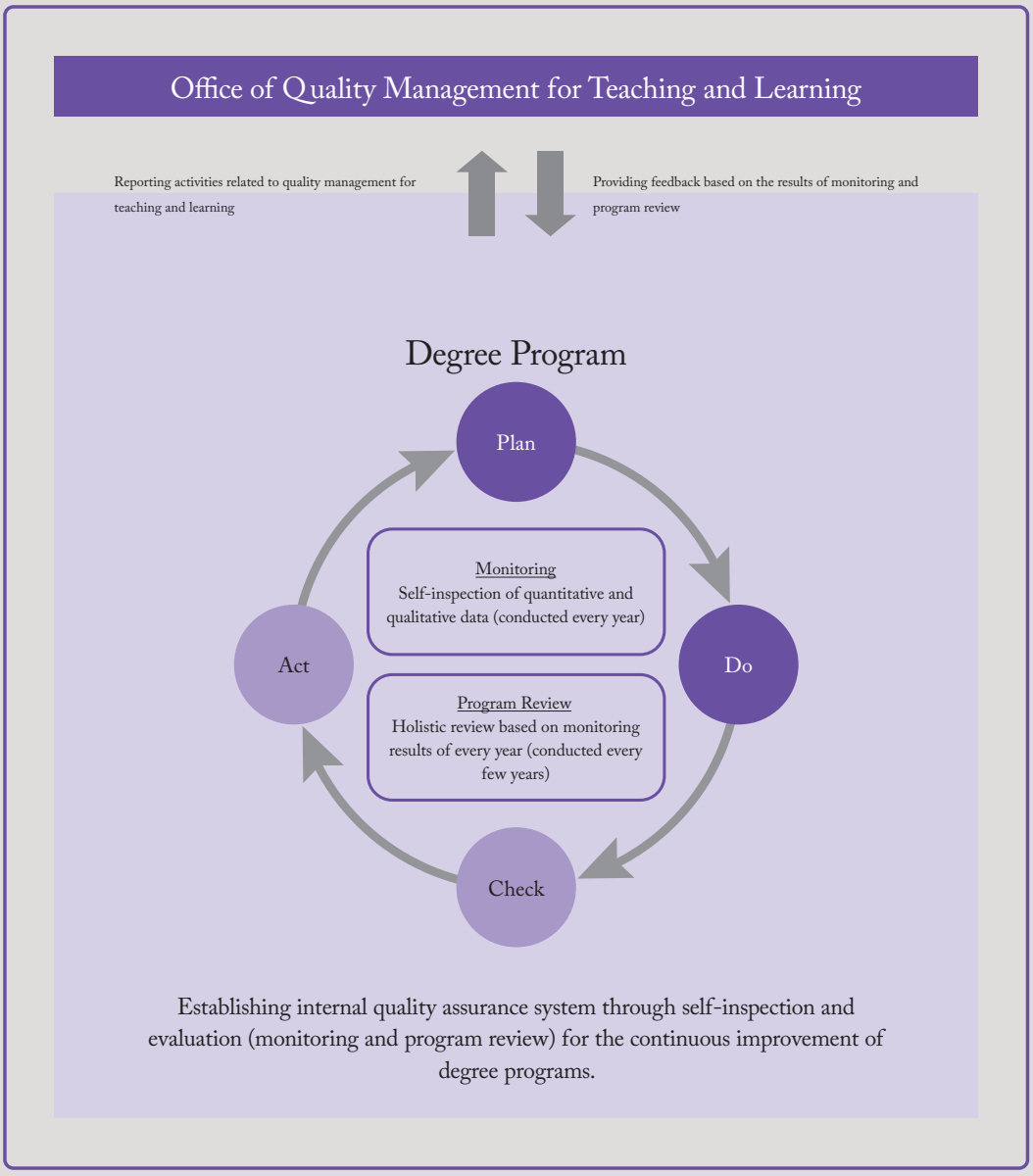
Promote continuous improvement in education by establishing internal quality assurance with monitoring and program review at its core.

Promotion of the PDCA cycle through university-wide academic management

The University establishes the Office of Quality Management for Teaching and Learning and realizes university-wide quality management for continuous assurance and improvement of remodeled degree program's quality.

The Office of Quality Management for Teaching and Learning will undertake monitoring (self-inspection conducted every year) and program review (holistic review conducted every few years, scheduled for the seven-year cycle accreditation audit) of degree programs as well as quality review of degree program proposals, Promotion of systematic faculty development activities, research in higher education for advancement of internal quality assurance.

Image of quality assurance model comprised of monitoring and program review



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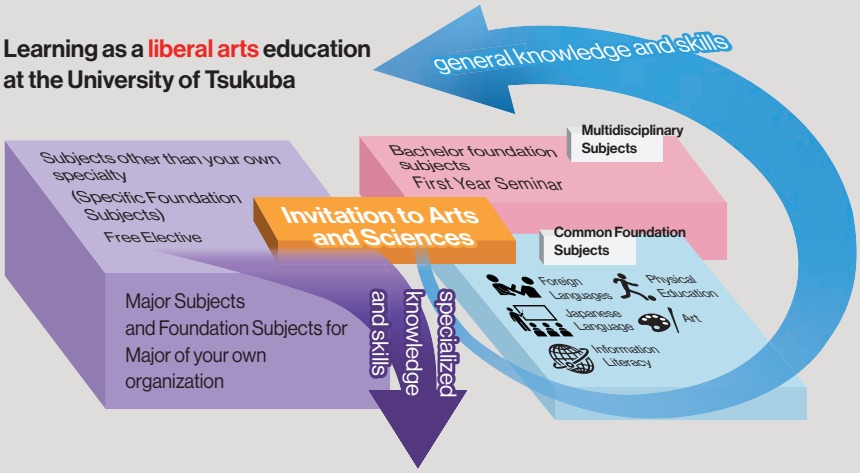
Creative Wisdom Education and Liberal Arts Education at the University of Tsukuba

The University has established an educational system known as the "creative wisdom education" to nurture highly-skilled intellectuals with well-balanced "general knowledge and skills" including ethics, humanity, logic, internationality, communication skills, a rich physical and mental foundation, and management, planning and coordination skills, in addition to a comprehensive intellectual foundation gained through the acquisition of highly specialized knowledge "specialized knowledge and skills" and diverse, interdisciplinary knowledge. Through this system we cultivate a foundation of integrated knowledge and skills that can respond to drastic changes such as globalization and the advancement of science and technology. The acquisition of knowledge, intellectual skills such as one`s mindset, deep insights related to what it means to be human and how to live, and the ability to understand reality correctly, which are commonly in demand regardless of each student's field of specialization, will be a driving force to delve deeper into each student's field of specialization.

In addition to fostering knowledge of various academic fields and the ability to apply general-purpose social issues to academic fields through Multidisciplinary Subjects, the University provides a university-wide system that encourages students to take major subjects other than their own. This is considered to be the liberal arts education at the University and is also positioned as the University's liberal arts education, including Foreign Languages, Information Literacy, Physical Education, Japanese, and Art, which are studied on a university-wide basis. If the study of Foundation Subjects for Major or Major Subjects offered in each college or major school are vertically developed toward specialization, the study of liberal arts in this University can be said to be a horizontal development of liberal arts education. We are building a university-wide curriculum with both of these as the wheels of a car.

Through the design of courses with high degree of freedom, including courses offered by various colleges or major schools that meet the interests and needs of each student, students are able to integrate within themselves the knowledge they have acquired through education that deepens their expertise and fosters their liberal arts, and acquire advanced problem-solving skills based on a broad academic perspective as creative wisdom.

Creative wisdom education at the University of Tsukuba



Systems to guarantee the quality of education

To promote and improve the quality of our University's creative wisdom education, we have established the Creative Wisdom Education Promotion Committee as a university-wide organization. The Committee plans, organizes, and continuously improves School Common Foundation Subjects and Multidisciplinary Subjects to foster highly common general knowledge and skills, and develop well-balanced creative wisdom while strengthening organic cooperation with each undergraduate course that cultivates specialized knowledge and skills.

Positioning of Common Foundation Subjects in Liberal Arts Education

The purpose of the Common Foundation Subjects at the University of Tsukuba is to cultivate a broad and deep culture, comprehensive judgment, and rich humanity through the development of expressive, compositional, and communication skills that are fundamental to the acquisition of knowledge in specialized fields. In particular, while giving consideration to the composition of universal content that is not bound by academic frameworks, we have constructed a system of courses that enables students to acquire the academic and interdisciplinary background appropriate for university students.

Multidisciplinary Subjects

Educational purpose

From the first year to the senior year, it is our goal to help students adapt to the new study environment of a university and to form their careers independently while collaborating with them. Moreover, through contact with a wide range of academic disciplines related to nature and human beings, and diverse societies and cultures, students will learn the foundations of knowledge necessary for the future society that transcends existing frameworks, with the goal of acquiring deep insights into the true nature of human beings and their ways of life, as well as the ability to correctly perceive the world.

Educational Content

We offer small-group courses to help first-year students adjust to the new study environment of a university and support them as they begin to develop their careers independently, as well as a range of courses that provide a solid intellectual foundation for advancing into specialized fields by allowing students to think about the nature of academics. And their own relationship to it from a wide variety of perspectives over the course of their senior year.

First Year Seminar

This course is offered in the spring AB module as a unit for a class consisting of about 20 new students and one class instructor. In addition to supporting students to adjust to university life in terms of both studying and daily life, such as course planning, career development, and mental health, we also facilitate communication between students and faculty members and between students.

Invitation to Arts and Sciences

A course that clarifies the origins and expansion of academic disciplines at universities and their relationships with other disciplines through specific problems. This course will deepen students' understanding of the significance of the specialized fields they intend to major in, as well as the positioning of those fields in undergraduate courses.

Multidisciplinary Subjects for the Undergraduate Degrees

These courses are designed to motivate students to take a bird's eye view of their own learning at university by exposing them to diverse ways of thinking and living from a broad perspective of society and the world. Through taking these courses, students will be able to establish their own academic foundation. These courses include career-supporting content, cross-disciplinary content, content that promotes self-analysis and self-establishment, and content that cultivates adaptability to social life, so that students can think about academics in diverse ways.

Characteristics of educational methods

- In the First Year Seminar, students are divided into classes with small numbers of students, and class instructors provide careful guidance and care for first-year students.
- In Invitation to Arts and Sciences, students are able to get a sense of the breadth and depth of academic study at the university, and use the University's proprietary edited guidebook as a reference for choosing their own field of specialization and future course planning.
- In Multidisciplinary Subjects for the Undergraduate Degrees, students are able to choose from a variety of styles of courses, including relay lectures by researchers and notable figures from inside and outside the university who are active on the world's front lines, subjects in which graduates are invited to discuss their experiences in society, and subjects closely related to the traditions of the University.
- Diverse class methods, including the use of manaba and teaching assistants, are used to provide education that guides the entire university.

Standards that should be achieved

Cooperative, independent, and autonomous attitudes

Through the First Year Seminar, communication between students and faculty members, as well as among students, is encouraged to understand the importance of teamwork and leadership.

Broad perspective and international character

In Invitation to Arts and Sciences and Multidisciplinary Subjects for the Undergraduate Degrees, through contact with a wide range of knowledge and ideas related to nature and human beings, society and culture, students recognize the relative position of their major fields of study and acquire a holistic view, interdisciplinary perspectives, internationality and social adaptability.

Guaranteeing the quality of education

Enrichment of course guidance

We offer course guidance to ensure that students understand the philosophy and goals of the University's liberal arts education. Specifically, we provide detailed course guidance on Multidisciplinary Subjects during the orientation for each college or specialty school held after the admittance ceremony.

"Multidisciplinary Subjects" expert sub-committee

We examine the nature of Multidisciplinary Subjects, course content and grading guidelines.

FD Implementation

As a part of the University of Tsukuba FD Committee, class evaluation questionnaires are administered and the results are fed back to each faculty member for self-assessment and improvement of Multidisciplinary Subjects.

Multidisciplinary Subjects

Total of at least 3 credits required

First Year Seminar	Invitation to Arts and Sciences	Multidisciplinary Subjects for the Undergraduate Degrees
1 credit required	1 credit required	At least 1 credit required

Physical Education

Educational purpose

Physical Education at the University of Tsukuba (Tsukuba Taiiku) aims to foster a healthy body, emotional richness, and strong spirit through the acquisition of sports skills for lifelong sports, knowledge and practical skills to maintain and improve health and physical fitness, fair thinking as a member of society, and understanding and communication with others through various sports practices based on leading-edge health and sport sciences. The Generic Competences to be acquired include "physical and mental health, humanity and ethics" and "Cooperative, independent, and autonomous attitudes"

Educational Content

The curriculum establishes academic work goals according to grade level: Basic Physical Education (First-year), Applied Physical Education (Sophomore), and Advanced Physical Education (Junior). The classes focus on practical exercises, but also include lectures on health, physical fitness, and the significance of sports.

Practical exercises

For practical exercises, we offer a variety of subjects including individual sports, ball sports, martial arts, outdoor sports, and dance. In addition, fitness training, refresh gymnastics, jogging and walking, and other practical exercises related to health and physical fitness are offered.

Lectures

In order to gain knowledge and skills to enjoy sports throughout life, students will learn about issues related to health and physical fitness, the significance of sports, as well as how to acquire sports skills.

Educational Methods

Classes at "authentic" sports facilities

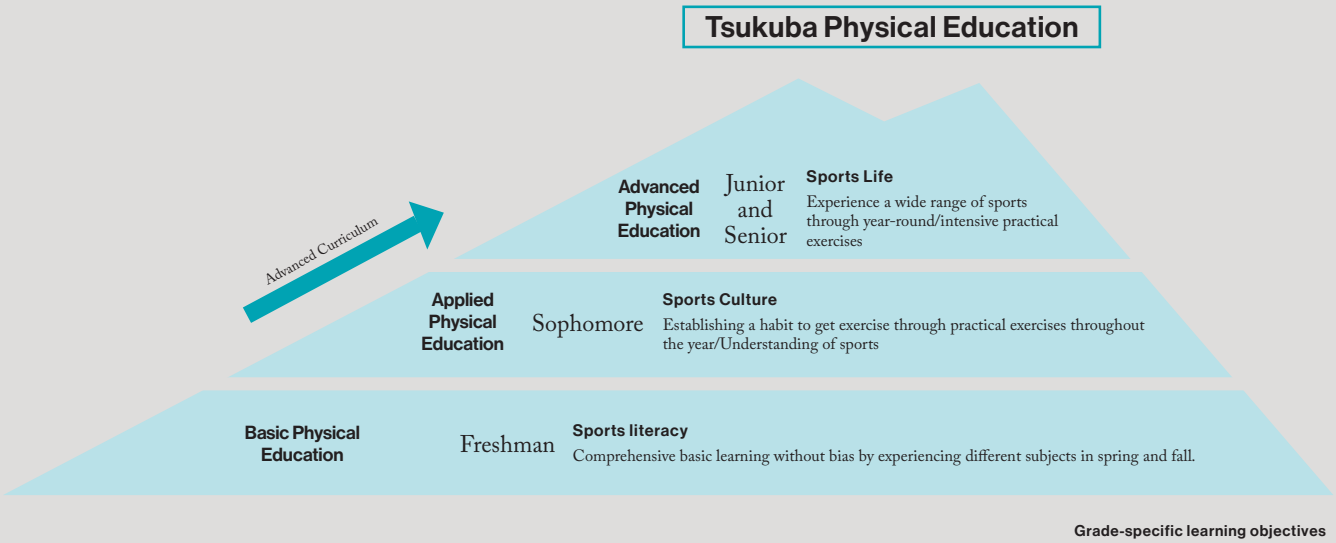
We have 16 outdoor facilities, including an athletic field that is capable of hosting official competitions, an artificial turf soccer field, tennis courts, and a jogging track that surrounds the campus, as well as 25 indoor facilities, including a central gymnasium and a heated swimming pool.

Wide variety of courses

In addition to popular sports such as tennis, volleyball, basketball, soccer, etc., we also offer more than 30 different subjects such as gymnastics using trampolines, bodywork to learn Qi Gong and breathing techniques, jogging and walking with the aim of completing the Tsukuba Marathon, trim exercise for students with injuries and other special needs, and judo and karate that can be used for self-defense.

Development of a wide range of seasonal sports subjects

We offer intensive seasonal courses in snowboarding, skiing, windsurfing and skin diving.



Courses by specialists

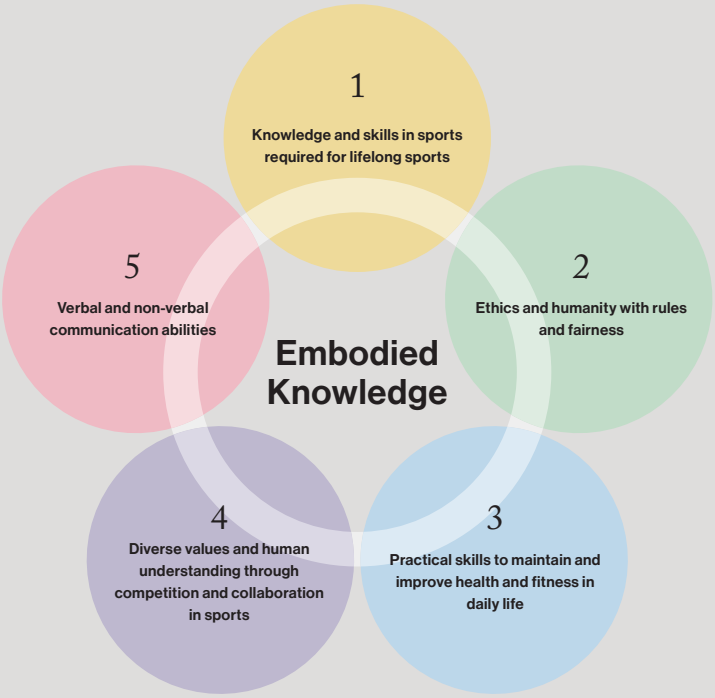
Courses are taught by experts in the subject. Courses are taught by top classes experts in their respective sports, including specialists who have won medals at the Olympics and World Championships.

Guaranteed quality of education

- Evaluation of classes by students is conducted independently in physical education courses. The classes of faculty members who received high scores in the evaluations are shared in peer training.
- Periodic evaluations by third parties outside the university are carried out, and improvement measures are taken in response.
- In classes where safety considerations are required or assistance is needed, faculty members and teaching assistants work together to conduct the class.
- The syllabus is published on the Bureau of Physical Education and Sports (former Physical Education Center) website in order that students can obtain information about the classes at any time.
- We conduct domestic and international research on University Physical Education curricula, and carry out research on curriculum models from new perspectives.

Standards that should be achieved

The five Embodied Knowledge acquired in Tsukuba Physical Education



Foreign Languages

Educational purpose

This research-oriented university offers three goals for foreign languages. The first is for students to become proficient in foreign languages in their academic research activities. Second, by learning multiple foreign languages, students can understand the diversity of culture, society, and values, and cultivate their ability to think from multiple perspectives. Third, through improving their foreign language competences, students can enhance their communication skills and cross-cultural competences in their future activities in society.

Educational Content

Courses for English as the first or second foreign language and new foreign languages (German, French, Spanish, Russian, Chinese, and Korean) are offered. For international or returnee students studying in English programs, Japanese language courses are offered.

English Language

The program emphasizes learning content through English rather than learning English itself, enabling students to become proficient in English for their academic and research activities.

- Compulsory Subjects

English Reading Skills and English Presentation Skills are offered as EGAP (English for General Academic Purposes) courses, which will be a bridge to undergraduate specialized academic English courses. In English Reading Skills, students read academic materials intensively and also acquire general academic vocabulary and expressions. In English Presentation Skills, students learn the basics of presentations in English necessary for academic communication activities.

- Elective and Free Elective Courses

Advanced courses or courses related to studying abroad such as English Academic Writing, English Academic Presentation, etc. are offered to suit students' diverse needs.

New Foreign Languages

Through learning a specific foreign language for the first time, students learn about the diversity of the world's cultures and societies, acquire the ability to think with multiple perspectives, develop cross-cultural understanding, and use the target language in a practical way.

- Compulsory Subjects

In Basic「Basic [Language Name]」courses, students learn the basic grammar and expressions of the target language, and in Language and Culture of xx Language Areas, students learn not only specific linguistic features but also social and cultural aspects of the language.

- Elective and Free Elective Courses

Foreign language courses such as Applied xx Language Reading and Applied [Language Name] Writing are offered for students aiming for intermediate to advanced levels.

Japanese Language

Japanese language courses are offered to international students and returnee students on a proficiency level basis. These courses are offered to meet the diverse academic needs of international students.

- Introductory and Elementary Courses

Students learn Japanese skills for living in Japan.

- Intermediate and Advanced Courses

Courses are offered in the four skills of reading, writing, listening, and speaking depending on students' learning objectives.

- Career Support Courses

Students will learn Japanese language skills that will help them to independently choose their own career path.

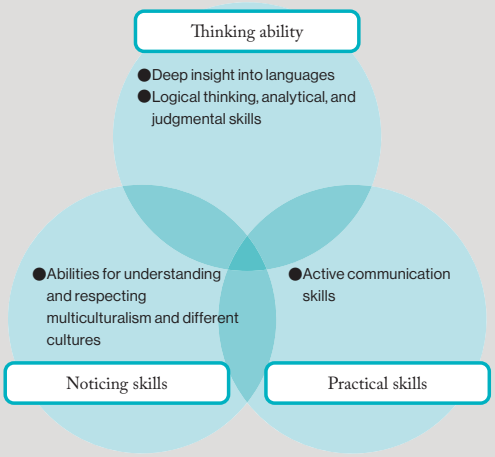
Characteristics of educational methods

- Courses that utilize both online and e-learning materials are offered.
- We have Academic Writing Suport Desk to assist in improving English academic writing skills.
- Both English and some elementary foreign languages offer three- to four-week language training programs at partner universities overseas, which place emphasis on experiencing the target language and culture of the host country.
- Students receive certificates for their outstanding extracurricular foreign language activities including studying abroad, receiving good grades in foreign language proficiency tests and volunteer activities with foreign languages.

Standards that should be achieved

English Language

The following three skills are to be acquired as a foundation for English for general academic purposes



New foreign languages

Abilities and qualities acquired through taking compulsory courses

・Basic grammatical knowledge and basic proficiency in speaking and conversation

Abilities and qualities acquired through courses in the second year or after

・Basic 4 skills (reading, writing, listening, and speaking)

・Skills for multifaceted thinking, skills for cross-cultural understanding, and attitudes of respecting linguistic and cultural diversity

・The ability to use the target foreign languages in academic research activities

Japanese Language

Cultivate abilities and qualities through course work

・Japanese language competence to conduct specialized research in Japanese

・Japanese language competence necessary for daily life

・Japanese language competence required for individual career paths in Japan

Guaranteeing the quality of education

Course syllabi, clearly stating the course contents and grading criteria, are publicly available.

Class evaluation questionnaires by students are administered and the results are given to faculty members to enhance their teaching methods.

Annual foreign language education FD training seminars are held to enhance the quality of education.

TOEIC® Listening & Reading IP tests are administered in the first and third years of each school, and the results are used to assess students' English proficiency over time and for curriculum development.

Information Literacy

Educational purpose

In addition to basic knowledge about computers and the Internet and their place in society, as necessity as a member of society living in an information society, the following four items are objectives for students to acquire basic ideas about the use of data to support the information society.

- To acquire the sense of ethics required in the information society, and to acquire essential information literacy for the use of Internet services
- To cultivate the ability to take responsibility for one's actions using computers and the Internet
- To acquire the ability to use computers, application software, and Internet services on one's own regardless of the situation in which they are used
- To acquire the ability to properly collect and manage data, and to use the collected data for data analysis

Educational Content

Information Literacy is made up of three subjects: "Information Literacy (Lectures)", "Information Literacy (Exercises)" and "Data Science".

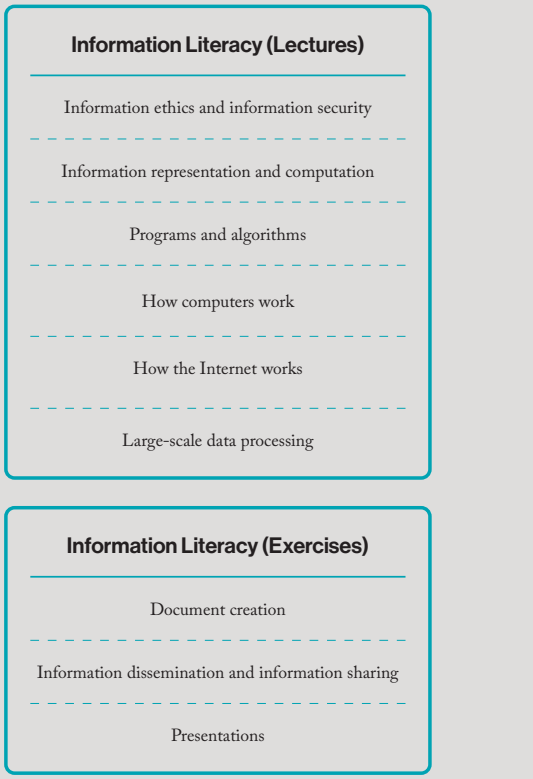
In "Information Literacy (Lectures)", through learning the basic concepts of computer-based information processing and the Internet, and in "Information Literacy (Exercises)", through mastering basic information use, sharing, and information technology using computers, students achieve the above educational purpose.

In "Data Science," students acquire the fundamentals of statistics and data engineering through lectures, and achieve the above educational purpose through repeated practice of data science through class exercises.

Characteristics of educational methods

- "Information Literacy (Lectures)" and "Information Literacy (Exercises)" are based on the following standard academic work topics. To suit the needs of each undergraduate course, the specific academic content is adjusted based on the following standard academic work topics. In "Information Literacy (Lectures)", students learn the "know-why" of basic concepts of information, and in "Information Literacy (Exercises)", they learn the "know-how" of using, sharing, and communication skills of information.

Standard academic work topics for "Information Literacy (Lectures)" and "Information Literacy (Exercises)"



- The following items are standard academic work topics for "Data Science". To suit the needs of each undergraduate course, the specific academic content is adjusted based on the following standard academic work topics.

Standard academic work topics for "Data Science"

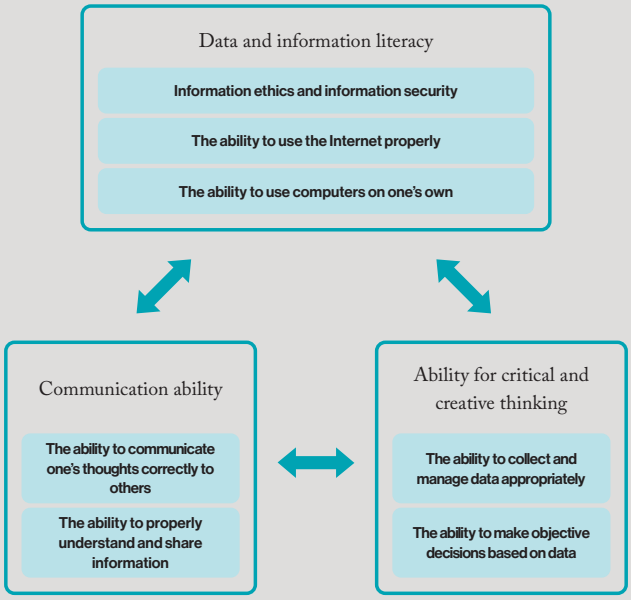
Data Science

- Data types and data collection
- Data preprocessing
- Data management
- Advanced data utilization and big data
- Data visualization
- Qualitative data analysis
- Quantitative data analysis
- Analysis of various types of data
- Artificial intelligence, generative AI and machine learning

Graduate students in Degree Programs in Systems and Information Engineering, etc. participate in classes as teaching assistants and provide detailed assistance to faculty members.

Standards that should be achieved

Through "Information Literacy (Lectures)", "Information Literacy (Exercises)" and "Data Science," students acquire basic skills related to the three Generic Competences of "Data and information literacy", "Ability for critical and creative thinking" and "Communication Skills."



Guaranteeing the quality of education

Based on the standard academic topics of "Information Literacy (Lectures)", "Information Literacy (Exercises)" and "Data Science", the course content and progress will be adjusted according to the needs of each college or specialty school.

Class questionnaires are administered and the results are fed back to each faculty member for class improvement.

We conduct round-table discussions with faculty members to discuss and share problems and issues in classes for course improvement.

Committee for the management of Information Literacy (consisting of representative faculty members from related organizations) discusses ways to improve classes and provides feedback to actual classes.

Japanese

Educational purpose

In order to survive in a globalized world and a knowledge-based society, it is necessary to acquire accurate knowledge of Japanese, their mother tongue, and to be able to use it properly to communicate their intent smoothly with others, as well as to be able to express and communicate their ideas clearly based on a variety of information. In Common Foundation Subject, "Japanese," the goal is to acquire these Japanese language skills that are essential for academic work at university and for being active in society.

Educational Content

- We offer "Japanese I" and "Japanese II" which cover from basic content to advanced issues.
- Classes are divided into classes of about 40 students per class, paying close attention to the needs of each student.
- In the undergraduate courses that designate compulsory subjects, classes are offered in consideration of the characteristics of these courses (for example: words in informed consent (Medicine and Nursing), Coaches and words (Physical Education)
- In the undergraduate courses that do not designate compulsory subjects, these are free courses, providing an environment in which students with different specialties can learn from each other.

Japanese Language I: Fundamentals of report (paper) writing

As a starting point for report preparation, students learn the necessary basic knowledge for problem awareness, originality, a writer's mindset, an objective stance in writing an argument, and expression, and receive practical training.

- Understand the idea of the paper, originality, issue awareness, and the significance and value of the main topic.
- Organize issues through the research, collection, organization, and examination of materials.
- Learn about proper and improper writing through revision and mutual criticism.

Japanese II: Applied and advanced course from "Japanese I"

This course builds on "Japanese I" to increase students' consciousness as independent writers.

- Clarifying the consciousness of problems and setting up a hypothesis.
- Understanding methods for searching literature and organizing information according to purpose.
- Critically reading previous research, examining its relevance to the subject, and verifying its arguments.
- Learning and executing honorifics and letter writing so that students can express themselves in a way that takes interpersonal relationships into consideration.

Characteristics of educational methods

We adopt class exercises-based educational methods.

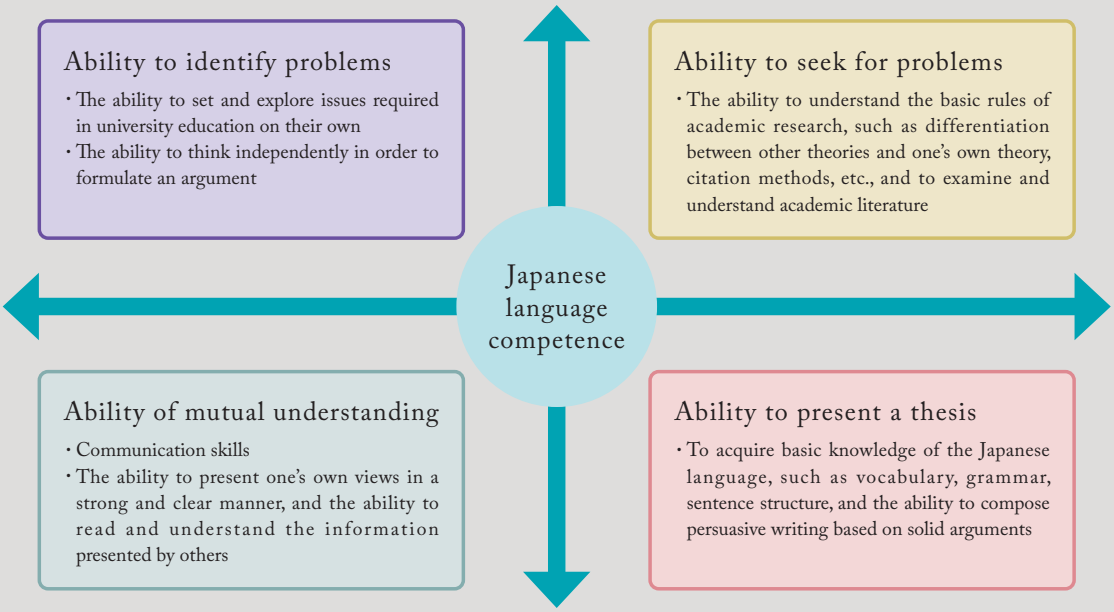
Through actually writing documents, making speeches, and critiquing each other's work, students aim to improve their Japanese language skills.

Education is conducted by utilizing the expertise of faculty members.

The classes are taught by specialists in Japanese linguistics, Japanese language education, etc., and the content of the classes is designed to leverage each of their specialties.

Standards that should be achieved

Achieve the four competencies



Guaranteeing the quality of education

We make the syllabus available to the public, and clearly indicate the contents of the classes that are unique to each faculty member's expertise and the grading criteria.

We have an ample feedback system for improving classes, including class evaluations by TWINS* and faculty members conducting their own surveys.

We have established a forum for regular discussions to improve the quality of our classes, taking into account the characteristics of each undergraduate course, and to ensure that the content of our classes is appropriate to the actual situation.

*TWINS (Tsukuba Web-based Information Network System) is an online educational information system.

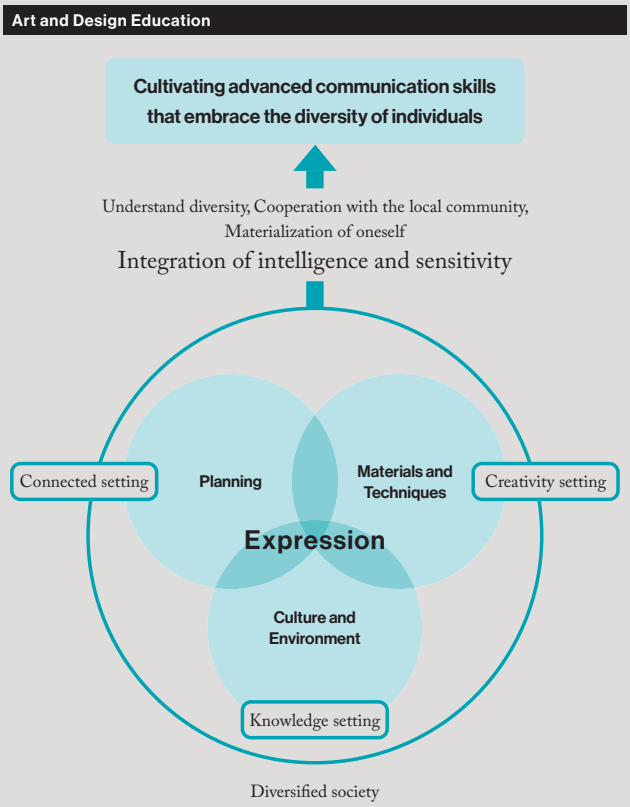
Art and Design

Educational purpose

The University of Tsukuba is the only comprehensive national university in Japan with its own education and research organization for nurturing professionals in Art and Design. The liberal arts education offered by the School of Art and Design leverages these characteristics to not only provide students with a broad knowledge of art and design, cultivate their aesthetic sensibilities, and experience the joy of expression, but also to foster higher-order communication skills that enable students to accept diverse individuals and values in a global society and to communicate their own ideas. The educational goal of the Common Foundation Subject "Art and Design" is to integrate intelligence and sensitivity, and to nurture the human ability to express oneself and to have a sense of balance that tolerates the ideas of others.

Educational Content

Art and Design education as a liberal arts education promotes the understanding of the background of different cultures and social values through the practical learning of traditions and art and design techniques and materials related to artistic expression. Students will learn specific methods and basic knowledge in order to understand how important it is for human beings to experience the joy of creating and appreciating art and design, such as drawing pictures and visiting museums, and will understand that it is something important for human beings to live as human beings. They will also aim to become citizens who act for the promotion of culture and art and design, seeking to engage with diversified local community and recognize the importance of art in developing all social infrastructures.



Characteristics of educational methods

Faculty members who are active as artists or researchers on the front lines of society will guide students to think deeply about their own individuality and qualities through "experiential knowledge" of art and design, instruction in techniques and expressions for "creation of works," and "practical experience" in society.

Students study in the same workshops and practical training rooms where students majoring in Art and Design study. By working on productions and projects together with students who major in the arts and design, students can take advantage of the mutual educational benefits of learning together.

Creative subjects: The joy of expression in a creative setting

Students will learn about materials, techniques, and expressions related to art and design. Students will learn the basic knowledge and basic concepts necessary for creating works of art and design, such as the basic names and methods of using materials, art supplies, and tools, selecting motifs and subjects to paint, setting themes and subjects of works, the flow of creating works of art and design from start to finish, the characteristics of techniques required at each stage of creation, honing one's sense of form, understanding forms, color expression, and mental preparation for creating works of art. and design

Workshops on Oil Painting
Workshops on Japanese-style Painting
Workshops on Sculpture
Practice: Calligraphy (A,B,C)

Practice:Picture Book

Problem-solving type courses...hands-on experience in society as a connected field

We offer problem-solving type classes through art and design in the local community. Students will actually organize a project using art and design, and learn what art and design can do for society.

Workshops on Art & Design Produce Studio. (1, 2, 3)

Standards that should be achieved

Understanding and deepening of art culture

Artistic expression is heavily influenced by the era and social context in which it is created. Students will understand regions that are receptive to artists, and understand culture as the soil in which people are nurtured and art is nurtured, and understand the depth of expression that cannot be obtained only through evaluation by the senses.

Practical Experience with Techniques and Materials

Students will strive to discover the possibilities of expression through observation of subjects and understanding of materials. Students will understand that they can express their inner thoughts and ideas through expressive activities, and that communication can be achieved through the medium of artwork.

Acquire methods to materialize one's intent

In problem-solving type classes, students will understand that practical planning for realizing expressions and attempts in hands-on experiences in society will lead to the utilization of art and design.

Guaranteeing the quality of education

We guarantee the quality of education through the provision of a forum for objective and relative self-evaluation as well as a sense of one's own achievement. As well as self-evaluation of their works, which are the tangible results of the class, the faculty member in charge will provide specific criticism in critique sessions, etc., and encourage each student to clarify their specific issues and establish their next goals.

While making efforts to understand the current situation by conducting class questionnaires, etc. for each subject, we will also keep an eye on the trial process of individual students and provide a forum for answering their questions.

The Curriculum Committee of the School of Art and Design will discuss the improvement of classes while referring to the questionnaires, etc., and provide feedback to the class instructors.

The School of Comprehensive Studies

Students who have been admitted through the Individual Achievement Test First Round (Comprehensive-Based) (hereafter Comprehensive-Based Selection) belong to the School of Comprehensive Studies. Comprehensive-Based Selection is a new entrance examination at the University, in which students are selected solely on the basis of the following categories: Humanities,and Science (which is subcategorized into three groups, Science I, II, III), beyond the boundaries of a college or a school .

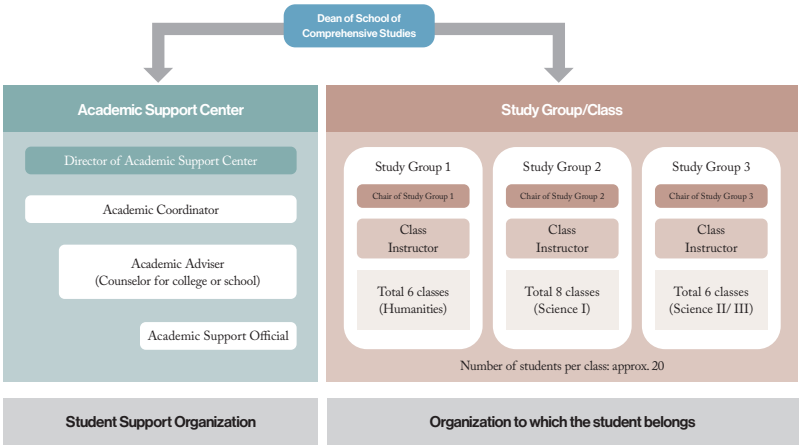
In the School of Comprehensive Studies, there are three groups (Study Group 1, Study Group 2, and Study Group 3) corresponding to the admission categories, and students who are admitted through Comprehensive-Based Selection will belong to one of the three groups. Students will have academic work in a variety of specialized fields in their first year, then find the specialty they want to pursue, and from their second year onward, they will belong to a college or a school. This is called "transfer." The decision on which college or school to transfer to is based on the student's preference, academic performance after admission and aptitude. Regardless of whether students select humanities or science entrance exam categories, it is possible for students to transfer from the School of Comprehensive Studies to any other college or school, except for the School of Physical Education, Health and Sport Sciences and the School of Transdisciplinary Science and Design.

School of Comprehensive Studies

Educational Objectives

The School of Comprehensive Studies is an organization to which students who are admitted through Comprehensive-Based Selection belong until they transfer in the second year of their studies to a college or a school. The aim of the School of Comprehensive Studies is to provide students with a wide range of support for their studies, mainly in the form of course planning, and to help them develop academic ideas from a broad perspective that are not restricted by the distinction between humanities and science, and to help them choose a specialist field that suits their interests. We also aim to help students to cultivate their ability to develop their future careers.

Conceptual Diagram of the School of Comprehensive Studies



Desired Individuals

In Comprehensive-Based Selection, we seek applicants who possess a diverse range of intellectual curiosity and a strong desire to learn, backed up by the required and sufficient basic academic skills, which are necessary for students to develop their own careers independently, while gaining a bird's-eye view of the academic world and defining their own fields of specialization at university. In order to achieve this, we seek applicants who have acquired all the basic academic skills up to high school prior to enrollment, as well as those who possess the flexibility and sensitivity to deepen their own intellectual curiosity.

Post-enrollment Studies

Students in the School of Comprehensive Studies take Common Foundation Subjects such as Multidisciplinary Subjects, Foreign Languages, and Information Literacy, as well as Introductory Subjects offered by the college or school. In the first year, students do not belong to any college or school yet, but they do take courses organized by those colleges and schools.

The specific courses that a student in the School of Comprehensive Studies will take other than those courses that are compulsory for all students will depend largely on the student's own interests and on which college or school the student wishes to transfer to in the second year and beyond. Introductory Subjects, which are introductory to each discipline, play an important role in helping students decide where they want to go.

Transition Procedures

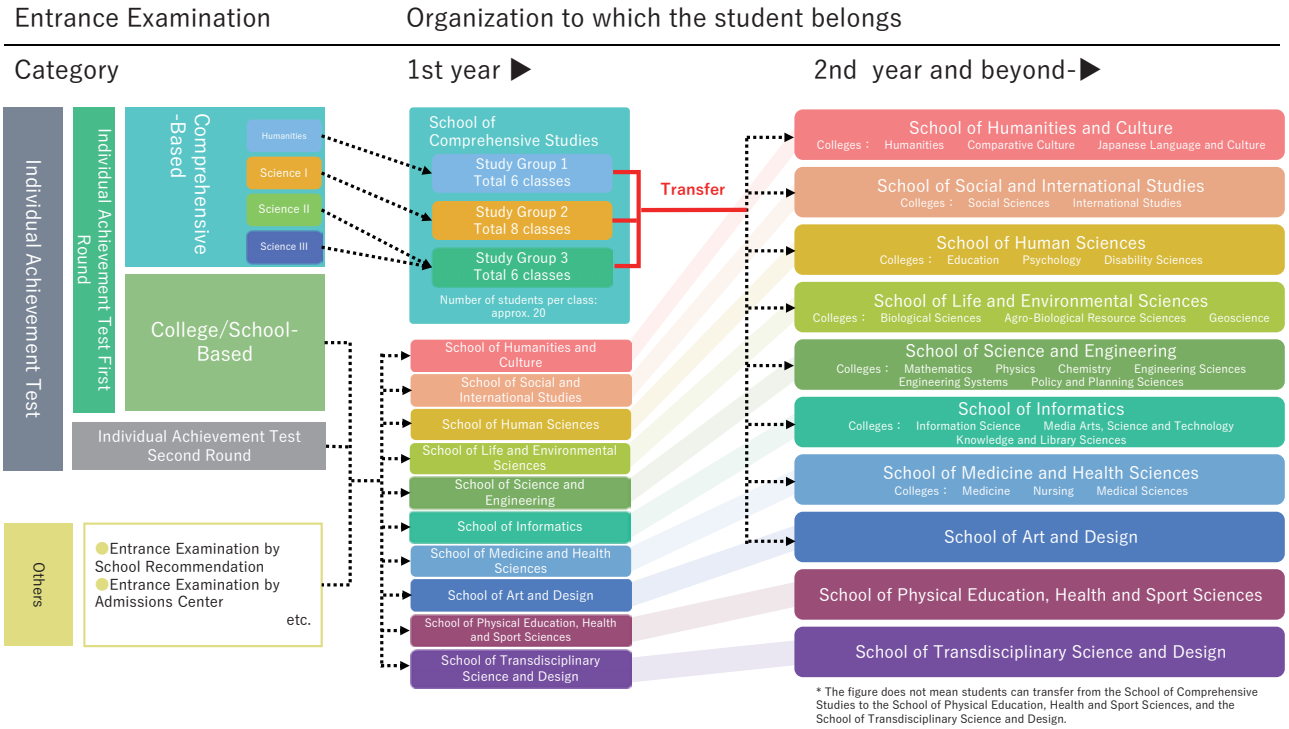
In March of their first year, students are assigned to their second and subsequent years of study. This is determined by a combination of the order in which the student chooses to study and the order in which they are accepted by each college or school.

There is no limit to the number of colleges or schools a student can apply for, but depending on where they wish to study, they may be required to take certain courses.

The order in which students are admitted to each college or school is determined by their overall performance in the courses they have taken, as well as other factors such as external English language examinations and aptitude tests. In some colleges, priority is given to students who have been admitted in certain categories.

Support Systems

We have the Academic Support Center to assist students in the School of Comprehensive Studies. In addition to class instructors, the Academic Support Center's teaching staff and other academic support officials are available to help students with their course planning and academic/career choices.



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School of Humanities and Culture

College of Humanities

- Bachelor of Arts

College of Comparative Culture

- Bachelor of Arts

College of Japanese Language and Culture

- Bachelor of Arts
- Bachelor of Arts in Japanese Language Education

Educational purpose

Our goal is to develop personnel with enriched intelligence, international mindsets, superior communication skills, and profound understanding of different cultures as well as their own cultures. Such personnel will be able to truly play an active and vigorous part in global society. They will acquire highly advanced knowledge at all times and in all places within diverse academic fields focused on culture and the humanities.

College of Humanities
College of Comparative Culture
College of Japanese Language and Culture

College of Humanities

Bachelor of Arts

Educational purpose

Students are trained to develop the true cultural knowledge that is rooted in the question “what is a human being?” to let them contemplate, of their own volition, the existence of human beings and overall culture as a result of their activities and to allow them to be actively get involved and utter opinions to the issues in the world which is becoming increasingly globalized.

Desired students

We seek individuals who have sufficient logical thinking ability and expressiveness required for the disciplines in the areas of humanities as well as the open-minded interest in the world’s diverse cultures and histories and have the abilities and motivation to detect and solve problems in their own right through autonomous learning and critical appreciation.

Measures to ensure and improve the quality of education

Through regular examinations and report assignment, as well as class questionnaire surveys, the faculty and students reciprocally evaluate the achievement of the educational goals, in an effort to improve our educational abilities.

We have a system for continuous improvement of the quality of education with exchange of opinions between students and faculty through class liaison committees.

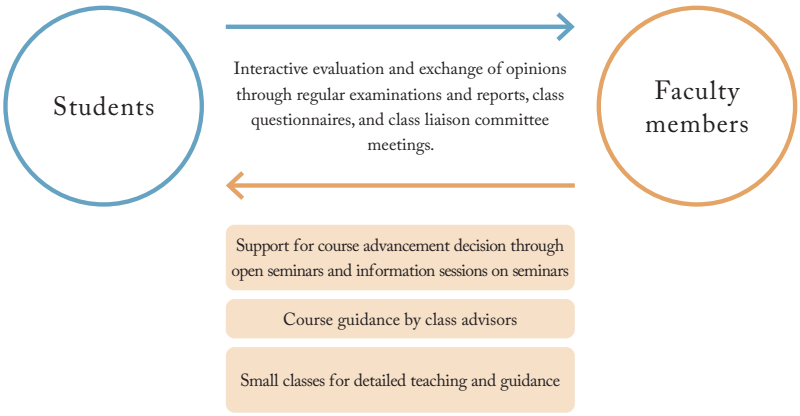
For 1st- and 2nd-year students, we hold open seminars and major information sessions to support smooth advancement to the major and courses in the third year.

In the class advisor system, each student has a same advisor from their first year to their fourth year. In addition, another advisor is assigned for each of 11 courses from the third year. The course advisors provide guidance to the students in taking courses for the specific major.

In practical classes and graduation thesis guidance, we provide small groups of students with detailed guidance based on a thorough understanding of their individual academic progress.

In practical training sessions, we report the results to the local community in the form of reports, etc. In return, the feedback from the community is used to improve the class.

Measures to improve educational abilities



Bachelor of Arts

Diploma policy

We grant diplomas for Bachelor of Arts to persons who have acquired the knowledge and abilities (that is, Generic Competences) to become learned based on the educational purpose for undergraduate students of the University of Tsukuba. In their learning outcomes, they will achieve the following goals based on the educational purpose of our school and college.

Specialized skills: Students will be able to empirically construct and continuously update their own conceptions through acquiring specialized knowledge and unique methodologies in given study areas for the humanities, as well as through investigating, collecting, and analyzing literature and source data related to issues they address based on the aforementioned knowledge and methodologies.
(Relevant competences: Understanding of philosophy, Understanding of history, Understanding of prehistory and archaeology, Understanding of folklore and cultural anthropology, Understanding of linguistics Reading comprehension, analytical, and discussion skills, Information-gathering ability and ability to adapt to the situation, Logic-forming skills and research abilities)

Communication abilities: While accurately making full use of foreign languages and computer skills, students will be able to logically communicate their concepts to other people and reach mutually comprehensive shared recognition. They will be able to do this through dialogues and by sufficiently understanding the concepts of other people.
(Relevant competences: Reading comprehension, analytical, and discussion skills)

Imagination: Students will be able to polish their intelligence and sensitivity deeply rooted in a question: "What is a human being?" They will gain sharp insight concerning the existence of human beings and overall culture as a result of their activities, boldly take on the challenge of discovery and solution of given issues in the modern world, and examine humanity's future.
(Relevant competences: Information-gathering ability and ability to adapt to the situation)

Curriculum policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Arts.

General policy

Major fields of study in Philosophy, the Study of History, Archaeology and Folklore, and Linguistics have been established, and there are courses (eleven as a whole) for specialized fields within each major. We offer superior learning curricula that allow students to deeply acquire specialized knowledge in a phased manner from the first year until graduation. Additionally, each class is composed of a curriculum completed during Spring semester and Fall semester and is arranged for flexible response to study abroad while students are enrolled.

Course sequence policy

During the first half of the curriculum, we foster basic abilities related to specialized fields and focus on cultivation of enriched cultured knowledge based on the principle of "creative wisdom education". During the second half of the curriculum, insight into specialized fields is deepened, and education leads to graduation research.

During the first year, we convey extensive knowledge related to the general humanities through Introductory Subjects for Major and foster cultural knowledge that constitutes the basis of subjective concepts rooted in various Foundation Subjects for Major. In parallel therewith, we foster a foundation for learning in specialized fields through Foundation Subjects for Major.

During the period from the second year to the third year, students choose major courses and other courses, acquire methodology for research in each field, and enhance abilities for solution of issues. Simultaneously, students become aware of importance from the humanities viewpoint concerning given issues of the contemporary

world and deepen collaboration and dialogues with society directly through practical training sessions and the like. Moreover, in practical training sessions, students improve their self-initiative through dialogues with faculty members and other students. Furthermore, at an early stage, we enhance an awareness of the issues for graduation research based on the following question: “What is a human being?”. In this way, students acquire extensive cultural knowledge and specialized skills. Based on such knowledge and skills, they create a Graduation Thesis during the fourth year.

Implementation policy

In respect of students’ desires, we allow students to subjectively choose major courses and other courses. We focus on small-classroom education that allows the faculty members to understand the status of student learning in detail and that allows appropriate assignments to be given according to progress in learning. Moreover, we have arranged facilities for students to take classes by making full use of videos and audio media in many classes and leaning environments through the use of PC satellites.

Policy for evaluation of learning outcomes

In class subjects, the faculty members implement strict educational evaluation. At the end of the second year, whether or not students have taken Foundation Subjects for Major designated through relevant courses is confirmed. Based on such results, students decide upon course affiliation. During the fourth year, the content of Graduation Thesis submitted in December and the result of oral examination are comprehensively evaluated and whether or not the same have fulfilled the goals of the Diploma Policy determined by the college in question is judged.

Major and course structure

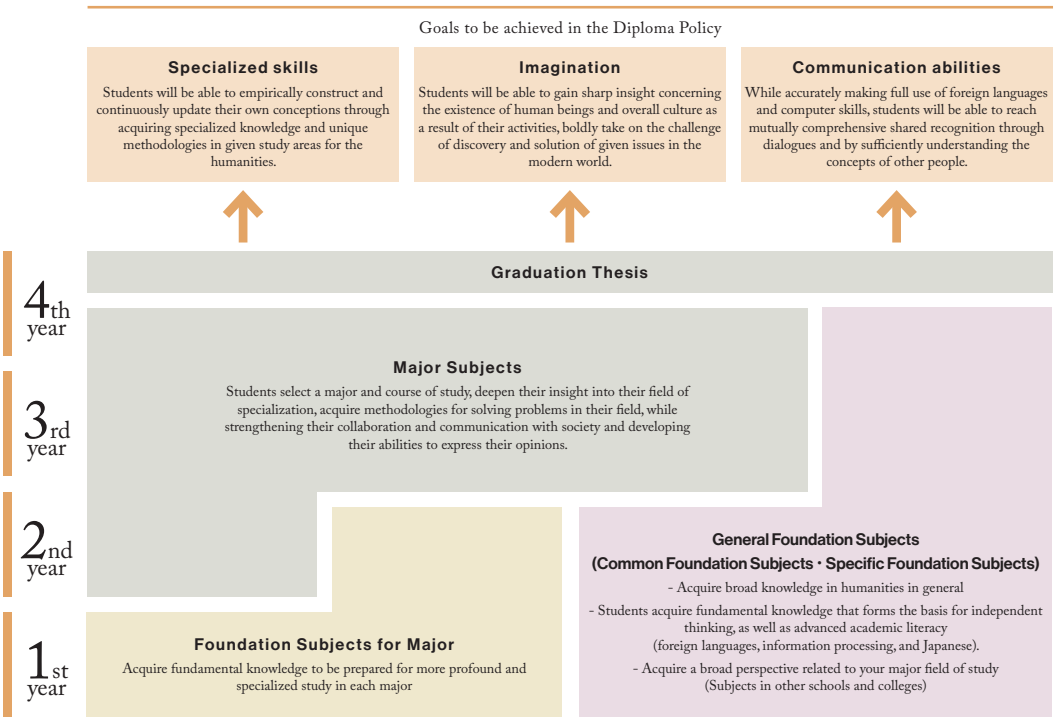
Philosophy Major
Philosophy and Ethic
Religious Studies

History Major
Japanese History
Eurasian History
Historical Geography

Archaeology and Folklore Major
Prehistory and Archaeology
Folklore and Cultural Anthropology

Linguistics Major
General Linguistics
Applied Linguistics
Japanese Linguistics
English Linguistics

Structure of competencies to be developed and curriculums



Bachelor of Arts

Characteristics

The course structure allows students to take classes in other courses, majors and schools/colleges (within a certain range), so that they can acquire a broad perspective. In addition, students intensively study at least two foreign languages with a goal to acquire a wide range of communication abilities. Students can use credits they earn during studying abroad.

Educational purpose

Our goal is to develop personnel with enriched intelligence, international mindsets, superior communication skills, and profound understanding of different cultures as well as their own cultures. Such personnel will be able to truly play an active and vigorous part in global society. They will acquire highly advanced knowledge at all times and in all places within diverse academic fields focused on culture and the humanities.

College of Humanities
College of Comparative Culture
College of Japanese Language and Culture

College of Comparative Culture

Bachelor of Arts

Educational purpose

With an awareness of the issues of interdisciplinary nature and modernity, various cultures built by human beings are compared and reviewed. Through such process, we foster personnel with open-minded wisdom and critical thinking who are not enclosed within a single study area. Moreover, through international communication abilities, we develop personnel with abilities to solve issues and negotiations pursued in a globalized society.

Desired students

- Starting from a self-awareness of the issues, persons who are interested in various academic fields and are motivated by wide and flexible learning concerning culture and society are desirable.
- Persons who intend to acquire global communication abilities backed up by an understanding of different cultures are desirable.
- Persons who academically deepen their awareness of the issues obtained through overseas experiences and social expenses are desirable.

Measures to ensure and improve the quality of education

Class evaluation questionnaires are answered by students, and the results are fed back to the instructors, who will use the results to improve their classes.

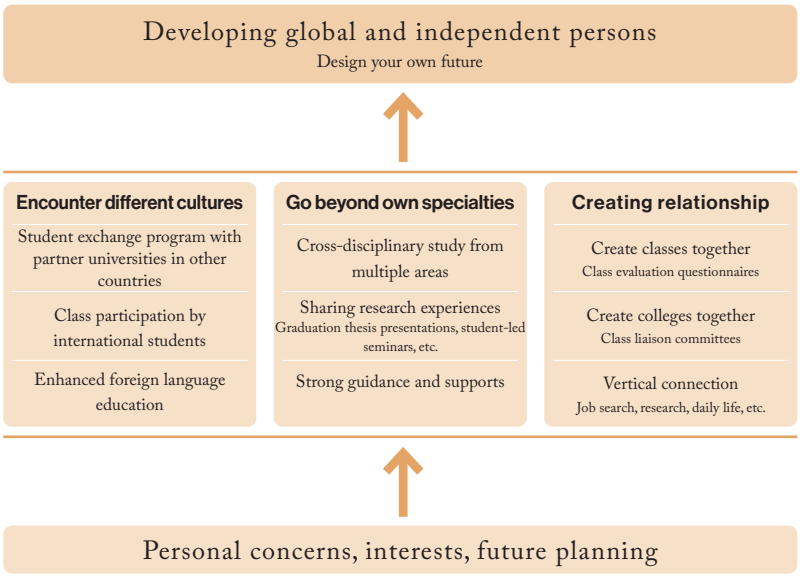
Believing that the process of writing the graduation thesis is important, mid-term presentations and oral examinations are guided and conducted in detail, which should contribute to students' careers after graduation.

We encourage international graduate students working as TAs and alumni to participate in class designing as a measure to build an open learning environment. Through these approaches, we strive to innovate our classes.

Detailed guidance is provided each year to help students in the colleges make the most of the curriculum.

Under the strengthened advisor system, students can get proper advice from the advisor whenever necessary and healthy and substantive learning is supported.

Assurance of the quality of education and human resources to be developed



Bachelor of Arts

Diploma policy

We grant diplomas for Bachelor of Arts to persons who have acquired the knowledge and abilities (that is, Generic Competences) to become learned based on the educational purpose for undergraduate students of the University of Tsukuba. In their learning outcomes, they will achieve the following goals based on the educational purpose of our school and college.

- Students have acquired multifaceted intelligence and robust abilities for solution of issues that extend to various academic fields.
(Relevant competences: Understanding of cultural phenomena, Ability to respond to cultural problems)

- Students have obtained abilities for widely investigating and critically interpreting various media and fields as well as documentary records.
(Relevant competences: Understanding of cultural phenomena, Ability to analyze cultural phenomena)

- Students have obtained advanced abilities for paper writing with creative perspectives, thorough data collection, firm and persevering literature reading, prominent structure, and logical consistency.
(Relevant competences: Understanding of cultural phenomena, Ability to analyze cultural phenomena)

- In light of the cultural tradition of their own countries, students have obtained attitudes and knowledge for understanding cultural diversity for a globalized society.
(Relevant competences: Ability to respond to cultural problems, International autonomy)

- Students have obtained international communication abilities that can contribute to a globalized society.
(Relevant competences: International communication skills)

- Students have obtained abilities for carrying out teamwork activities by subjectively working in various cultural environments.
(Relevant competences: International communication skills, International autonomy)

Curriculum policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to undergraduate degrees (comparative culture).

General policy

Paying attention to flexible, interdisciplinary organization that allows students to learn about multiple academic fields in a cross-sectional manner, we have the preparedness to construct curricula corresponding to an awareness of relevant issues and career plans for each student. Moreover, in order to obtain international communication abilities and cross-cultural competence, we endeavor to provide many various opportunities, including classes.

Course sequence policy

- We require students to undertake mandatory introductory and general subjects as well as foreign languages among the Common Foundation Subjects during the first year. We offer Studies in Comparative Culture related to six areas for learning basic academic methods that constitute prerequisites for literature research and fieldwork in each area as well as Introductory Subjects that allow students to learn generalized knowledge. In this way, we aim to require students to widely acquire basic knowledge for multiple academic fields. At the end of the first year, after implementation of the first-year guidance, we have students submit first-year research plan proposals and we provide them with guidance for specialized learning following the second year.
- Students learn Introductory Seminars for Introduction to Major Subjects and Major Subjects for several fields in which students are interested during the second year. In order for them to accurately acquire international communication abilities demanded in today's global society, they learn Intermediate Specialized Foreign Languages. Moreover, during the second half of the second year, in order for students to conduct learning activities in a deeper and more

specialized manner, they think about fields and courses to which they belong. We implement the second-year guidance, have students submit second-year research plan proposals, and provide them with guidance for selecting relevant fields and courses.

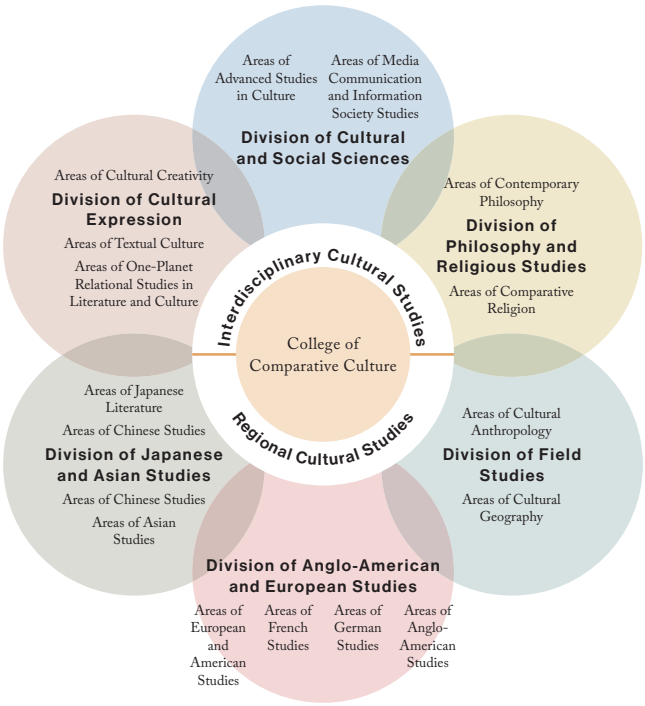
Students determine fields and courses during the third year and substantially learn Major Subjects and Introductory Seminars for the Graduation Thesis provided through the aforementioned fields and courses. We implement third-year guidance and have student submit third-year research plan proposals, and students deepen their own research assignments for the Graduation Thesis through close exchanges with the faulty members. Students continue to study Advanced Specialized Foreign Languages.

Students conduct intensive reading of a variety of literature, fieldwork, and discussions on a single theme based on production of the Graduation Thesis during the fourth year. Students polish their logical ability through discussions with the faculty members. We implement mid-term presentations for the Graduation Thesis and conduct assessments and guidance for progress with such theses.

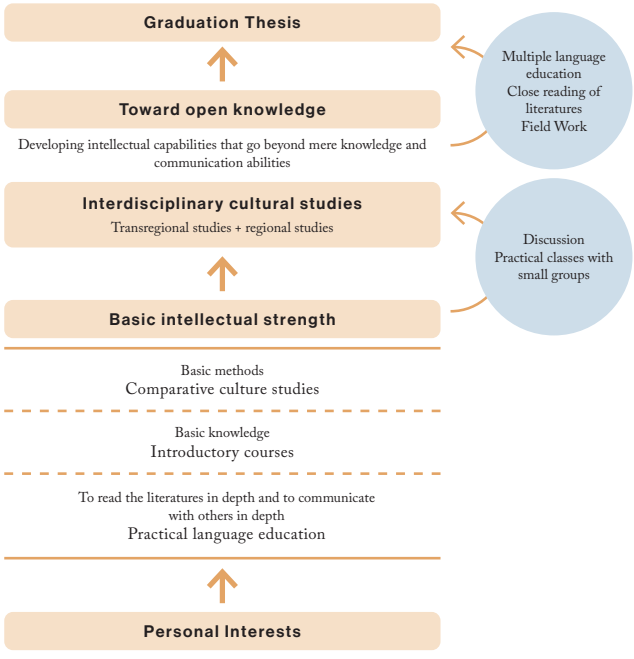
Implementation policy

Under the two areas of Regional Culture Studies and Interdisciplinary Cultural Studies, we set six fields dealing with multiple regions and academic fields and give consideration so that learning about interdisciplinary culture studies will be possible. At the same time, we focus on fostering intelligence and communication abilities beyond the leaning of simple knowledge and seminar-form classes. We deploy various English classes that involve debates and paper guidance. In addition to English, we provide many foreign language classes, such as those in German, French, Spanish, Russian, and Chinese. Moreover, we offer Korean, Greek, Latin, Sanskrit, etc. in small-class practical language education.

The Cosmos of the College of Comparative Culture



Structure of competencies to be developed and curriculums



Bachelor of Arts

Policy for evaluation of learning outcomes

The faculty members in charge of class subjects implement strict educational evaluation. At the end of the fourth year, they comprehensively evaluate learning outcomes (i.e., whether or not acquisition of credits, results of oral examinations for the Graduation Thesis and acquisition of competences demonstrate sufficient mastery). Based on the aforementioned evaluation, graduation judgment is conducted.

Characteristics

Placing value on "internationalization in everyday life," international graduate students will actively participate in classes as TAs. In addition, students can learn foreign languages from international graduate student TAs in extracurricular activities. Students have many other opportunities to interact with international students.

Educational purpose

Our goal is to develop personnel with enriched intelligence, international mindsets, superior communication skills, and profound understanding of different cultures as well as their own cultures. Such personnel will be able to truly play an active and vigorous part in global society. They will acquire highly advanced knowledge at all times and in all places within diverse academic fields focused on culture and the humanities.

College of Humanities
College of Comparative Culture
College of Japanese Language and Culture

College of Japanese Language and Culture

- Bachelor of Arts
- Bachelor of Arts in Japanese Language Education

Educational purpose

We foster persons who are able to comprehensively understand linguistic and cultural phenomena in Japan from a global viewpoint. In this way, after foreseeing a society of multicultural coexistence, such persons can share issues with persons from different backgrounds with different languages and cultures, as well as next-generation persons, and they can solve such issues together.

Desired students

Persons with vigorous intellectual curiosity who have a clear awareness of the issues related to Japanese language, Japanese culture, and the nature of a society of multicultural coexistence, as well as abilities for responding to such issues, are desired.

Measures to ensure and improve the quality of education

To properly evaluate students' learning outcomes and their achievement, the college formulates the grading guidelines, and makes it open to the public through the college's website. Along this line, it would allow the college to adopt fair and transparent grading policy and offer the opportunity to review the learning outcomes between students and faculty members for effective guidance.

Based on class evaluation conducted by students, all faculty members make "class improvement plans," which are opened to public. Through these processes, we create a continuous feedback system for improving the curriculum and class contents.

Activities and educational achievements of the colleges are reported to public through such media, such as our website, Facebook and Twitter.

Students and faculty members are encouraged to have opinion exchange opportunities, such as regularly held class liaison committee meetings and college-organized lunch meetings.

Taking advantage of our small class sizes, the college encourages close interaction between students and faculty members and provides detailed instruction and guidance in practical training and thesis seminars.

The class advisor system, in which one faculty member serves as the advisor to the students through all years from the first to fourth year, makes continuous support available for each student in his/her academic and daily life.

Close interaction between students and faculty members support high-quality education

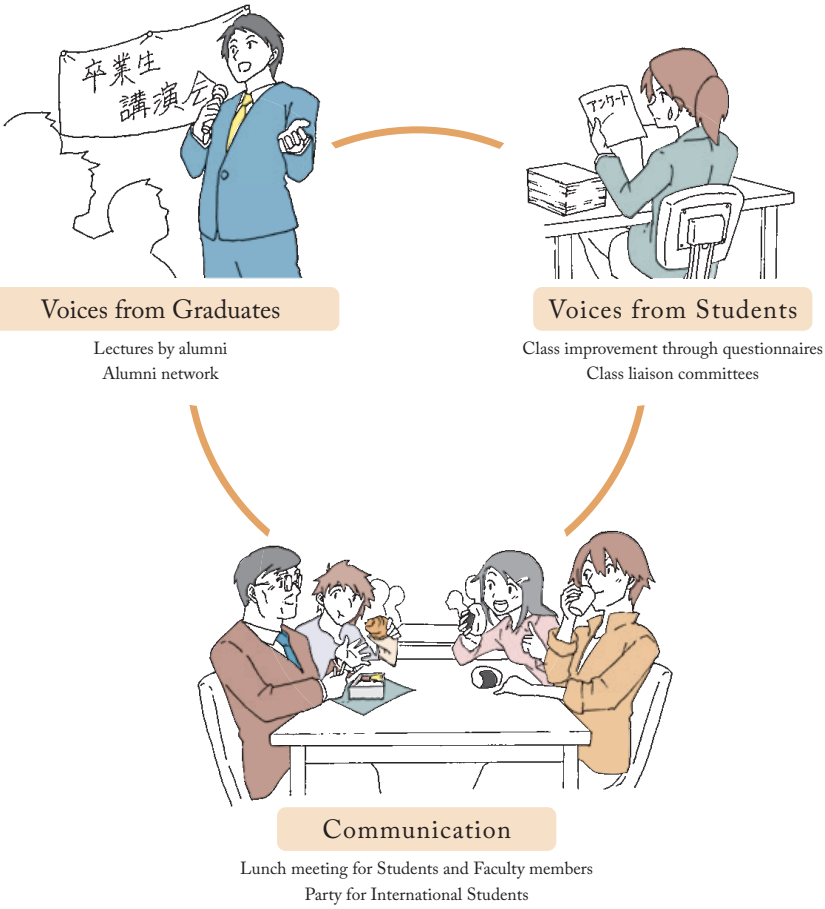


Illustration: Based on Daiya Hashimoto (student, College of Japanese Language and Culture)

Bachelor of Arts

Diploma Policy

Students acquire knowledge and abilities (Generic Competences) to be learned based on educational purpose for undergraduate degrees at the University of Tsukuba as well as knowledge and abilities (professional competences) to be learned based on the educational purpose of our school and college. We grant diplomas for Bachelor of Arts to persons whose learning outcomes have achieved the following goals.

- Students have acquired specialized knowledge (e.g., in Linguistics, Japanese Language Education, Cultural Anthropology, the Study of History, and Literature) and analytical abilities for comprehensively understanding language and culture phenomena in Japan from a global standpoint.
(Relevant competences: 1. Ability to analyze linguistic phenomena structurally; 2. Ability to understand linguistic phenomena in relation to society and people; 3. Ability to understand cultural phenomena as intrinsic to the text; 4. Ability to understand cultural phenomena in relation to society and people)

- Students have acquired abilities for solving issues among different cultures and practical social skills that allow them to share issues with persons with different backgrounds with different languages and cultures, as well next-generation persons, and they are able to solve such issues together.
(Relevant competences: 5. Intercultural problem-solving skills; 6. Practical social skills)

Curriculum Policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Arts.

General policy

We use a single major system that allows all students to extensively learn knowledge related to Linguistics, Japanese Language Education, Cultural Anthropology, the Study of History, Literature, and the like. We also offer not only education about knowledge but also class subjects focusing on practicality for leaning via practical training sessions and internships. Moreover, we have organized curricula so that students are able to understand the nature of multicultural coexistence through daily learning opportunities as well as onsite through the following measures. Related measures are international training for students to learn overseas, joint classes for joint investigation and research with foreign exchange students, and tutoring systems for supporting foreign exchange students.

Course sequence policy

- The first year: Students widely learn Foundation Subjects for Major from among Common Foundation Subjects and study at other colleges. In this way, students discover and determine their own specialized fields.
- The second year: We aim to require students to acquire well-balanced knowledge related to Linguistics, Japanese Language Education, Cultural Anthropology, the Study of History, Literature, and the like, through Major Subjects. Moreover, we foster an awareness of the issues concerning students' own languages and cultures that they encounter through coming into contact with different languages and cultures in practical subjects, such as by practical training sessions, joint classes with foreign exchange students, and international training. At the same time, students can acquire foreign language abilities (in particular, in English) that allow them to conduct research and dispatching activities through specialized English.
- The third year: Students acquire comprehensive

and more advanced knowledge and study research methods for setting graduation research themes while learning about more specialized subjects through seminars, etc. Moreover, in practical subjects, such as practical training sessions, students deepen their awareness of the issues and improve abilities for application and practical solutions.

- The fourth year: We aim at enhancing overall analytical abilities with the entirety of character and integration of problem discovery and solution abilities through writing a Graduation thesis.

Implementation policy

- We hold explanatory meetings by grade and provide periodic overall guidance regarding curricula.
- We have established integrated seminars for the third year and we provide guidance so as to create bridges from the learning of Major Subjects to the creation of a Graduation thesis. While making use of the specialties of the faculty members through group guidance comprising multiple faculty members, we offer overall research guidance. In addition, we also offer tutorial lessons to develop specific skills and abilities the students need for Graduation thesis.
- We aim at acquisition of practical communication abilities and abilities for resolution of issues through overseas international training and internships and Fieldwork Practicum, and further classes for information literacy, etc.

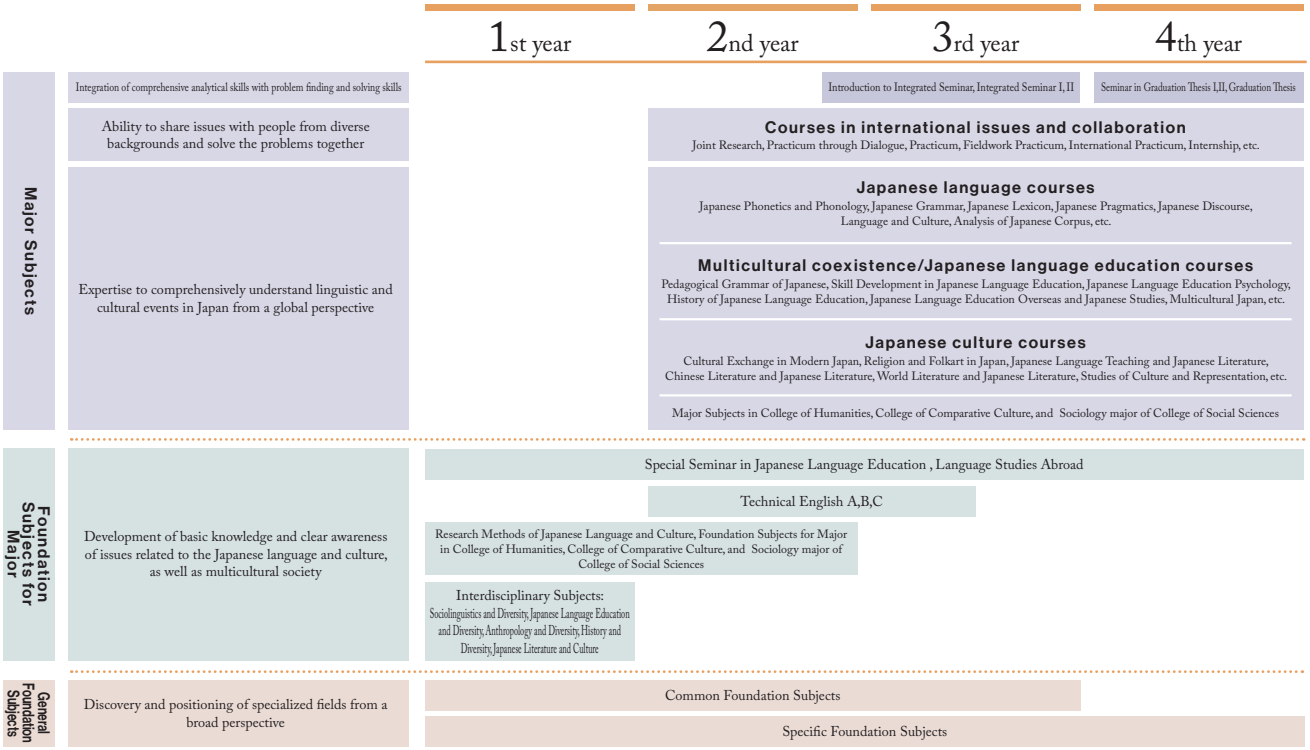
Policy for evaluation of learning outcomes

We evaluate students' abilities and independence in a multifaced manner by determining methods for evaluation according to the patterns of classes through a combination of direct and indirect evaluation. Moreover, we understand and evaluate competences acquired by students by year, which is of use for improvement of students' learning plans.

Characteristics

Through general seminar on teacher education led by multiple instructors, students develop the ability to examine a single event or issue from multiple perspectives and sterically. Also, international and collaborative courses provide students with practical learning of various actual measures taken to cope with issues that are really happening.

Structure of competencies to be developed and curriculums



Bachelor of Arts in Japanese Language Education

Diploma Policy

Students acquire knowledge and abilities (Generic Competences) to be learned based on educational purpose for undergraduate degrees at the University of Tsukuba as well as knowledge and abilities (professional competences) to be learned based on the educational purpose of our school and college. We grant diplomas for Bachelor of Arts in Japanese Language Education to persons whose learning outcomes have achieved the following goals.

- Students have acquired specialized knowledge (e.g., in Linguistics, Japanese Language Education, Cultural Anthropology, the Study of History, and Literature) and analytical abilities for comprehensively understanding language and culture phenomena in Japan from a global standpoint.
(Relevant competences: 1. Ability to analyze linguistic phenomena structurally; 2. Ability to understand linguistic phenomena in relation to society and people; 3. Ability to understand cultural phenomena as intrinsic to the text; 4. Ability to understand cultural phenomena in relation to society and people)

- Students have acquired abilities for solving issues among different cultures and practical social skills that allow them to share issues with persons with different backgrounds with different languages and cultures, as well next-generation persons, and they are able to solve such issues together.
(Relevant competences: 5. Intercultural problem-solving skills; 6. Practical social skills)

- Abilities to use their specialized knowledge in leading corporate and civic activities as a leader of the local communities have been earned.
(Relevant competence: 7. Leadership skills)

Curriculum Policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Arts in Japanese Language Education.

General policy

We use a single major system that allows all students to extensively learn knowledge related to Linguistics, Japanese Language Education, Cultural Anthropology, the Study of History, Literature, and the like. We also offer not only education about knowledge but also class subjects to develop practical and leadership skills for leaning via practical training sessions and internships.
Moreover, we have organized curricula so that students are able to understand the nature of multicultural coexistence through daily learning opportunities as well as onsite through the following measures. Related measures are international practicum overseas and collaborative classes in which students from diverse linguistic and cultural backgrounds conduct surveys and research together.

Course sequence policy

- First year: Students take intensive Japanese language classes for the first six months after admission, and then by taking common courses and a wide range of Foundation Subjects for Major from the curricula of other colleges, students will discover and position their own specialized fields of study from a broad perspective.
- Second year: Through the courses for the specialized field, students aim to acquire a balanced knowledge of linguistics, Japanese language education, cultural anthropology, history, literature, etc. Through practical training, International Practicum, and other domestic and international study activities students will develop an awareness of issues related to the Japanese language and culture from a broader perspective. Through specialized English courses, students will acquire foreign language skills (especially English) that will enable them to conduct research and publish the results.

Third year: While taking more specialized courses such as practical classes, students acquire comprehensive and more advanced knowledge and research methods in order to set a theme for their graduation research. Through practical training such as the Japan-Expert Internship Program, students deepen their awareness of problems and improve their applied, practical, and leadership skills for problem solving.

Fourth year: Through the writing of a graduation thesis, students enhance their holistic and comprehensive analytical skills with an aim to integrate their problem finding and solving abilities.

Implementation policy

Japanese language education coordinators are assigned to support students in their studies. We hold explanatory meetings by grade and provide periodic overall guidance regarding curricula.

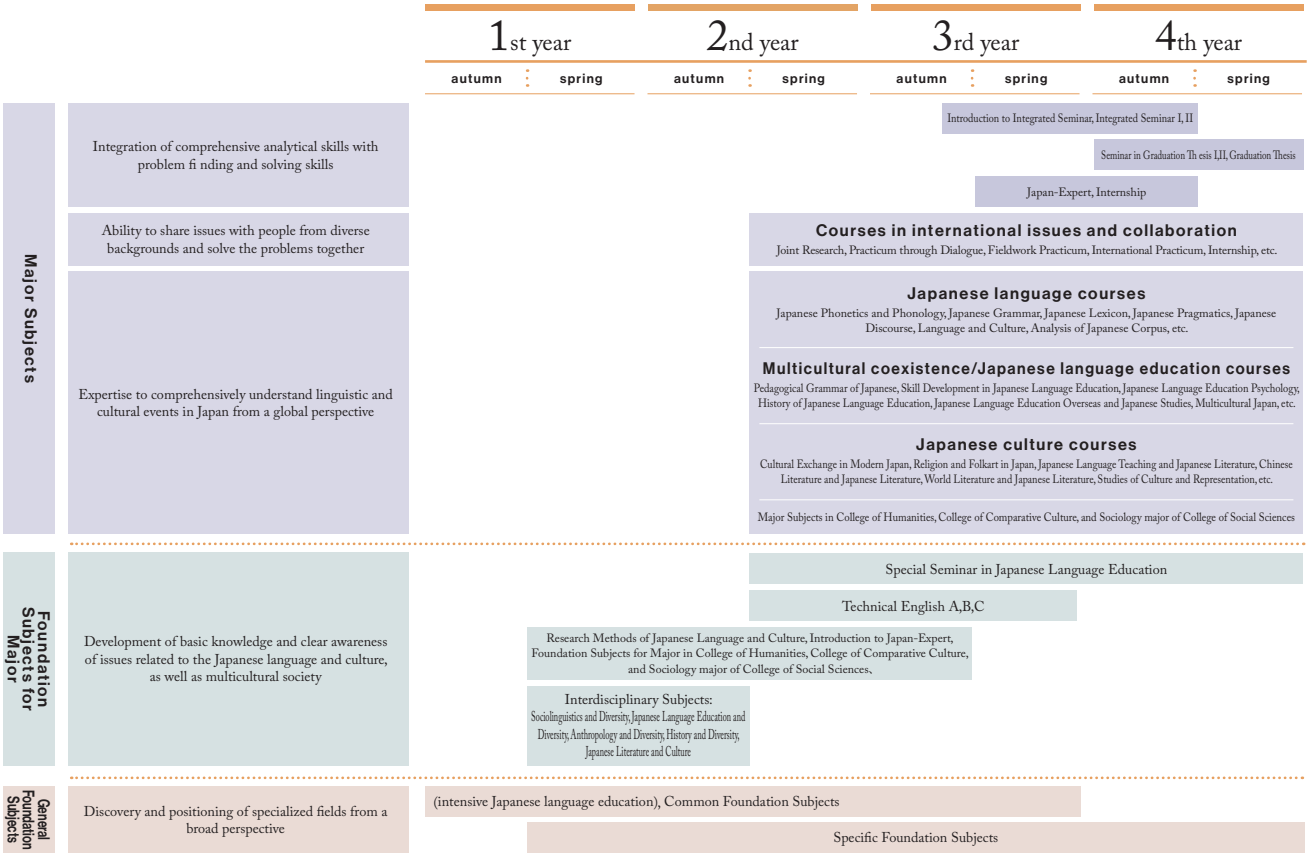
We have established integrated seminars for the third year and we provide guidance so as to create bridges from the learning of Major Subjects to the creation of a Graduation thesis. While making use of the specialties of the faculty members through group guidance comprising multiple faculty members, we offer overall research guidance. In addition, we also offer tutorial lessons to develop specific skills and abilities the students need for Graduation thesis.

We strive to provide information to students by holding information sessions on practical training and internships, and we also work hard to obtain scholarships to cover the costs of participation.

Policy for evaluation of learning outcomes

We evaluate students' abilities and independence in a multifaced manner by determining methods for evaluation according to the patterns of classes through a combination of direct and indirect evaluation. Moreover, we understand and evaluate competences acquired by students by year, which is of use for improvement of students' learning plans.

Structure of competencies to be developed and curriculums



School of Social and International Studies

College of Social Sciences

- Bachelor of Arts in Sociology
- Bachelor of Laws
- Bachelor of Arts in Political Science
- Bachelor of Arts in Economics
- Bachelor of Arts in International Social Sciences

College of International Studies

- Bachelor of Arts in International Relations
- Bachelor of Arts in International Development
- Bachelor of Arts in International Social Sciences

Educational purpose

We foster professionals who can accurately understand and analyze complex problems that arise in the globalized society, so that they can address such problems flexibly and creatively. For that purpose, students are expected to acquire comprehensive knowledge based on the field of social sciences including environmental and information sciences, as well as the methodology backed by their respective expertise.

College of Social Sciences
College of International Studies

College of Social Sciences

- Bachelor of Arts in Sociology
- Bachelor of Laws
- Bachelor of Arts in Political Science
- Bachelor of Arts in Economics
- Bachelor of Arts in International Social Sciences

Educational purpose

We offer education that allows students to intensively deepen specialized knowledge in Sociology, Law, Political Science, and Economics, and we also implement inter-disciplinary education to comprehensively acquire basic knowledge for each field. In this way, we aim at the development of personnel with a "Glocal" (i.e., "Global + Local") orientation to exercise highly advanced specialty backed up by a general viewpoint for Social Sciences.

Desired students

Persons with basic academic skills necessary for comprehensive study on Social Sciences, along with a keen interest, and analytical competence to understand and engage with various issues in the globalizing society.

Measures to ensure and improve the quality of education

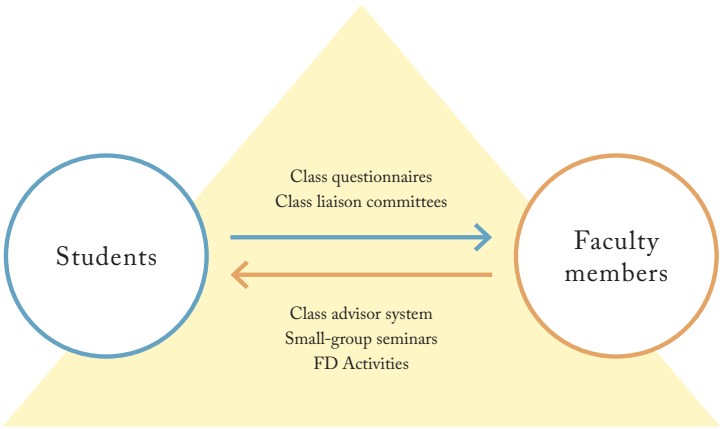
Implementation of Class evaluation

Class evaluations are conducted using standardized evaluation items for the college, and the results are fed back to the relevant faculty members to help them improve their classes. For courses that do not meet the standardized evaluation criteria, the instructor conducts his or her own survey with the students taking the course.

Learn about the interrelationship between social science theory and practice

- By offering specialized and practical classes and seminars in social theor y and research method every year, we secure opportunities for students to learn social research techniques needed for their graduation thesis writing.
- As an opportunity to see the real site of legal practices, tours to courts, stock exchanges, prisons, etc. are held annually.
- Excise-oriented courses where emphasis are placed on practical lessons using mock courts and experiments in economic theory are provided.
- In order to learn about economic practices, we conduct tours of local factories and of the Bank of Japan and stock exchanges as needed.

Measures to improve educational abilities



Bachelor of Arts in Sociology

Diploma Policy

Acquired knowledge and abilities (Generic Competences) to be acquired based on the educational purpose of the University of Tsukuba bachelor's program, and achieved the following achievement goals based on the purpose of human resource development in social studies and international school sociology. Bachelor of Arts in Sociology will be awarded to those who are recognized as having a bachelor's degree.

- While widely learning about Sociology and Social Science, students can understand the connection between various specific Sociology viewpoints and methods and grasp complicated contemporary society from a multifaced viewpoint.
(Relevant competences: Fundamentals of Social Sciences, Background in Social Sciences)

- Students have acquired abilities for identifying and analyzing problems by targeting common sense in a new way that can be seen in existing social systems and customs. They have also gained abilities to conceive of the way society exists in an overall manner.
(Relevant competences: Discovering social issues, Understanding and analysis of social phenomena, Solving social issues)

- Students have acquired communication abilities for describing social phenomena in a sociological manner and presenting relevant problems.
(Relevant competences: Expression and discussion in Social Sciences, Applications in the real world)

Curriculum policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Arts in Sociology.

General policy

Sociology, Law, Political Science, and Economics belong to the same college. To maximize such characteristics, overall learning in Social Science allows students to gain a wide-ranging viewpoint and comprehensibility. Based on this, our policy is to foster the following abilities related to Sociology.

- Aiming at the goal of having students acquire knowledge related to sociological interest and viewpoint as well as sociological practical skills, such as through abilities for investigation and analysis and those for logical description and expression, we organize the required structure in consideration of proper organization.
- In order to urge students' subjective approaches, we consider the possibility of free choice of subjects so that students can foster an awareness of the issues in line with their interests and learn based on them.

Sequential course structure

- During the first year, we allocate basic subjects (Foundation Subjects for Major) for sociological knowledge. Moreover, we offer Foundation Subjects for Major in Law, Political Science, and Economics that allow students to foster basic knowledge and gain a wide vision related to Social Science.
- During the second year through the third year, in parallel with the Foundation Subjects for Major category, we have a Major Subject category related to extensive sociological themes as well as a subject category related to sociological Research Methods. We aim to require students to implement small-class seminars and practical training sessions on their own. We consider so that students can make corrective choices based on their interests.

During the fourth year, we continuously allocate a Major Subject category related to sociological knowledge, seminars and practical training sessions related to sociological practice, subjects for seminars for the Graduation Thesis, etc., and we aim at a fused, integrated outcome regarding these elements in Graduation Thesis.

Implementation policy

We develop teaching materials and other resources that relativize common sense related to social systems and customs.

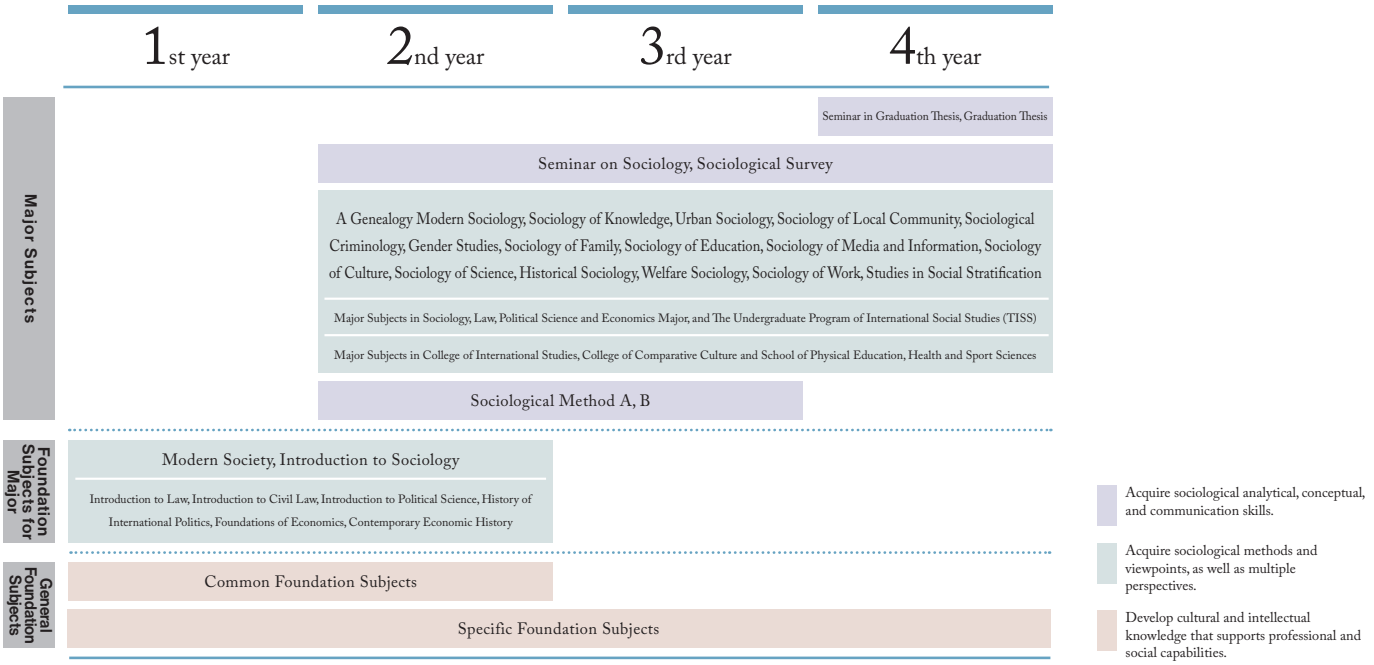
We set assignments, collect materials, and perform analysis in respect of individuals' interests.

We implement investigation of practical training sessions, collaborate onsite and with local communities through the use of guest speakers in lectures, and integrate theories into social phenomena.

Policy for evaluation of learning outcomes

Concerning the evaluation of learning outcomes for major courses of Sociology, based on the Curriculum Policy, whether or not students have reached goals for class subjects is appropriately determined via methods of evaluation described in the syllabuses of each subject. In particular, in major Sociology courses, students voluntarily set research themes and assignments and each writes a Graduation Thesis. When evaluation of subjects related to seminars for the Graduation Thesis and evaluation of the degree of completion of the theses have resulted in a judgement that the learning goal and appropriate level has been reached as determined through the Diploma Policy, students will be granted Sociology diplomas. In the process of writing a Graduation Thesis, mid-term reporting sessions are held for the Graduation Thesis. A system for guaranteeing high-level theses has been implemented through evaluation performed and advice given by multiple faculty members, including supervising faculty members. As such, through a combination of evaluation of the alignment of curriculum subjects

Structure of competencies to be developed and curriculums



Bachelor of Arts in Sociology

and fair evaluation of the Graduation Thesis, students learn high-level general and academic abilities.

Bachelor of Laws

Diploma Policy

In order to acquire the degree of Bachelor of Laws, students acquire knowledge and abilities pursuant to the educational goals of the University of Tsukuba undergraduate program (Generic Competences). Bachelor of Laws will be awarded to those who are recognized to achieve the following goals based on the purpose of human resource development of the College of Social Sciences, School of Social and International Studies.

- Through profound observation related to the roles of and significance of the law, students obtain abilities for solving problems from comprehensive viewpoints. with continuous interested in the nature of society.
(Relevant competences: Fundamentals of Social Sciences, Background in Social Sciences, Solving social issues)

- In relation to specialized knowledge in law, students acquire systematic understanding and logical thinking abilities that allow them to grasp phenomena of actual society deduced from basic legal concepts represented by the Constitution, the Civil Code, the Penal Code, etc.
(Relevant competences: Understanding and analysis of social phenomena)

- Students acquire two-way legal communication abilities.
(Relevant competences: Expression and discussion in Social Sciences)

- Students acquire abilities to discover legal issues in social phenomena and insight to understand the nature of problems.
(Relevant competences: Discovering social issues, Applications in the real world)

Curriculum policy

A curriculum is organized and implemented based on the following policies for students to achieve learning outcomes to acquire Bachelor of Laws.

General policy

We offer the curriculum to provide students with opportunities for gaining wide and flexible perspectives in social sciences that constitutes the foundation of a legal mind. This curriculum also allows students to engage in step-by-step learning experience in light of the academic characteristics of the law and to obtain practical knowledge.

Course sequence policy

- During the first year, students take Introduction to Law and Introduction to Civil Law, mandatory Foundation Subjects for Majors, to obtain concepts and knowledge that constitute a foundation of the law. Furthermore, we offer Foundation Subjects for Majors in sociology, law, political science, and economics for students to obtain extensive knowledge related to overall social sciences.
- During the first year and second year, students can choose Constitutional Law I and Constitutional Law II, General Provisions of Civil Law, and Criminal Law: General Part among the three main fields (Constitution, Civil Law, and Criminal Law), which are the necessary subjects for students to major in law in the third year.
- For preparation of specialized education in Law during the third year, the second year can also take courses other than those in the main three fields, such as the commercial law, the law of civil procedure, the law of criminal procedure, and the administrative law.
- During the third and fourth years, we provide more specialized subjects and seminars with small-class discussion and dialogues with the faculty members. Based on the fundamental understanding of the law that has been fostered in the first and second years, students will acquire

Bachelor of Laws

abilities in application of legal knowledge, in investigation and analysis for specific topics, and to acquire legal communication skills.

Implementation policy

In addition to acquiring the basic legal theory and knowledge essential for a bachelor's degree, we foster persons who are able to respond to the current and future social problems. We adopt methods that make students to be interested in learning law.

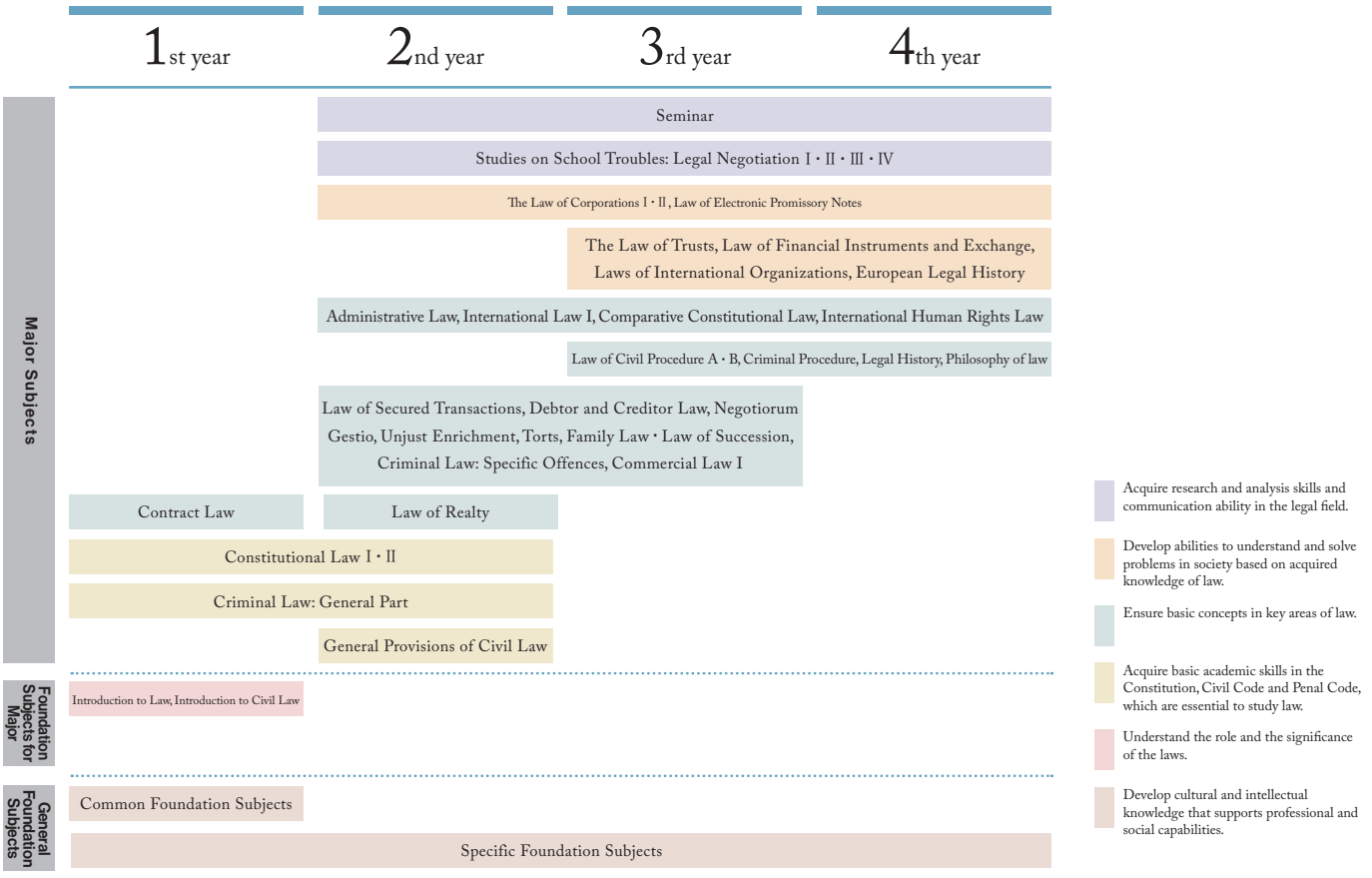
We will implement the above policies through: (i) specific and vivid classes using a moot courts; (ii) tours to visit institutions such as courts; (iii) utilization and creation of materials through use of the latest data and videos that allow students to realize the connection between society and the law; and (iv) enhancement of seminars.

We will provide opportunities where you can comprehensively demonstrate your acquired knowledge and communication skills through joint seminars with other universities and participation in events in which major universities in Japan and overseas participate.

Policy for evaluation of learning outcomes

The faculty members in charge of a law major conduct strict and fair grade evaluation in

Structure of competencies to be developed and curriculums



accordance with methods in line with syllabi. We put emphasis on students' answers to question from the faculty members in classes and discussion among students in seminars as well as final examinations and midterm examinations. In this way, we endeavor to evaluate the degree of acquisition of a legal mind and acquisition of competences assumed in the Diploma Policy that are difficult to be grasped through answer to the final examination alone. At present, the Graduation Thesis is not mandatory. However, for students who desire to submit Graduation Theses, we provide opportunities of interim presentations attended by a majority of the faculty members of a law major, including advisor. Faculty members provide students with various forms of advice for thesis, the culmination of study at the university, by asking questions from many perspectives. In addition, we have class questionaries on almost all subjects that are of use in verification of appropriate education.

Bachelor of Arts in Political Science

Diploma Policy

In order to earn the degree of Bachelor of Arts in Political Science, students are supposed to acquire knowledge and abilities pursuant to the educational goals of the University of Tsukuba undergraduate program (Generic Competences). Bachelor of Arts in Political Science will be awarded to those who are recognized to have achieved the following goals based on the purpose of human resource development of the College of Social Sciences, School of Social and International Studies.

- Students have acquired the abilities to understand political phenomena, that have increasingly been globalized, complicated, and diversified, in a comprehensive and interdisciplinary manner, with reference to various related phenomena in contemporary society.
(Relevant competences: Fundamentals of Social Sciences, Background in Social Sciences, Understanding and analysis of social phenomena)

- Students have acquired systematic and specialized knowledge in political science and the abilities to analyze and examine political phenomena critically from multiple perspectives, find policy issues in social turmoil, and propose solutions to these issues from the viewpoint of political science.
(Relevant competences: Understanding and analysis of social phenomena, Discovering social issues, Solving social issues)

- Students have acquired the abilities to logically express orally and by texts analyses and examination based on specialized knowledge in political science and discuss them with others, and to take leadership in various fields of society as well as organizations and groups they belong to.
(Relevant competences: Expression and discussion in Social Sciences, Applications in the real world)

- Students have acquired a sense of responsibility and ethics, founded on public nature, as an autonomous citizen for political and social issues.
(Relevant competences: Discovering social issues, Solving social issues, Applications in the real world)

Curriculum policy

A curriculum is organized and implemented based on the following policies for students to achieve learning outcomes to acquire Bachelor of Arts in Political Science.

General policy

At the College of Social Sciences, we expect students to acquire interdisciplinary knowledge of social sciences as well as expertise in each major in a well-balanced manner. Major in Political Science organizes a stepwise curriculum ranging from basic to advanced and application levels in political science, in order to foster autonomous citizens with a sense of public nature, broad viewpoints, comprehensive vision, and a high level of expertise in political science.

Specifically, we take advantage of the fact that sociology, law, and economics belong to the same college and implement a curriculum for learning social sciences comprehensively in order to enable students to develop the abilities to understand political phenomena, which have increasingly been globalized, complicated, and diversified, in a comprehensive and interdisciplinary manner, with reference to various related phenomena in contemporary society. We also implement a curriculum for learning Major Subjects including political theory/thoughts/history, public administration, and international politics as well as Foundation Subjects for Major, Introduction to Political Science and History of Global Politics, for students to obtain systematic and specialized knowledge in political science and the abilities to analyze and examine political phenomena critically from multiple perspectives, find policy issues in social turmoil, and propose solutions to these issues from the viewpoint of political science. Moreover, we offer Introductory Seminar of Politics, Seminars I-IV, and Graduation Thesis to encourage students to gain the abilities to logically express orally and by texts analyses and examination based on specialized knowledge in political science and discuss them with others, and

to take leadership in various fields of society as well as organizations and groups they belong to.

Sequential course structure

During the first year, we allocate mandatory Foundation Subjects for Major that provide opportunities to learn theories, thoughts, and histories essential for studying political science. We also offer Foundation Subjects for Major in sociology, law, political science, and economics that allow students to foster basic knowledge and broad viewpoints on the society.

During the second year, students learn specialized knowledge in political theory/thoughts/history, public administration, and international politics.

Moreover, students learn the basics of political science in a seminar format through Introductory Seminar of Politics, and get proficient in understanding political science in English through Political Science Reading in Foreign Language Texts (English).

During the third year, students gain more advanced knowledge in political science and deepen their own research themes in Seminars I and II. During the fourth year, students do their own research in Seminars III and IV and complete Graduation Theses or seminar theses.

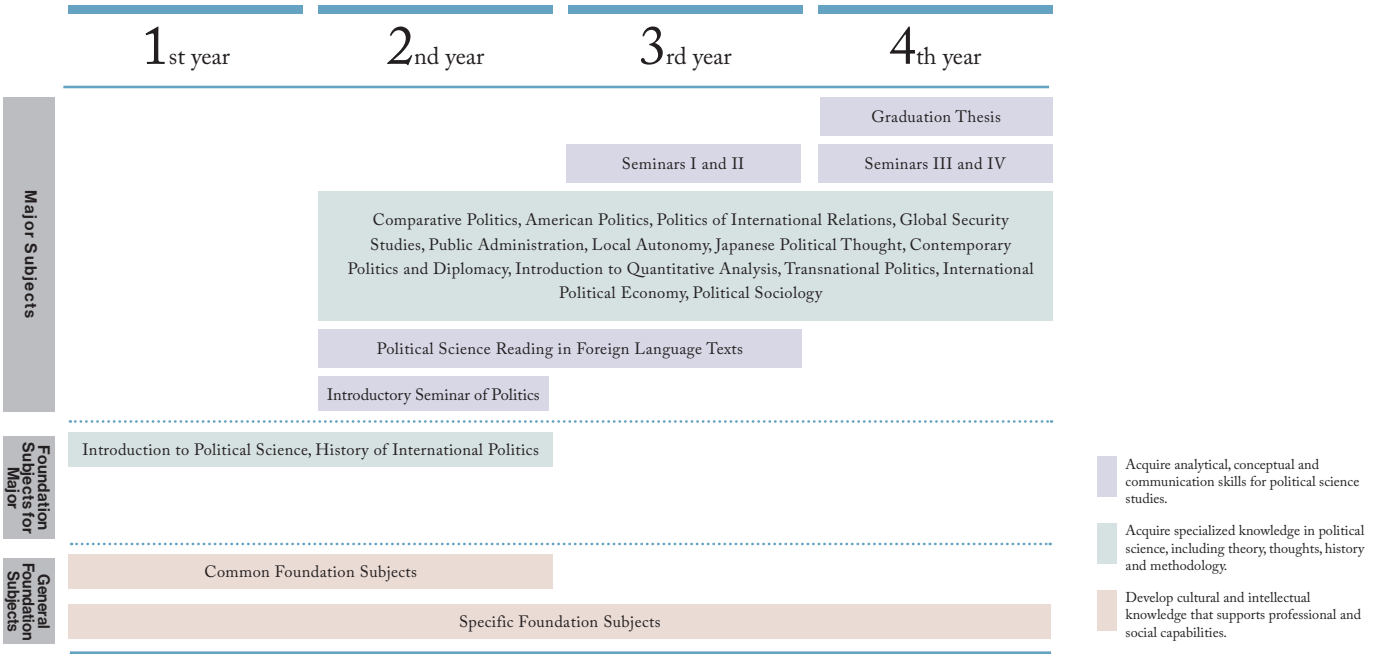
Implementation policy

Major in Political Science for the College of Social Sciences offers most lecture courses in a semester-long, two-credit form. Seminars I-IV are implemented in a small-class form and students take seminar courses taught by two or more faculty members.

Policy for evaluation of learning outcomes

The evaluation of learning outcomes for Major in Political Science is based on the Curriculum Policy and appropriately determined by judging whether students have achieved the goals set for each lecture and seminar course via the methods described in the syllabus. Students take two or more seminars during the third and fourth years

Structure of competencies to be developed and curriculums



Bachelor of Arts in Political Science

and have opportunities to receive guidance from multiple faculty members at the same time. As for Graduation Thesis, an elective subject, a single faculty member is in charge of examination in principle. In practice, however, instruction by multiple faculty members is provided through seminars.

Bachelor of Arts in Economics

Diploma Policy

Acquired knowledge and abilities (Generic Competences) to be acquired based on the educational goals of the University of Tsukuba bachelor's program, and achieved the following achievement goals based on the purpose of human resource development in social studies and international school sociology. Bachelor of Arts in Economics will be awarded to those who are recognized as having a bachelor's degree.

Students have acquired technical abilities necessary for economic analysis. Students learn skills and knowledge for analysis by mastering Intermediate Microeconomics, Intermediate Macroeconomics, and the like, which constitute basic subjects for Economics, and by learning Mathematics for Economics, Econometrics, and the like that allow students to study methods necessary for empirical analysis.
(Relevant competences: Fundamentals of Social Sciences, Background in Social Sciences, Understanding and analysis of social phenomena, Expression and discussion in Social Sciences)

Students have systematically acquired specialized knowledge in Economics. Students have acquired more profound specialized knowledge in Economics through electives in Major Subjects.
(Relevant competences: Understanding and analysis of social phenomena, Solving social issues)

Students have acquired comprehensive analytical abilities through a combination of economic theories, histories, and current situation. Students obtain extensive understanding concerning economic problems through studying the Contemporary Economic History, Regional Economics, Japanese Economy or the like.
(Relevant competences: Fundamentals of Social Sciences, Background in Social Sciences, Discovering social issues, Understanding and analysis of social phenomena, Expression and discussion in Social Sciences)

Students have extensive interest in and insight into economic problems and social problems. Students obtain abilities for applying Economics tools to social problems.
(Relevant competences: Background in Social Sciences, Discovering social issues, Understanding and analysis of social phenomena, Solving social issues, Expression and discussion in Social Sciences, Applications in the real world)

Curriculum policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Arts in Economics.

General policy

Based on fundamental learning in given fields of Social Science, we aim to require students who select major courses in Economics to nurture abilities to observe and solve economic and social problems based on theoretical methods of thinking in Economics. First of all, we offer Foundation Subjects for Major (e.g., Foundation of economics and Contemporary Economic History) and Introduction to game theory. After the second year, we require students to choose more Major Subjects (e.g., Intermediate Microeconomics, Intermediate Macroeconomics, Empirical Analysis, Mathematics for Economics, Regional Economies and other Major Subjects). From the first year, students are taught an introductory mathematics for economics and game theory, and are then progressively introduced to higher level mathematics for economics. In parallel with these lecture subjects, we provide Seminars for Economics, which are small-class opportunities for students to subjectively learn with the faculty members. Given such opportunities, students can further deepen the knowledge learned in classes through reading specialized literature or participating in experiments and inspection tour training and enhance application abilities. Graduation theses are not mandatory. However, it is recommended that students write them to further deepen the knowledge in Economics they have acquired through 4-year learning experiences by taking on the challenge of voluntary research assignments.

Course sequence policy

When deciding on major courses at the time of completion of the second year, students who select Economics are required to take Foundations of Economics and Contemporary Economic History

Bachelor of Arts in Economics

from among Foundation Subjects for Major. In addition, in order to furnish students with a solid understanding of the method for thinking in Economics, we provide them with Elective Major Subjects, such as Economic Theory (e.g., Microeconomics and Macroeconomics), Advanced Mathematics for Economics, Itroduction to Empirical Analysis, Intoroduction to Game Theory, and Economic History. Following the second year, students sequentially select and study them.

Based on basic knowledge in Economics and understanding for the method of thinking on the same obtained through learning during the first year and the second year, we aim to require students to obtain more advanced specialized knowledge and abilities for application. Through learning Applied Subjects (e.g., Public Economics, Industrial Organization, Regional Economics, and Japanese Economy, and Contract Theory), students acquire abilities for applying theories of Economics to given problems of contemporary society.

Implementation policy

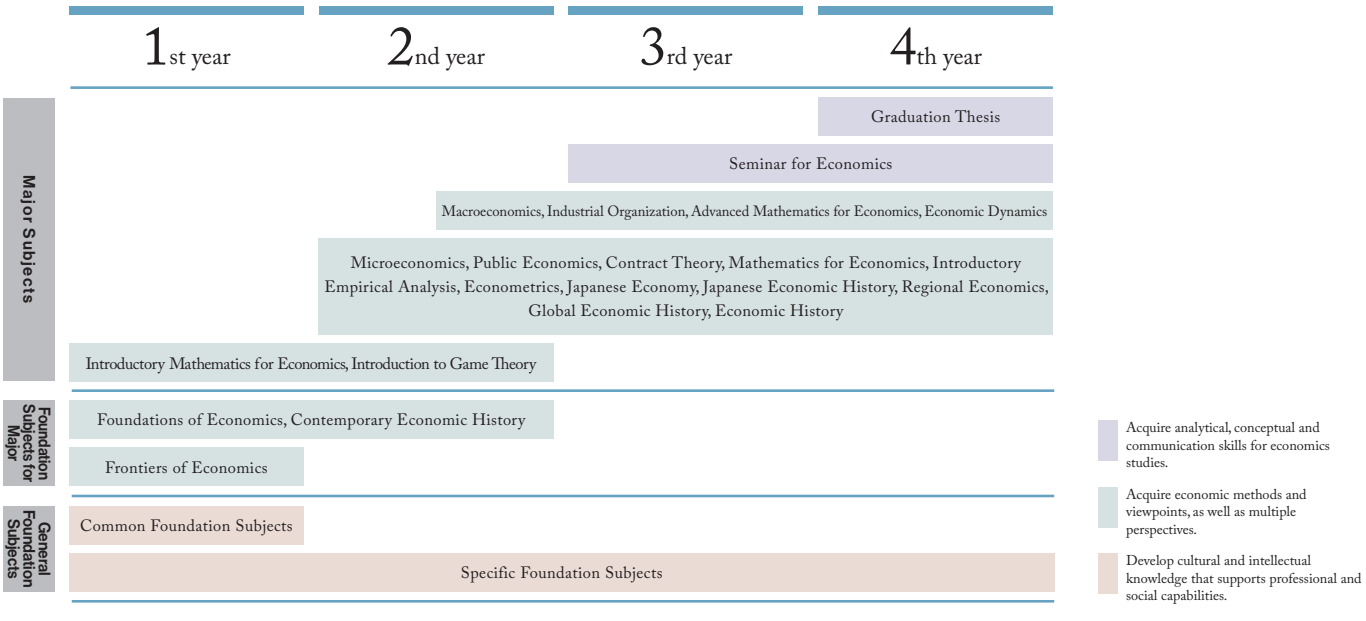
In addition to Major Subjects offered as lecture subjects, in order to encourage students' subjective learning and to have them profoundly learn specialized knowledge held by the faculty members, we offer seminar subjects.

In seminar subjects, we provide students with opportunities for learning Economics in society through listening to the opinions of enterprise managers and conducting fact-finding investigations related to the regional economy. Experimental Economics and Experimental Game Theory also are offered as a practical seminar. Moreover, in order to enhance learning abilities for Economics in English, we provide lectures in English (e.g., Economic History). At the request of students, we offer guidance for writing of the Graduation Thesis.

Policy for evaluation of learning outcomes

In major courses in Economics, the Graduation Thesis is considered as an elective subject. The primary faculty supervisor conducts the evaluation of such theses. The due date for determining titles

Structure of competencies to be developed and curriculums



for the Graduation Theses is May, and the titles are reported via the faculty member meetings in the College of Social Sciences.

In many class subjects other than Seminars for Economics, class evaluation questionnaires are implemented.

Bachelor of Arts in International Social Sciences

Diploma Policy

Bachelor of Arts in International Social Sciences is granted to those who are admitted having gained the knowledge and ability (Generic Competences) based on the curriculum targets stipulated for the University of Tsukuba's undergraduate degree programs and have reached the following achievement targets in their learning outcomes based on the educational purpose for the Undergraduate Program of International Social Studies.

Understanding International Relations

In addition to its specialized fields, students will gain broad knowledge on international studies in general and various research methods.

Multidisciplinary Knowledge

Students are provided with skills and knowledge through the perspectives from different fields of social sciences, mainly economics, political science, sociology, and law.

Data analysis & application for social science research

Students are trained to mobilize, organize, analyze, and interpret data and information in social science research.

Fundamentals of negotiation skills

Students are given opportunities to develop the skills to engage in mutually beneficial negotiation on issues of local and international importance and context.

Policy-related fundamental skills

These courses are oriented towards practices of policy making, design and implementation.

Cross-cultural awareness skills

These courses offer fundamental knowledge to rise students' awareness on different cultures and perspectives that will encourage a broader understanding of local and global cultural landscapes.

Project analysis and completion skills

Students undertake research projects and seminars to design, research, and present important themes in social sciences. In the process, they create and present their graduation thesis in order to contribute to the production of socially relevant and meaningful knowledge.

Host culture integrative skills

By living and studying in Japan, students obtain a unique opportunity to engage, understand and contextualize the Japanese culture and its contribution to global welfare and society.

Curriculum Policy

The curriculum is organized based on the following policies.

General policy

This program's general policy is to provide students with tools to understand international issues in the globalized world through a multidisciplinary perspective, encompassing areas such as economics, political science, sociology, and law.

Sequential course structure

The curriculum allows the student to obtain knowledge in a gradual and structured way, through general foundation subjects in a first stage, foundation subjects for major and major subjects later. Finally, students write the graduation thesis as a synthesis of their academic development.

Implementation policy

Through a broad perspective on global issues, the educational philosophy of the program aims to develop students' ability to think about these issues in a multidisciplinary way, both from a theoretical standpoint and in solving practical problems based on empirical data.

To achieve this goal, educational resources include classes that promote the debate of ideas and a multidisciplinary curriculum centered on Economics, Sociology, Law, and Political Science.

Students' participation in events such as the National Model United Nations in Washington, DC, and joint workshops involving high schools in Japan has fostered their ability to debate international issues and connect with the local community within the context of the country's internationalization.

Through internships, students have played a highly dynamic role, taking part in programs in Japan and countries such as India, Mongolia, China, and Ethiopia, in institutions ranging from international organizations to private companies. Topics addressed include issues such as child welfare promotion, food security, financial

Interactive applied competence

Courses that provide opportunities for students to apply their skills and knowledge in practical contexts, allowing them to shape their capacity to solve and prevent problems in society.

management, marketing and green energy.

All these activities aim to equip students as global human resources who will undoubtedly contribute positively to solving current and future international challenges.

Policy for evaluation of learning outcomes

In accordance with the program policy and guidelines, periodic assessments of students are applied, as well as the assessment of the graduation thesis. In relation to courses, quality is guaranteed through systematic evaluations.

School of Social and International Studies

Educational purpose

We foster professionals who can accurately understand and analyze complex problems that arise in the globalized society, so that they can address such problems flexibly and creatively. For that purpose, students are expected to acquire comprehensive knowledge based on the field of social sciences including environmental and information sciences, as well as the methodology backed by their respective expertise.

College of International Studies

- Bachelor of Arts in International Relations
- Bachelor of Arts in International Development
- Bachelor of Arts in International Social Sciences

Educational purpose

With respect to complicated problems in international society under globalization, we foster students to acquire practical knowledge through the integration of the arts and sciences. Also, we develop the knowledge of students to foster their insights and ability of information analysis for the investigation of root of problems, and to develop their communication abilities so that they could share their original and farseeing solutions with others.

Desired students

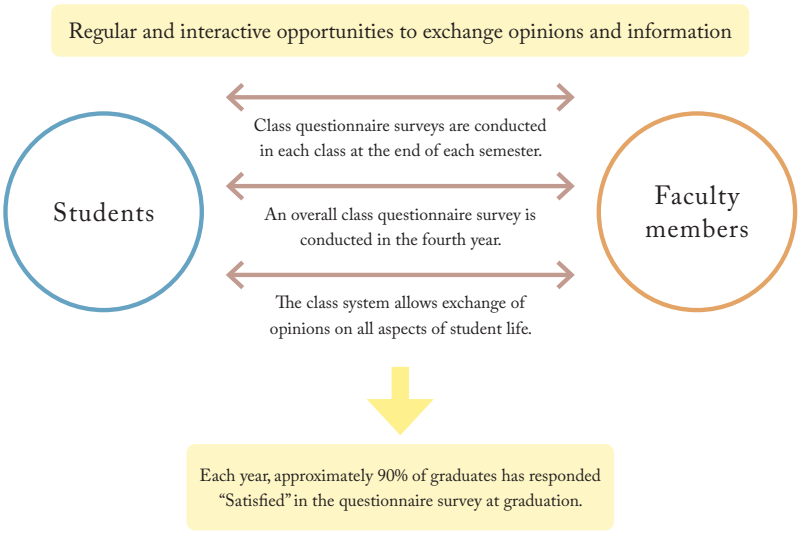
Economic activities and environmental problems have been developing beyond national borders. In this globalized world, absolute truth does not exist. We seek students who observe issues and matters with the diversified values, identify the problems, think how to handle the problems, think logically and explain to others with logical thoughts. We also seek students who are motivated by and have a spirit of taking on challenges in order to make more people understand them.

Measures to ensure and improve the quality of education

Class evaluation questionnaires are conducted for all classes at the end of each semester. With a class system, students and faculty regularly exchange opinions on all aspects of student life in an effort to improve the educational environment. In the college' s own survey conducted at the time of graduation, about 90% of the students responded that they were "satisfied" with their studies.

One of the characteristics of the College of International Studies is that an extremely large number of students are interested in activities in a variety of fields overseas, and in any given year about 50% of students study abroad through exchange programs or overseas training programs. In order to respond to the desire of these students to have experience abroad, the College of International Studies awards credits for participation in its own overseas training programs, United Nations volunteer projects, and internships. In addition, the College has concluded credit exchange agreements with universities in Europe, the United States, Asia, Central and South America, North Africa, and other regions to provide institutional support for students who wish to study abroad.

Measures to improve educational abilities



Bachelor of Arts in International Relations

Diploma Policy

We grant Bachelor of Arts in International Relations for students who have acquired the knowledge and abilities (General competence) for undergraduate students of University of Tsukuba, and those who achieved the goals of study based on the human resource development policy of College of International Studies.

- Students have acquired interdisciplinary knowledge through the integration of arts and sciences with various methodology supported by IT skills in the fields of international politics, international law, economics, linguistic and cultural anthropology.
(Relevant competences: Understanding of international studies (international relations), Understanding of international studies (international development))

- Students have understood issues of the contemporary world with historical and cultural background, and have understood the processes of international governance that suggest basic solutions.
(Relevant competences: Understanding of international studies (international relations), Understanding of international studies (international development))

- Students have acquired knowledge and abilities for expression based on advanced logical thinking and diversified values through the discussion at seminar of International Studies and the implementation of research for graduation thesis.
(Relevant competences: Analytical skills in international studies (international relations), Ability to express oneself logically about international studies (international relations), Analytical skills in international studies (international development), Ability to express oneself logically about international studies (international development))

- Students have acquired basic human skills such as abilities for obtaining opinion from others, negotiation, presentation and proactive attitudes and desire to improve themselves, in addition to technical skills for computer analysis, expression and presentation.
(Relevant competences: Analytical skills in international studies (international relations), Ability to express oneself logically about international studies (international relations), Analytical skills in international studies (international development), Ability to express oneself logically about international studies (international development))

Curriculum policy

We organize and implement the curriculum based on the following policies so that students could fulfill academic achievements which is necessary to be awarded Bachelor of Arts in International Relations.

General policy

Currently, as issues and problems in international society are deeply related to economy and culture, approach by political science alone is difficult to find solutions. The goal of the major course of International Relations is to foster students with global mindset to acquire governance-oriented abilities for solving problems through the interdisciplinary educational program including political science, international law, economics, cultural anthropology and linguistics. While some fields overlap with the major course of International Development, the major course of International Relations provides the academic system from the point of social sciences for the analysis on various issues and problems emerging in international society. In principle, its curriculum is composed from the viewpoints for deepening knowledge and experience from the specialized basic subjects which are shared with the field of international development to more specialized subjects and seminars in the field of international relations.

Course sequence policy

- The first year — study on basic subjects: students acquire awareness of basis on international relations, global viewpoints and wide-range knowledge on liberal arts through the study of Introductory Subjects: “International Studies I-IV”. Overviewing basis of multiple disciplines, including humanities and social sciences, environmental sciences, and information sciences, students choose major courses and specialized fields which they would like to study deeply in the future. Also, students enhance language proficiency of English in particular and communication abilities.

The second year — study of analytical skills from interdisciplinary approach: we require students to develop their knowledge for making an international comparisons and for the analysis on historical backgrounds through the study of basic subjects (elective). In addition, through obtaining knowledge, experience, and analytical methods in the fields of environmental sciences and information sciences, students enrich their interdisciplinary capability and insights into the issues of international society. Moreover, after students gain a strong recognition that languages are skills and means, we enhance true communication abilities with a perquisite of flexible understanding of diverse viewpoints and values.

The third year — issue oriented and theoretical research for problem solving: we require students to acquire logical knowledge and expertise that contribute to solve problems in light of related fields through the study of major courses in international relations. Students obtain a sharp motivation on the issues as well as well-balanced international way of thinking in order to find solutions by identifying "what are the fundamental problems?", responding to the complexed and rapidly changing international societies.

The fourth year — research on internationally applicable persuasive policies: participating in small-class seminar courses (Seminars of International Studies) and writing of graduation theses, students finalize four-year research outcomes. We aim to require students to make a problem-setting from creative view, make an analysis logically, and then enhance their abilities to govern their work. In this way, we promote students who could play active roles internationally and globally.

Implementation policy

To enhance motivation of students, we organize symposiums and discussions related to international problems by inviting overseas researchers and politicians. Through such opportunities, we try to create study environments where students can feel internationalization on a daily basis.

Structure of competencies to be developed and curriculums

4th year	Set original problems and analyze and demonstrate them in a logical manner.
3rd year	Acquire theoretical knowledge that contributes to the construction of specific solutions.
2nd year	Develop an interdisciplinary background and insight into international issues. Further strengthen communication abilities.
1st year	Acquire the basic knowledge of international relations, a global perspective, and a broad knowledge. At the same time, strengthen language and communication abilities.

Bachelor of Arts in International Relations

Policy for evaluation of learning outcomes

In light of goals for Diploma Policy, together with achievements of general competences, we evaluate the degree of proficiency through examinations, reports, independent thesis and graduation theses in relation to understanding, analytical abilities, and abilities for logical expression in the field of international relations.

Bachelor of Arts in International Development

Diploma Policy

We grant Bachelor of Arts in International Development for students who have acquired the knowledge and abilities (General competence) for undergraduate students of University of Tsukuba, and those who achieved the goals of study based on the human resource development policy of College of International Studies.

Students have acquired interdisciplinary insights into the integration of arts and sciences, and they can make use of professional methodology related to social science, including economic development and social development, information sciences and environmental sciences.
(Relevant competences: Understanding of international studies (international relations), Understanding of international studies (international development))

Students have understood IT skills that constitute a foundation for global communications and how the basis of international exchange has been evolved.
(Relevant competences: Understanding of international studies (international relations), Understanding of international studies (international development))

Students have acquired knowledge and abilities of advanced mathematical and logical thinking and practical analytical skills through the discussion at seminar of International Studies and the implementation of research for graduation thesis.
(Relevant competences: Analytical skills in international studies (international development), Ability to express oneself logically about international studies (international development), Analytical skills in international studies (international relations), Ability to express oneself logically about international studies (international relations))

Students have acquired basic human skills such as abilities for obtaining opinion from others, negotiation, presentation and proactive attitudes and desire to improve themselves, in addition to technical skills for computer analysis, expression and presentation.
(Relevant competences: Analytical skills in international studies (international development), Ability to express oneself logically about international studies (international development), Analytical skills in international studies (international relations), Ability to express oneself logically about international studies (international relations))

Curriculum Policy

We organize and implement the curriculum based on the following policies so that students could fulfill academic achievements which is necessary to be awarded Bachelor of Arts in International Development.

General policy

While some fields overlap with the major course of International Relations, the major course of International Development provides the academic system from the point of social sciences and mathematical sciences for the analysis on various issues and problems emerging in international society. In light of various viewpoints related to the nature of international society, the goal of this major course is to foster students with global mindset developing practical knowledge and techniques related to development issues. In principle, its curriculum is composed from the viewpoints for deepening knowledge and experience from the specialized basic subjects which are shared with the field of international relations to more specialized subjects and seminars in the field of international development.

Course sequence policy

The first year — study on basic subjects: students acquire awareness of basis on international relations, global viewpoints and wide-range knowledge on liberal arts through the study of Introductory Subjects: “International Studies I-IV”. Overviewing basis of multiple disciplines, including humanities and social sciences, environmental sciences, and information sciences, students choose major courses and specialized fields which they would like to study deeply in the future. Also, students enhance language proficiency of English in particular and communication abilities.

The second year — study of analytical skills from interdisciplinary approach: we require students to develop their knowledge for making an international comparisons and for the analysis on historical backgrounds through the study of basic

Bachelor of Arts in International Development

subjects (elective). In addition, through obtaining knowledge, experience, and analytical methods in the fields of environmental sciences and information sciences, students enrich their interdisciplinary capability and insights into the issues of international society. Moreover, after students gain a strong recognition that languages are skills and means, we enhance true communication abilities with a perquisite of flexible understanding of diverse viewpoints and values.

The third year — issue oriented and theoretical research for problem solving: we require students to acquire logical knowledge and expertise that contribute to solve problems in light of related fields through the study of major courses in international relations. Students obtain a sharp motivation on the issues as well as well-balanced international way of thinking in order to find solutions by identifying "what are the fundamental problems?", responding to the complexed and rapidly changing international societies.

The fourth year — research on internationally applicable persuasive policies: participating in small-class seminar courses (Seminars of International Studies) and writing of graduation theses, students finalize four-year research outcomes. We aim to require students to make a problem-setting from creative view, make an analysis logically, and then enhance their abilities to govern their work. In this way, we promote students who could play active roles internationally and globally.

Implementation policy

To enhance motivation of students, we organize symposiums and discussions related to international problems by inviting overseas researchers and politicians. Through such opportunities, we try to create study environments where students can feel internationalization on a daily basis.

Policy for evaluation of learning outcomes

In light of goals for Diploma Policy, together with achievements of general competences, we evaluate the degree of proficiency through examinations, reports, independent thesis and graduation theses in relation to understanding, analytical abilities, and abilities for logical expression in the field of international development.

Structure of competencies to be developed and curriculums

4th year	Set original problems and analyze and demonstrate them in a logical manner.
3rd year	Learn modeling techniques based on a developmental approach.
2nd year	Acknowledge techniques for analysis, evaluation and management, and acquire IT theory and techniques. Further strengthen communication abilities.
1st year	Acquire a foundation in international relations and a broad knowledge in the fields of environment, information, civil engineering, and urban development. At the same time, strengthen language and communication abilities.

Bachelor of Arts in International Social Sciences

Diploma Policy

Bachelor of Arts in International Social Sciences is granted to those who are admitted having gained the knowledge and ability (Generic Competences) based on the curriculum targets stipulated for the University of Tsukuba's undergraduate degree programs and have reached the following achievement targets in their learning outcomes based on the educational purpose for the Undergraduate Program of International Social Studies.

Understanding International Relations

In addition to its specialized fields, students will gain broad knowledge on international studies in general and various research methods.

Multidisciplinary Knowledge

Students are provided with skills and knowledge through the perspectives from different fields of social sciences, mainly economics, political science, sociology, and law.

Data analysis & application for social science research

Students are trained to mobilize, organize, analyze, and interpret data and information in social science research.

Fundamentals of negotiation skills

Students are given opportunities to develop the skills to engage in mutually beneficial negotiation on issues of local and international importance and context.

Policy-related fundamental skills

These courses are oriented towards practices of policy making, design and implementation.

Cross-cultural awareness skills

These courses offer fundamental knowledge to rise students' awareness on different cultures and perspectives that will encourage a broader understanding of local and global cultural landscapes.

Project analysis and completion skills

Students undertake research projects and seminars to design, research, and present important themes in social sciences. In the process, they create and present their graduation thesis in order to contribute to the production of socially relevant and meaningful knowledge.

Host culture integrative skills

By living and studying in Japan, students obtain a unique opportunity to engage, understand and contextualize the Japanese culture and its contribution to global welfare and society.

Curriculum Policy

The curriculum is organized based on the following policies.

General policy

This program's general policy is to provide students with tools to understand international issues in the globalized world through a multidisciplinary perspective, encompassing areas such as economics, political science, sociology, and law.

Sequential course structure

The curriculum allows the student to obtain knowledge in a gradual and structured way, through general foundation subjects in a first stage, foundation subjects for major and major subjects later. Finally, students write the graduation thesis as a synthesis of their academic development.

Implementation policy

Through a broad perspective on global issues, the educational philosophy of the program aims to develop students' ability to think about these issues in a multidisciplinary way, both from a theoretical standpoint and in solving practical problems based on empirical data.

To achieve this goal, educational resources include classes that promote the debate of ideas and a multidisciplinary curriculum centered on Economics, Sociology, Law, and Political Science.

Students' participation in events such as the National Model United Nations in Washington, DC, and joint workshops involving high schools in Japan has fostered their ability to debate international issues and connect with the local community within the context of the country's internationalization.

Through internships, students have played a highly dynamic role, taking part in programs in Japan and countries such as India, Mongolia, China, and Ethiopia, in institutions ranging from international organizations to private companies. Topics addressed include issues such as child welfare promotion, food security, financial

Bachelor of Arts in International Social Sciences

Interactive applied competence

Courses that provide opportunities for students to apply their skills and knowledge in practical contexts, allowing them to shape their capacity to solve and prevent problems in society.

management, marketing and green energy.

All these activities aim to equip students as global human resources who will undoubtedly contribute positively to solving current and future international challenges.

Policy for evaluation of learning outcomes

In accordance with the program policy and guidelines, periodic assessments of students are applied, as well as the assessment of the graduation thesis. In relation to courses, quality is guaranteed through systematic evaluations.

School of Human Sciences

College of Education

- Bachelor of Arts in Education

College of Psychology

- Bachelor of Arts in Psychology

College of Disability Sciences

- Bachelor of Arts in Disability Sciences
- Bachelor of Arts in Special Education
- Bachelor of Science in Social Work

Educational purpose

The School of Human Sciences fosters personnel who have a broad range of interests and concerns about human beings and human society and nature in which they live, who have an attitude of scientific analysis and understanding and specialized knowledge and skills of human development and support, and who can use these attitudes, knowledge and skills to independently and creatively deal with various human problems and make a broad contribution to human society.

College of Education
College of Psychology
College of Disability Sciences

College of Education

■ Bachelor of Arts in Education

Educational purpose

We foster persons who make use of specialized knowledge and skills for education related to personality formation, school education development, educational planning and design, and regional and international education and contribute to various fields, such as schools, municipalities, private institutions, international institutions, etc. and persons with research abilities.

Desired Students

We seek persons with an extensive interest in and awareness of problems concerning culture, education, and learning activities shaped by human society, while having a desire to academically their understanding. Such persons are also motivated by cultivating scientific, logical, and practical abilities for problem-solving through learning and thinking voluntarily.

Measures to ensure and improve the quality of education

In the Introduction to Education II, Foundation Subjects for Major, the Faculty Development (FD) Committee of the college conducts class questionnaire surveys every year. The results are reflected in the teaching contents and methods for the following year.

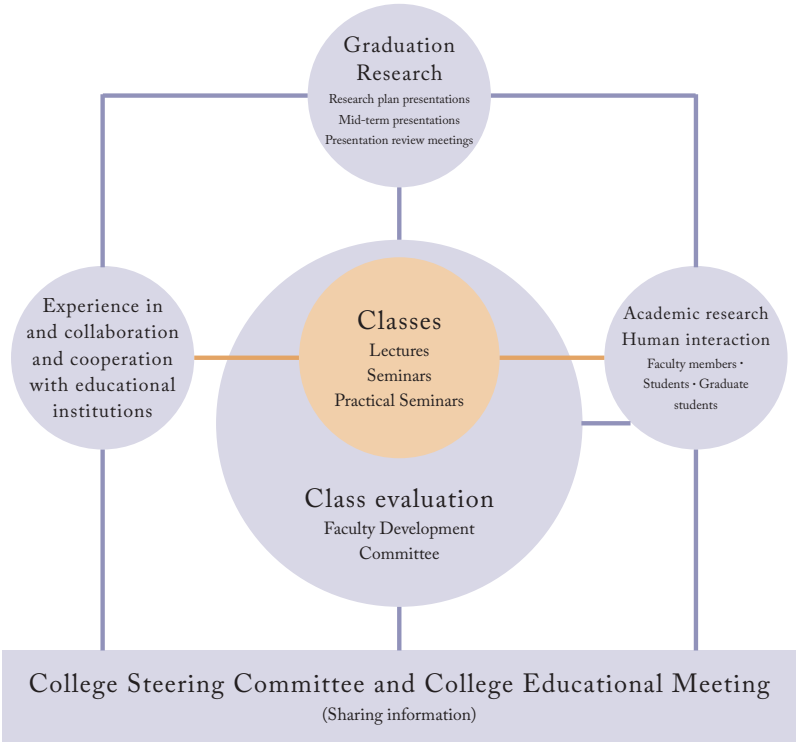
We collaborate and cooperate with educational institutions by inviting school teachers and experts from social education facilities and visiting their sites.

In order to provide regular graduation research guidance and rigorous evaluation, and ultimately to ensure the quality of graduation research, research plan presentations, mid-term presentations, and presentation review meetings are held throughout the year with the participation of all faculty members.

In every March, the Pestalozzi Festival is held in the International Conference Room of the University Hall, where faculty members, graduate students, and undergraduate students gather together. In Part I of the event, research presentations are made by faculty members and graduate students (and sometimes speakers invited from outside the university) followed by a social gathering in Part II. The event serves as an opportunity for students to receive answers to their questions and concerns on research, as well as an opportunity where many students and faculty members in the field of education study can build personal connection.

For continuous improvement of educational activities, information related to guidance for students in their learning and daily life is shared widely among faculty members, while the activities by the Faculty Development (FD) Committee are being enhanced.

Measures to improve educational abilities



Bachelor of Arts in Education

Diploma Policy

We grant diplomas for Bachelor of Arts in Education to persons who have acquired the knowledge and abilities (that is, Generic Competences) to become learned based on the educational purpose for undergraduate students of the University of Tsukuba. In their learning outcomes, they will achieve the following goals based on the educational purpose of our school and college.

- Students have acquired overall intelligence and cultured knowledge related to human beings as a basis for education.
(Relevant competences: Understanding of human sciences)

- Students have acquired an expanse of academic knowledge related to education and can engage in systematic perspectives and ways of thinking.
(Relevant competences: Knowledge of basic system of education, Integrated thinking skills in education)

- Students have acquired educational expertise competences at a level acceptable for professionals, such as teaching professions.
(Relevant competences: Educational practical exercises)

- Students have acquired basic research abilities that allow them to enter graduate schools in relation to education-related theories and practices.
(Relevant competences: Le ading communication on education)

Curriculum Policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Arts in Education.

General policy

Thinking about the connection among various research fields composed of education, we have established four systems (i.e., personality formation, educational planning and design, school education development, and regional and international education) corresponding to education comprehensiveness. Students study elective subjects using the aforementioned systems as their guidance. It is recommended that students choose a single system out of the aforementioned four systems in which they are particularly interested based on their future purposes and intensively study in classes of the system that they have chosen. Moreover, during the second year, students who desire to obtain licenses for elementary school teachers take the Elementary Education Course and students who do not take the Education Course.

Course sequence policy

- The first year: Students learn General Foundation Subjects (Common Foundation Subjects and Specific Foundation Subjects) and Common Foundation Subjects for the School of Human Sciences, and they also gain foundational knowledge in psychology and disability sciences. While we foster extensive interest in human beings, society, and nature, we develop comprehensive intelligence and cultured knowledge related to human beings as a foundation for education.
- The second year: Students learn Research Methods in Education, allowing them to improve their research abilities. Moreover, students extend the width of their specialty by taking general introductory lectures in systematic subjects and study in the Introduction to Educational Internship and the Practical Seminar in

Educational Internship.

The third year: Students take seminars and conduct inquiries established by the system, gain complete systematic characteristics for specialized knowledge, and take the Practical Seminar in Education for preparation of the Graduation Research. In this way, students foster wide-ranging academic knowledge for education and systematic perspectives and ways of thinking.

The fourth year: Students make presentations in two Graduation Research guidance sessions (i.e., presentation of thesis plans and mid-term presentation) held in May and October, in principle. In light of such guidance, students organize learning outcomes for four years as a Graduation Thesis.

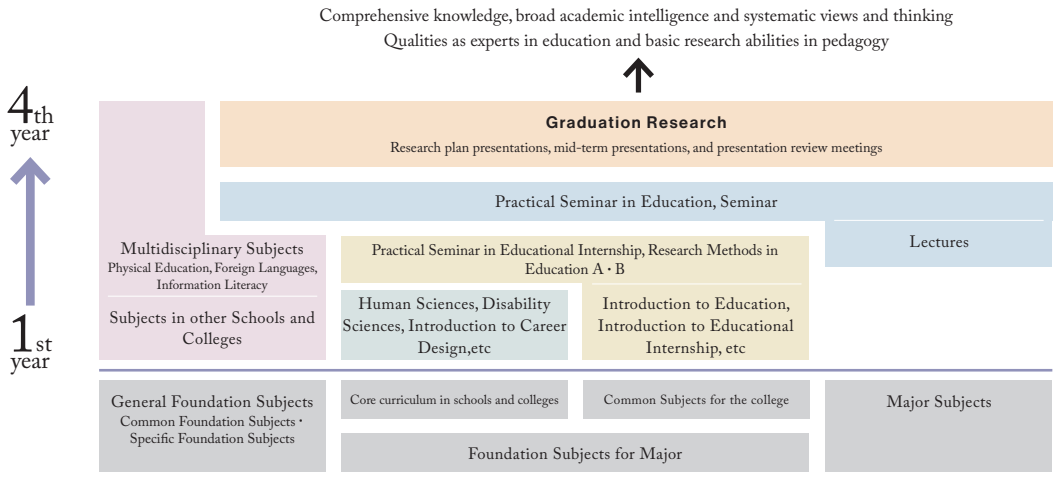
Implementation policy

We offer two courses and four systems and deepen individuals' interest in specialized research. At the same time, students are able to engage in comprehensive study in education from various standpoints. Moreover, subjects necessary for licenses for elementary school teachers, junior high school (social studies) teachers, and high school (geography, history, and civics) teachers as well as qualifications for social education supervisors have been prepared.

Policy for evaluation of learning outcomes

In class subjects, we strictly and fairly evaluate grades via the methods described in syllabuses based on the Curriculum Policy. In particular, we emphasize the graduation research as a compilation of four-year learning outcomes, which is examined by two appraisers. All relevant students are required to orally explain overviews and answer questions about graduation theses. Based on the comprehensive results described above, graduation theses are evaluated. Moreover, in order to verify whether or not the contents of education in line with Diploma Policy and Curriculum Policy is appropriately constructed and implemented via an effective educational method, in a majority of class subjects (excluding some subjects, such as the Practical Seminar in Educational Internship and Graduation Research), class evaluation questionnaires are implemented.

Course taking model in College of Education



Educational purpose

The School of Human Sciences fosters personnel who have a broad range of interests and concerns about human beings and human society and nature in which they live, who have an attitude of scientific analysis and understanding and specialized knowledge and skills of human development and support, and who can use these attitudes, knowledge and skills to independently and creatively deal with various human problems and make a broad contribution to human society.

College of Education
College of Psychology
College of Disability Sciences

College of Psychology

■ Bachelor of Arts in Psychology

Educational Purpose

Based on interest related to human psychology and behaviors, we foster human resources with the following: (i) attitudes and specialized knowledge and skills to scientifically and empirically analyze and understand human psychology and behaviors; (ii) through use the learning outcomes obtained in (i), abilities to subjectively and creatively solve actual problems; and (iii) applicable internationally intelligence, humanity, and strength.

Desired Students

Students are desired who are motived by cultivating with voluntary learning, thinking, scientific, logical, and practical abilities for the solution of issues with high interest in human psychology and behaviors and who possess a spirit of inquiry for profoundly understanding human beings.

Measures to ensure and improve the quality of education

Small classes

The students (maximum: 50) are divided into two classes, and the same faculty member serves as the class advisor for the entire four years, giving advice for their academic and daily life. The small-class system enables us to provide education and guidance that takes into account the needs of students.

Faculty development (FD)

We conduct FD activities related to the verification of the three policies, checking the contents of the syllabus, setting the policy for grading, and verifying the grading distribution.

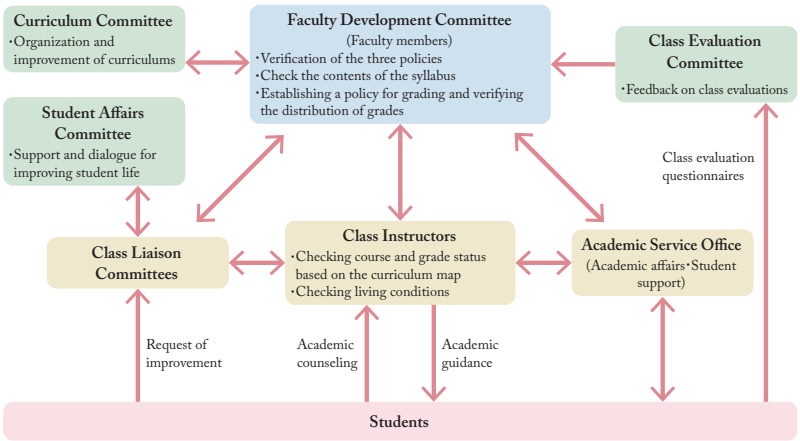
Consideration for international standards

The Introduction to Psychology is designed to ensure that the course meets international standards in psychology education. To this end, the latest edition of standard textbooks written in English that are highly evaluated worldwide are used, and practical training sessions provided in overseas universities are referred to.

Feedback from the alumni association Sinyukai

To maintain and further improve the quality of education, we regularly hear opinions from graduates who are active in society, mainly the members of the Sinyukai, the alumni association with a long history since its start with the first graduate of then Tokyo University of Arts and Sciences 90 years ago.

Measures to improve educational abilities



Bachelor of Arts in Psychology

Diploma Policy

Acquired knowledge and abilities (Generic Competences) to be acquired based on the educational purpose of the University of Tsukuba bachelor's program, and achieved the following achievement goals based on the purpose of human resource development in College of Psychology, School of Human Sciences. Bachelor of Arts in Psychology will be awarded to those who are recognized as having a bachelor's degree.

- Students are able to appropriately collect and scientifically analyze data through use of specialized knowledge related to psychology and psychological methodologies.
(Relevant competences: Ability to observe people and Ability to analyze behavior)

- Students are able to work with others to solve problems based on their understanding of themselves and others.
(Relevant competences: Ability to observe people and Ability to offer support with psychology)

- Students have acquired a practical orientation to empirically explore diverse human and social phenomena and to deal with problems.
(Relevant competences: Practical orientation toward psychological problem-solving and Inquisitive mind with an empirical orientation)

- Students are able to understand diversity and multiculturalism in the global society from a psychological perspective, and have the communication skills to form mutually beneficial relationships.
(Relevant competences: Understanding universality and diversity)

Curriculum Policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Arts in Psychology.

General policy

The class subjects are divided into four categories of acquisition of psychology-related knowledge, acquisition of research methods, presentation and debate abilities, and practical training sessions. Based on such categories, we offer fundamental extensive psychological education that covers all typical fields of psychology and leads students to complete graduation theses.

Course sequence policy

Undergoing the following steps, we offer extensive psychological education ranging from basic fields to applied and practical fields.

- The first year: Students learn fundamental knowledge for psychology through Introduction to Psychology and Psychological Research Methods. Students also acquire fundamental analytical techniques for psychology through Psychological Statistics I and II as well as Practical Training in Psychological Statistics.
- The second year: Students extensively learn fundamental Major Subject categories and specialized knowledge for psychology. In Psychological Experiments, students acquire aptitude in basic research techniques. In English Seminar in Psychology, students learn the expertise and methodology of psychological research and the basic rules for writing psychological papers through reading papers written in English.
- The third year: Students gain advanced specialized knowledge related to psychology with a central focus on lectures and seminar subjects. Moreover, in Practical Training in Psychological Research I, based on sufficient understanding of previous studies, students conduct experiments and investigative research and practically learn abilities for data collection, scientific analysis, and

debates. At the end of the third year, students take the Seminar for Graduation Thesis and substantially commence to prepare graduation theses.

The fourth year: Through presentation for carrying out graduation theses, submission of the same, and Q&A for final presentation, we foster abilities for constructing papers and presentations based on logical thought, insight, and creativity, and performing highly responsive debates.

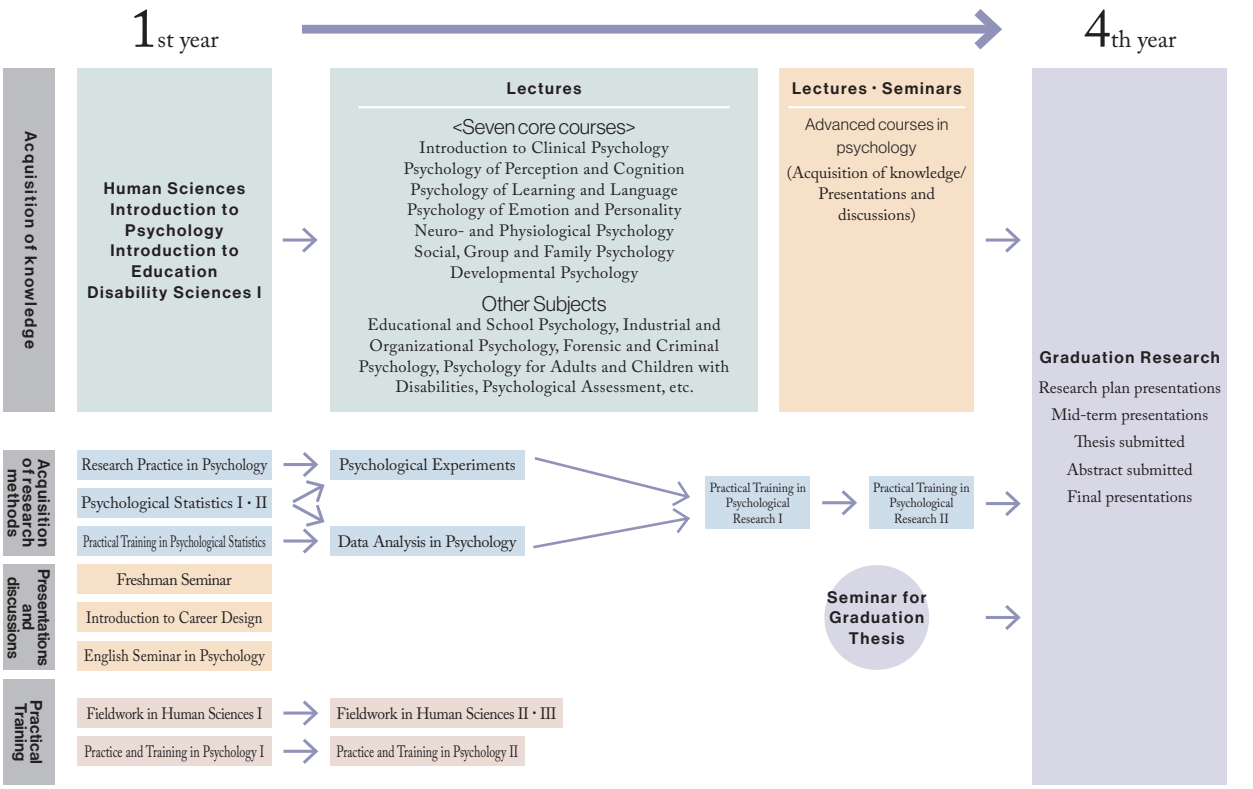
Implementation policy

We observe the learning regulations and guarantee that students extensively learn psychology. We establish subjects for literature studies and experimental and investigative research related to previous studies performed by students and urge them to subjectively engage in such studies. Through Practical Training in Psychological Research I and II as well as the Graduation Thesis, we directly provide students with the newest learning in psychological research together with the faculty members and graduate school students.

Policy for evaluation of learning outcomes

In class subjects, we strictly and fairly evaluate grades via the methods described in syllabuses based on the Curriculum Policy. In particular, we emphasize the graduation thesis as a compilation of four-year learning outcomes, which is examined by two reviewers. All relevant students are required to orally explain overviews and answer questions about graduation theses. Based on the comprehensive results described above, graduation theses are evaluated. In addition, classes evaluation questionnaires are conducted in all classes subjects in order to verify that educational content is appropriately structured and effective educational methods are used in accordance with the Diploma

Structure of competencies to be developed and curriculums



Bachelor of Arts in Psychology

Policy and Curriculum Policy.

Other noteworthy features

- We encourage students to study abroad in order to develop globally oriented human resources.
- In addition to lectures and group discussions, seminars are given by invited speakers in the occupations and career fields closely related to the specialties of the School of Human Sciences, so that students can use the information in their own career design.
- In addition to classroom lectures, students are given opportunities to improve their practical and applied skills through a variety of practical training exercises and to make their knowledge more established and useful.

Educational purpose

The School of Human Sciences fosters personnel who have a broad range of interests and concerns about human beings and human society and nature in which they live, who have an attitude of scientific analysis and understanding and specialized knowledge and skills of human development and support, and who can use these attitudes, knowledge and skills to independently and creatively deal with various human problems and make a broad contribution to human society.

College of Education
College of Psychology
College of Disability Sciences

College of Disability Sciences

- Bachelor of Arts in Disability Sciences
- Bachelor of Arts in Special Education
- Bachelor of Science in Social Work

Educational purpose

We help students acquire comprehensive fundamental knowledge about support methods for sensory, physical, cognitive, and language impairments in addition to health, age, and developmental disabilities. These knowledge and skills are obtained through studies about health, age, development, and social and cultural challenges pertaining to disabilities in fields such as education, psychology, social welfare, and medicine. The students also acquire internationally applicable abilities that would allow them contribute to creating a more symbiotic society.

Desired Students

We seek students who are interested in learning about disabilities and other phenomena, and cultivating voluntary learning and thinking, and scientific, logical, and practical abilities for problem solving. They should also have an awareness of issues related to disabilities of the human mind and behavior, and must possess a spirit of inquiry leading to a profound understanding of human beings.

Measures to ensure and improve the quality of education

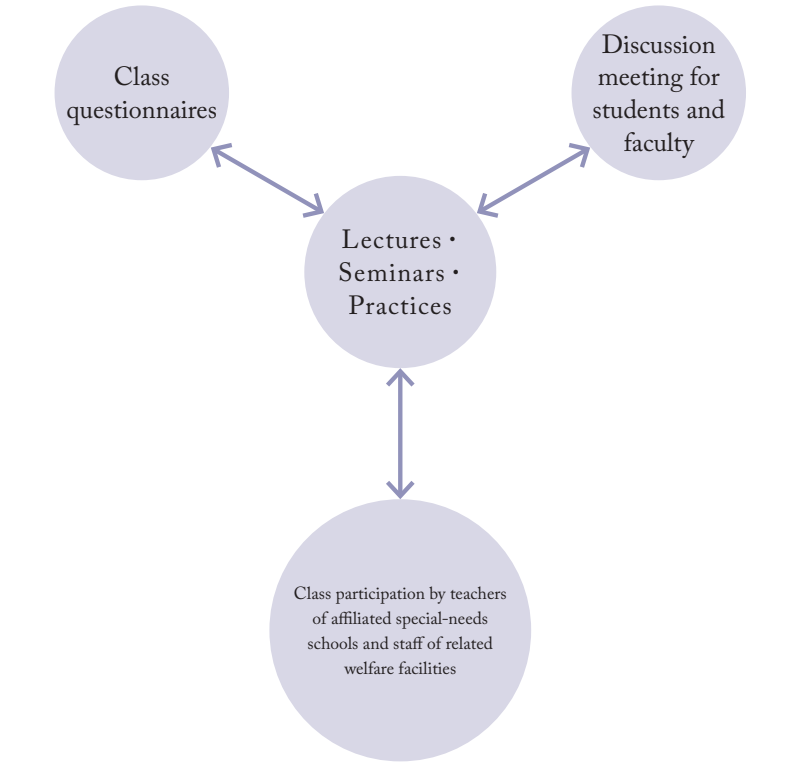
Class questionnaires are conducted, and the results are reflected in the teaching contents and methods for the following year.

Twice a year, all students and faculty members of the College of Disability Sciences participate in a discussion meeting, where students' questions and concerns about learning are answered and connections between students in different academic years and faculty members are built.

In course where exercises and practical training activities are provided, advanced and practical knowledge and skills are taught with involvement of current specialists such as teachers of affiliated special-needs schools and so on.

As a graduation research instruction involved by all faculty members, design presentations, in-term presentations and final presentations are held with a purpose of improving students' research skills and ensuring the quality of their graduation research.

Measures to improve educational abilities



Bachelor of Arts in Disability Sciences

Diploma Policy

We grant the Bachelor of Arts in Disability Sciences to students who have acquired the knowledge and abilities (i.e., Generic Competences) listed under the educational purpose for undergraduate students of the University of Tsukuba. In their learning outcomes, they are expected to achieve the following goals based on the school and college's educational purpose.

- Students have understood the overall philosophy and concepts in Introduction to Disability Sciences and have acquired basic knowledge and skills on education, physiology, and social welfare.
(Relevant competences: Understanding of human sciences, Basic knowledge of Disability Sciences, Practical skills in Disability Sciences)

- Students have gained awareness of the challenges in Disability Sciences, are able to solve such challenges by demonstrating scientific thinking, and have the fundamental abilities necessary to develop specialized research.
(Relevant competences: Analytical thinking skills in Disability Sciences)

- Students have acquired fundamental leadership abilities related to Disability Sciences.
(Relevant competences: Practical skills in Disability Sciences, Leading communication skills in Disability Sciences)

- Students have become proficient in a foreign language, such as English, related to Disability Sciences.
(Relevant competences: Basic knowledge of Disability Sciences, Leading communication skills in Disability Sciences)

Curriculum Policy

For the Bachelor of Arts in Disability Sciences, we organize and implement a curriculum based on the following policies:

General policy

We have established a Disability Sciences Learning Model that allows students to acquire extensive knowledge on disabilities and disabled persons. Models are there to guide students in planning for learning and this model is considered as a basic learning model. Students gain an understanding of the overall philosophy and concepts underpinning Disability Sciences in relation to all fields for special needs education including disability psychology and physiology, disability social welfare, etc. Through this, they acquire basic knowledge about visual and hearing impairments, speech-language disorders, physical disabilities, health impairments, and disability related to aging, the psychology of intellectual and developmental disabilities, and behavior disabilities. Moreover, students acquire foundational knowledge of diverse technologies through clinical research, experiments, investigations, literature studies, etc. required to professionally and scientifically examine the aforementioned fields.

Course Sequence Policy

- Year I: Students learn fundamental principles behind Disability Sciences through Introduction to Disability Sciences I and II, and visit practice sites in Introduction to Practices of Disability Sciences. These courses will stimulate students' motivation to learn. Moreover, students come to understand Disability Sciences as a whole and gain knowledge in specialized fields through Lectures on Principles of Disabilities Problems, Lectures on Welfare of Persons with Disabilities, and Introduction to Special Needs Education.
- Year I and II: Students cultivate basic abilities and think about their future. Students acquire basic knowledge in each specialty through courses such as Special Lecture on Psychology, Physiology

and Pathology of Children with Disabilities, Introduction to Education for Children with Disabilities, Social Welfare, etc. which are based on different types of disabilities. Students gain foundational knowledge in research methods through Psychological Statistics I and Introduction to Methods of Disability Sciences as well as Practical Training. Students think about their learning goals and career paths after graduation through courses like Introduction to Career Planning, Fieldwork in Human Sciences, etc.

Year III and IV: Students acquire research and practical skills related to Disability Sciences and prepare for graduate school. Through Graduation Theses I and II, students become well-versed in research methods, plan and implement research related to Disability Sciences, and prepare for graduate studies.

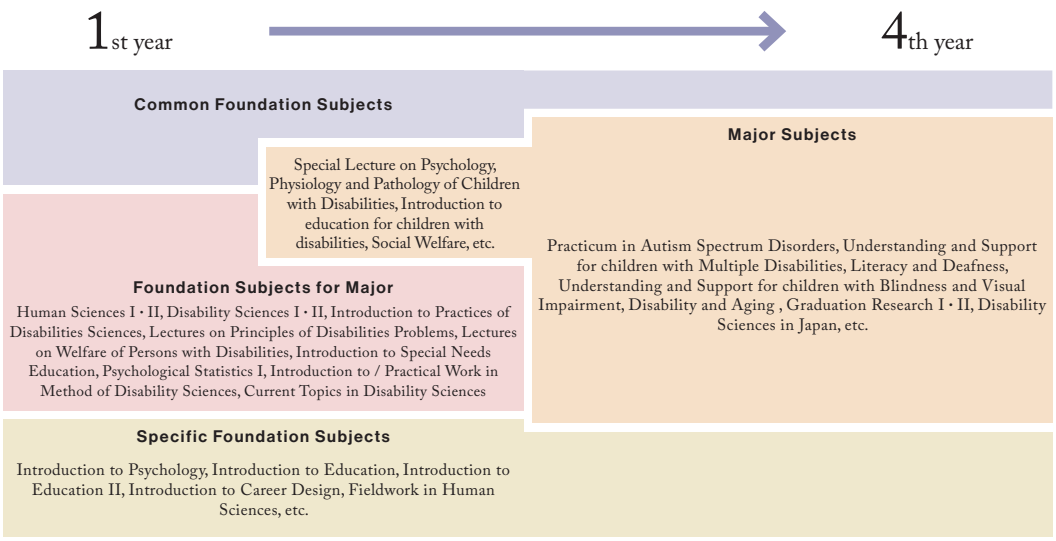
Implementation policy

Based on the Disability Sciences Learning Model, students broadly learn about Disability Sciences by obtaining credits required for graduation according to the learning outcome. In seminars and practical training sessions, we offer a participation-oriented form of learning. We also enlist teachers from affiliated special needs schools, current experts in welfare facilities, and graduate school students in courses, so students are able to gain the most advanced and practical knowledge and skills. International courses, Current Topics in Disability Sciences, taught in English, are also provided.

Policy for evaluation of learning outcomes

In each course, we strictly and fairly evaluate grades as described in the syllabi based on the Curriculum Policy. In particular, we emphasize the graduation thesis as a culmination of learning outcomes across four years, which are examined by two reviewers. All qualified students are required to orally explain overviews and answer questions about their thesis. Graduation thesis is evaluated based on the aforementioned comprehensive results. Moreover, appropriate creation and effective implementation of educational practices in line with the Diploma Policy and Curriculum Policy are verified using class evaluation questionnaires in a majority of courses.

Course taking model in Disability Sciences



Bachelor of Arts in Disability Sciences

Characteristics

We learn how to support students with disabilities through courses such as Skills in Support for Students with Disabilities and participate in activities to support students with disabilities at the university.

Credits earned at overseas universities can be transferred, while credits are awarded for volunteer activities and research activities inside or outside the university and used as requirement for graduation.

Bachelor of Arts in Special Education

Diploma Policy

We grant the Bachelor of Arts in Special Education to students who have acquired the knowledge and abilities (i.e., Generic Competences) based on the educational purpose for undergraduate students of the University of Tsukuba. In their learning outcomes, they will achieve the following goals based on the educational purposes of our school and college:

- Students have gained the specialized knowledge and techniques related to physiology and psychology in disability studies to lead pioneering research on special needs education
(Relevant competences: Understanding of human sciences, Basic knowledge of Disability Sciences)

- Students have acquired professional abilities, such as those required for the teaching profession.
(Relevant competences: Basic knowledge of Disability Sciences, Practical skills in Disability Sciences)

- Students have gained basic awareness of problems related to special needs education and have the ability to scientifically think to find solutions, and develop specialized research.
(Relevant competences: Analytical thinking skills in Disability Sciences)

- Students have acquired fundamental leadership abilities related to special needs education.
(Relevant competences: Practical skills in Disability Sciences, Leading communication skills in Disability Sciences)

- Students have become proficient in a foreign language, such as English, related to special needs education.
(Relevant competences: Basic knowledge of Disability Sciences, Leading communication skills in Disability Sciences)

Curriculum Policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Arts in Special Education.

General Policy

We establish the Special Needs Education Learning Model with the aim of fostering experts who can pioneer research and education in the field. We have wide-ranging subject categories that allow students to gain the required knowledge for obtaining a teacher's license (Type I) for special needs schools. Students are also able to obtain a teacher's license for special needs schools in all disability fields (visual and hearing impairments, intellectual disabilities, physical disabilities, and chronic illness in children).

Course sequence policy

- Year I: We enhance students' motivation and arrange a foundation for learning. Students learn fundamental principles for special needs education through Introductions to Disability Sciences I and II, and visit practical sites, such as affiliated special needs schools through Introduction to Practices of Disability Sciences. Moreover, students gain basic knowledge for special needs education through Lectures on Principles of Disability Problems, Lectures on Welfare of Persons with Disabilities, and Introduction to Special Needs Education.
- Year I and II: Students cultivate basic abilities and think about the future. Students acquire basic knowledge about each specialty through the Special Lecture on Psychology, Physiology and Pathology of Children with Disabilities, Introduction to Education for Children with Disabilities, etc., classified according to specialty. Students learn about the basic methodology through Lectures on Curriculum and Teaching Methods for Students with Disabilities and Introduction to JIRITSU-KATSUDO. Students learn about research methods through Psychological Statistics I and Introduction to

Bachelor of Arts in Special Education

Methods of Disability Sciences and Practical Training. Students think about their learning direction and career paths after graduation through Introduction to Career Planning, Fieldwork in Human Sciences, etc.

Year III and IV: Students learn research and practical techniques for special needs education in affiliated special needs schools. They gain specialized knowledge and practical techniques and skills in major subjects required to obtain a teacher's license for special needs schools. They also gain basic practical abilities through Practicum in the School for the Students with Disabilities (educational training at affiliated special needs schools). Through Graduation Theses I and II, students learn about research methods, plan and implement research related to special needs education, organize their graduation thesis, and undertake study for attending graduate school.

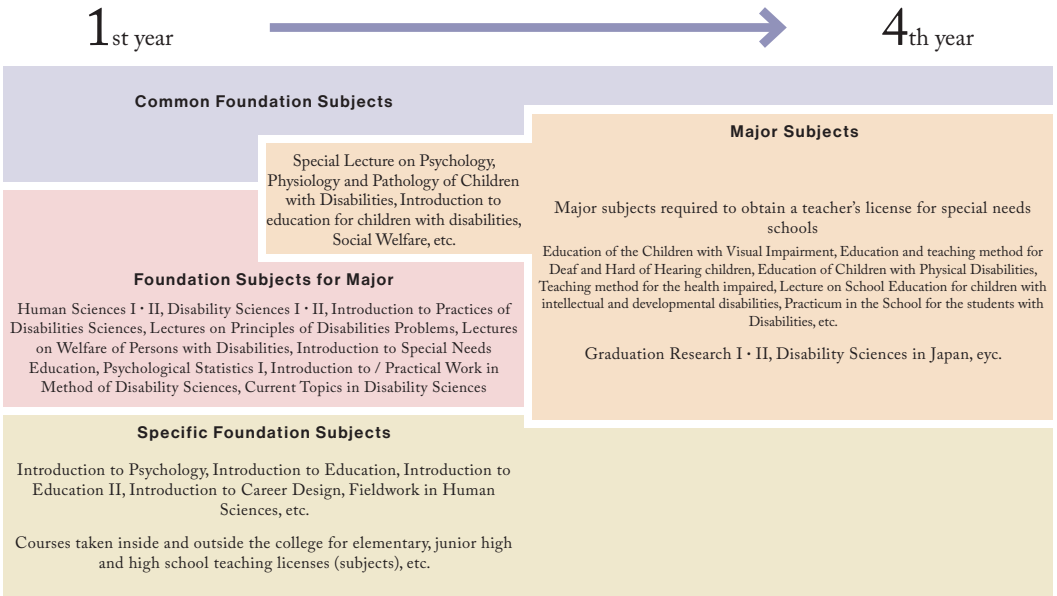
Implementation policy

Based on the Special Needs Education Learning Model, students obtain credits required for graduation according to learning outcomes and credits for the teaching profession curricula for elementary, junior high or high schools. In this way, students are able to obtain teacher's licenses for special needs schools. We use participation-based learning in seminars and practical training sessions. We also attempt to have current experts from affiliated special needs schools and graduate school students participate in courses, and undergraduate students are able to gain the most advanced and practical knowledge and skills. International courses, Current Topics in Disability Sciences, taught in English, are also provided.

Policy for evaluation of learning outcomes

In each course, we strictly and fairly evaluate grades through methods described in the syllabi based on the Curriculum Policy. In particular, we emphasize the graduation thesis as a culmination of the learning outcomes across four years, which is examined by two evaluators. All qualified students are required to orally explain overviews and answer questions about their thesis, which are then evaluated based on the comprehensive results

Course taking model introduction to Special Needs Education



described above. Moreover, class evaluation questionnaires are used for a majority of courses. This is done to verify that the education is appropriately structured and implemented in line with the Diploma Policy and Curriculum Policy in an educationally effective way.

Characteristics

- We learn how to support students with disabilities through courses such as Skills in Support for Students with Disabilities and participate in activities to support students with disabilities at the university.
- Credits earned at overseas universities can be transferred, while credits are awarded for volunteer activities and research activities inside or outside the university and used as requirement for graduation.

Bachelor of Science in Social Work

Diploma Policy

We grant the Bachelor of Science in Social Work to persons who have acquired the knowledge and abilities (i.e., Generic Competences) based on the educational purpose for undergraduate students of the University of Tsukuba. In their learning outcomes, they will achieve the following goals based on the educational purpose of our school and college.

- Students have acquired proficiency in measures and supporting methods for implementation of social welfare philosophy called "normalization", and have a basic understanding of physiology, psychology, and education related to social welfare studies.
(Relevant competences: Understanding of human sciences, Basic knowledge of Disability Sciences)

- Students have acquired the necessary knowledge and skills to clear the Certified Social Worker Examination and become professionals in social welfare administration.
(Relevant competences: Understanding of human sciences, Basic knowledge of Disability Sciences, Practical skills in Disability Sciences)

- Students have acquired specialized knowledge, techniques, and research abilities that allow them to comprehensively and scientifically inquire into theories and practices related to social welfare studies.
(Relevant competences: Understanding of human sciences, Basic knowledge of Disability Sciences, Analytical thinking skills in Disability Sciences)

- Students have gained fundamental leadership abilities related to social welfare studies.
(Relevant competences: Practical skills in Disability Sciences, Leading communication skills in Disability Sciences)

- Students have obtained proficiency in a foreign language, such as English, related to social welfare studies.
(Relevant competences: Basic knowledge of Disability Sciences, Leading communication skills in Disability Sciences)

Curriculum Policy

We organize and implement curricula based on the following policies for programs that allow students to acquire the learning outcomes related to the Bachelor of Science in Social Work.

General Policy

We established the Social Welfare Studies Learning Model with the aim of fostering social workers and scholars pursuing social welfare studies. Students comprehensively and scientifically learn measures and supporting methods for the implementation of the social welfare philosophy, normalization, targeting elderly persons, children with disabilities, and children in foster care environments, who are the targets of modern social welfare. Moreover, regarding medicine and rehabilitation for disabilities, students learn about educational collaboration beyond the framework of conventional social welfare studies, which includes measures such as onsite practical training sessions for social welfare in a combined manner.

Course sequence policy

- Year I: We enhance students' motivation and arrange a foundation for learning.

Students learn fundamental principles of social welfare studies through Introductions to Disability Sciences I and II, and visit practice sites as part of Introduction to Practices of Disability Sciences. Moreover, students obtain basic knowledge for social welfare studies through Lectures on Principles of Disability Problems, Lectures on Welfare of Persons with Disabilities, and Introduction to Special Needs Education.

- Year I and II: Students cultivate basic abilities and think about the future.

With a central focus on designated subjects required to clear the certified social worker examination, students gain basic specialized knowledge through Social Welfare, Introduction to Medicine, Lecture on Welfare for the Aged, etc. Students learn about basic methodologies through Theory and Methods of Social Work and

Professional Basis of Social Work Practice. Students learn research methods through Psychological Statistics I, Introduction to Method of Disability Sciences and Practical Training, and Theory for Social Welfare Research. Students think about their learning direction and career paths after graduation through Introduction to Career Planning, Fieldwork in Human Sciences, etc.

Year III and IV: Students acquire research knowledge and practical techniques.

In Major subjects, such as Social Work Exercise, students gain specialized knowledge and learn practical techniques and skills in a seminar format. Students obtain basic practical abilities through courses such as Social Work Practical Training. In Graduation Theses I and II, students acquire knowledge of research methods, plan and implement research related to social welfare studies, organize their graduation thesis, and prepare for graduate studies.

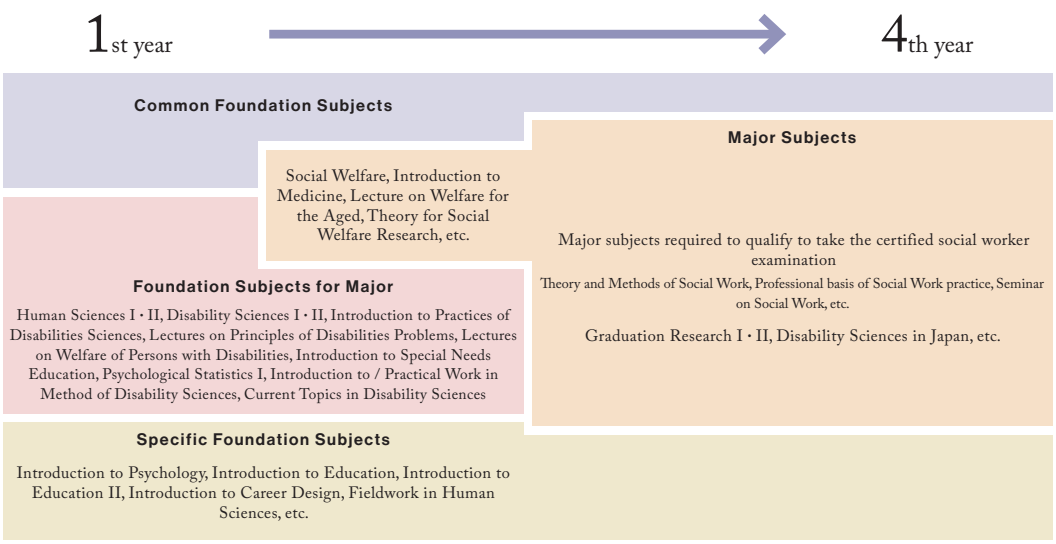
Implementation policy

Based on the Social Welfare Studies Learning Model, students obtain credits required for graduation as per learning outcome. Thus, they are able to obtain the knowledge necessary for the Certified Social Worker Examination. We implement a participation-type form of learning. We also attempt to have current experts from social welfare facilities, participate in courses, and undergraduate students are able to gain the most advanced and practical knowledge and skills. To provide students with international courses, we have introduced Current Topics in Disability Sciences, which are taught in English.

Policy for evaluation of learning outcomes

In each course, we strictly and fairly evaluate grades via the methods described in syllabi based on the Curriculum Policy. In particular, we emphasize the graduation thesis as a culmination of the learning outcomes across four years, which is examined by two evaluators. All qualified students are required to orally explain overviews and answer questions about their thesis. Graduation thesis is evaluated based on the comprehensive parameters described above. Moreover, class evaluation questionnaires are used for a majority of courses. This is done to verify that the education is appropriately structured and implemented in line with the Diploma Policy and

Course taking model in Social Welfare



Bachelor of Science in Social Work

Curriculum Policy in an educationally effective way.

Characteristics

- We learn how to support students with disabilities through courses such as Skills in Support for Students with Disabilities and participate in activities to support students with disabilities at the university.
- Credits earned at overseas universities can be transferred, while credits are awarded for volunteer activities and research activities inside or outside the university and used as requirement for graduation.

School of Life and Environmental Sciences

College of Biological Sciences

- Bachelor of Science

College of Agro-Biological Resource Sciences

- Bachelor of Bioresource Science
- Bachelor of Agricultural Science

College of Geoscience

- Bachelor of Science

Educational purpose

We foster graduates with the skills and outlook required to become future global leaders, and a strong capacity to discover and solve problems. Students develop a comprehensive understanding of biological phenomena of various organisms including humans, the evolution of the earth and dynamics of the environment, and methods of conservation and sustainable use of biological resources.

College of Biological Sciences
College of Agro-Biological Resource Sciences
College of Geoscience

College of Biological Sciences

Bachelor of Science

Educational purpose

We foster graduates who can bridge society and advanced sciences, with a well-developed mechanistic understanding of living organisms and biological systems, research methods for biology, and the significance of advanced research. Our graduates are equipped to become researchers, educators, engineers, and business people who are globally active in various academic fields related to biology.

Desired students

The program is designed for creative people with a passion for living things and biology, who have basic academic skills in natural science and language, and a strong curiosity and inquisitiveness regarding a wide range of diverse life phenomena.

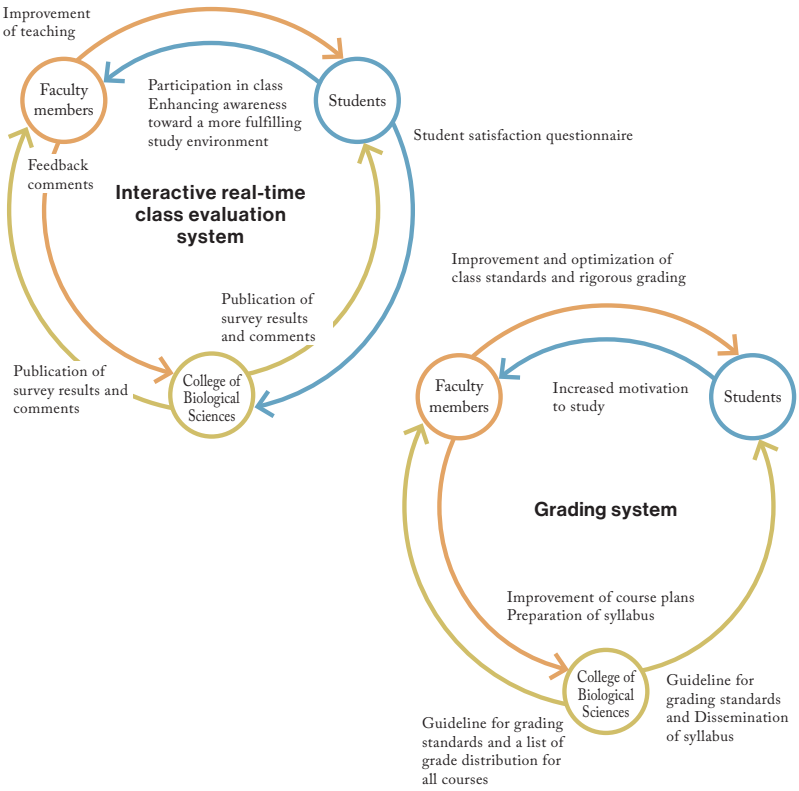
Measures to ensure and improve the quality of education

By making all students aware of the grading criteria guidelines and syllabus in advance, we aim to motivate students to learn while improving the standards to be achieved. The guidelines assign a grade of B to students who achieve their goals, and an A or A+ to those who are particularly outstanding.

In order to verify whether the assignments in each course were appropriate, a list of grade distributions for all courses offered by the College of Biological Sciences is created on the online academic management system TWINS and shared with all faculty members. In addition, for courses which do not meet the guidelines above, reasons and explanations are sought from the instructor. In this way, an appropriate grading system for the entire college has been established.

All courses offered by the College of Biological Sciences are evaluated by students using the TWINS, an interactive real-time system that allows students to freely write their opinions. These opinions, along with the results of university-wide course evaluation questionnaires are used to further improve the courses. Moreover, evaluations and opinions from students and feedback comments on them from instructors are made public for all courses, and the Curriculum Committee and the Chair of the College provide instruction as needed to improve the quality of education throughout the college.

Evaluation of course standard and improvement of classes in the College of Biological Sciences



Bachelor of Science

Diploma Policy

A Bachelor of Science degree will be awarded to students who have acquired the knowledge and abilities (Generic Competences) in accordance with the educational objectives for undergraduate students of the University of Tsukuba, and who are recognized as having achieved the following goals based on the educational purpose of the School and College.

- Understanding of natural science: Students have acquired basic knowledge of natural science, and capacity for scientific thinking.
- Understanding of biology: Students have developed a broad understanding of biology, including fields in addition to their field of specialty, and have acquired understanding of various biology research methods.
- Ability to analyze biological phenomena: Students have acquired the ability to use appropriate methods to analyze data including "big data" obtained through experiments and observations of biological phenomena, and to accurately describe and critically evaluate them.
- International communication abilities: Students have gained sufficient English ability essential for international career growth, and the communication abilities to express their thoughts and opinions accurately and clearly.
- Logical expressive abilities: Students have acquired the ability to read academic papers and have gained logical expressive abilities by reading academic papers in English related to the theme of their graduation research and summarizing the content in a report, etc.
- Problem discovery and solution abilities: Students have acquired abilities to proactively discover and solve problems through the completion of their graduation research in their final year. Moreover, students have gained competency in scientific expression by presenting their research outcomes and publishing their abstract online.

Curriculum policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes appropriate to Bachelor of Science.

General policy

We offer subject groups ranging from fundamental biology to advanced fields such as genome biology, as well as neighboring fields involving agriculture and medicine, designed to enable students to learn the extensive field of biology. We foster students' practical and creative abilities by offering numerous laboratory courses, field laboratory courses, and seminars.

Course sequence policy

During the first year, students develop their basic knowledge of natural science in general, as well as acquiring fundamental knowledge and techniques in general biology through Introductory Subjects and Fundamental Biology Laboratories.

Students choose a field of specialization in their second year, with third year students studying a range of biology major courses both in their specialization as well as other fields. In this way, students acquire a breadth of biological understanding along with specialized knowledge and skills that allow them to engage in graduation research.

In their fourth year, students engage in a graduation research project, which develops their abilities for the proactive discovery and solution of problems, along with skills in the expression of scientific ideas.

Implementation policy

In addition to Fundamental Biology Laboratories during first year, students are required to take a minimum of four additional specialized laboratory classes during the second and third year, and engage in Graduation Research in their chosen laboratory during the fourth year. In this way, we foster student research abilities.

We offer approximately 30 subject classes in English (primarily major subjects for second- and third-year students), to foster student capability for active international roles.

Policy for evaluation of learning outcomes

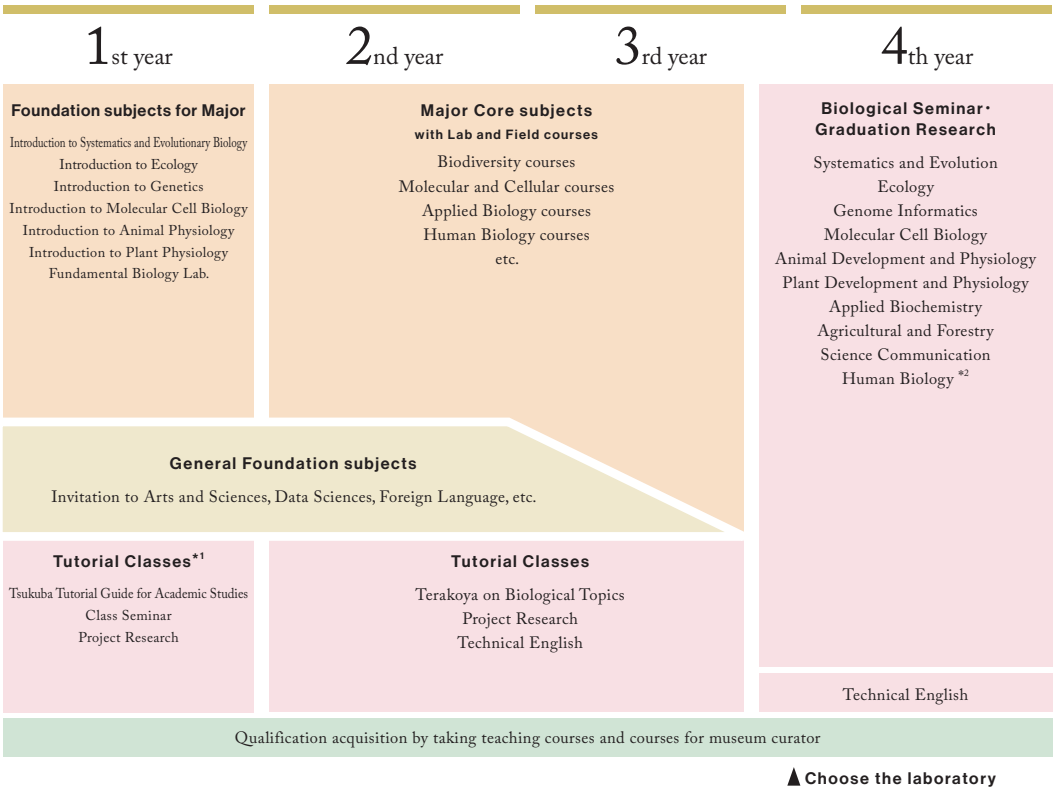
We evaluate the achievement of learning outcomes at the curriculum level in a comprehensive and multifaceted manner, using measures of knowledge acquisition such as GPA, outcomes from graduation research, acquisition of qualifications and licenses, career paths, and the like as indicators.

We evaluate the achievement of learning outcomes at the subject level in a comprehensive and multifaced manner, using grade evaluation based on the attainment of course learning outcomes, learning portfolios, reports, questionnaires and so on as indicators.

Characteristics

In order to further strengthen international communication abilities, Science Commnunication classes in the second and third years and Technical English classes in small groups in the third and fourth years are designated as compulsory courses. Moreover, we offer an exchange program with the University of Manchester, for students who wish to develop their international communication abilities, as a measure to foster graduates with particularly excellent international communication abilities.

Structure of curriculum and competencies to be developed



*1 Faculty members, as tutors, provide an environment in which students' awareness of academic problems is fostered through discussion, encouraging self-motivated and interdisciplinary learning

*2 Students in Human Biology are required to take designated courses principally in their third year. There is also a limited number of students

Educational purpose

We foster graduates with the skills and outlook required to become future global leaders, and a strong capacity to discover and solve problems. Students develop a comprehensive understanding of biological phenomena of various organisms including humans, the evolution of the earth and dynamics of the environment, and methods of conservation and sustainable use of biological resources.

College of Biological Sciences
College of Agro-Biological Resource Sciences
College of Geoscience

College of Agro-Biological Resource Sciences

- Bachelor of Bioresource Science
- Bachelor of Agricultural Science

Educational purpose

In the College of Agro-Biological Resource Sciences, we foster personnel who can contribute to a stable food supply as well as sustainable development and conservation-based use of biological resources in harmony with the environment from a regional and global viewpoint through comprehensive learning related to biological resources that are a foundation for human existence and for safe and enriched lives.

Desired students

Personnel with strong interest in biological resources, agriculture, forestry, and environmental conservation are desired, They should also have flexible ways of thinking that allow them to conduct extensive studies, be motivated to identify their own problems, work to resolve the same, convey information on the same internally and externally, and offer logical explanations.

Measures to ensure and improve the quality of education

Class liaison committee meetings are held every semester with participation of class advisors for the first and second years, course instructors, Faculty Development (FD) Committee members of the College and class representatives to implement continuous curriculum improvements.

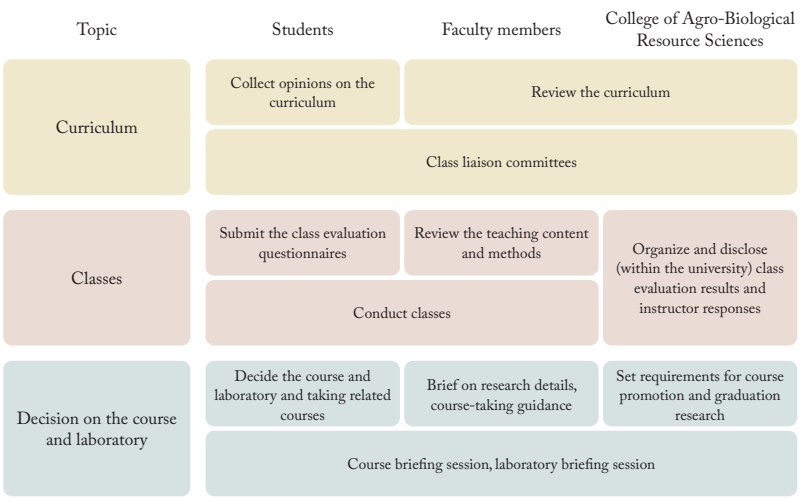
Student class evaluations are conducted for each course, and the results are reported to the instructor of the course, so that teaching contents and methods can be improved.

Our FD activities include class observation by other faculty members, sharing of class materials, strengthened cooperation among courses, study sessions, and meetings for class improvement.

We offer course information sessions for first- and second-year students and laboratory information sessions for third-year students to support smooth progression into the course in the third year and graduation research in the fourth year.

The course requirements for promotion to the third year course and the start of the graduation research in the fourth year are set, and promotion and graduation are approved based on strict grading.

Evaluation and improvement systems for courses and curriculum



Bachelor of Bioresource Science

Diploma Policy

We grant diplomas for Bachelor of Bioresource Science to persons who have acquired knowledge and abilities (that is, Generic Competences), based on the educational purpose for undergraduate students at the University of Tsukuba, who have achieved the following goals based on the educational purpose of our school and college.

- Students have acquired a wide-range knowledge that allows them to substantially understand relationship between the natural environment and human society.
(Relevant competences: Systematic expertise on Bioresource Science, Refinement representing Foundation of Major on Bioresource Science)

- Students have acquired systematic specialized knowledge related to the use of diverse biological resources, abilities to utilize such knowledge, and abilities for further highly advanced specialized pursuits in graduate schools.
(Relevant competences: Systematic expertise on Bioresource Science, International expertise on Bioresource Science, Ability to utilize ICT on Bioresource Science, Ability to cultivate a critical mind on Bioresources)

- Students have gained abilities and communication competency for understanding different cultures necessary for overseas cooperation in the field of development and the use of biological resources.
(Relevant competences: Systematic expertise on Bioresource Science, International expertise on Bioresource Science)

- Students are able to analyze information and knowledge related to the utilization of biological resources through making use of Information and Communication Technology (ICT) and to receive and dispatch information internally and externally.
(Relevant competences: Systematic expertise on Bioresource Science, Refinement representing Foundation of Major on Bioresource Science, Ability to utilize ICT on Bioresource Science)

- Students are motivated to contribute to the development of agriculture and forestry as well as food and environmental problems and have acquired the power to continue their growth even after graduation.
(Relevant competences: Systematic expertise on Bioresource Science, Ability to cultivate a critical mind on Bioresources)

Curriculum policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Bioresource Science.

General policy

We offer the following four courses: Biological Sciences for Agriculture and Forestry, Advanced Life Sciences, Environmental Engineering, and Agriculture and Forestry Social Sciences as major courses in Agrobiological Sciences. During the first half of the curriculum, students study broad subjects in classes that are not classified as part of a specialized field, and common Major Subjects that constitute a foundation for the Bioresource Sciences. During the second half of the curriculum, students take specialized courses, obtain specialized course knowledge and cross-sectional understanding, organize such knowledge, and work on their graduation theses. In this way, students deepen their specialties.

Course sequence policy

- During the first year, students build foundational knowledge as experts with extensive abilities through General Foundation Subjects and Foundation Subjects for their Major. In particular, students will cultivate an interest in a wide range of fields in bioresource science, as well as cultivate problem-solving awareness through deepening their understanding of bioresource science by studying mandatory subjects in the college.
- During the second year, students acquire competency with methods for deepening specialties through learning basic Major Subjects. Students mainly take course subjects to be selected during the third year, but expand interdisciplinary views by taking Major Subjects I, a cross-sectional field subject.
- During the third year, students choose a single course from the four, and deepen their specialties through Major Subjects II of the selected course. Students concentrate on subjects of the course to which they belong, but also gain knowledge in

associated fields through Major Subjects that which are cross-sectional field subjects.

During the fourth year, students continue studying Major Subjects II. Simultaneously, we implement a mandatory Graduation Thesis. By comprehensively applying specialized knowledge and methods learned thus far to a single research assignment, students are able to more deeply understand Bioresouce Sciences.

Implementation policy

During the first year, students gain basic knowledge about bioresource science through Development and Production of Biological Resources and Sustainable Use, Genes and Genomes as Biological Resources, Biological Resources and the Environment, Forefront of Food Science and Technology in Agro-Biological Resource Sciences, and Agro-Biological Resource Science, Exercises. After that, students study Major Subjects.

In the four courses, students deepen specialties by systematically studying Major Subjects. At the same time, students can foster abilities for identifying and solving problems through learning experiments, practical training sessions, and seminars.

Students can deepen interdisciplinary views by learning cross-sectional subjects. The keywords here are food, environment, and internationalism.

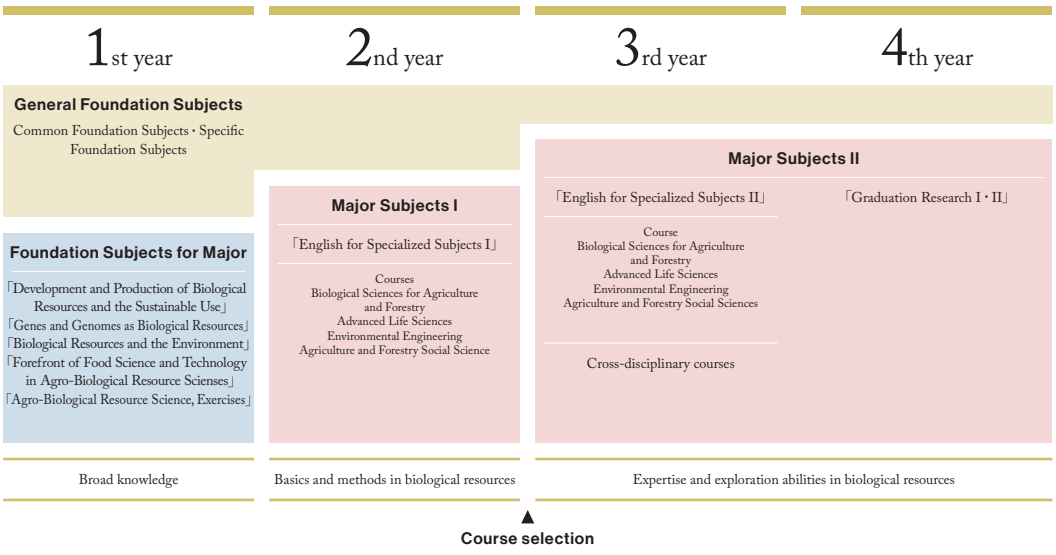
Policy for evaluation of learning outcomes

Faculty members strictly evaluate grades according to the methods described in syllabuses. Moreover, understanding and confirming competences obtained by students are of use for guidance in choosing courses, graduation theses, and career paths.

Characteristics

Students can enhance their internationalism and motivation to contribute to society through hands-on experience at overseas partner universities, the International Internship Courses (training at the JICA Tsukuba Center, etc.), and the Internship on Food and Environment Course (activities at local companies and organizations).

Structure of competencies to be developed and curriculums



Bachelor of Agricultural Science

Diploma Policy

We grant diplomas for Bachelor of Agricultural Science to persons who have acquired knowledge and abilities (that is, Generic Competences) based on the educational purpose for undergraduate students at the University of Tsukuba, who have achieved the following goals based on the educational purpose of our school and college.

- Students have acquired a wide-range knowledge that allows them to substantially understand relationship bewteen the natural environment and human society.
(Relevant competences: Systematic expertise on Agricultural Science, Refinement representing Foundation of Major on Agricultural Science)

- Students have acquired systematic specialized knowledge related to the use of diverse biological resources, abilities to utilize such knowledge, and abilities for further highly advanced specialized pursuits in graduate schools.
(Relevant competences: Systematic expertise on Agricultural Science, International expertise on Agricultural Science, Ability to utilize ICT on Agricultural Science, Ability to cultivate a critical mind on Agriculture)

- Students have gained abilities and communication competency for understanding different cultures necessary for overseas cooperation in the field of development and the use of biological resources.
(Relevant competences: Systematic expertise on Agricultural Science, International expertise on Agricultural Science)

- Students are able to analyze information and knowledge related to the utilization of biological resources through making use of Information and Communication Technology (ICT) and to receive and dispatch information internally and externally.
(Relevant competences: Systematic expertise on Agricultural Science, Refinement representing Foundation of Major on Agricultural Science, Ability to utilize ICT on Agricultural Science)

- Students are motivated to contribute to the development of agriculture and forestry as well as food and environmental problems and have acquired the power to continue their growth even after graduation.
(Relevant competences: Systematic expertise on Agricultural Science, Ability to cultivate a critical mind on Agriculture)

- Students have acquired the basic knowledge and skills necessary to work as experts in Agricultural Sciences in Japan.
(Relevant competences: Systematic expertise on Agricultural Science, Ability to cultivate a critical mind on Agriculture)

Curriculum policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Agricultural Science.

General policy

In the first half of the curriculum, students acquire knowledge on a wide range of liberal arts courses and study courses for a specialized field that form the basis for agricultural science. In the second half of the curriculum, students study specialized and cross-disciplinary courses, participate in internship programs, and improve their expertise by compiling the knowledge in graduation research.

Course sequence policy

- During the first year, students build foundational knowledge as experts with a wide range of abilities by not only acquiring and improving Japanese language proficiency but also taking General Foundation Subjects and Foundation Subjects for Major subjects. In particular, students will cultivate an interest in a wide range of fields in agricultural science, as well as cultivate problem-solving awareness through deepening their understanding of agricultural science by studying mandatory subjects in the college.
- During the second year, students acquire competency with methods for deepening specialties through learning basic Major Subjects. At the same time, students expand interdisciplinary views by taking Major Subjects I, a cross-sectional field subject.
- During the third year, students deepen their specialties through Major Subjects II. Students concentrate on subjects of the course to which they belong. At the same time, they gain knowledge in associated fields through Major Subjects, cross-sectional field subjects.
- During the fourth year, students continue studying Major Subjects II. Simultaneously, we implement the mandatory Graduation Thesis. By comprehensively applying specialized knowledge

and methods learned thus far to a single research assignment, students are able to more deeply understand agricultural science.

In the third or fourth year, students obtain a practical experience about Agricultural Sciences by internship.

Implementation policy

During the first year, students will acquire and improve Japanese language proficiency by taking Japanese language subjects in the Japan-Expert program. In addition, students take Major subjects after learning the foundation of agricultural science by taking Development and Production of Biological Resources and Sustainable Use, Genes and Genomes as Biological Resources, Biological Resources and the Environment, Forefront of Food Science and Technology in Agro-biological Resource Sciences, Agro-Biological Resource Science, Exercises, and Foundation Subjects for Major in the second year.

Students deepen specialties by systematically studying Major Subjects. Students can foster abilities for identifying and solving problems through learning experiments, practical training sessions, and seminars.

Students can deepen interdisciplinary views by learning cross-sectional subjects. The keywords here are food, environment, and internationalism.

Students can obtain a practical experience about agricultural science by Japan-Expert Internship I or II.

Policy for evaluation of learning outcomes

Faculty members strictly evaluate grades accoring to the methods described in syllabuses. Moreover, understanding and confirming competences obtained by students are of use for guidance in choosing courses, graduation theses, and career paths.

Characteristics

Students can enhance their internationalism and motivation to contribute to society through hands-on experience at overseas partner universities, the International Internship Courses (training at the JICA Tsukuba Center, etc.), and the Internship on Food and Environment Course (activities at local companies and organizations).

Educational purpose

We foster graduates with the skills and outlook required to become future global leaders, and a strong capacity to discover and solve problems. Students develop a comprehensive understanding of biological phenomena of various organisms including humans, the evolution of the earth and dynamics of the environment, and methods of conservation and sustainable use of biological resources.

College of Biological Sciences
College of Agro-Biological Resource Sciences
College of Geoscience

College of Geoscience

Bachelor of Science

Educational purpose

We foster personnel who vigorously play active parts from an international standpoint in fields pertaining to society. Such personnel are required to have comprehensive knowledge and ways of thinking concerning the Earth's evolution from its birth to the present time, and various phenomena and processes occurring in the atmosphere, hydrosphere, and lithosphere

Desired students

Personnel with strong interest in and a spirit of inquiry into the global environment and evolution who can voluntarily and proactively engage in problem solution and analyze phenomena from a broad viewpoint are desired.

Measures to ensure and improve the quality of education

Enhanced teaching systems

We provide appropriate course-taking and career guidance at the time when students start their college life and promote to the next level studies. In addition, we improve the syllabus description to better support students in their studies.

Small-class system

Specialized language courses, seminars, and exercise-oriented courses are provided in small class sizes. Each student is given one-on-one attention by a faculty member, who provides detailed and kind instruction.

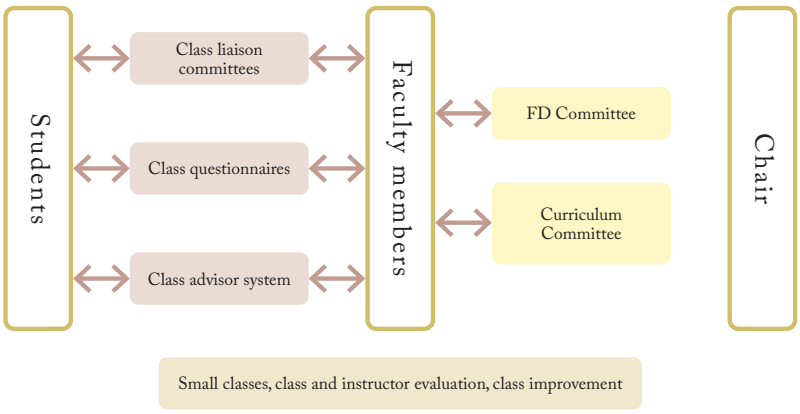
Assurance of research and teaching abilities of faculty

We assign faculty members with highly specialized abilities by conducting peer review by other faculty members to develop finely tuned education and research activities that meet the different needs of students. In addition, the university evaluates and verifies the education and research achievements of the faculty members from a variety of perspectives, using class evaluations by students and faculty evaluations of the University of Tsukuba. We are committed to continuously providing high-quality education.

Measures to improve classes

Faculty development activities are carried out systematically, and individual and groups of faculty members independently develop class contents and methods to improve classes.

Measures to ensure and improve the quality of education



Bachelor of Science

Diploma Policy

We grant diplomas for Bachelor of Science to persons who have acquired the knowledge and abilities (that is, Generic Competences) to become learned based on the educational purpose for undergraduate students of the University of Tsukuba and who have acquired the following specific competences that based on the educational purpose of our school and college.

- Students have gained extensive knowledge related to general natural science beyond specialized fields.
- Students have gained highly specialized knowledge and grasp diverse research methods related to earth science.
- Students have acquired abilities for analyzing scientific data and information in an appropriate method and guiding reasonable inferences.
- Students have acquired skills for using experiment devices and analytical devices indoors in light of points to note in the course of ensuing safety.
- Giving consideration to ensuring safety, protection of personal information, etc., students have acquired abilities for carrying out observation and data collection outdoors.
- Students have acquired abilities for planning and carrying out research and investigation and for accurately organizing and making presentations of outcomes of the same in the form of graduation theses, reports, etc.

Curriculum Policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Science.

General policy

In the College of Geoscience, we offer two major courses in Geoenvironmental Sciences for handling the current global environment and in Earth Evolution Science for handling global history. In major courses, students learn Human Geography, Regional Geography, Atmospheric Sciences, Hydrological Sciences, Geomorphology, and Analysis of Environmental Dynamics. (The above subjects are major courses in Geoenvironmental Sciences.) Students also learn Historical Geology – Paleontologybiology, Stratigraphy, Geodynamics, Petrology, Mineralogy, and Resource Geoscience. (The above subjects are major courses in Earth Evolution Science.)

Course sequence policy

During the first year, students obtain basic knowledge related to overall studies including humanities and social science studies with a central focus on natural science. Students also acquire basic abilities necessary after the second year through study in the Introductory Subjects for geoscience. During the second year, students learn Major Subjects intended for an introduction to geoscience as well as mathematics, physics, chemistry, English, etc. necessary for geoscience and improve their ability to use computers and laboratory equipment for calculations, organization of materials, and presentations. Moreover, students take specialized English so as to acquire reading and communication abilities in English. During the third year, courses are divided into major courses and students mainly learn Major Subjects. By taking Major Subjects comprising lectures, seminars, laboratory experiments, and outdoor experiments, students deepen their specialized knowledge. Moreover, through onsite observation, measurement, and

material collection, we provide many outdoor experiments observing various assignments in the field and students acquire abilities for outdoor investigation and indoor operations. Moreover, in addition to major courses, student can choose minors including major courses in the Interdisciplinary Program in Life and Environmental Sciences (a course for foreign students). During the fourth year, students mainly work on their graduation theses. While discussing matters with the faculty members and graduate school students, students proceed to investigations and experiments. In this way, students enhance abilities for research planning, performing, and overall controlling as well as accurately conveying research outcomes to a third party.

Implementation policy

In order to urge students' subjective learning, we prepare textbooks by the faculty members in charge in the college and make use of e-learning systems. We offer internship subjects as a part of collaboration with industrial circles and local communities as well as career path education. Moreover, we arrange supporting environments for learning, such as laboratories and computers, independently by our college and jointly with schools and associated colleges. Furthermore, in order to promote internationalization, we offer small-size specialized language classes and international outdoor experiments and recommend that students take English lectures in major courses in the Interdisciplinary Program in Life and Environmental Sciences.

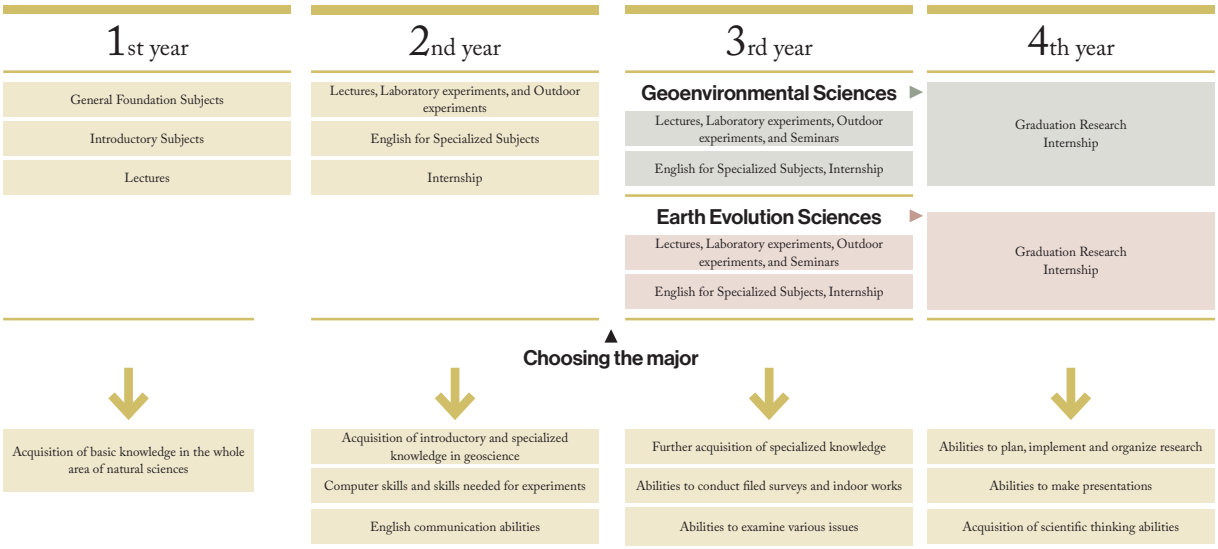
Policy for evaluation of learning outcomes

We impose examinations (written and oral) and reports on students based on the category of classes (e.g., lectures, seminars, experiments, and graduation theses) and evaluate grades according to the extent of goal achievements.

Characteristics

Field experiments, the special features of the College of Geoscience, are conducted in collaboration/cooperation with the university's affiliated research centers and training facilities, where large waterways and heat and water balance observation plots are installed to support the achievement of research and educational goals. By cooperating in activities for the Geology and Geography Olympics and the establishment of

Structure of curriculum and competencies to be developed



Bachelor of Science

geoparks, we provide the students with opportunities to have contact with society through the studies of geoscience.

School of Science and Engineering

College of Mathematics

- Bachelor of Science

College of Physics

- Bachelor of Science

College of Chemistry

- Bachelor of Science

College of Engineering Sciences

- Bachelor of Engineering

College of Engineering Systems

- Bachelor of Engineering

College of Policy and Planning Sciences

- Bachelor of Policy and Planning Sciences

Bachelor's Program in Interdisciplinary Engineering

- Bachelor of Engineering

Educational purpose

To develop global human resources with the extensive knowledge needed to realize a sustainable society, and having specialties from the basics to applications of science and technology, flexibility in thinking, competencies for intellectual creativity with problem finding and solving skills, broad perspectives, enriched sense of humanity, and collaboration skills to work in teams, all with a view to contributing to the international society.

College of Mathematics
College of Physics
College of Chemistry
College of Engineering Sciences
College of Engineering Systems
College of Policy and Planning Sciences
Bachelor's Program in Interdisciplinary Engineering

College of Mathematics

Bachelor of Science

Educational purpose

The educational purpose is to require students to gain extensive basic knowledge in modern mathematics ranging from pure mathematics to applied mathematics. In this way, students can acquire advanced logical abilities and analyze and resolve problems based on an understanding of the structure of problems. As such, we foster global personnel with mathematical thinking abilities who vigorously play active parts in various fields in society.

Desired students

Personnel who have a passion for mathematics and are persistent in thinking about answers when there are unclear matters are desired. Moreover, personnel who desire to acquire logical (mathematical) thinking abilities are desired.

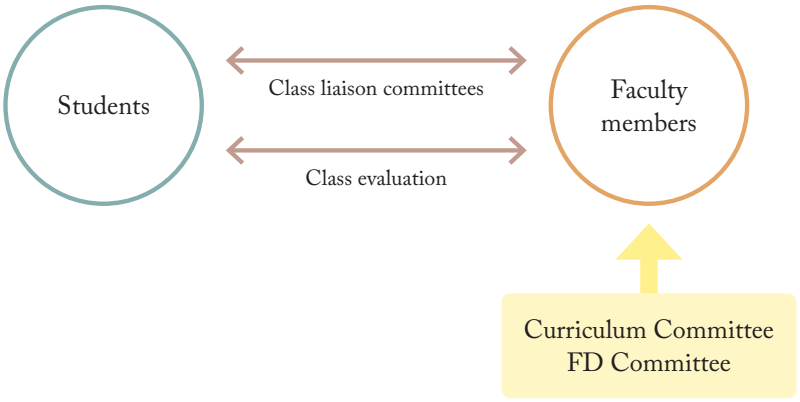
Measures to ensure and improve the quality of education

In addition to graduation research conducted in a small group of several students per laboratory, small seminar-style classes are offered from the second year. In these classes, students prepare and give presentations to check their own level of understanding and improve their understanding through direct discussions with the faculty members.

For smooth communication between the students and faculty members, class liaison committees are organized at the College of Mathematics. Based on class questionnaires answered by the students, as well as other data, we hold discussion meetings for students and faculty (class liaison meetings) twice a year in spring and autumn. The candid opinions exchanged in these meetings are used for educational improvement.

For courses with multiple classes, such as calculus and linear algebra, course liaison committees are organized to coordinate the contents and improve lecture techniques among the instructors.

Measures to ensure and improve the quality of education (conceptual diagram)



Bachelor of Science

Diploma Policy

We grant diplomas for Bachelor of Science to persons who have acquired the knowledge and abilities (that is, Generic Competences) to become learned based on the educational purpose for undergraduate students of the University of Tsukuba. In their learning outcomes, they will achieve the following goals based on the educational purpose of our school and college.

- Students have acquired basic knowledge in natural science and scientific thinking methods.
(Relevant competences:Basic knowledge of natural sciences)

- Students are able to freely make use of Calculus and Linear Algebra, which are foundations of mathematics.
(Relevant competences: Basic knowledge of natural sciences)

- Students have understood mathematical logic development methods as well as acquired mathematical ways of thinking, logical power, and applied abilities.
(Relevant competences: Expertise on mathematics (algebra, analysis, geometry, mathematics of information))

- Students have acquired specialized knowledge in any of the fields of Algebra, Geometry, Analysis, and Mathematics for Informatics.
(Relevant competences: Expertise on mathematics (algebra, analysis, geometry, mathematics of information))

- Students have acquired basic English proficiency and presentation abilities related to specialized fields.
(Relevant competences: Expertise on mathematics (algebra, analysis, geometry, mathematics of information), English skills for mathematics)

Curriculum Policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Science.

General policy

Mathematics is a remarkably systematic academic study with international universality and its curriculum is almost the same anywhere in many universities in developed countries. In line with this, we organize and implement curricula so that students will be able to move along the sequence smoothly, ranging from the basic level to specialized, developed, and applied levels.

Course sequence policy

- During the first year, students acquire basic knowledge related to overall natural science and learn Calculus and Linear Algebra, which are foundations for all mathematics as Foundation Subjects for Major. In addition to lectures in the aforementioned studies, seminar hours are included, during which students actually solve problems. Moreover, students widely learn non-specialized fields such as languages as Common Foundation Subjects and Specific Foundation Subjects.
- The second year is the period for study from the basic level to the development level.
During such period, students prepare for more profound knowledge about Calculus and Linear Algebra and specialized fields (e.g., Set Theory, Phases, Curved Lines, and Curved Surfaces). We also offer seminar-form Mathematics in Foreign Language I for improving linguistic proficiency and presentation abilities.
- During the third year, students learn General Foundation Subjects for specialized fields. We offer lectures and seminars that allow students to obtain core knowledge about the four fields of Algebra, Geometry, Analysis, and Information. We also offer seminar-form Mathematics in Foreign Language II. The Introduction to the Study of Graduation Thesis allows for smooth

shifting to graduation theses engaged in during the fourth year.

During the fourth year, students participate in seminars and laboratories. They join small-class and seminar-form graduation theses groups comprising about several persons in each seminar and laboratory. At the same time, we offer lectures related to specialized themes.

Implementation policy

Seminar hours are offered for the main subjects, in which students solve examples and development problems on their own. In this way, students are able to deepen their understanding of lectures.

Subjects urging interests (e.g., Introduction to Mathematics and Mathematics in Foreign Language) are prepared.

English textbooks are used for some classes and seminars. In this way, students are able to brush up their expressions and language proficiency abilities and consider internationalization.

Policy for evaluation of learning outcomes

In Major Subjects and Foundation Subjects for Major, we fairly and strictly conduct grade evaluations. Moreover, in order to verify whether or not education is being effectively implemented, we offer class evaluation questionnaires concerning all Major Subjects and Foundation Subjects for Major.

Characteristics

The curriculum design helps students acquire teaching license (mathematics).

We regularly organize "Tenarai-juku" (tutorial class) for mathematics, where students can get answers for their questions, including those concerning the calculus and the linear algebra which are core courses in the first year.

At "Career Path Seminar in the College of Mathematics", in order to broadly learn about the high need for mathematics in society and the career path after graduating from the College of Mathematics, company representatives explain the strengths of students who majored in mathematics.

Structure of competencies to be developed and curriculums

1st year	2nd year	3rd year	4th year
Foundation Subjects for Major Introduction to Mathematics Mathematics Literacy 1・2・3 Calculus 1・2・3 Linear Algebra 1・2・3	**Major Subjects** Advanced Linear Algebra Vector Analysis and Geomety Introduction to Differential Equations Introduction to Set Theory Introduction to Algebra Introduction to Topology Surface Theory Introduction to Complex Analysis Exercise in Computer Statistics Mathematics in Foreign Language I Career Path Seminar in the College of Mathematics	Introduction to the Study of Graduation Research Mathematics in Foreign Language II	Graduation Research
		Major Subjects in Algebra Algebra IA・IB	Algebra II・III・IV
		Major Subjects in Geometry Topology A・B Introduction to Manifolds	Topology C Differential Geometry
		Major Subjects in Analysis Lebesgue Integral Partial Differential Equation Introduction to Functional Anslysis Probability Theory I・II	Functional Analysis Complex Analysis
		Major Subjects in Information Mathematics Mathematical Logic I・II Mathematical Statistics I・II Computer Mathematics I・II	
General Foundation Subjects Common Foundation Subjects Specific Foundation Subjects			
Basic knowledge of natural science in general	Obtain more profound theory, prepare for specialized fields	Fundamental knowledge in the fields of algebra, geometry, analysis, and information.	Graduation research with small-group seminars
Basic skills for studying specialized mathematics	Improve language and presentation skills	Improve language and presentation skills, preparation for graduation research	More specialized knowledge

Educational purpose

To develop global human resources with the extensive knowledge needed to realize a sustainable society, and having specialties from the basics to applications of science and technology, flexibility in thinking, competencies for intellectual creativity with problem finding and solving skills, broad perspectives, enriched sense of humanity, and collaboration skills to work in teams, all with a view to contributing to the international society.

College of Mathematics
College of Physics
College of Chemistry
College of Engineering Sciences
College of Engineering Systems
College of Policy and Planning Sciences
Bachelor's Program in Interdisciplinary Engineering

College of Physics

Bachelor of Science

Educational purpose

We foster personnel who possess the solid foundations and advanced specialized knowledge of modern physics, which is diversely developing. Students also gain flexible thinking ability through the processes of pursuing the truth as well as the capability for getting insights about the true nature of things and thereby solving the actual causes of problems. Utilizing their abilities, they will play an active part in various areas in the society.

Desired students

We seek candidates who possess the basic academic abilities in various high school subjects and the ability to further study physics in the university. Students are expected to have a wide perspective of view, learn by themselves, and flexibly deal with unknown matters.

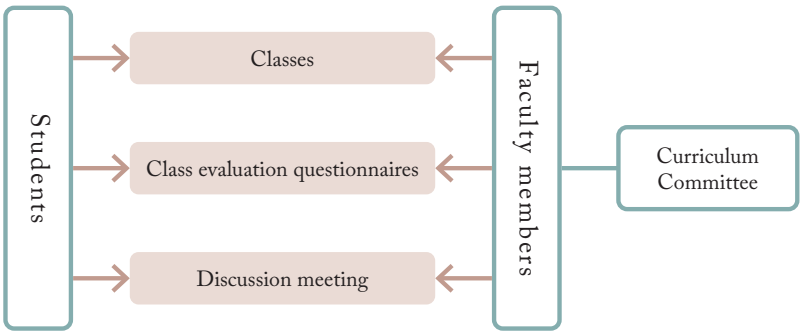
Measures to ensure and improve the quality of education

Rigorous grading: Grading is done rigorously based on exams and reports submitted.

Standing Curriculum Committee: The Curriculum Committee, consisting of approximately 10 faculty members, meets several times each semester to review and improve the classes.

Questionnaires for class improvement and discussion meetings between faculty members and students: Students take the initiative in conducting questionnaire surveys for all the major subjects, and the results of the surveys are made public. Based on the class questionnaires, discussion meetings for students and faculty are held every year for class improvement.

Measures to ensure and improve the quality of education (conceptual diagram)



Bachelor of Science

Diploma Policy

We grant diplomas for Bachelor of Science to persons who have acquired the knowledge and abilities (Generic Competences) to accomplish the educational purpose for undergraduate students of University of Tsukuba. In their learning outcomes, they have achieved the following goals based on the educational purpose of our school and college.

- Understanding concepts and ways of thinking that are bases for natural science, and abilities to solve problems (Calculus, linear algebra, and courses in Chemistry and Biology, etc.)
(Relevant competences: Understanding natural sciences)

- Understanding concepts and ways of thinking that are bases for classical physics, and abilities to solve problems (Mechanics, electromagnetics, analytical mechanics, thermodynamics, etc.)
(Relevant competences: Understanding classical physics)

- Understanding concepts and ways of thinking that are bases for modern physics, and abilities to solve problems (Quantum mechanics, statistical mechanics, relativity, etc.)
(Relevant competences: Understanding modern physics)

- Understanding concepts and ideas of specialized physics in each field, and abilities to solve problems (Graduation research, physics in each specialized field)
(Relevant competences: Understanding specialized physics)

- Abilities to implement computer programs and to obtain proper physical insights from numerical results (Graduation research, computational physics)
(Relevant competences: Computational analysis skills)

- Understanding principles and operation of experiments, and abilities to properly obtain physical meaning from the results (Graduation research, physics experiments, experimental physics, etc.)
(Relevant competences: Ability to analyze experiments)

- Ability to express and discuss physics content in English and other languages (Graduation research, scientific English, etc.)
(Relevant competences: Professional dialogue skills)

- Ability to explore and solve problems in physics independently (Graduation research, problem exploration practice seminar, etc.)
(Relevant competences: Problem solving skills)

Curriculum Policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Science.

General policy

We organize a systematic curriculum for students to gain basic knowledge related to overall natural science and to effectively acquire specific competence. In order for students to proactively study, we select the most appropriate subject format (lecture, seminar, experiment).

Course sequence policy

Physics has been developed as a process based on what predecessors have built. In this way, new discoveries are accumulated in a repeated manner. The modern physics have been significantly developed and highly specialized in each field. At the same time, basic concepts are universally used in different fields. During the four years in the College, it is necessary to learn in order, starting from classical physics, moving to basic subjects forming a core of the modern physics, then, to highly specialized developing subjects. A standard year of learning is set for each subject.

- The first year: Students understand classical physics of point mass and fields and widely learn natural science subjects, such as mathematics, chemistry, biology, and earth science.
- The second year: Students further study classical physics and acquire basic knowledge in quantum mechanics, etc., forming the core of the modern physics.
- The third year: Students study more advanced topics in modern physics as well as specialized physics.
- The fourth year: Each student joins a laboratory to study specialized physics and conduct graduation research.

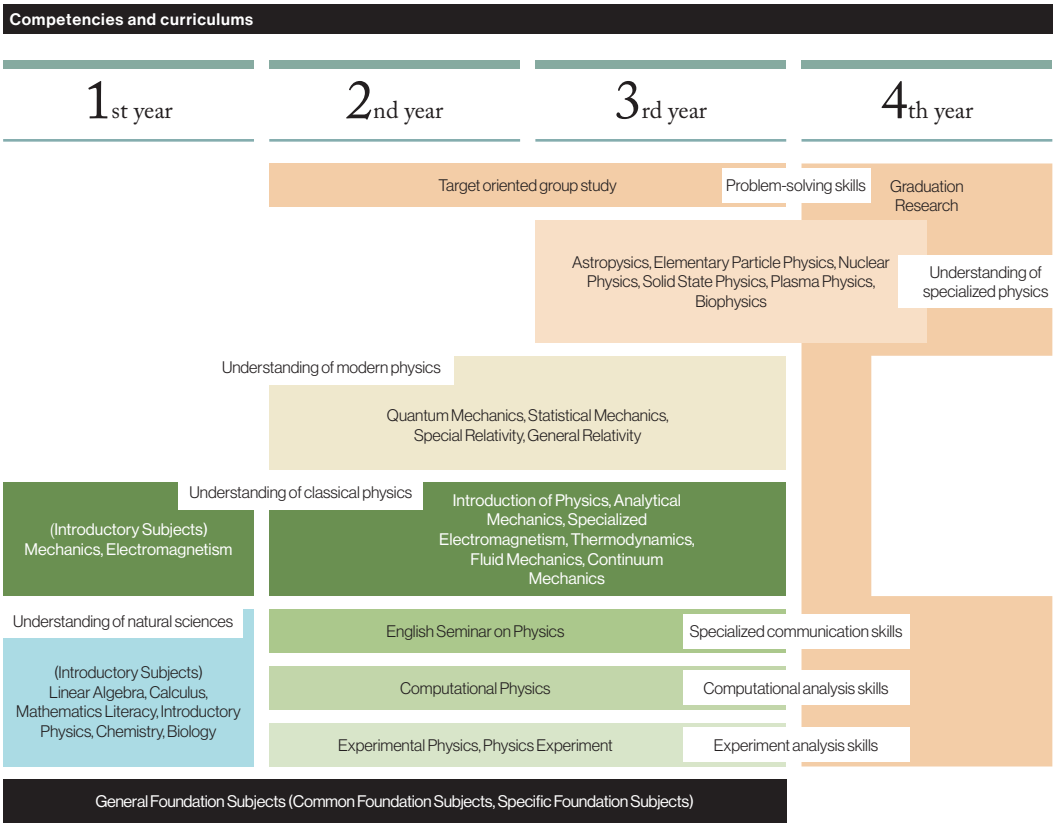
Implementation policy

We offer courses that utilize e-learning to promote active learning, and courses that explore issues to foster creativity. Furthermore, in order to

produce human resources who can conduct research on the international stage, we have established courses taught by foreign faculty members.

Policy for evaluation of learning outcomes

We evaluate learning outcomes based on the status of acquisition of abilities written in the Diploma Policy.



Educational purpose

To develop global human resources with the extensive knowledge needed to realize a sustainable society, and having specialties from the basics to applications of science and technology, flexibility in thinking, competencies for intellectual creativity with problem finding and solving skills, broad perspectives, enriched sense of humanity, and collaboration skills to work in teams, all with a view to contributing to the international society.

College of Mathematics
College of Physics
College of Chemistry
College of Engineering Sciences
College of Engineering Systems
College of Policy and Planning Sciences
Bachelor's Program in Interdisciplinary Engineering

College of Chemistry

■ Bachelor of Science

Educational purpose

We foster personnel with basic and extensive chemistry knowledge necessary for: (i) the pursuit of universal principles in the natural world as well as unknown substances and unknown phenomena; (ii) the creation of functional substances and materials development; (iii) the solution of environmental problems and energy problems; and (iv) the elucidation of life phenomena at the molecular level. Based on this, we aim to develop students with flexible ways of thinking backed by the aforementioned knowledge and understanding who are able to play vigorously active roles internationally.

Desired students

Personnel with sufficient academic abilities related to chemistry and basic academic skills in the associated fields who are motivated to pursue universal principles in the natural world and seeking new substances and unknown phenomena are desired.

Measures to ensure and improve the quality of education

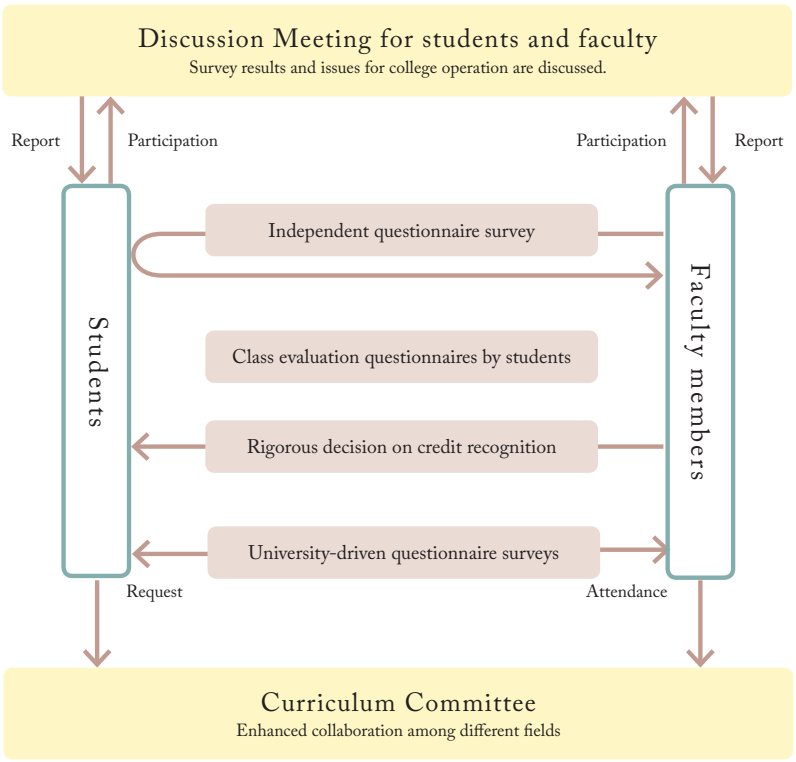
Every year, class questionnaire evaluations are conducted independently by students and by the university. The results of these surveys, along with other issues for college operation, are discussed at the discussion meetings, where students and faculty members gather together. The minutes of these meetings are published in the form of an annual report.

The instructor of each course carries out his/her own survey and uses the results to improve educational effects.

Results of the questionnaires above and other data are used to review the class contents and link between courses for each field of chemistry (inorganic chemistry, organic chemistry, and physical chemistry) as needed. In addition, the Curriculum Committee works to strengthen links among different fields.

The results of final exams and reports are comprehensively evaluated for rigorous decision on credit recognition.

Discussion meetings for students and faculty, and the Curriculum Committee



Bachelor of Science

Diploma Policy

We grant diplomas for Bachelor of Science to persons who have acquired the knowledge and abilities (that is, Generic Competences) required based on the educational purpose for undergraduate students of the University of Tsukuba. In their learning outcomes, they will achieve the following goals based on the educational purpose of our school and college.

- Students have acquired basic knowledge in natural science and scientific thinking methods.
(Relevant competences: 1 Knowledge and understanding of basic chemistry, 2 Knowledge and understanding of, and ability to apply, inorganic and analytical chemistry, 3 Knowledge, understanding, and application of the fields of thermodynamics and statistical, 4 Knowledge and understanding of the fields of quantum chemistry and spectroscopy and the ability to apply, 5 Knowledge and understanding of the field of organic chemistry and the ability to apply them, 6 Knowledge and understanding of the field of biochemistry and the ability to apply them, 7 Ability to carry out chemical experiments)

- Students have understood substances at the level of molecular, atomic, electronic, and chemical bonding states.
(Relevant competences: 1 Knowledge and understanding of basic chemistry, 2 Knowledge and understanding of, and ability to apply, inorganic and analytical chemistry, 3 Knowledge, understanding, and application of the fields of thermodynamics and statistical, 4 Knowledge and understanding of the fields of quantum chemistry and spectroscopy and the ability to apply, 5 Knowledge and understanding of the field of organic chemistry and the ability to apply them, 6 Knowledge and understanding of the field of biochemistry and the ability to apply them)

- Students have basic chemistry knowledge necessary for: (i) pursuing universal principles in the natural world as well as unknown substances and unknown phenomena; (ii) creation of functional substances and materials development; (iii) solution of environmental problems and energy problems; and (iv) elucidation of life phenomena.
(Relevant competences: 1 Knowledge and understanding of basic chemistry, 2 Knowledge and understanding of, and ability to apply, inorganic and analytical chemistry, 3 Knowledge, understanding, and application of the fields of thermodynamics and statistical, 4 Knowledge and understanding of the fields of quantum chemistry and spectroscopy and the ability to apply, 5 Knowledge and understanding of the field of organic chemistry and the ability to apply them, 6 Knowledge and understanding of the field of biochemistry and the ability to apply them, 7 Ability to carry out chemical experiments)

- Based on basic and essential knowledge about chemistry as mentioned above, students have flexible ways of thinking backed by the aforementioned knowledge and understanding, and they are able to play vigorously active roles internationally.
(Relevant competences: 1 Knowledge and understanding of basic chemistry, 8 Ability to understand and express chemical English)

- Students are able to solve chemistry-related problems through cooperation with other people.
(Relevant competences: All of the Specific Competences)

Curriculum Policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Science.

General policy

We organize and implement a curriculum that allows students to move from basic knowledge to specialized knowledge so as to foster a chemistry specialty over four years. We offer class subjects with a central focus on lectures and experiments. We also provide seminar subjects that allow students to proactively engage in learning activities and a Graduation Project and Thesis for fostering comprehensive abilities related to chemistry.

Course sequence policy

- During the first year, we offer education with a central focus on lectures so that students acquire basic knowledge related to overall natural science and basic knowledge for learning specialized chemistry.
- During the second year and the third year, in order for students to acquire extensive chemistry knowledge and techniques from the basic level to the specialized level, we offer practical training sessions and seminars according to systematic lectures and the progression of lectures in specialized chemistry. Moreover, in order to acquire abilities for reaching international chemical information, we provide lectures related to chemistry English.
- During the fourth year, in order for students to learn knowledge about advanced chemistry and learn methods for uncovering relevant information concerning chemistry research and international chemistry information for inquiries into the truth, students engage in the Graduation Research and Thesis.

Implementation policy

- We offer well-balanced lectures for Basic Chemistry and Advanced Chemistry so that the level of chemistry increases sequentially according

to the year. In order to acquire experimental methods for understanding natural phenomena, we implement practical training sessions.

In order for students to obtain the research methods that allow them to elucidate the truth about nature and unknown phenomena, we have a graduation project and thesis.

We offer chemistry lectures in English so students obtain English proficiency, which is internationally necessary in the field of chemistry.

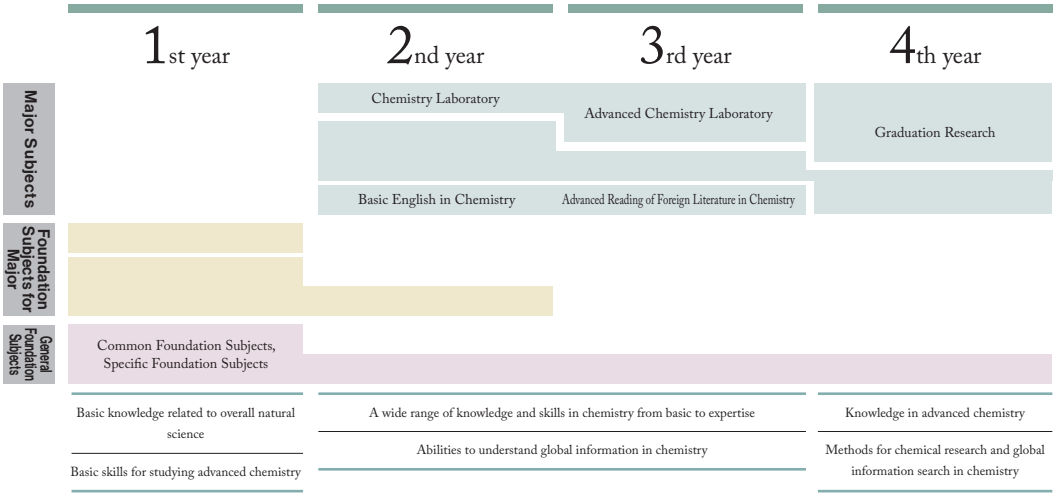
Policy for evaluation of learning outcomes

We set achievement goals for each class subject, and comprehensively evaluate achievement in lectures through final tests, quizzes, reports, presentations, etc., and in practical training through reports, attitudes toward experiments, questions and answers, etc.

Characteristics

In order to obtain deeper understanding of what is learned in lectures, students take specialized Advanced Chemistry Laboratory courses in their third year, where focus is placed not only on theory but also on acquisition of experimental methods.

Educational Plan



Subjects in College of Chemistry

1st year	2nd year	3rd year	4th year
Introduction to Chemistry	Inorganic Chemistry I	Inorganic Chemistry II	Graduation Research
Chemistry 1	Analytical Chemistry	Chemistry of Inorganic Elements	Advanced Lecture in Inorganic Analytical Chemistry
Chemistry 2	Physical Chemistry I・II	Nuclear Chemistry	Advanced Lecture in Physical Chemistry
Chemistry 3	Organic Chemistry I・II	Molecular Structure Analysis	Advanced Lecture in Organic Chemistry
Basic Chemistry Seminar	Biochemistry	Physical Chemistry III・IV	Advanced Lecture in Biomolecular Chemistry
	Basic English in Chemistry	Organic Chemistry III・IV	
	Chemistry Laboratory	Seminar in Advanced Chemistry	
	Chemistry Laboratory II	Advanced Chemistry Laboratory I・II	
		Advanced Reading of Foreign Literature in Chemistry	
Common Foundation Subjects	**Common Foundation Subjects**	Computational Chemistry Bioorganic Chemistry	
Multidisciplinary Subjects, English	Multidisciplinary Subjects		
Information Literacy	Physical Education		
Physical Education			

Educational purpose

To develop global human resources with the extensive knowledge needed to realize a sustainable society, and having specialties from the basics to applications of science and technology, flexibility in thinking, competencies for intellectual creativity with problem finding and solving skills, broad perspectives, enriched sense of humanity, and collaboration skills to work in teams, all with a view to contributing to the international society.

College of Mathematics
College of Physics
College of Chemistry
College of Engineering Sciences
College of Engineering Systems
College of Policy and Planning Sciences
Bachelor's Program in Interdisciplinary Engineering

College of Engineering Sciences

■ Bachelor of Engineering

Educational purpose

We foster engineers and researchers with enriched creativity who understand the fundamental principles for science and technology that constitute a foundation for the most advanced engineering necessary for continuing to maintain and develop our society and who are able to develop such science and technology.

Desired students

Personnel with mathematic and logical ways of thinking that constitute a foundation for understanding fundamental principles in advanced science and with basic scientific knowledge in physics, chemistry, etc. who are interested in advanced engineering applications are desired.

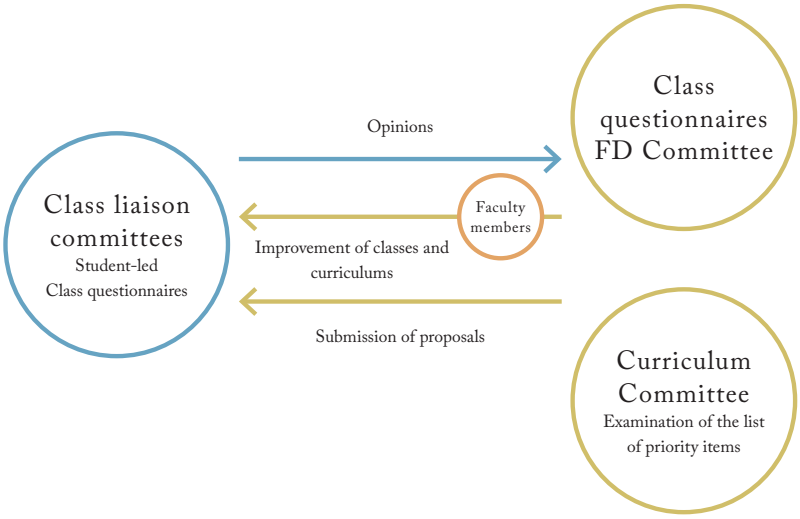
Measures to ensure and improve the quality of education

In order to understand the rapidly evolving advanced technology, it is essential to review the educational contents from time to time. Therefore, we improve our educational abilities through the following measures.

For the Foundation Subjects for Major (i.e., mathematics, physics, chemistry), which are the common foundation for all engineering fields, as well as for the specialized common core courses, we conduct class questionnaires and work on educational improvement through the Curriculum Committee meetings held three times a year and the FD Committee meetings. Discussions are made based on comments from students, and the results of the questionnaires are fed back to improve classes and are used to enhance the educational abilities of the faculty. For all classes, from Foundation Subjects for Major to Major Subjects, a list of priority items to be learned in each class is created, which is used by the Curriculum Committee to review the continuity between courses and class contents as needed. The results of student-led class questionnaire surveys are also used to improve the classes from the students' perspective.

In the four-class system, class advisers play a central role in providing detailed follow-up to students who are not doing well academically.

Measures to improve educational abilities



Bachelor of Engineering

Diploma Policy

We grant diplomas for Bachelor of Engineering to persons who have acquired the knowledge and abilities (that is, Generic Competences) to become learned based on the educational purpose for undergraduate students of the University of Tsukuba. Such persons are required to obtain basic abilities (i.e., abilities for understanding physics, chemistry, and biology, and those for mathematical logics and calculation) as well as specialized skills (i.e., from among "applied physics and measurement,""electronics and quantum engineering and nanoscience," "condensed matter physics and materials engineering," and "materials and molecular engineering and multidisciplinary chemistry," one or multiplicity of the four aforementioned types of knowledge as well as logical ways of thinking). This allows the handling of various problems in the field of engineering involving knowledge and abilities (that is, professional competences) to be learned based on the educational purpose of our school and college. In their learning outcomes, students have achieved the following goals based on the educational purpose of our school and college.

- Students have acquired basic academic skills that allow them to understand fundamental principles the most advanced science technology at atomic and molecular level. Furthermore, such students have also obtained specialized knowledge that allows them to develop and create the aforementioned basic academic skills.

- Students are able to logically think about various problems that they confront in the course of science technology from an interdisciplinary vantage and wide-ranging viewpoints in physics, chemistry, and biology.

- Students have acquired cooperation abilities that allow them to play active parts vigorously in a team and abilities that allow them to express themselves through communicating with people in different fields.

- Students have acquired language proficiency and presentation abilities that allow them to play vigorous active roles internationally.

Curriculum Policy

We organize and implement curricula based on the following policies for programs that allow students to acquire basic abilities and logical ways of thinking for handling various problems in the field of engineering and learning outcomes related to Bachelor of Engineering.

General policy

In the highly advanced modern society, the mission of college education is to return outcomes from natural science from the technical aspect and contribute the same to the society. In order to do so, we offer an educational curriculum for acquiring basic academic skills essential for understanding and developing fundamental principles for advanced science technology, specialized knowledge for the most advanced science and technology, and a sense of the international milieu.

Course sequence policy

We offer education that emphasizes mathematics, physics, and chemistry in order for students to foster basic and logical ways of thinking for understanding the most advanced science by the second year. In particular, students sufficiently experience seminars during the second year. We allow for the fostering of calculation abilities and processing abilities as well as logical ways of thinking. In addition to experience and experiment-related learning for basic science, we have mandatory experiment sessions for physics and chemistry in which students can cultivate cooperativeness during the second year. Moreover, through introductory and general lectures in specialized fields, we offer education in specialized fields after the third year. During the third year, in order to respond to science technology that continues to be developed in an advanced manner, we provide four major courses (i.e., Applied Physics, Quantum and Electronic Engineering, Applied Condensed Matter Physics, and Materials and Molecular Engineering). In this way, we offer students highly specialized lectures

and experiment subjects. We provide major courses giving consideration to desires of students to the maximum extent possible. During the fourth year, all students are assigned to relevant seminars and laboratories by college faculty members. In addition to classes, students engage in graduation project and thesis. We foster abilities for carrying out proactive learning, which constitute research for discovering students' own value.

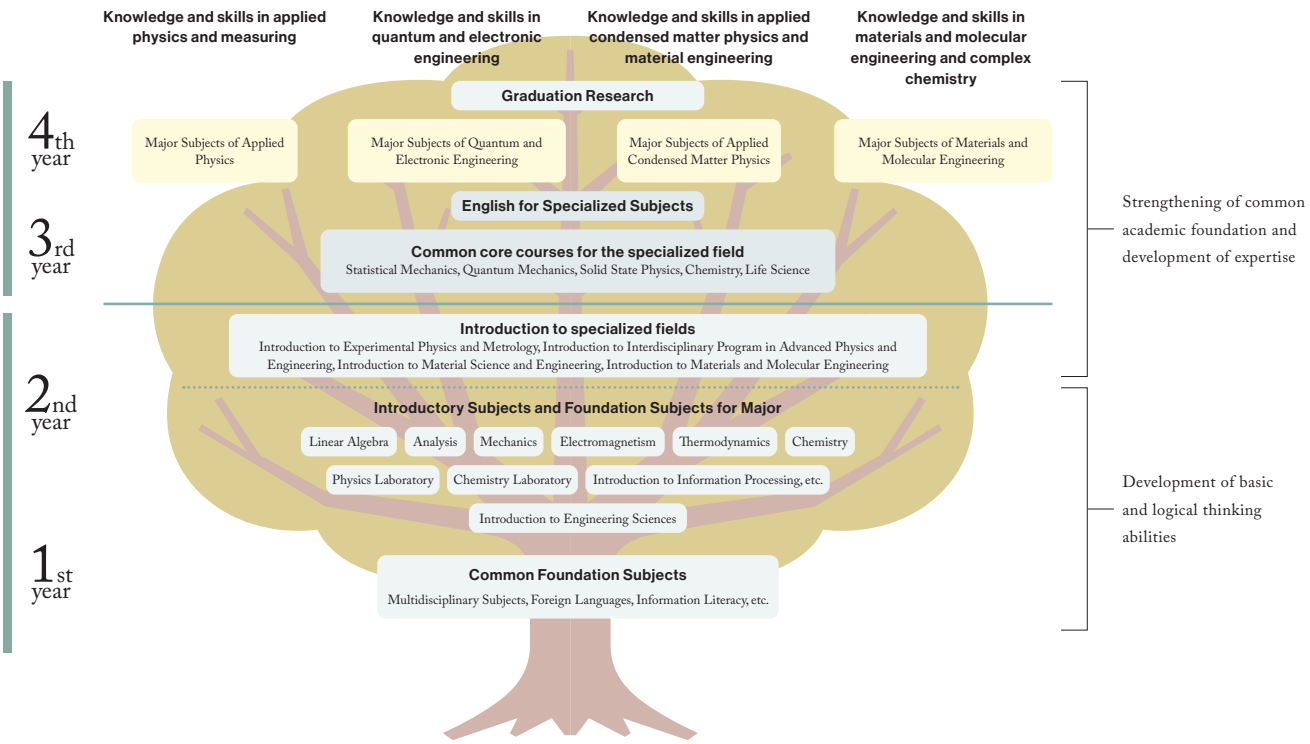
Implementation policy

We offer specialized subjects that constitute the foundations of each field (i.e., physics, chemistry, and biology) as specialized shared core subjects. We offer students a wide variety of viewpoint that allow students to gain a vantage regarding matters in a cross-sectional manner. Moreover, we continuously offer specialized English education until the third year. In this way, we provide education that enhances language proficiency and a sense of internationality for students.

Policy for evaluation of learning outcomes

We evaluate students based on the following points: (i) they have acquired credits for subjects in line with curriculum; (ii) they have acquired generic and professional competences; and (iii) they have retained insights, extensive viewpoints, and abilities for solution of issues that are suitable for Bachelor of Engineering. In the Graduation Project and Thesis, we evaluate students from the viewpoints of abilities for discovery of problems, problem-solving abilities, abilities for research implementation, etc. In the presentation of the Graduation Project and Thesis, we confirm presentation and communication abilities as well as abilities for dealing with questions, etc. and we comprehensively evaluate whether or not and general and professional competences have been fostered.

Structure of competencies to be developed and curriculums



Bachelor of Engineering

Characteristics

As part of active learning from early years, students are encouraged to participate in the Advancing Researcher Experience Program, which supports first- to third-year students who are interested in research.

Educational Purpose

To develop global human resources with the extensive knowledge needed to realize a sustainable society, and having specialties from the basics to applications of science and technology, flexibility in thinking, competencies for intellectual creativity with problem finding and solving skills, broad perspectives, enriched sense of humanity, and collaboration skills to work in teams, all with a view to contributing to the international society.

College of Mathematics
College of Physics
College of Chemistry
College of Engineering Sciences
College of Engineering Systems
College of Policy and Planning Sciences
Bachelor's Program in Interdisciplinary Engineering

College of Engineering Systems

■ Bachelor of Engineering

Educational Purpose

Human resources who can support and lead safe, secure, comfortable, affluent, and sustainable human life from an engineering perspective, i.e.

1. basic skills that can be applied to a wide range of fields
2. the ability to carry out work with a broad perspective
3. basic human skills as a member of society and a professional

We train engineers and researchers who have acquired the skills and the ability.

Desired Students

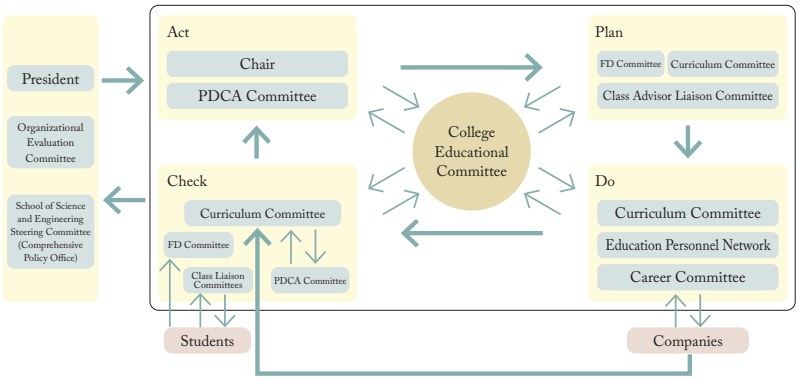
Students admitted to College of Engineering Systems are expected to have the following

(1) to have the basic academic skills and sense required for engineering.
(2) to be full of curiosity and a desire to learn.
(3) to have a clear sense of purpose to become an engineer.
(4) to acquire excellent thinking, judgment, and expression skills and communication skills.

Measures to Ensure and Improve the Quality of Education

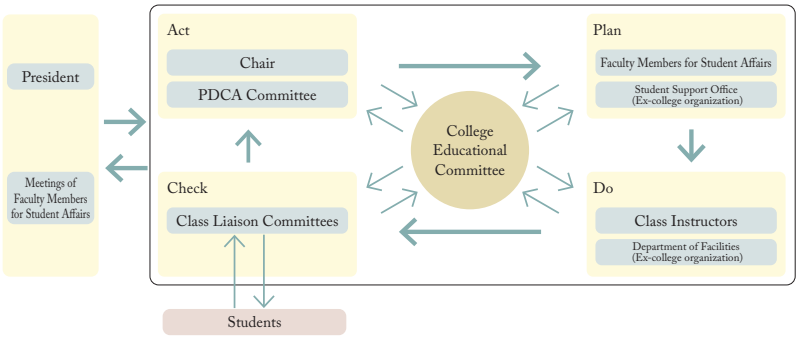
Practice of PDCA cycle and FD activities: We organize curricula to achieve educational goals (Plan) and conduct classes based on syllabi (Do). At the end of each course, a class questionnaire survey is conducted (Check) to examine the effectiveness of the course and to examine the content improvement (Act). With the establishment of the educational inspection system (shown in the figure below), use of the PDCA cycle and the college faculty development (FD) activities aimed at improving class methods, we are constantly examining and improving our whole education system.

Educational Inspection System



Improvement of the educational and learning support environments: We have established a system for improvement of the educational and learning support environments (see the figure below). The university obtains facilities, equipment and systems necessary for conducting education and supporting student learning by referring to the opinions of students and take necessary measures to maintain, operate and update them.

System to Improve the Educational and Learning Support Environments



From FY2004 to FY2026, College of Engineering Systems is accredited by Japan Accreditation Board for Engineering Education (JABEE) as a JABEE program in the Field for Multi- and/or Trans- disciplinary Engineering and New-disciplinary Engineering. In addition, our graduates have been recognized as engineers who have completed engineering education at the international level (Washington Accord) since 2005.

Bachelor of Engineering

Diploma Policy

A bachelor's degree in engineering will be awarded to students who have acquired knowledge and abilities (i.e., General Competence) based on the educational objectives of the University of Tsukuba's Bachelor's Program, and who have acquired the basic skills and logical thinking abilities to deal with various problems in the field of engineering based on the educational purposes of School of Science and Engineering and College of Engineering Systems.

In terms of basic abilities that can be applied to a wide range of fields, students are required to acquire specialized basic subjects related to mathematics, physics, and computers, and to be able to apply this knowledge to analyze various engineering problems. Specifically, students are expected to acquire the ability to think and analyze logically and mathematically, to deepen their understanding of physical and natural phenomena, and to acquire the ability to get and process information using computers.

In terms of the ability to carry out work with a broad perspective, students are expected to master the specialized subjects of each major, acquire the latest knowledge, understand the relationship between science and technology and society, the world, and the entire globe, and be able to plan new technologies and design and operate specific systems. In addition, students are expected to be able to devise concrete solutions to problems and carry out their work systematically through cooperation with their classmates and guidance from their supervisors in experiments and graduation research.

In terms of basic human skills as a member of society and a professional, students are required to acquire subjects such as foreign languages, experiments, and graduation research, and to acquire communication skills that will enable them to be active internationally, as well as presentation skills that will enable them to express their ideas in a logical and easy-to-understand manner to a third party. In addition, students are expected to possess a sense of responsibility and ethics as well as social skills as engineers, along with initiative and the ability to take action.

Curriculum Policy

The program is designed to enable students to acquire the basic skills and logical thinking abilities to deal with various problems in the field of engineering and to achieve the goal of a bachelor's degree in engineering.

General policy

This college covers an extremely wide range of engineering fields, and consists of two majors: the major in Intelligent Engineering Systems and the major in Engineering Mechanics and Energy. Although there are some differences in the content of study in each major, it is easy to take courses in the other major, and there are no barriers to major assignment in the final year of study. The curriculum is designed to emphasize cross-disciplinarity as much as possible while maintaining some differences in expertise among majors.

Course sequence policy

In the first and second years, students study the concept of "engineering systems," which is a cross-sectional approach to engineering fields, and develop basic skills that can be applied to any major in College of Engineering Systems, through a curriculum system that allows students to study a variety of specialized fields in a cross-sectional manner.

From the fall semester of the second year, students are divided into two majors, where they can select distinctive courses in a variety of specialized fields and acquire in-depth specialized knowledge.

In the second and third years, through the completion of basic, specialized, and applied experiments in each major and related specialized subjects, students develop the integrated creative solution skills necessary to design various systems. In addition, all experiments are conducted in group units, which helps students to cultivate teamwork skills.

In the fourth year, students are assigned to a laboratory of their choice in the college without

being limited to their major field of study, and complete their graduation research using the basic skills and broad range of specialized knowledge they have acquired. Students complete their graduation research by utilizing their acquired basic skills and a wide range of specialized knowledge. In this way, we foster engineers with the ability to construct engineering systems that are useful in people's lives. In addition, students with excellent grades up to the second year can graduate early by conducting special graduation research in the third year.

Implementation policy

In order to ensure the level of education demanded by society, we actively appoint part-time lecturers from industry in several specialized subjects, such as practical business, and we also offer specialized English courses taught by foreign faculty. In addition, we have a sufficient number of laboratories and equipment for the experiments and exercises conducted in each year, as well as a large-scale programming laboratory that can be used by many students simultaneously. In addition, each semester, the class teachers conduct personal interviews with students to provide detailed guidance for their studies.

Policy for evaluation of learning outcomes

Grading is conducted strictly in accordance with the syllabus, and the grading process is recorded.

Structure of Majors

Intelligent Engineering Systems
Informatics
Artificial Intelligence
Risk Engineering
Electrical and Electronic Engineering
Communication Engineering
Control Engineering
Mechanical Engineering
Systems Engineering
Cybernics
Robotic Engineering

Engineering Mechanics and Energy
Architectonics
Mechanical Engineering
Civil Engineering
Materials Engineering
Aerospace Engineering
Informatics
Risk Engineering
Energy Science
Electrical and Electronic Engineering
Nuclear Engineering

Curriculum structure

	Intelligent Engineering Systems	Engineering Mechanics and Energy
	Artificial Intelligence, Communications, Electrical and Electronic Engineering, Control and Systems Engineering, Robot Engineering	Architecture Engineering, Civil Engineering, Aerospace Engineering, Risk Engineering, Materials Engineering, Energy Science
4th year	**Graduation Project and Thesis**	
	Ethics for Engineers	
3rd year	Pattern Recognition, Information Theory, Numerical Analysis, Devices and Elements for Mechatronics, Image Processing, Info-Telecommunication Systems II, Principles of Research and Development, Machine Learning A・B, Intelligent Information Processing, System Dynamics, Advanced Programming Reliability Engineering Measurement Engineering	Combustion Engineering, Steel Structure, Gas Dynamics, Disaster Preventive Engineering, Introduction to Environmental Engineering, Electric Power Engineering, Architectural Equipments, Geotechnical Engineering, Remote Sensing, Machinery Engineering of Energy Conversion, Reinforced Concrete Structure, System Dynamics, Hydrogen Energy Engineering
	Laboratory of Intelligent Interactive Systems	**Advanced Laboratory of Mechanics Engineering and Energy/Applied Laboratory of Engineering Mechanics and Energy**
	Artificial Intelligence, Communication Engineering, System Optimization, Robotics, Info-Telecommunication Systems I, Human Computer Interface, Digital Signal Processing, Data Structure and Algorithm, Technical English Exercise Electronic Circuits Topics on Engineering Systems Feedback Control	Heat Transfer, Architectural Environmental Engineering, Planning and Design, Mechanics of Composite Materials, Architectural Design and Planning , Soil Mechanics, Aquatic Environment, Power Electronics, Engineering Fluid Dynamics, Concrete Engineering, Technical English Exercise, Introduction to Energy Studies
2nd year	Discrete Mathematics, Introduction to Programming C・D, Control of Linear Systems, Logic Circuits, Materials Engineering for Mechatronics, Technical English B, Computer and Network, Biosystem Electric Circuit Machine Design Applied Mathematics B	Advanced Thermodnamics, Materials Engineering, Physical Chemistry, Fluid Mechanics, Electro magnetics Engineering, Numerical Computation, Electromagnetic Materials, Applied Thermodynamics, Theory of Vibration, Structural Mechanics, Technical English B
	Basic Laboratory of Engineering Systems	
1st year	**Mathematics Subjects** Complex Analysis Ordinary Differential Equations Advanced Analysis Advanced Linear Algebra Calculus 1・2・3 Linear Algebra 1・2・3 Mathematics Literacy 1・2 **Physics Subjects** Introduction to Materials Engineering Introduction to Fluid Mechanics Introduction to Thermodynamics Advanced Mechanics Advanced Electromagnetics Mechanics 1・2・3 Electromagnetics 1・2・3 **System Programming** Introduction to Programming A・B Introduction to Engineering Systems Foundation Subjects for Major	Probability Theory and Statistics Introduction to Material Science for Engineers Applied Mathematics A Technical English A Contents Engineering System Space Technology Tsukuba Robot Contest Contents Media Engineering Introduction to Engineer of Large Scale Projects	Information Literacy (Lectures・Exercises) Data Science Invitation to Engineering Systems Invitation to Arts and Science English, Physical Education (until 3rd year) Introductory Subjects that are offered by other Schools and Colleges Common Foundation Subjects, Specific Foundation Subjects

Educational purpose

To develop global human resources with the extensive knowledge needed to realize a sustainable society, and having specialties from the basics to applications of science and technology, flexibility in thinking, competencies for intellectual creativity with problem finding and solving skills, broad perspectives, enriched sense of humanity, and collaboration skills to work in teams, all with a view to contributing to the international society.

College of Mathematics
College of Physics
College of Chemistry
College of Engineering Sciences
College of Engineering Systems
College of Policy and Planning Sciences
Bachelor's Program in Interdisciplinary Engineering

College of Policy and Planning Sciences

■ Bachelor of Policy and Planning Sciences

Educational purpose

We develop human resources with a thinking ability integrating arts and sciences and skills of analyzing and utilizing data, needed for engineering, practical, and strategic analyses of various social problems, where human behaviors are intricately intertwined, and the skills to design systems for comprehensive problem-solving.

Desired students

Acquiring the interdisciplinary thinking needed to recognize and manage a wide variety of social problems that occur in society/economy, companies/management, and cities/regions; and desiring to contribute to the international society.

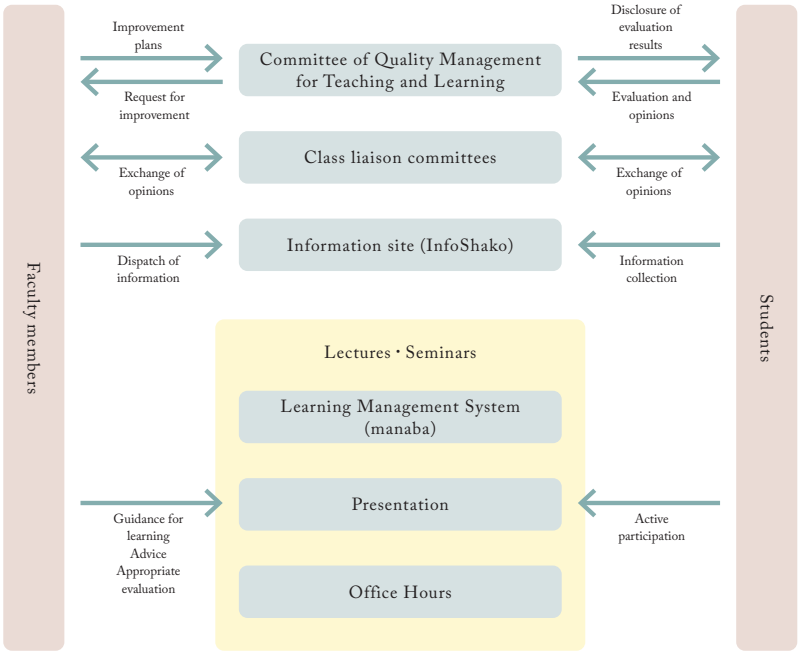
Measures to ensure and improve the quality of education

We present course descriptions, course goals, and schedules/course plans in the CPPS Syllabi, while objectively assessing academic performance to guarantee the achievement of sufficient levels of specialty and interdisciplinarity by the time of graduation.

We also evaluate all lectures and seminars, and share the results with students, in addition to all faculty, requiring the submission of improvement plans by the faculty in charge of lectures/seminars scored 40 or less (full score: 100). Furthermore, as a measure for faculty development, we also hold a meeting to exchange opinions with students during each term, and improve the contents and methodologies of lectures/seminars.

When several faculty are in charge of the same course, we minimize variations in assessment results among these faculty by adjusting the level of difficulty/progress of learning among their classes and adopting common questions for examinations.

Measures to ensure and improve the quality of education



Bachelor of Policy and Planning Sciences

Diploma Policy

We confer a bachelor's degree (of policy and planning sciences) to students, who have acquired the knowledge and skills (Generic Competences) specified based on the goals of education in undergraduate courses at the University of Tsukuba, and have achieved the following goals, meeting the purposes of human resource development at the College of Policy and Planning Sciences, School of Science and Engineering.

- Having a basic understanding and insight into social systems, such as economy, enterprises, and cities, and being able to propose specific policies to reduce uncertainty in the social environment based on evidence.
(Relevant competences: Basic understanding and insight into social systems)

- Being able to use one's knowledge of mathematics (calculus/linear algebra), statistics (data analysis), and information technology (programming) as a tool to solve various problems facing complex societies.
(Relevant competences: Mathematics, statistics, and information technology for solving complex social problems)

- Being able to identify the essences of global problems in modern society.
(Relevant competences: Ability to analyze global issues)

- Being able to flexibly fulfill social demands from multiple perspectives, such as economics, management science and engineering, and urban and regional planning.
(Relevant competences: Ability to fulfill social demands)

- Being able to comply with professional ethics as an expert/engineer in the field of economics, management science and engineering, or urban and regional planning.

- Having objective and persuasive communication skills.
(Relevant competences: Communication skills)

- Having skills for basic communication using English.

- Being able to act cooperatively as a member whenever team collaboration is required.

- Being able to explore issues autonomously, and learn independently and continuously.
(Relevant competences: Problem-solving skills)

Curriculum Policy

As a program to obtain academic achievements related to the bachelor's degree (in policy and planning sciences), we plan education and implement these plans based on the following policies.

General policy

The complex and diverse problems facing modern society are no longer manageable for individual areas of traditional scholarship on their own. With a view to addressing such a situation, we organize 3 majors, Social and Economic Sciences, Management Science and Engineering, and Urban and Regional Planning, and help students acquire both specialized and interdisciplinary skills. We place an emphasis on the scientific and empirical aspects of policy- or project-related decision-making processes for the national government, local governments, corporate organizations, and communities as a goal. Therefore, at this college, students decide on a major to acquire more specialized knowledge and skills not at the time of enrolment, but during the fall semester of the second year after taking various courses from the first year to the spring semester of the second year. It is also possible for them to choose a minor, in addition to these majors.

Course sequence policy

- Until the spring semester of the second year, students mainly take basic courses (foundations) required for advanced learning (major subjects) at this college, including those serving as introductory to the 3 majors
- From the fall semester of the second year, they belong to one of the 3 majors, and take major subjects. To show the structure of each specialized field in an easy-to-understand manner, we divide major subjects in each major into groups of courses called "areas", and encourage students to acquire interdisciplinary skills. This program also allows students with excellent academic performance to graduate in their third year.

After advancing to the fourth year, students conduct research for their graduation thesis throughout the year. They select supervisors from researchers in various specialized fields, such as engineering, economics, management, statistics, psychology, and sociology, to conduct theoretical and practical studies.

Implementation policy

To help students autonomously learn theories and practices, seminars are held in all areas of each major. Thoroughly practicing presentation and discussion skills through these seminars, they can also acquire the skills needed to develop engineering, practical, and strategical solutions to various problems that occur in society.

Policy for evaluation of learning outcomes

We have also defined criteria for the acquisition of the 9 skills listed in the Diploma Policy, and show skill acquisition goals in the syllabus for each course. With regard to the evaluation of skill acquisition, we measure the achievement level based on the credit acquisition status in these courses. We decide whether or not to confer a degree comprehensively based on the results of graduation thesis evaluation and the status of acquiring credits required for graduation.

Characteristics

We provide opportunities for real-world problem-solving activities in cooperation with national and local governments, private companies, and local communities. In addition, for each major, we have developed specialized exercises to help students develop their skills in analyzing and utilizing data.

Curriculum structure

1st year → 4th year

Foundation Subjects for Major

Mathematics Literacy
Linear Algebra
Calculus
Statistics

Introduction to Economic Theory
Introduction to Quantitative Economics
Accounting and Management
Optimization in Practice
Introduction to Urban and Regional Planning
Urban Analytics

Introduction to Programming

Seminar in Policy and Planning Sciences
Policy and Planning Sciences in English

Major Subjects

Major in Social and Economic Sciences
Econometric Analysis System area (Lecture・Seminar)
Public System area (Lecture・Seminar)
Strategic Behavior System area (Lecture・Seminar)

Major in Management Science and Engineering
Management area (Lecture・Seminar)
Information Technology area (Lecture・Seminar)
Mathematical Engineering area (Lecture・Seminar)

Major in Urban and Regional Planning
Environment and Community Development area (Lecture・Seminar)
Urban Structure/Social Infrastructure area (Lecture・Seminar)
Regional Science area (Lecture・Seminar)

General Foundation Subjects (Common Foundation Subjects, Specific Foundation Subjects)

Educational purpose

To develop global human resources with the extensive knowledge needed to realize a sustainable society, and having specialties from the basics to applications of science and technology, flexiblity in thinking, competencies for intellectual creativity with problem identifying and solving skills, broad perspectives, enriched sense of humanity, and collaboration skills to work in teams, all with a view to contributing to the international society.

College of Mathematics
College of Physics
College of Chemistry
College of Engineering Sciences
College of Engineering Systems
College of Policy and Planning Sciences
Bachelor's Program in Interdisciplinary Engineering

Bachelor's Program in Interdisciplinary Engineering

■ Bachelor of Engineering

Educational purpose

This program aims to foster the development of global human resources, who by acquiring firm and basic academic skills in mathematics and physics, which form the foundation of engineering education, will be able to understand and analyze any issues in the field of Interdisciplinary Engineering ranging from the micro to macro-scale, from the fundamental perspective, and to find creative solutions.

Desired students

The Interdisciplinary Engineering Program requires admittees to satisfy the following.

(1) To have motivation for leading the next-generation manufacturing in a Super Smart Society.
(2) To have the necessary English proficiency to be devoted to studying the engineering field.
(3) To have basic academic skills in mathematics to study the wide range of engineering field.
(4) To have aptitude and motivation for studying in the engineering field.

Measures to ensure and improve the quality of education

Post class surveys are conducted for all courses with an effective questionnaire, and the Curriculum Committee and the FD Committee meet regularly to work on the improvement of education. The survey results and students' comments are used as a feedback for faculty members to improve the courses, and enhance their teaching skills. World standard textbooks are used for all courses in the Foundation Subjects for Major and Major Subjects to maintain the world standard of education. At the same time, the Curriculum Committee reviews the continuity between courses, and course contents as needed.

Bachelor of Engineering

Diploma Policy

Diplomas for Bachelor of Engineering will be awarded to those who are recognized as having achieved the knowledge and abilities (that is, Generic Competences) based on the educational purpose of the bachelor's degree program at the University of Tsukuba and the purpose of the human resource development of the college in question. In their learning outcomes for the Bachelor's Program in Interdisciplinary Engineering, they achieve the following goals.

- Students have acquired basic academic skills in mathematics and physics.
(Relevant competences:
  - Mathematical logic and calculation skills,
  - Understanding of phenomena in Physics)

- Students are able to understand and analyze any issues related to the Interdisciplinary Engineering field based on the fundamental approach, and are able to creatively solve the same.
(Relevant competences:
  - Understanding of phenomena in chemistry and biology, and analytical skills for physics and systems engineering experiments,
  - Ability in micro-engineering and nano-science,
  - Ability in macro-engineering and systems engineering,
  - Problem exploration and problem solving skills)

- To have the ability of collaboration, as well as abilities for communication and presentation that allow them to play active roles in a multicultural and multidisciplinary team.
(Relevant competences:
  - Problem exploration and problem solving skills)

Curriculum Policy

We organize and implement curriculum based on the following policies for the programs that allow students to acquire the academic achievements related to the degree in Bachelor of Engineering.

General policy

In order to play active roles in the field of modern engineering, which is interdisciplinary over a wide range of different fields, it is essential to have solid basic academic skills in mathematics and physics, which are common foundations in the aforementioned Engineering fields, and to have the ability to solve problems spontaneously and creatively with a cross-disciplinary perspective in cutting-edge science and technology. This program in particular offers the curriculum for fostering such skills and power.

Course sequence policy

We implement the education focusing on mathematics and physics, that constitutes a foundation for all science and engineering fields, during the first year and the second year. In particular, we set the goal of having students improve their abilities for the use of basic concepts as well as logical ways of thinking through sufficient implementation of practices together with the use of computers. Moreover, students cultivate experiment-based learning and acquire cooperative ability through practical works of fundamental laboratories and advanced laboratories. During the third year, students learn important Major Subjects that form common cores for micro-engineering and macro-engineering. At the same time, all students belong to two laboratories and proactively conduct research (PBL). In this way, students foster more profound expertise, creative abilities, and interdisciplinary skills.

Implementation policy

We ensure a world level of education using world-standard textbooks for most of the Foundation Subjects for Major, and the Major Subjects related to mathematics and physics. We also conduct practices through use of computers. In this way, we consider fostering of information processing and

programming abilities. In PBL during the third year and the fourth year, students join two laboratories and carry out research in both fields of micro-engineering and macro-engineering. In this way, we foster their interdisciplinary knowledge and skills. In addition, students are required to take courses in other schools or colleges in order to deepen their understanding of the significance of their own specialized field and the positioning of their specialization in relation to other disciplines.

Policy for evaluation of learning outcomes

In class subjects, we fairly and strictly evaluate homework, assignments, midterm examinations, and final examinations. In this way, we verify the degree of learning achievement. In experiments, practical subjects, and PBL, we evaluate proactive learning performance abilities through experiments, research outcome presentation, and assignment reports, etc.

Other noteworthy features

In order to foster interaction with Japanese students, international cooperation abilities and Japanese language skills, laboratories and practical subjects are offered as joint courses of the relevant courses in the College of Engineering Sciences and the College of Engineering Systems. First- and second-year students who are interested in research in the most advanced areas are encouraged to participate in the Advanced Research Experience (ARE) program. Participated students are awarded credits upon completion. Students may also graduate early for entry into graduate schools in Japan.

School of Informatics

College of Information Science

- Bachelor of Information Science
- Bachelor of Information Engineering

College of Media Arts, Science and Technology

- Bachelor of Science in Media Sciences and Engineering

College of Knowledge and Library Sciences

- Bachelor of Arts in Library and Information Science

Educational purpose

We foster personnel leading the unfolding of the 21st century who understand and use various information technologies related to given activities, such as recording, accumulation, sharing, processing, and utilization of knowledge and information as well as the science underlying such technologies. Moreover, we aim to require students to acquire sufficient knowledge and expertise for human intellectual activities and social and cultural foundations as well as from the aspect of science and technology.

College of Information Science
College of Media Arts, Science and Technology
College of Knowledge and Library Sciences

College of Information Science

- Bachelor of Information Science
- Bachelor of Information Engineering

Educational purpose

We foster personnel with practical abilities for understanding engineering technologies to collect, analyze, understand, transmit, transform, and utilize information, which is a driving force for modern society, as well as mathematical theories and natural science underlying the fundamental principles of such technologies and for applying the aforementioned skills to various problems and their solution in the real world. Moreover, such personnel are able to take initiative in developing information technology from the global viewpoints.

Desired students

Personnel with strong curiosity and a spirit of inquiry concerning information technology and natural science/engineering, and with basic academic skills necessary for learning the subjects. Moreover, such personnel are desired to be motivated to creatively use and developing leaned knowledge, proactively engage in new challenges, and take leadership in the information society.

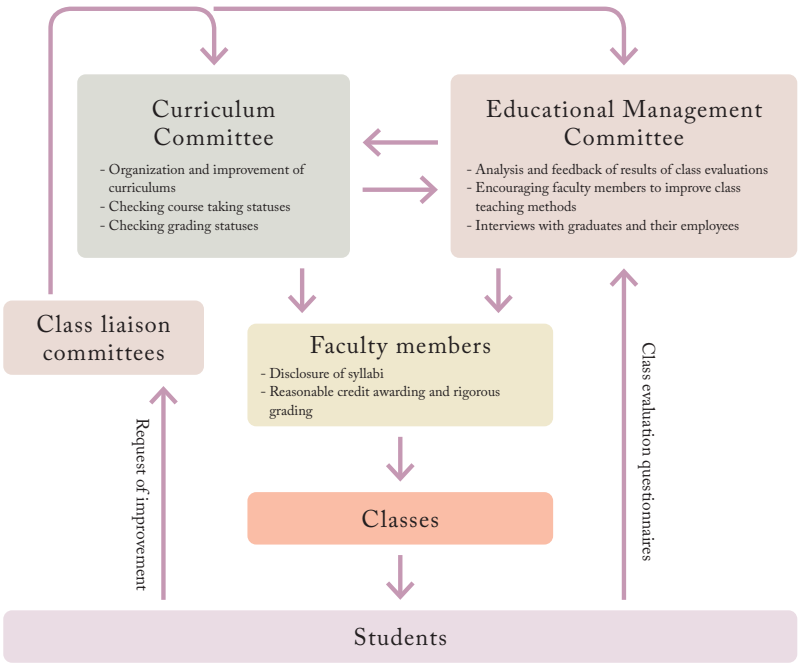
Measures to ensure and improve the quality of education

Class evaluation and feedback: The Educational Management Committee conducts class evaluation for all classes. The questionnaire surveys consist of standardized questions and open-ended questions to efficiently collect comprehensive data and student opinions on class content and class operation. The surveys also provide students with opportunities to reflect on their own approaches to the classes. The Educational Management Committee analyzes the results of the survey and provides feedback and recommendations for improvement to the faculty and the Curriculum Committee.

Opinions from outside the university: We interview or set discussions with graduates and their employees. Their opinions are used in feedbacks. In addition, the Curriculum Committee and the Educational Management Committee hold meetings, where students and faculty directly exchange their opinions.

Class improvement by faculty members: To support faculty members, especially young and new members and improve their educational skills, peer class observations and lectures are carried out as needed.

Measures to improve educational abilities



Bachelor of Information Science

Diploma Policy

We grant diplomas for Bachelor of Information Science to persons who have acquired the knowledge and abilities (that is, Generic Competences) to become learned based on the educational purpose for undergraduate students of the University of Tsukuba. In their learning outcomes, they will achieve the following goals based on the educational purpose of our school and college.

- Understanding of the mathematics and physics underlying information representation, modeling, and abstraction
(Relevant competence: Foundation of Information Science)

- Ability to produce high quality software with an understanding of mathematical modeling and program construction principles and methods
(Relevant competence: Expertise in the field of software and computing science)

- Ability to design computer systems with a systematic understanding of hardware, software, and network technologies
(Relevant competence: Expertise in the field of computer systems)

- Ability to systematically understand and apply various intelligent information processing technologies and media processing technologies
(Relevant competence: Expertise in the fields of machine intelligence and media technologies)

- Ability to work internationally based on specialized English skills and a global perspective related to information science
(Relevant competence: English communication skills in Information Science)

- Practical ability to solve unknown problems related to information science, problem-solving ability, and innovation ability
(Relevant competence: Practical technical skills and problem-solving abilities)

- Understanding of information ethics, security, and intellectual property rights as a professional engineer and researcher who leads the information society
(Relevant competence: Information ethics for professional engineers)

Curriculum Policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Information Science.

General policy

We provide a high quality curriculum that reflects the latest technological trends and encompasses international standards in the field of information ranging from hardware and networks to software and intelligent media.

We provide a well-balanced education that enables students to acquire a broad knowledge of information science and engineering as well as advanced expertise in information science fields such as programming language theory, mathematical modeling, software science, and intelligent interfaces, etc. In addition, we place the utmost importance on students making their own choices in their learning.

Course sequence policy

- In the first and second years, students learn foreign languages including English, select subjects from a wide range of fields, and culture in order to become active members of society. Also students learn mathematics and other subjects serving as the foundations of information science and engineering and participate in workshops and experiments to learn the fundamentals that extend over the entire areas of information such as hardware, programming, algorithms.
- In the third year, students take the classes of mathematical modeling and software science, etc., based on the curriculum of the major in Software and Computing Science in order to gain the knowledge and specialization in the entire areas of information science and engineering. Moreover, practical skills and problem-solving ability are gained through Software and Computing Science Laboratory. In addition, extensive specialized knowledge and specialized skills are gained through a broad range of specialized courses in information science and engineering including

the area of Computer Systems, and Machine Intelligence and Media Technologies.

In the fourth year, in addition to the above learning, students are engaged in diploma research and technical English to cultivate the creative ability and challenge spirit that can produce innovative technologies in information science and also acquire inspiration, communication ability and cooperativeness from an international point of view to gain the skills that work in the actual society.

Implementation policy

We provide education that deepens students' knowledge and understanding of the technologies acquired in lectures by incorporating many practical exercises and computer-based training and experiments, not only in major subjects in information science and engineering, but also in basic subjects such as mathematics and English.

In addition, we provide a group of courses to draw out students' autonomy, such as courses in which students set their own themes and plan their own studies.

Policy for evaluation of learning outcomes

Evaluation method: We evaluate the achievement of academic results throughout the entire educational program, including student grades, achievement of graduation requirements, questionnaire surveys, graduation theses and other deliverables, conference presentations, and results of extracurricular activities.

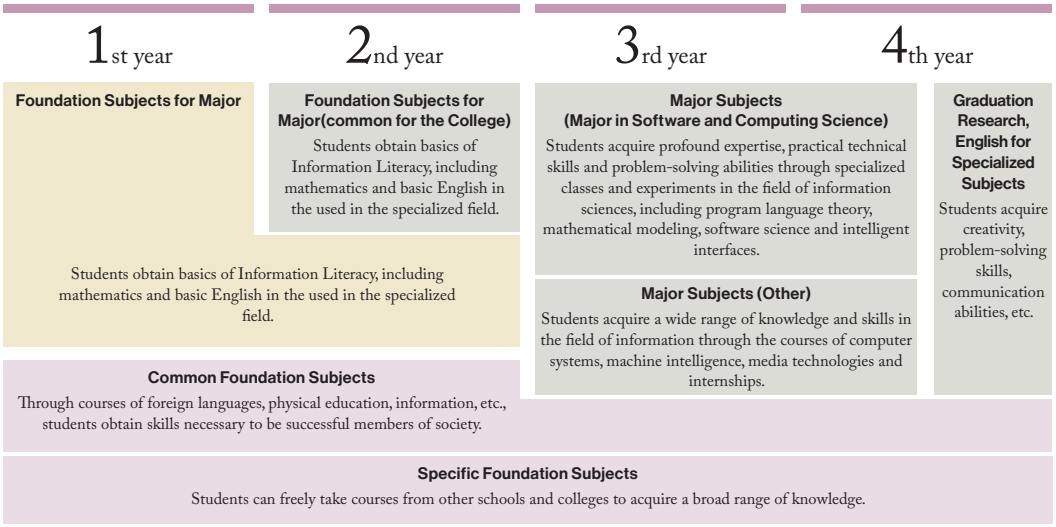
Evaluation index (while in the course): status of credit acquisition, GPA, English test scores, progression and retention rate, absence and withdrawal rate, and status of out-of-class activities, etc.

Evaluation index (upon graduation): GPA, rate of acquisition of bachelor's degree, thesis and presentation of bachelor's degree, employment rate/ graduate school enrollment rate, questionnaires upon graduation and outcomes of out-of-class activities, etc.

Characteristics

In the Embedding Technology Campus OJT Program, students can receive practical courses from instructors who are involved in product development at companies.

Structure of competencies to be developed and curriculums



Bachelor of Information Engineering

Diploma Policy

We grant diplomas for Bachelor of Information Engineering to persons who have acquired the knowledge and abilities (that is, Generic Competences) to become learned based on the educational purpose for undergraduate students of the University of Tsukuba. In their learning outcomes, they will achieve the following goals based on the educational purpose of our school and college.

- Understanding of the mathematics and physics underlying information representation, modeling, and abstraction
(Relevant competence: Foundation of Information Science)

- Ability to produce high quality software with an understanding of mathematical modeling and program construction principles and methods
(Relevant competence: Expertise in the field of software and computing science)

- Ability to design computer systems with a systematic understanding of hardware, software, and network technologies
(Relevant competence: Expertise in the field of computer systems)

- Ability to systematically understand and apply various intelligent information processing technologies and media processing technologies
(Relevant competence: Expertise in the fields of machine intelligence and media technologies)

- Ability to work internationally based on specialized English skills and a global perspective related to information science
(Relevant competence: English communication skills in Information Science)

- Practical ability to solve unknown problems related to information science, problemsolving ability, and innovation ability
(Relevant competence: Practical technical skills and problem-solving abilities)

- Understanding of information ethics, security, and intellectual property rights as a professional engineer and researcher who leads the information society
(Relevant competence: Information ethics for professional engineers)

Curriculum Policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Information Engineering.

General policy

We provide a high quality curriculum that reflects the latest technological trends and encompasses international standards in the field of information ranging from hardware and networks to software and intelligent media.

We provide a well-balanced education that enables students to acquire a broad knowledge of information science and engineering as well as advanced expertise in information engineering fields such as hardware, network, fundamental software, intelligent media, media informatics, etc. In addition, we place the utmost importance on students making their own choices in their learning.

Course sequence policy

- In the first and second years, students learn foreign languages including English, select subjects from a wide range of fields, and culture in order to become active members of society. Also students learn mathematics and other subjects serving as the foundations of information science and engineering and participate in workshops and experiments to learn the fundamentals that extend over the entire areas of information such as hardware, programming, algorithms.

- In the third year, students take the classes of foundation software/system build, intelligence information/media engineering, etc. based on the curriculum of the major in Computer Systems, and Machine Intelligence and Media Technologies in order to gain the knowledge and specialization in the entire areas of information engineering. Moreover, practical skills and problem-solving ability are gained through Computer Systems Laboratory/ Machine Intelligence and Media Technologies Laboratory. In addition, extensive specialized knowledge and

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Characteristics

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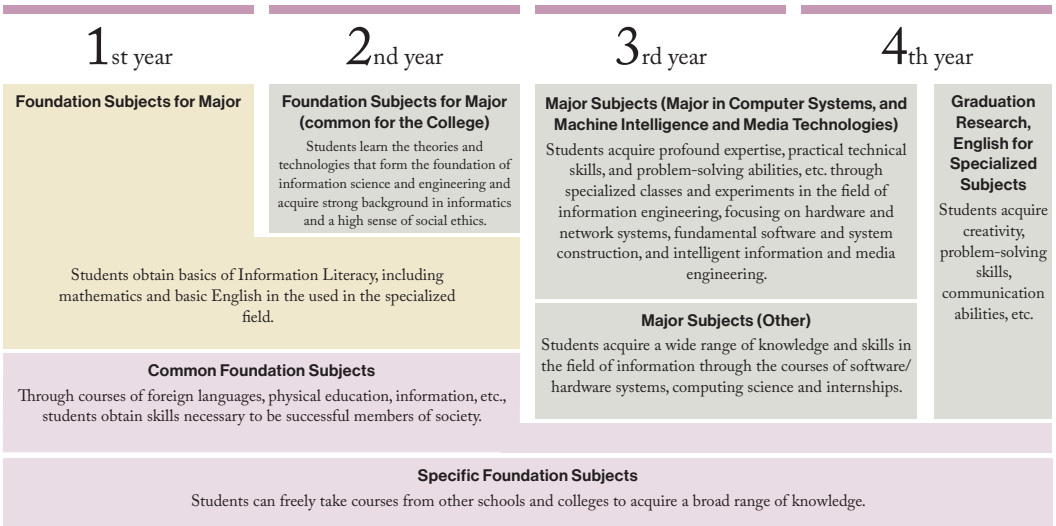
Structure of competencies to be developed and curriculums



Educational purpose

We foster personnel leading the unfolding of the 21st century who understand and use various information technologies related to given activities, such as recording, accumulation, sharing, processing, and utilization of knowledge and information as well as the science underlying such technologies. Moreover, we aim to require students to acquire sufficient knowledge and expertise for human intellectual activities and social and cultural foundations as well as from the aspect of science and technology.

College of Information Science
College of Media Arts, Science and Technology
College of Knowledge and Library Sciences

College of Media Arts, Science and Technology

■ Bachelor of Science in Media Sciences and Engineering

Educational purpose

College of Media Arts, Science and Technology cultivates engineers or researchers who can creatively produce innovative technologies and scientific theories in the infrastructural technological areas indispensable for developing the future network information society and in the areas in which diverse information contents such as web, video and music contents are handled for circulation.

Desired students

Candidates should have both scientific/technical skills and the well-rounded perception for culture and art, and moreover, should have a great interest and motivation to learn a variety of techniques in the network information society and the relevant disciplines and pursue to contribute to the society creatively.

Measures to ensure and improve the quality of education

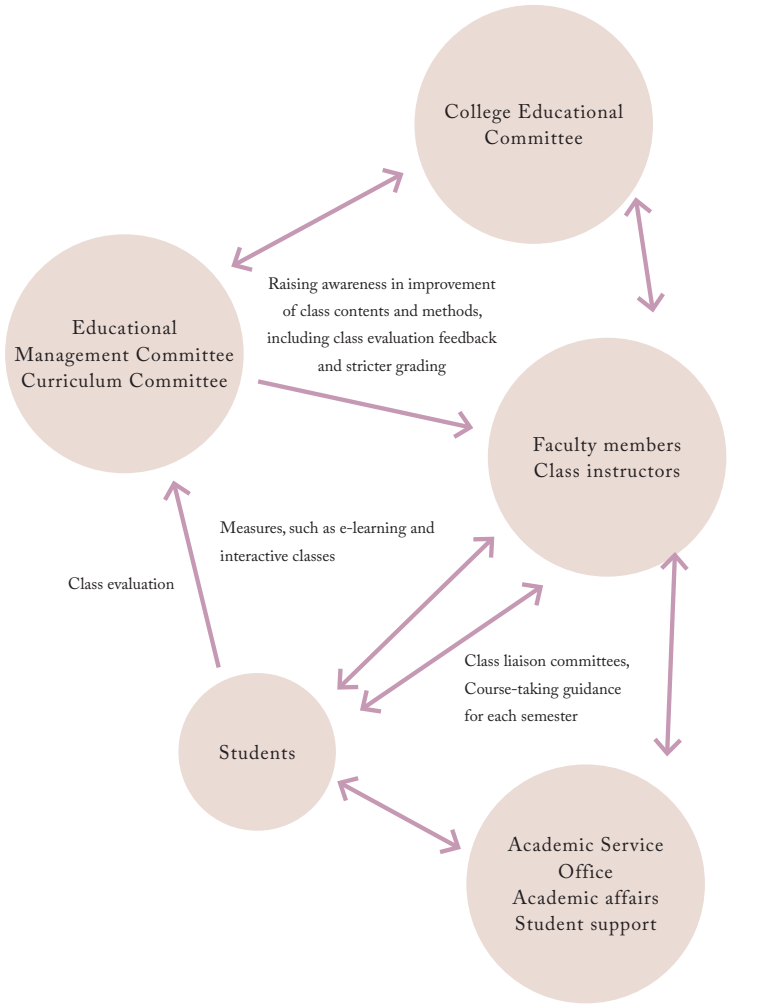
Class instructors will adjust class progress according to students' level of understanding, operate classes that are active-learning oriented, and provide individualized support for each student by taking sufficient office hours. In addition, we hold seminars for faculty members to support them on these issues.

The class advisors cooperate with the course instructors to provide detailed care for students. Students' course-taking statuses are checked every semester, and those with particularly unsatisfactory statuses receive detailed support from the class advisors for course taking. We promote the digitization of class materials and the development of e-learning courses to encourage students' independent study, particularly to review the classes.

We establish guidelines for rigorous grading and work on reasonable credit awarding.

Each semester, the Educational Management Committee conducts the college's own class evaluation (with open-end questions), which includes university-wide questionnaires. The Educational Management Committee analyzes the answers and feedback the results to the class instructor for effective class improvement.

Measures to improve educational abilities



Bachelor of Science in Media Sciences and Engineering

Diploma Policy

We grant diplomas for Bachelor of Science in Media Sciences and Engineering to persons who have acquired the knowledge and abilities (that is, Generic Competences) to become learned based on the educational purpose for undergraduate students of the University of Tsukuba. In their learning outcomes, they will achieve the following goals based on the educational purpose of our school and college.

Specialization ... Capable of understanding the concepts, principles, theories and techniques in media sciences systematically and carrying out research and development into them
(Relevant competences: Digital contents, Network science, Information media and interaction, Computing and systems, Fundamentals of mathematical methods, Human cognition and society)

Design ability ... Possesses the artistic skills based on logical thinking for the objective appreciation of the functional beauty and feasibility in engineering and science as well as the design ability for designing actual systems by using the skills.
(Relevant competences: Information media and interaction, Fundamentals of mathematical methods, Design and creativity)

Human skill ... Possesses the communication, issue-identification and problem-solving abilities that allow him or her to work cooperatively in a project team.
(Relevant competences: Information media and interaction, Human cognition and society, Design and creativity)

Ethical view … Possesses the safeguarding techniques for intellectual properties, personal information, etc. and also the social ethical view.
(Relevant competences: Human cognition and society)

Curriculum Policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Science in Media Sciences and Engineering.

General policy

Centering on the two realms of the network media technologies supporting the accumulation and distribution of contents and the content technologies involving the utilization and production of contents, the Program offers a curriculum for media sciences that merges the education in the areas of information science and engineering which are indispensable for the two realms. The curriculum is designed to offer the subjects that allow students to gain extensive knowledge and advanced specialization while students select the subjects to take in their own right.

Course sequence policy

In the first year, students predominantly take mathematical subjects, such as linear algebra and calculus, and information technology subjects, such as literacy and programming, to gain the fundamental abilities in the areas of media sciences and engineering. To develop art skills, etc., the introduction subjects for contents processing are provided.

In the second year, to make the foundation ability cultivated in the first year fuller, students gain the solid engineering ability in information science, the ability to apply what they learn, and ethical view through subjects including those related to data, algorithms and networks, and those related to human science, network society and business, which cultivate a wide perspective and liberal arts as to people, culture and society.

In the third and fourth years, the curriculum offers a wide variety of Major Subjects in six areas (“Network and Communication Technology”, “Storage and Distribution of Content”, “Interaction Technology”, “Computer Science”,

"Content Processing and Application", "Content Creation and Technology") for media sciences. Students take these subjects along with experimental subjects, which pursue a specific theme for the long term, so that students gain human skills, practical abilities, etc., let alone specialization. The diploma research in the fourth year finishes up the learning of specialized knowledge, technical skills and other elements in media sciences to gain the practical ability to creatively produce innovative techniques and scientific theories.

Implementation policy

The curriculum is designed to let students select subjects freely in correspondence with their own learning plans and motivations after mastering the common fundamentals. This allows them to draw up diverse learning plans that suit the wish and aptitude of each one and thereby supports various careers to follow in response to social needs. With an eye toward the current circumstances and future of the dynamically transforming network information society, the curriculum structure always reflects unremitting reviews and modifications to meet the needs in accordance with the times, including taking advantage of the instructors who are invited from the industrial community to teach from their own experiences.

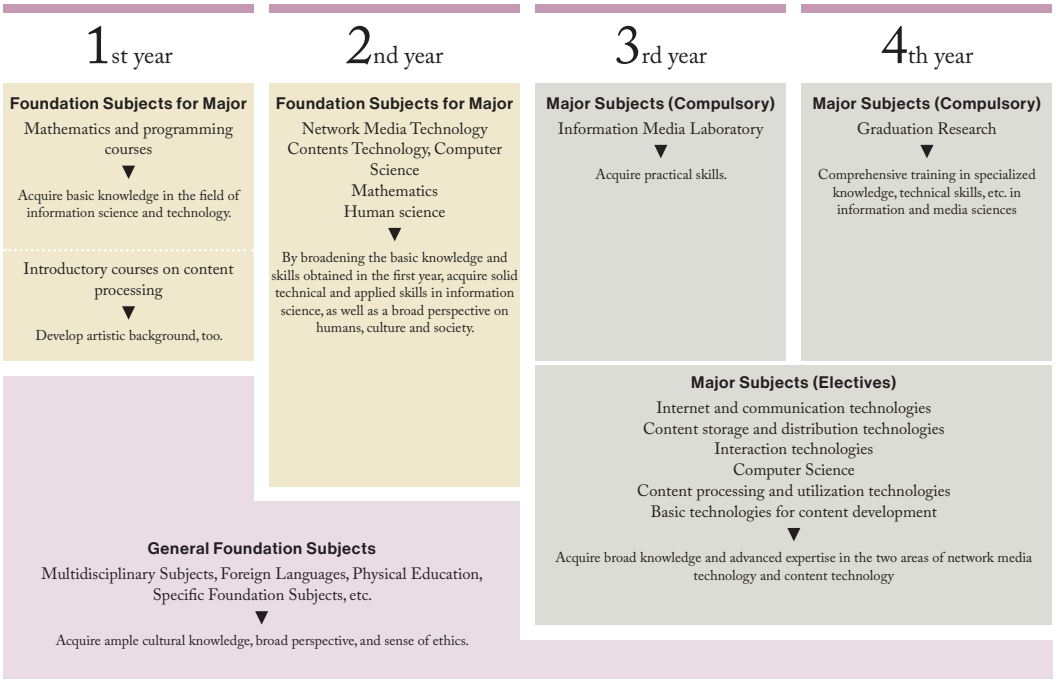
Policy for evaluation of learning outcomes

The achievement progress of learning outcomes in the entire curriculum is evaluated through the outcomes of diploma thesis and research, GPA, the credits earned, interviews as to learning status, etc. In addition, the criteria and methods for student performance evaluation are clarified for each classroom subject, and based on them, learning outcomes are evaluated fairly.

Characteristics

As seen in the Embedding Technology Campus OJT Program, we conduct practical seminars and experiment courses in cooperation with leading-edge IT companies (including venture companies), aiming to make students acquire

Structure of curriculum and competencies to be developed



Bachelor of Science in Media Sciences and Engineering

technologies that are truly needed in the real world.

Educational purpose

We foster personnel leading the unfolding of the 21st century who understand and use various information technologies related to given activities, such as recording, accumulation, sharing, processing, and utilization of knowledge and information as well as the science underlying such technologies. Moreover, we aim to require students to acquire sufficient knowledge and expertise for human intellectual activities and social and cultural foundations as well as from the aspect of science and technology.

College of Information Science
College of Media Arts, Science and Technology
College of Knowledge and Library Sciences

College of Knowledge and Library Sciences

Bachelor of Arts in Library and Information Science

Educational purpose

Developing the abilities to use knowledge and information, The Program offers specialized education for associated system of society and techniques. Through learning them, we develop experts who contribute to make strides in the formation, processing, distribution and use of knowledge resources and also professionals who possess a comprehensive perspective extending over human, society and technology and problem-solving ability.

Desired students

We seek those who have fertile minds and expressiveness appropriate to knowledge specialists and have logical thinking and communication abilities deemed appropriate to knowledge generalists.

Measures to ensure and improve the quality of education

Policies and measures for guaranteeing the quality of education

The College expects students to make a high level of achievement in the selected courses, not arbitrarily taking courses for a greater number of credits. Class advisors and supervisors are required to meet with students on a regular basis. We use the GPA system as a tool for academic guidance. In the first year, students take the Progress Report On Generic Skills (PROG) test to understand their own strengths and weaknesses, which will serve as a guide for their personal development at university. Students are required to take the TOEIC test in the third year to prepare themselves for global society.

Measures to improve educational abilities of faculty members

- We conduct class evaluation surveys by students.
- The results of surveys on course enrollment and grade distribution are published.
- The content of the syllabi is reviewed.

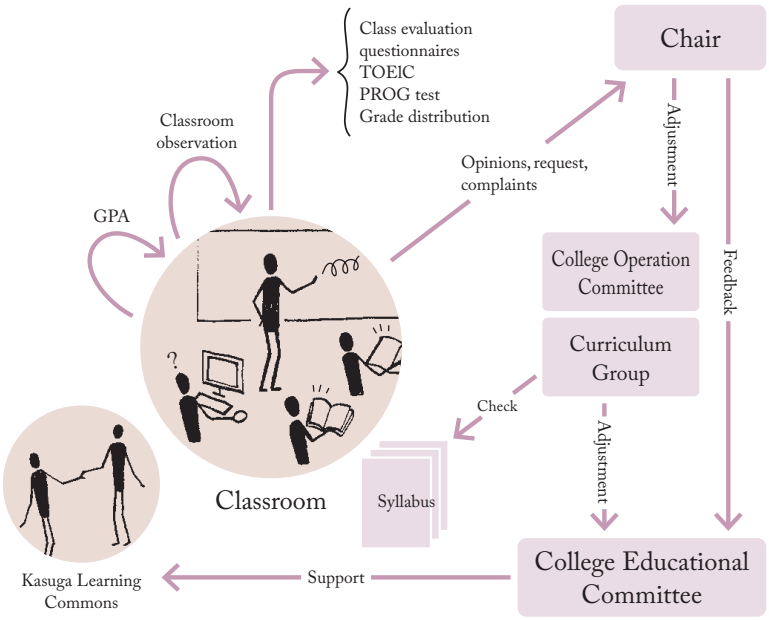
Educational improvement scheme

The Curriculum Group is responsible for planning and implementation of the overall curriculum.

Measures for improvement of curriculum

The Curriculum Group takes the lead in periodic review of the curriculum contents and link between courses.

Cycle of improving the learning environment and enhancing educational abilities



Bachelor of Arts in Library and Information Science

Diploma Policy

Bachelor of Arts in Library and Information Science will be awarded to those who are recognized as having acquired knowledge and abilities (Generic Competences) to be acquired based on the educational purpose of the University of Tsukuba bachelor's program, and achieved the following achievement goals based on the educational purpose of College of Knowledge and Library Sciences, School of Informatics.

Acquisition of foundation for the integration of humanities and sciences: Must have gained a broad foundation and perspective in the field of informatics across the humanities and sciences

Understanding of knowledge-sharing phenomena: Must understand and grasp the knowledge-sharing phenomena that encompasses the generation, processing, accumulation, transmission, and utilization of knowledge from a variety of academic perspectives

Research ability: Must have obtained the ability to carry out research using a variety of survey and analysis methods, including quantitative research, qualitative research, and statistical analysis

Ability to build a knowledge base: Must have obtained the ability to use information technology to build and utilize knowledge resources and data infrastructure

Knowledge transfer capability: Must have obtained the ability to search for appropriate information from a variety of sources and to communicate accumulated knowledge by processing and expressing it in an appropriate manner

Understandings of diversity and acquisitions of ethics: Must understand cultural and value diversities, and acquire ethics and public-spiritedness

Curriculum Policy

As the program to pursue studies for a Bachelor of Arts in Library and Information Science, the curriculum is organized and implemented based on the following policies.

General policy

Divided into three majors, the curriculum is organized based on the keyword “human” for the major in Knowledge Studies, “information technology” for the major in Knowledge Information Systems, and “society” for the major in Information Resources Management. In any of the majors, the courses offered train students to have a wide perspective and to understand the union and interactive roles between human, information technology and society/culture in line with the realm of specialty.

Course sequence policy

In the first year, students learn basic knowledge and techniques through General Foundation Subjects such as knowledge information, information systems and other Foundation Subjects for Major as well as elementary programming, etc. in addition to Multidisciplinary Subjects and foundation subjects such as foreign languages and physical education. In the second year, to further deepen the knowledge and techniques gained in the first year, students take Foundation Subjects for Major, which include the lectures set up for each major theme and Knowledge Information Resources Labs from which students learn techniques. In the third year, students select one of the three majors and take the Major Subjects of the selected one. To develop diverse viewpoints, students are required to take the Major Subjects of other majors in addition to those of the major to which the student belongs. In the fourth year, each student belongs to a relevant research laboratory to conduct graduation research and write a graduation thesis.

Implementation policy

The courses offered are carefully selected and many of them are set up as required subjects so

that special consideration is given to allow all students to learn the foundations of both humanities and science above a certain level. To allow students to understand their studies comprehensively in an applied and practical setting, the curriculum includes seminars and workshops as required subjects for all academic years of students. In addition, "Internship" at a library or company and "International Internship" as an overseas training subject are programmed.

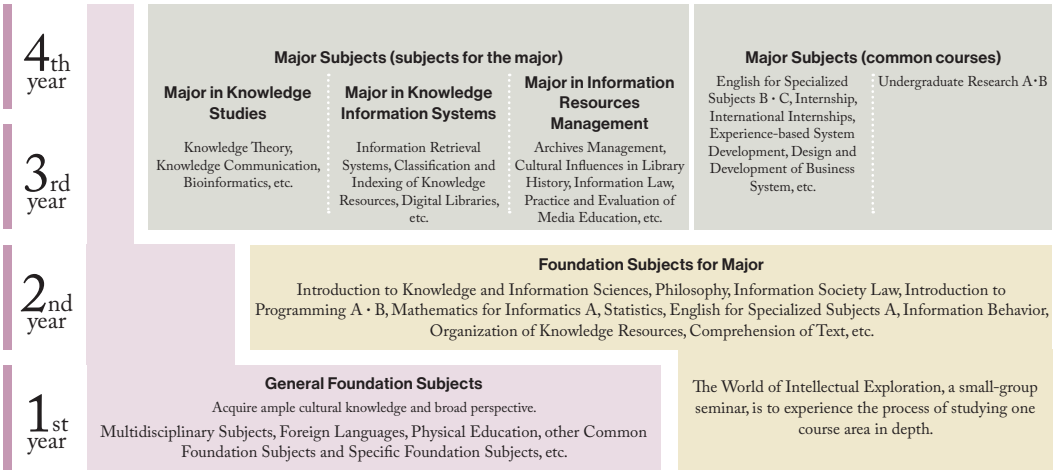
Policy for evaluation of learning outcomes

For each of the subjects offered in the College, the achievement target and its corresponding evaluation criteria are clarified in the syllabus so that the grant of credits is based on the reliable evaluation of the target achievement of the subject. To make the evaluation of student performance fairer and more transparent, the target value of performance grade distribution is defined, and the distribution for each subject will be made public. On the whole, the curriculum is structured to cover the knowledge and abilities required for the grant of diploma, which are shown in the section for the diploma policy.

Characteristics

The Kasuga Learning Commons has been set up in the Library on Library and Information Science, where students can seek advice from senior students. The advice given at the Commons includes issues on course-taking planning, daily life, tips for class assignments, report writing, and use of libraries. Students can also receive practical training in system software development through the Embedding Technology Campus OJT and the Education Network for Practical Information Technologies (enPiT) programs.

Structure of curriculum



School of Medicine and Health Sciences

College of Medicine

- Doctor of Medicine

College of Nursing

- Bachelor of Science in Nursing
- Bachelor of Science in Healthcare

College of Medical Sciences

- Bachelor of Medical Sciences
- Bachelor of International Medical Sciences

Educational purpose

School of Medicine and Health Sciences cultivates good medical professionals, that is, those who can deal with every person backed up by solid communication ability in addition to outstanding medical skills in adherence with the global standards, as well as the world's level researchers in the disciplines of medicine, nursing and medical sciences.

College of Medicine
College of Nursing
College of Medical Sciences

College of Medicine

■ Doctor of Medicine

Educational purpose

To be able to serve and contribute to society as excellent clinicians, medical researchers, medical educators, or specialists in health and welfare, and to take on the challenge of solving global issues with global activities in their respective fields, the program trains physicians with basic clinical skills and medical research skills, as well as advanced problem-solving skills and good communication skills. The Department also trains physicians with a rich sense of humanity to promote patient-centered medicine and medical research throughout their lives, with a high level of problem-solving ability and good communication skills.

Desired students

We seek candidates those who possess sufficient basic academic abilities in natural science, linguistic skill, etc. as well as rich creativity, inquisitive mind, high ethical view, cooperativeness, communication ability, and the determination to contribute to the health and welfare of humanity throughout their life.

Measures to ensure and improve the quality of education

To improve the quality of education, we established the Office of Medical Education Planning and Evaluation, which plays a coordinating role in education in cooperation with the College of Medicine Committee for the Promotion of Education. In addition to making improvements through making proposals for curriculum development, supporting the implementation of each program, and working on a series of processes from class evaluation to feedback, the Office conducts planning of new programs to meet the needs of society.

We work on faculty development (FD) to improve teaching methods. Along with the starter and refresher training programs that are mandatory for all faculty members, training sessions are held for relevant faculty members under the theme of PBL tutorial scenario development, brush-up, etc. A total of 200 members attend these programs each year.

Program evaluations from students and faculty are conducted at the end of each course and at the end of each academic year to provide feedback for curriculum development and steady improvement.

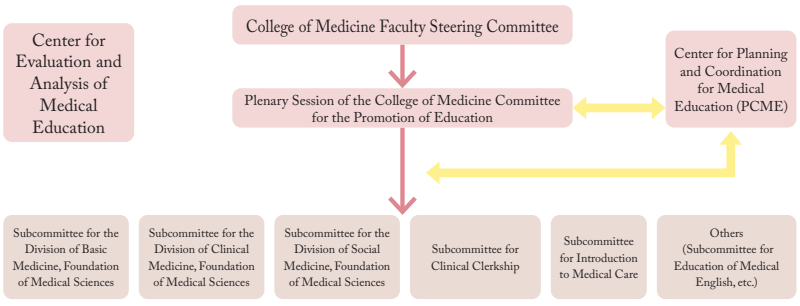
The Center for Evaluation and Analysis of Medical Education has been established as an independent evaluation department to analyze educational outcomes.

Students take the tests administrated by the Common Achievement Tests Organization, which are commonly taken by the medical students all over Japan. To ensure the level of our graduates entering into the professional world, the College of Medicine Steering Committee, which is composed of faculty members responsible for each division of the College, makes decisions on credit approval, promotion, and graduation.

Accreditation of medical education by field based on international standards

College of Medicine, School of Medicine and Health Sciences at the University of Tsukuba underwent an on-site review by the Japan Accreditation Council for Medical Education (JACME) based on the self-assessment report from November 7 to 10, 2023, and gained accreditation (accreditation period: October 1, 2024 to end of September 30, 2031). (The self-assessment report used in the on-site review is available on the College of Medicine website.)

Measures to ensure the quality of education and improve educational abilities



- College of Medicine Faculty Steering Committee: Approval for curriculum and grades.
- College of Medicine Committee for the Promotion of Education: Examination on the problems and improvement in the curriculum.
- Office of Planning and Coordination for Medical Education (PCME): Advice on curriculum development for each academic year, support for implementation, class evaluation, curriculum evaluation (evaluation by students, faculty, graduates, and external organizations), feedback of evaluation results and suggestions for improvement, planning and implementation of FD.
- Center for Evaluation and Analysis of Medical Education: Collection and analysis of information on educational outcomes as an organization under the direct control of the College of Medicine.

Doctor of Medicine

Diploma Policy

A Doctor of Medicine is granted to those who are admitted to have gained the knowledge and ability (Generic Competences) that should be gained based on the curriculum targets stipulated for the University of Tsukuba's undergraduate degree programs and have gained the required competencies at the time of the graduation of College of Medicine.

Professionalism

One has well-rounded human nature, the deep appreciation for the sanctity of life and ethical view and are capable of practicing medicine with a sense of identity and responsibility as a potential doctor who preserves life and health. In addition, one always has aspirations and can reflect what he or she learns and continue self-improvement throughout his or her life.

Scientific thinking

One interprets an event from a scientific point of view with curiosity and inquisitive mind and can understand scientific methods for solving unknown problems.

Communication

To provide medical care that focuses on patients in cooperation with a medical team that involves many different job types, one can communicate with patients, their families and team members appropriately.

Practice of medical examination

Possesses the knowledge of basic medicine, clinical medicine, social medicine and behavioral science as the foundation of medical care, understands the problems of every patient by applying it, and can carry out appropriate examination for solving them.

Medical sociality

Interpreting the problems of the community/society or of all mankind, let alone of human individuals, from a wide perspective, one can recognize associated laws and regulations, institutions, systems and resources with regard to health, medicine and welfare, and practice activities that support the health in the community/society based on social infrastructures.

Ability to open up the future

To build up one's future to widely contribute to the society, he or she possesses a global perspective and shows willingness to challenge daringly and strongly but flexibly even under difficult circumstances. In addition, inheriting the tradition as "Tsukuba the education", one can practice education with passion and exert leadership in cooperation with persons around him or her.

Curriculum Policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Doctor of Medicine.

General policy

As the nation's first medical school that adopted a program of six years, Tsukuba started its medial school integrating the disciplines of fundamental medicine, clinical medicine and social medicine. The Program features the prime importance on self-learning and problem-solving ability development and a rich selection of hands-on programs.

Course sequence policy

First through third year...Basic course of medicine

Students are divided in a small group of eight to nine students of the basic course of medicine. Facilitated by tutor faculty members, students learn predominantly with the "PBL tutorial" learning method, which gives students tasks to solve problems independently through debates on case examples or self-study.

The curriculum is structured with 28 courses in which the areas of basic, clinical and social medicine are integrated.

Fourth through sixth year...Clinical participatory training (Clinical clerkship)

Different from the conventional clinical training, in which medial students predominantly visit and see medical care scenes, medical students are engaged in participatory clinical training as a student doctor, which is hence a medical care team member. During one year in the first-half period, students learn at internal medicine, surgery and other required clinical departments at mainly the university hospital, and in the second-half period, training is also given at community medical institutions in Ibaraki Prefecture in addition to elective training. Before engaged in hospital training, students need to pass the CBT (computer-based evaluation of knowledge) and

OSCE (objective evaluation of practical skills with regard to basic clinical competences and attitudes), which are organized by Common Achievement Tests Organization.

▌First through sixth year...Introductory medical care

The realms difficult to learn in the above programs by organ, such as medical ethics, team medical care, community medical care (primary care), health promotion, doctor-patient relationship, and other realms, are systematically learned.

▌Sixth year...Advanced electives

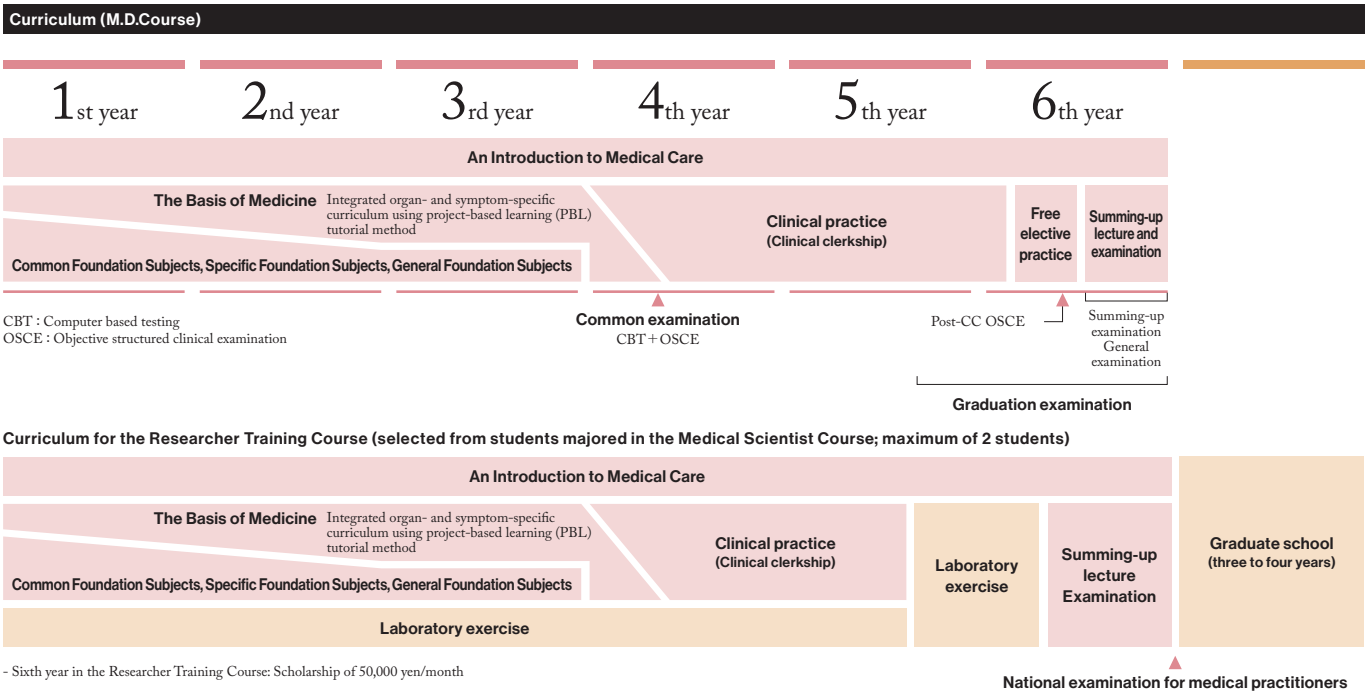
Training is given at in-/outside university hospitals in-/outside Japan, laboratories, administrative institutions, or other places according to the need of each student.

▌First through sixth year...Laboratory seminars/ workshops

Under the advice of faculty members at the laboratory in the area in which each student has interest, students are engaged in leading-edge medical research. From the second half of the fifth year, students have the option to move on to the future medical research by selecting "new major in medicine" or another option to advance to the graduate school master's program right after graduation (researcher development course).

Implementation policy

Tutorial-type small group courses are adopted in all aspects during first academic years to encourage students to acquire the attitude and habit of voluntarily learning and the ability of solving unknown problems. To support this learning, resource persons (faculty members) are staffed, systems of learning support such as an e-learning environment are organized, and study meetings for faculty members are held on a regular basis to improve teaching methods. Students learn with clinical training at principally each clinical department of the university hospital and also by using the system of community medical care education center/station in which university faculty members directly instruct students in medical scenes in the communities in Ibaraki Prefecture.



Doctor of Medicine

Policy for evaluation of learning outcomes

The achievement of learning targets of each subject is fairly evaluated using the method defined in the syllabus. In the fourth year, students take the CBT and Pre-cc OSCE, which are national common exams, and those who pass them are authorized to advance to hospital training as student doctors. In the sixth year, after completion of clinical clerkship, students take the OSCE and pass of the examination is required for graduation. Grade advancement or graduation is judged with justice by the College of Medicine education conference management board based on the objective criteria of each year of grade.

Other noteworthy features

By engaging in English language education reform and conducting the International Baccalaureate Special Entrance Examination, we recruit students with a rich sense of internationalism from all over the world and train them to be physicians who can play active roles in the world.

Educational purpose

School of Medicine and Health Sciences cultivates good medical professionals, that is, those who can deal with every person backed up by solid communication ability in addition to outstanding medical skills in adherence with the global standards, as well as the world's level researchers in the disciplines of medicine, nursing and medical sciences.

College of Medicine
College of Nursing
College of Medical Sciences

College of Nursing

- Bachelor of Science in Nursing
- Bachelor of Science in Healthcare

Educational purpose

College of Nursing is designed to cultivate outstanding nursing professionals who are founded on the liberal arts in a broad range of areas and the deep understanding of people and thereby can provide quality nursing that meets people's needs in cooperation with others as a member of a health, medical or welfare team and also cultivate the human resources who contribute to the society widely in the areas of health and medicine, such as civil officials and nursing professionals working from an international viewpoint, interdisciplinary researchers and educators who nurture the next generation.

Desired students

We seek those who possess sufficient basic academic abilities including scientific knowledge and linguistic skill along with deep interest and concern for nursing science and have the ability and motivation to pursue and develop novel nursing for supporting new health, medical and welfare.

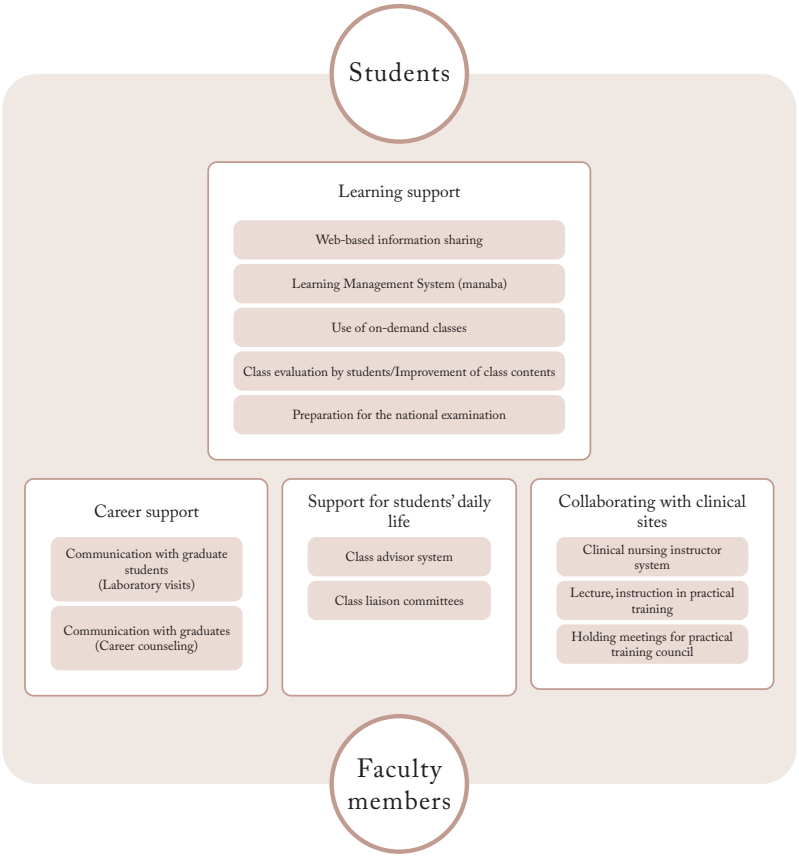
We seek those who possess sufficient basic academic abilities including scientific knowledge and linguistic skill along with deep interest and concern for nursing science and have the ability and motivation to pursue and develop nursing for supporting new health, medical and welfare.

Measures to ensure and improve the quality of education

Student-centered class evaluations are conducted, and student opinions are fed back to the faculty through class liaison meetings (this is possible because of the class advisor system) and are used to improve education.

In addition, to ensure the quality of education, we have established the Office of Planning and Coordination for Medical Education, where specialized staff work on curriculum planning, and support the implementation of various educational programs and evaluation. Specifically, the Office plans new programs to meet the needs of society (e.g., a joint course by the three colleges in the School of Medicine and Health Sciences), improves current programs based on evaluation results, trains tutors, holds faculty training sessions, and conducts follow-up surveys of graduates.

Ensuring the quality of education at College of Nursing



Bachelor of Science in Nursing

Diploma Policy

We grant diplomas for Bachelor of Science in Nursing who have acquired the knowledge and abilities (that is, Generic Competences) to become learned based on the educational purpose for undergraduate students of the University of Tsukuba. In their learning outcomes, they will achieve the following goals based on the educational purpose of our school and college.

- Has taken major subjects based on the premise of liberal arts studies.
(Relevant competences: Understanding of the subject in nursing, Expertise and skills in nursing)

- Possesses knowledge and skills based on scientific evidence as well as the ethical view and attitude appropriate to an advanced nursing professional.
(Relevant competences: Ability to practice nursing based on scientific evidence, Nursing ethics and caring)

- Possesses the attitude and habit of learning new knowledge and skills in one's own right and has gained the ability to solve unknown problems.
(Relevant competences: Ability to practice nursing based on scientific evidence)

- Possesses the ability to continue self-learning throughout one's life.
(Relevant competences: Ability to develop a career in nursing)

- Possesses the ability to pursue the role of nursing from diverse viewpoints including the understanding of international trends.
(Relevant competences: Cooperation and collaboration in medical treatment, International nursing perspectives)

Curriculum Policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Science in Nursing.

General policy

Taking advantage of the characteristics as a university with diverse fields, the curriculum is designed to build on students' interaction with other College students through learning of Multidisciplinary Subjects and Introductory Subjects, etc. In order not to have theory disconnected from practice, school seminars invite currently-active clinical nursing staff to direct the students to develop a realistic, practical competence that works with the present leading-edge technologies. For hospital training, the Program is deeply tied up with the university hospital and other facilities in the prefecture to offer the students opportunities to learn through the experience of the latest medicine and care.

Course sequence policy

The curriculum for the first and second years, which is centered on the understanding of the specialized nursing roles and evolve from "living support science" as the foundations for nursing, is organized to lead students to the upcoming learning in each area of expertise. In addition, with the enrichment of specialized foundation subjects for nursing, the curriculum is also designed to allow students to understand specialized nursing science from an extensive point of view. In the third through fourth year, students acquire evidence-based advanced specialized skills in each of the areas through the learning of practical nursing science (clinical nursing, phychiatric nursing, gerontological nursing, women's health nursing, child developmental nursing). Skill acquisition is aided with the objective structured clinical examination (OSCE), etc. In addition, students learn community and home-care nursing to gain the knowledge of system of administration in health,

medicine and welfare, etc. To achieve global human resource development, the Program offers the students opportunities to learn the practice of nursing from an international viewpoint through international health care and, nursing science, international nursing training, etc. For the specialized realms of nursing, the curriculum includes subjects that allow students to pursue the practice of nursing that makes use of what they have learned so far in the fourth year.

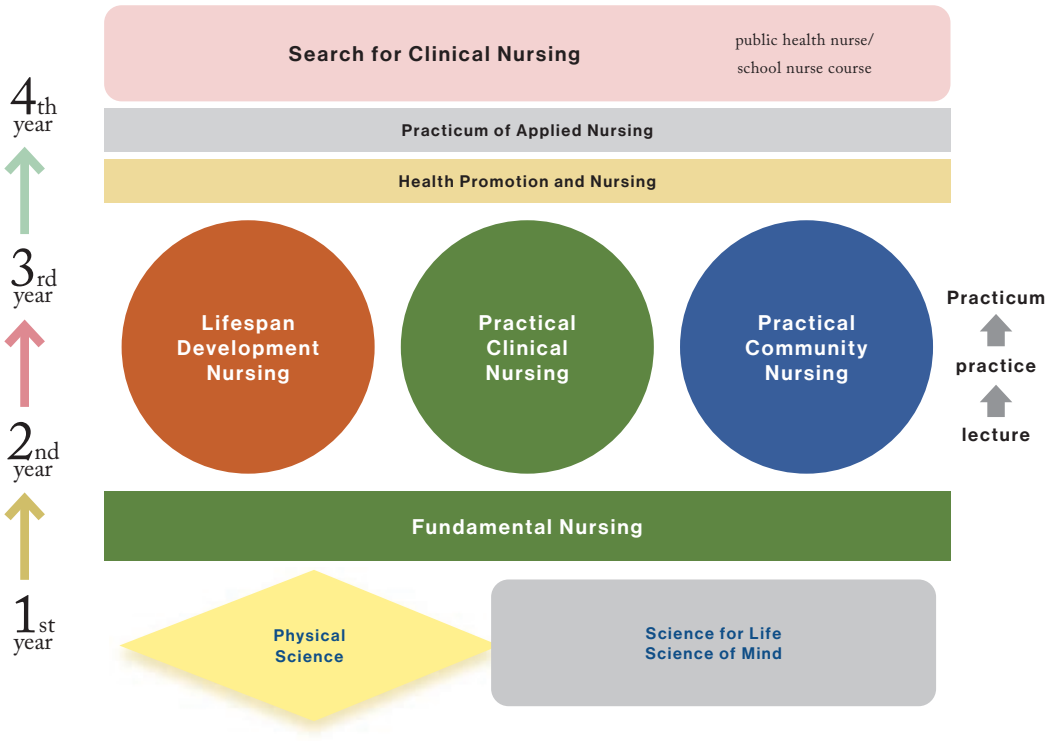
Implementation policy

Tutorial-type small group seminars and workshops are adopted to cultivate the attitude and habit of voluntarily learning and the ability of solving unknown problems. To support this learning, e-learning, which can effectively support students' learning via computer networks anytime and anywhere, is fulfilled, and to make possible the self-check of learning outcomes there, IBT, (Internet Based Test), with which students can take online tests, and other information technologies are used to organize the system of learning support. In addition, to improve the instructing ability of faculty members, the Faculty Development (a study meeting for faculty members to improve teaching methods) is actively held.

Policy for evaluation of learning outcomes

Learning outcomes are fairly evaluated by faculty members teaching the class. For the achievement evaluation of knowledge and skills based on scientific evidence, the learning outcomes from the lectures of Foundation Subjects for Major and Major Subjects are objectively evaluated with exams, reports, etc. As for the ethical view and attitude appropriate to advanced nursing professionals, the learning outcomes from the lectures and seminars of Foundation Subjects for Major and Major Subjects are objectively evaluated with exams, reports, etc. The achievements in workshops are evaluated by multiple faculty members who are relevant to the

Curriculum structure



Bachelor of Science in Nursing

subject. The independence in learning and the abilities of solving unknown problems and of continuing self-learning throughout their life are evaluated with the learning outcomes of major subjects in the applied realms of nursing science and also the research seminars of nursing science. The abilities of understanding international trends and of pursuing the roles of nursing from diverse viewpoints are objectively evaluated with the exams, reports or the like in international health care science, international nursing science, etc.

Characteristics

Students can select courses according to their nursing specialties. The curriculum is designed so that all students will be qualified to take the nursing license examination (the basic license requirement). Courses for those who aim to be a public health nurse or nursing teacher are offered as selective courses.

In addition, there are students who wish to go on to the graduate school of master's/doctoral program in nursing science of our university immediately after graduation or after gaining clinical nursing experience in order to obtain the midwifery license or become educators/researchers. There is a system that can support the carrer advancement of nursing graduates.

Bachelor of Science in Healthcare

Diploma Policy

We grant diplomas for Bachelor of Science in Healthcare who have acquired the knowledge and abilities (that is, Generic Competences) to become learned based on the educational purpose for undergraduate students of the University of Tsukuba. In their learning outcomes, they will achieve the following goals based on the educational purpose of our school and college.

- Has taken major subjects based on the premise of liberal arts studies.
(Relevant competences: Understanding of health care needs, Healthcare expertise and skills)

- Possesses knowledge and skills based on scientific evidence as well as the ethical view and attitude appropriate to an advanced healthcare service professional.
(Relevant competences: Health care based on an interdisciplinary perspective, Health care and ethics)

- Possesses the attitude and habit of learning new knowledge and skills in one's own right and has gained the ability to solve unknown problems.
(Relevant competences: Health care based on an interdisciplinary perspective)

- Possesses the ability to continue self-learning throughout one's life.
(Relevant competences: Career development skills in healthcare settings)

- Possesses the ability to pursue the role of health care service profession from diverse viewpoints including the understanding of international trends.
(Relevant competences: Ability to collaborate in healthcare, International health care perspectives)

Curriculum Policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Science in Healthcare.

General policy

Taking advantage of the characteristics as a university with diverse fields, the curriculum is designed to build on students' interaction with other College students through learning of Multidisciplinary Subjects and Introductory Subjects, etc. In order not to have theory disconnected from practice, school seminars invite currently-active clinical nursing staff to direct the students to develop a realistic, practical competence that works with the present leading-edge technologies. For hospital training, the Program is deeply tied up with the university hospital and elderly care facilities to offer the students opportunities to learn through the experience of the latest healthcare services.

Course sequence policy

The first-year students place focus of study on Japanese language. From the second year, the curriculum is structured so that students can start learning in their special areas starting with Life Support Science, a basic of healthcare courses, with other students in College of Nursing. In addition, with the enrichment of specialized foundation subjects for nursing, the curriculum is also designed to allow students to understand healthcare services from an extensive point of view. In the third through fourth year, students acquire evidence-based advanced specialized skills in each of the areas through the learning of Introduction to Global Healthcare and Healthcare Internship, etc. In addition, students learn community and home-care nursing to gain the knowledge of system of Japanese and International administration in health, medicine and welfare, etc. To achieve global human resource development, the Program offers the students opportunities to learn healthcare services from an

Bachelor of Science in Healthcare

international viewpoint through international health care science, nursing science, international nursing training, etc. For the specialized realms of nursing, the curriculum includes subjects that allow students to pursue the healthcare services that makes use of what they have learned so far.

Implementation policy

Tutorial-type small group seminars and workshops are adopted to cultivate the attitude and habit of voluntarily learning and the ability of solving unknown problems. To support this learning, e-learning, which can effectively support students' learning via computer networks anytime and anywhere, is fulfilled, and to make possible the self-check of learning outcomes there, IBT, with which students can take online tests, and other information technologies are used to organize the system of learning support. In addition, to improve the instructing ability of faculty members, the Faculty Development (a study meeting for faculty members to improve teaching methods) is actively held. In addition, the Health Care Course has a tutor system by Japanese nursing students.

Policy for evaluation of learning outcomes

Learning outcomes are fairly evaluated by faculty members teaching the class. For the achievement evaluation of knowledge and skills based on scientific evidence, the learning outcomes from the lectures of Foundation Subjects for Major and Major Subjects are objectively evaluated with exams, reports, etc. As for the ethical view and attitude appropriate to advanced nursing professionals, the learning outcomes from the lectures and seminars of Foundation Subjects for Major and Major Subjects are objectively evaluated with exams, reports, etc. The achievements in workshops are evaluated by multiple faculty members who are relevant to the subject. The independence in learning and the abilities of solving unknown problems and of continuing self-learning throughout their life are evaluated with the learning outcomes of major subjects in the applied realms of nursing science and also the research seminars of nursing science. The abilities of understanding international trends and of pursuing the roles of nursing from diverse viewpoints are objectively evaluated with the exams, reports or the like in international health care science, international nursing science, etc.

Educational purpose

School of Medicine and Health Sciences cultivates good medical professionals, that is, those who can deal with every person backed up by solid communication ability in addition to outstanding medical skills in adherence with the global standards, as well as the world's level researchers in the disciplines of medicine, nursing and medical sciences.

College of Medicine
College of Nursing
College of Medical Sciences

College of Medical Sciences

- Bachelor of Medical Sciences
- Bachelor of International Medical Sciences

Educational purpose

College of Medical Sciences educates fundamental knowledge and technical skills in health and medical science. Students are expected to have a sense of mission and responsibility as medical professionals. Graduates will promote research and education, contribute to the advancement of medical care, and engage in advanced specialized medical care to develop new diagnostic and therapeutic technologies.

Desired students

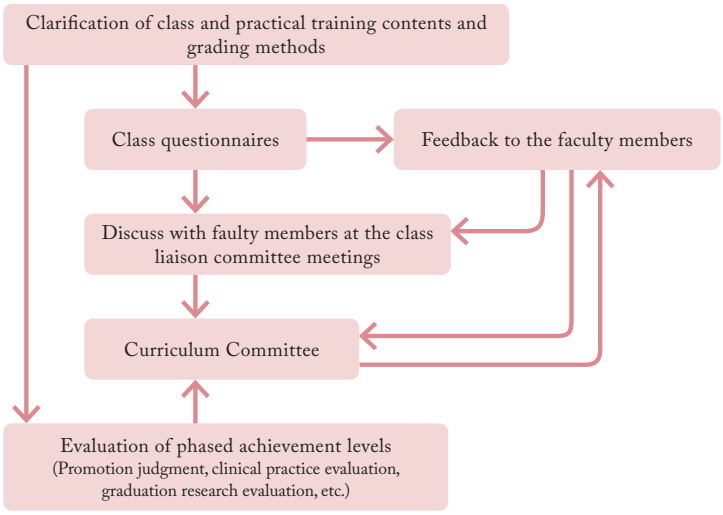
We are seeking individuals who have a strong interest in medical science, and are motivated to play an active role in research, facilitate medicine and medical care technologies, and are flexible to understand of their roles in a medical care team.

Measures to ensure and improve the quality of education

The levels of achievement of students' academic goals are tested with quizzes and achievement tests. At the end of each semester, class questionnaire surveys are conducted to continuously evaluate educational courses. The results of the surveys are used as a base for discussions on educational processes and course contents to improve the quality of education. In addition, we implement faculty development and evaluate the results to strengthen the quality of education each year.

In order to ensure the quality of education, students' academic achievements are assessed when they move on to the third year, when they decide their majors. In addition, students' academic achivement, and their clinical skills are evaluated by clinical competency tests to ensure their capabilities before taking clinical practice courses. In the major of Medical Science, students are given individual guidance and preparation for the national examination for clinical laboratory technicians through on-campus mock examinations. They are ensured to be competent as clinical laboratory technicians at the time of graduation. In the major of International Medical Sciences, students are expected to be proficent in taking courses taught in Englsh and aquired acadmic knowldege to conduct resarech in medcial science.

Measures to ensure and improve the quality of education



Bachelor of Medical Sciences

Diploma Policy

A bachelor's degree (Medical Science) will be awarded to those who have advanced their knowledge and capability beyond the general competence level, described under the educational purpose of the University of Tsukuba's bachelor's program.

- Acquire a broad knowledge of human biology and view humanity with respect to dignity and life ethics.
- Acquire fundamental knowledge and skills necessary for learning and advancing human sciences as well as medical knowledge of human health and disease.
- Learn essential knowledge and skills in clinical laboratory techniques, and acquire academic skills, clinical knowledge, and ethical practice required for a clinical laboratory technician.
- Acquire basic knowledge and learning skills through laboratory training and experiences to develop and promote your own research.
- Understand your roles as a clinical laboratory technician in a medical team and acquire knowledge and medical communication skills to work in a team setting.

Curriculum Policy

The curriculum is based on the following policies to obtain a bachelor's degree in Medical Sciences.

General policy

The curriculum offers students a broad range of subjects, including specialized knowledge, skills, and ethical practice, essential for the clinical laboratory technician.

Course sequence policy

Students must study basic subjects consisting of liberal arts, science, and medical science subjects before proceeding to specialized subjects. The specialized subjects consist mainly of classes and practical training to acquire the specialized knowledge and skills necessary for clinical laboratory technicians. After completing these subjects, students are required to take hospital practical training to develop practical skills. In addition, medical and nursing schools offer joint courses to learn how to work in a team of medical professionals. Moreover, graduation research allows students to explore the basics of medical research beyond clinical medicine.

Policy on evaluation of learning outcomes

Students are required to select a major in Medical Science when they advance to their third year. Students will be evaluated for their academic performance through their transcript of courses taken. Hospital training is permitted on the condition that students acquire the specialized knowledge and skills necessary for clinical laboratory technicians.

Policy for evaluation of learning outcomes

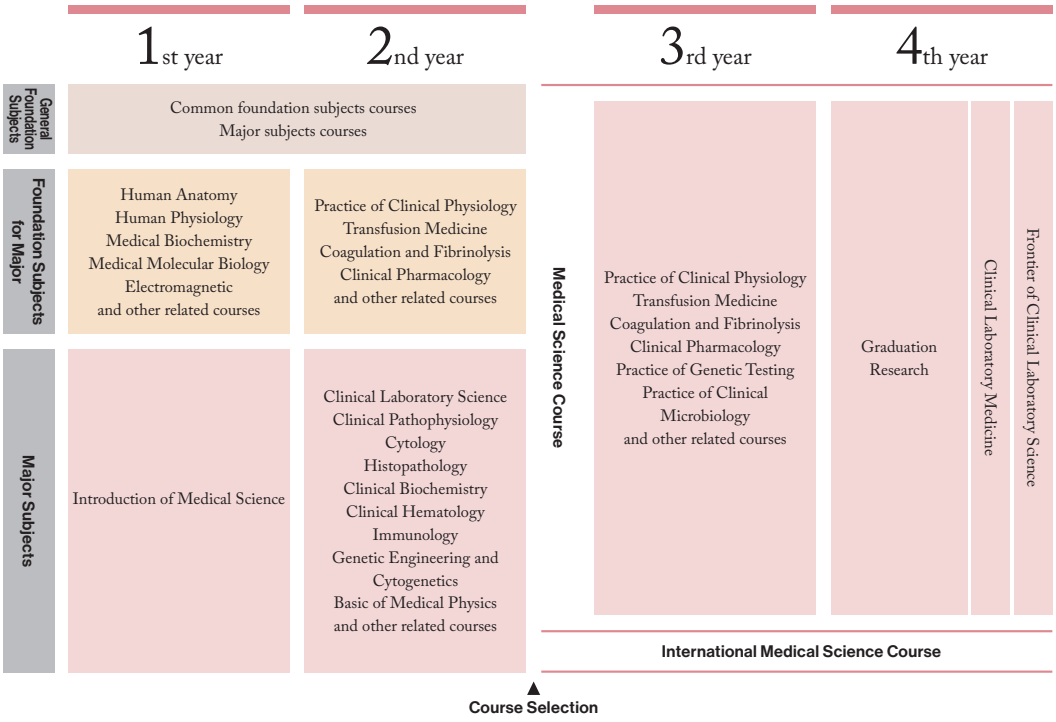
Achievements in ethics and humanity as a medical professional will be assessed objectively through examinations scores from the courses and other means. Understanding of human health and disease will be assessed by examination scores and reports submitted in classes and practical training courses. Clinical testing knowledge and practical skills will be evaluated through scores achieved on the examinations and reports. The results from the clinical practice exam will be considered as well.

The ability to promote research in medical science will be assessed through interviews, presentations, and graduation research thesis. The ability to understand and practice team medicine will be evaluated based on the performance in Care Colloquium and Clinical Practice courses.

Characteristics

We provide education centered on classes and practical training that cultivates specialized knowledge and skills in the medical field with a focus on laboratory techniques, as well as clinical skills and teamwork skills.

Curriculum structure



Bachelor of International Medical Sciences

Diploma Policy

A bachelor's degree (International Medical Science) will be awarded to those who have reached and advanced their knowledge and capability beyond the general competence level, described under the educational purpose of the University of Tsukuba's bachelor's program.

- Acquire a broad knowledge of human biology and view humanity with respect to dignity and life ethics.
- Acquire fundamental knowledge and skills necessary for learning and advancing human sciences as well as medical knowledge of human health and disease.
- Acquire basic knowledge and learning skills through laboratory training and experiences to develop and promote your own research.
- Acquire basic principles and experimental skills essential for medical science research.
- Acquire the skills in basic knowledge and scientific communication skills, the willingness to learn and explore, and the ability to cope with medical issues to play an active role on a global scale in the field of medical science.

Curriculum Policy

To obtain a bachelor's degree (International Medical Science), the program implemented the following academic policies.

General policy

The curriculum offers a broad range of subjects, including specialized knowledge, scientific communication skills, and ethical practices, for students to conduct and contribute to medical research on a global scale.

Course sequence policy

Students must study subjects consisting of liberal arts, basic science, and medical science subjects before proceeding to specialized subjects. The specialized subjects consist mainly of classes and practical training to acquire the technical knowledge and skills necessary for clinical laboratory technicians. After completing these subjects, students are required to take hospital practical training to develop practical skills. Medical and nursing schools offer joint courses to learn how to work in a team setting with other medical profession. Moreover, graduation research allows students to explore the basics of medical research beyond clinical medicine.

Implementation policy

Students are required to select a major in Medical Science when they advance to their third year. Students will be evaluated academically based on the transcript of their courses taken and their English proficiency. Students take advanced subjects together with international students to strengthen their English discussion skills. Students are assigned to a faculty supervisor and engage in a laboratory activities to master fundamental and technical research skills for their graduation research.

Policy for evaluation of learning outcomes

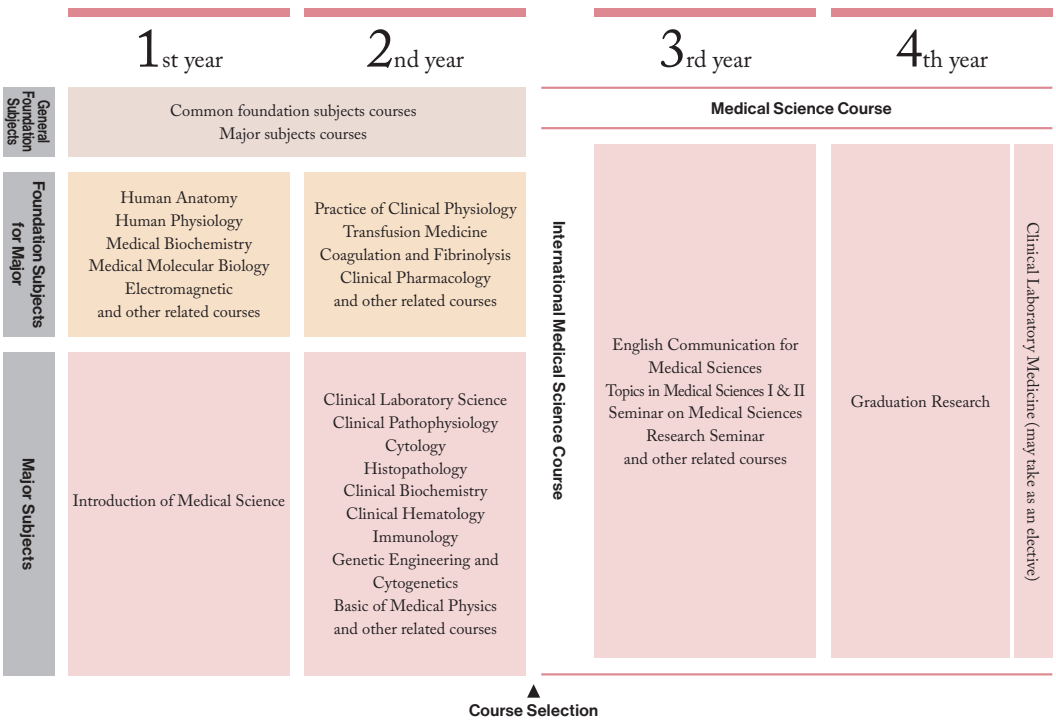
Achievements in ethics and humanity in the life sciences will be assessed objectively through examination scores from the courses and other means. Understanding human health and disease, medical science knowledge and skills will be

assessed by examination scores and reports submitted in classes and practical training courses. The ability to promote research in medical science will be evaluated through interviews, research presentations, and graduation research thesis. Students' ability to understand and respond to international issues will be assessed from the following courses: Workshop for Medical Science, International Forum on Medical Biology Research, Training Abroad on Medical Biology, and English Communication for Medical Sciences.

Characteristics

The International Medical Science major provides education in which students learn together with international students through English language classes and practical training, and acquire specialized knowledge and skills in medical science, imagination, and academic abilities in the environment of "internationalization in everyday life."

Curriculum structure



School of Physical Education, Health and Sport Sciences

School of Physical Education, Health and Sport Sciences

- Bachelor of Health and Physical Education

School of Physical Education, Health and Sport Sciences

■ Bachelor of Health and Physical Education

Educational purpose

The School of Physical Education, Health and Sport Sciences is designed to cultivate leaders in the physical education/sports world, who are founded on outstanding athletic skills and extensive athletic experience with solid academic ability, virtue and a healthy body and can manage organizations adequately and solve all sorts of problems using the general knowledge and the latest scientific findings in physical education, health, sport and coaching.

Desired students

We seek candidates who are strongly interested in the realms of physical education, health, sport and coaching and have the enthusiasm and motivation to further increase the athletic skills that they have acquired as well as associated knowledge, in addition to learning more and expanding the athletic experience, and to contribute to make domestic and international strides in physical education and sport.

Measures to ensure and improve the quality of education

To improve students' motivation to learn, we set the views and criteria for grading and clearly show them in the syllabus. This allows faculty members and the students have common understanding on class operation and grading.

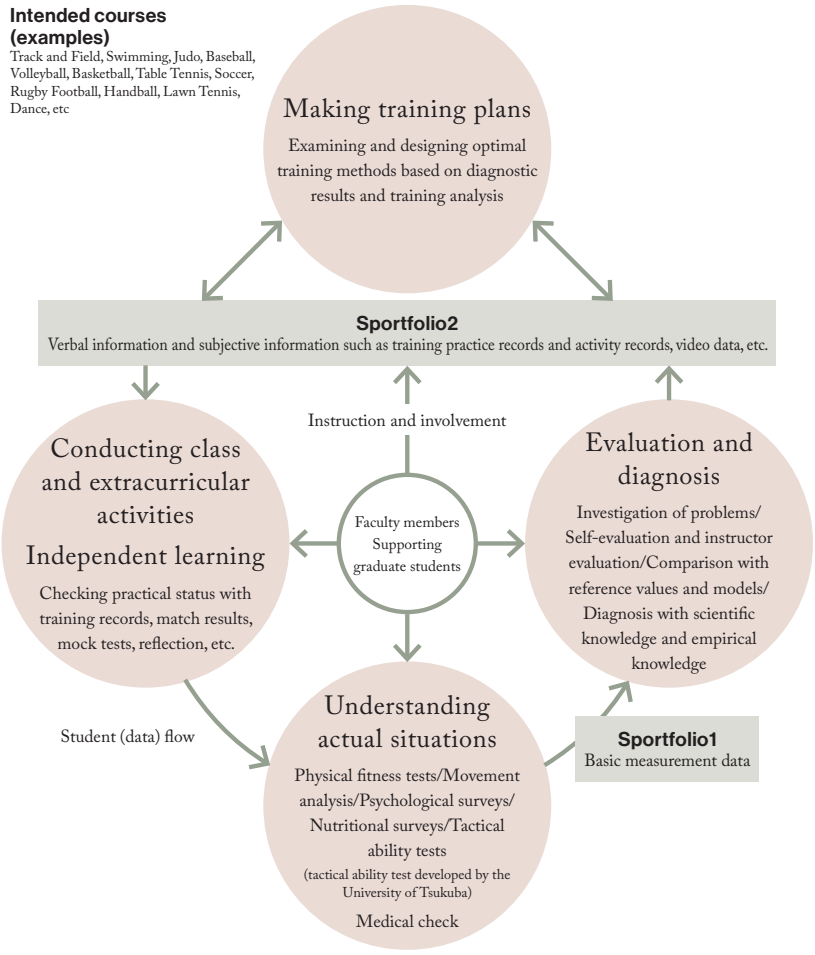
Led by the FD Committee of the School of Physical Education, Health and Sport Sciences, class evaluations by students and class observations by faculty members are conducted. The results are fed back to the class instructor as basic data for improving classes. Videos of practical skills and basic study content are uploaded to specific websites so that students can study on their own at any time.

In order for students and faculty to mutually confirm the status of acquisition of a wide range of practical skills, teaching abilities and academic knowledge and skills, and to clearly understand the direction of education and learning, we have established a system where practical skill tests are conducted to support the improvement of each student's athletic and teaching abilities.

Exercises are conducted in collaboration with graduate students as a part of high quality classes while encouraging the students to continue study at the graduate school.

Training sessions and other events are carried out in collaboration with external organizations that have agreements with the University with an aim to raise awareness of students in international cooperation and development.

Loop education system (for efficient use of data and improvement of practical teaching skills)



Bachelor of Health and Physical Education

Diploma Policy

A Bachelor of Health and Physical Education is granted to those who are admitted to have gained the knowledge and ability (Generic Competences) that should be gained based on the curriculum targets stipulated for the University of Tsukuba's undergraduate degree programs and have reached the following achievement targets in their learning outcomes based on the educational purpose for the School.

- Possess the basic skills in extensive areas of sport and the instructing ability for beginners.
(Relevant competences: Understanding of coaching science, Ability to apply and develop coaching science)

- Capable of high performance in a specific sport and possesses the instructing ability for athletes
(Relevant competences: Understanding of coaching science, Ability to apply and develop coaching science)

- Possesses extensive knowledge and theory of physical education, health, sport and coaching as well as the ability to systematize them in relation to the future society.
(Relevant competences: Understanding of physical education and sports science, Understanding of health and fitness, Understanding of coaching science)

- Possesses the ability to identify one's challenges and work on solving them on the basis of scientific findings in physical education, health, sport and coaching.
(Relevant competences: Analytical skills in physical education and sports studies, Ability to analyze health and fitness studies, Ability to apply and develop coaching science)

- Understands the philosophy of Jigoro Kano, which are "Maximum efficiency in energy use/Mutual prosperity" and "Education for each person will lead to education for all", as well as the leadership and communication ability (including foreign language proficiency) required to manage a physical education or sport organization.
(Relevant competences: Career development skills)

Curriculum Policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Health and Physical Education.

General policy

The School has only one major, which is Health and Physical Education. Students gain solid academic ability, virtue and a healthy body required for the leaders in the physical education/sports world through the learning of knowledge and philosophy about physical education, health, sport and coaching, the practice of sport and the seminars for health science. Including the studies on the philosophy of Jigoro Kano, the founder of physical education, students also pursue the way how physical education and sport need to be in the society from now on.

Course sequence policy

- In the first and second years, students take Foundation Subjects for Major predominantly, and gain fundamental and general knowledge and skills through theoretical classes involving the realms of physical education, health, sport and coaching and practical classes such as a marine seminar. The classes also include the studies of the philosophy and actions of Jigoro Kano. In addition, students are engaged in the learning to analyze their own challenges in the practice of sport based on scientific data. According to the outcomes of this learning, each student designs a course plan and training and works on solving their challenges by creating a program for this purpose.
- In the third year, with the self-evaluation and check of the practical skills and class study skills that have been acquired so far, students learn more specialized theory as to physical education, health, sport and coaching in relation to the society to further improve knowledge, skills and instructing ability. In addition, to academically pursue a theme that highly interests each student, the completion of a diploma thesis is required in the

third and fourth years. For this thesis, students select a theme from one of the diploma research realms (38 realms) and learn the latest scientific findings of the area. This requirement is an achievement of School education, and at the same time serves as a stepping stone to study in a graduate school.

Implementation policy

Including the selection of the realm for diploma research, the selection of class subjects is left up to the autonomy of each student, while the learning process is presented with the basic learning models. The School places emphasis on the issue-solving learning that is carried out by students throughout the curriculum, and especially, practical classes provide rich databases such as video data to allow students to autonomously learn.

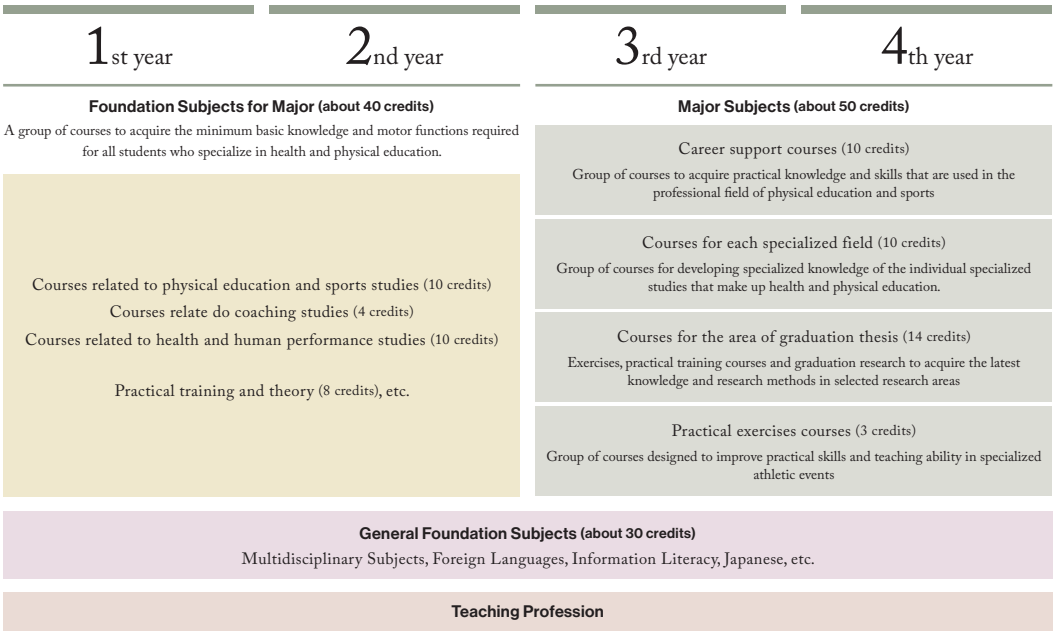
Policy for evaluation of learning outcomes

As the School overall, the achievements of School learning outcomes are evaluated with the credits earned, diploma research, GPA and the acquisition of licenses or qualifications. As for the class subjects, the achievements of learning outcomes are evaluated from the results of exams, reports and every comment paper in light of the purposes and achievement targets of each class defined in the syllabus.

Characteristics

In the summer, students are provided with opportunities to receive lectures in English from researchers visiting from abroad, as well as to communicate with students from abroad. In addition, the School values education through extracurricular athletic club activities. In the extracurricular activities, while students improve their own athletic abilities, they also learn highly specialized scientific teaching methods. The School also aims to foster students' well-rounded humanities and attitudes that contributes to international activities.

Skills to be developed and curriculum structure



School of Art and Design

School of Art and Design

- Bachelor of Art and Design

School of Art and Design

Bachelor of Art and Design

Educational purpose

School of Art and Design is designed to cultivate experts in art or design who possess interdisciplinary and international perspectives and solid academic ability as well as flexible inspiration and rich expressiveness, filled with creative lifeblood.

Desired students

We seek those who are enthusiastically pursue training in art and have the motivation to challenge creative activities from social and international points of view and the motivation to contribute to the society by art or design expressions based on the knowledge and means that extend to many areas.

Measures to ensure and improve the quality of education

Assurance of the quality of education

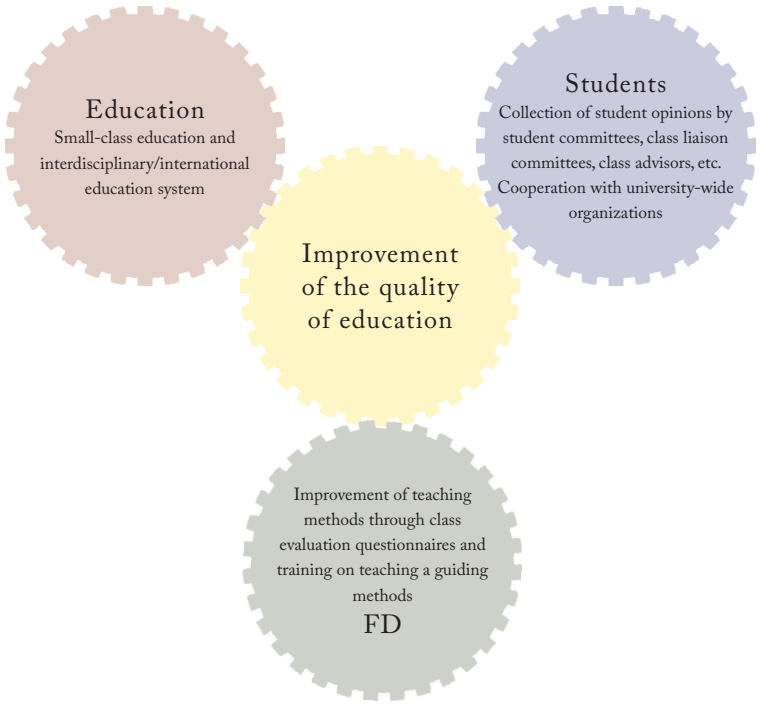
We encourage students to present their works and research at exhibitions and study group meetings both on and off campus. As a result, students are able to recognize their own abilities and faculty members are able to view their teaching objectively, which leads to the improvement of the quality of education.

Reflecting student opinions in educational improvement

Led by the Art Faculty Development (FD) Committee, student class evaluation surveys, as well as research and training on teaching methods and student guidance, are conducted to continuously improve our educational methods.

The Student Committee of the School of Art and Design, class liaison committees, class advisors, and graduation research advisors carefully collect opinions on education from students. In addition, in cooperation with the university-wide organizations, such as the Student Support Center and University Health Cente, we support students to ensure their healthy and meaningful student lives.

Measures to ensure and improve the quality of education



Bachelor of Art and Design

Diploma Policy

A Bachelor of Art and Design is granted to those who are admitted to have gained the knowledge and ability (Generic Competences) that should be gained based on the curriculum targets stipulated for the University of Tsukuba's undergraduate degree programs and have reached the following achievement targets as to the learning outcomes in art.

Creative expressiveness

Capable of appropriately expressing ingenious and flexible artistic inspiration and thought by getting the specialized knowledge and skills in art or design into full use

Problem-solving ability

Capable of spontaneously identifying modern problems in art or design and solving them with flexible thought and accurate decision-making using gained knowledge or skills

Logical thinking ability based on extensive knowledge

Capable of logical thinking for diverse issues from a wide perspective developed by interdisciplinary and international education and based on specialized knowledge and experience

Highly developed sense of communication

Capable of communication that produces rich and creative personal relationships using the ability to communicate sensibilities in forms and to cooperate by sharing sensibilities

Fundamental ability for autonomous and social activities of creation

Capable of autonomously continuing the activities of creation as an expert in art or design with the understanding of the meanings and roles of art in the society

Curriculum Policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Art and Design.

General policy

Taking advantage of the features that the artistic education opportunities available through a diverse-field university can offer, the curriculum is designed to cultivate experts in art or design bursting with creative ability with fostering creative wisdom that the integration of artistic sensibilities into wide interdisciplinary intellect (general knowledge and skills) and deep specialized skills (specialized knowledge and skills).

The curriculum builds up the specialized foundations of art through Foundation Subjects for Major, from which students learn the foundations of each of the realms in art and design in a cross-disciplinary manner, and with Major Subjects. Furthermore, students acquire a highly developed sense of communication through the cross-disciplinary subjects that are placed regardless of the academic years of students and the area of expertise.

Course sequence policy

In the curriculum for the first and second years in which foundations and specializations are integrated, the General Foundation Subjects connecting to diverse specialized areas are set up as required subjects to cultivate the base to be flexibly adept at using the creative expressiveness in art, problem-solving ability and logical thinking ability. In addition, the ability to use specialized knowledge is cultivated by learning the foundations in applicable specialized realms and at the same time by selectively taking interdisciplinary and international lectures and seminars.

After the third year, through the lectures, seminars and workshops of more advanced Major Subjects in relevant realms, students develop the

outstanding expressiveness and persuasiveness founded on the logical thinking ability and cross-disciplinary knowledge for use in diverse issues to shift to diploma research with the utilization of these acquisitions.

▌Diploma research

The diploma research, which is the culmination of the four years, serves to assure the independency of the student. With diploma research supervision, each student finds a research theme in his or her own right and thinks and expresses it. In this way, the foundation ability for carrying out the activities of creation autonomously and socially as an expert in art or design is cultivated, and the expressiveness bursting with sensibilities and the communication ability for forming rich, creative human relationships that share perceptions and sensibilities are honed. In principle, graduation works or theses are exhibited in a public space outside the university (museum, gallery, etc.) and with the publication of a diploma research portfolio to solicit social evaluations, excellent works are awarded to be collected in the university.

Implementation policy

▌Education that places value on student individuality

In the education in art, student individuality should be respected to a maximum extent. The specialized education in each of the realms is implemented in small classes wherever possible to communicatively help students develop their own distinct personalities.

▌Classes connecting to "actual scenes"

Interdisciplinary curriculums are organized in cooperation with the students and faculty members of all School and communities to provide education that directly connects to actual work, such as those at companies, administrative organizations, museums and education scenes as well as interactions with people for educational purposes so that students develop their high collaboration ability suited to the times and an interdisciplinary perspective.

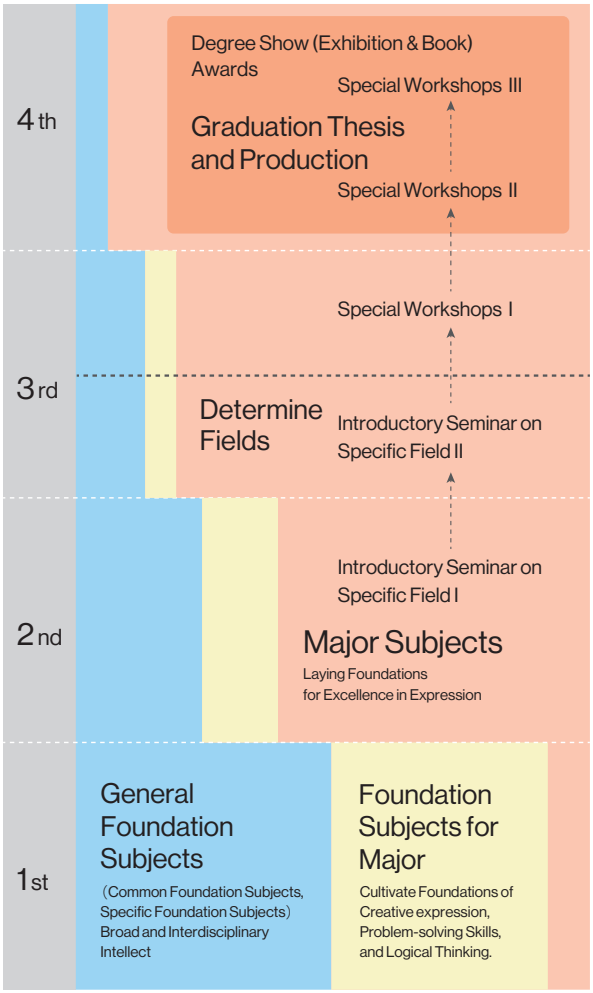
▌Both creative expressiveness and logical thinking ability

Creation and thesis writing are set up as diploma requirements to aim at the acquisition of creative expressiveness through the practice of creation and the acquisition of solid text expressiveness founded on objective and logical reasoning.

▌Development of creative ability based on worldwide points of view

The international communication ability and the

Fostering Creative Wisdom Through
General, Specialized Knowledge and Skills



Bachelor of Art and Design

creative ability from a worldwide perspective are trained with the use of the opportunities such as an exchange program for studying abroad and research exchanges based on the international exchange agreement, etc., work exchange exhibitions, and international internships.

Policy for evaluation of learning outcomes

Evaluation is made with a diploma research ("thesis" and "work", or "thesis") that concentrates or expands learning outcomes. In addition, diploma research is exhibited in public or published into a portfolio in order to solicit external evaluations.

School of Transdisciplinary Science and Design (University of Tsukuba, Malaysia)

School of Transdisciplinary Science and Design (University of Tsukuba, Malaysia)

- Bachelor of Arts and Science

School of Transdisciplinary Science and Design

(University of Tsukuba, Malaysia)

■ Bachelor of Arts and Science

Educational purpose

The programme aims to develop individuals with data science literacy who can apply ideas and technologies from the natural sciences, humanities and social sciences to a broad range of environmental and social issues. By utilising design thinking, our students can creatively contribute to solving global issues.

Desired students

Our programme will particularly appeal to students who are:

1. Strongly interested in and motivated to study global issues and their resolutions in Malaysia and South-East Asia
2. Clearly enthusiastic about integrating knowledge from the natural sciences, humanities and social sciences to solve complex global issues
3. Keenly determined in judging information applicability based on objective data and materials, and who can logically communicate their ideas
4. Genuinely interested in Japanese language and culture, and who can respect diverse values and ways of thinking

Expected career paths

- Pursue a higher degree in a Japanese or Malaysian graduate school in fields such as information science, humanities and social sciences, life sciences, environmental sciences, education, sports science, or science and engineering etc.
- Work in a Japanese company in Malaysia or in a company in Japan
- Work in a government agency, organisation, etc. in Malaysia

Measures to ensure and improve the quality of education

Our School's PDCA committee continuously evaluates education and administrative activities. This committee improves and enhances education and research within the School by:

① Conducting self-checks and implementing quality improvement proposals concerning teaching and learning evaluation standards (Office of Management for Teaching and Learning).

② Conducting self-checks and implementing quality improvement proposals concerning organisational evaluation standards (Organisational Evaluation Committee).

③ Undertaking continuous collection of quantitative and qualitative data on quality assurance.

④ Responding to other educational and administrative matters

The quality improvement proposals noted in 1 and 2 follow a PDCA cycle for quality assurance and improvement within the School.

Bachelor of Arts and Science

Diploma policy

A Bachelor of Arts and Science is granted to those who are recognised as having gained the appropriate knowledge and ability (generic competences) set out in the curriculum targets stipulated for the University of Tsukuba's undergraduate degree programmes, as well as who have reached the following achievement targets and abilities in their learning outcomes based on the educational purpose for the School.

- Demonstrated understanding and ability to utilise data science techniques and methods.
- Demonstrated understanding and ability to integrate knowledge from the natural sciences, humanities and social sciences to solve global issues.
- Demonstrated comprehension of environmental studies and its application to solve global issues.
- Demonstrated ability to communicate smoothly and respectfully with a diverse range of people.
- Demonstrated ability to consider diverse values through understanding of Japanese culture and traditions.

Curriculum policy

Our curriculum is based on the following policies to help students achieve the learning outcomes for their Bachelor of Arts and Science degrees:

- Our programme integrates fundamental knowledge in humanities and social sciences, understanding Japanese culture and society, and natural sciences, with the basic academic principles of data science that include core applications of mathematics, programming, and statistics. The information literacy and data science foundation learned in the first year of the programme enables students to apply their knowledge to problem-solving in their upper years. This approach enables students to simultaneously develop a deep understanding of data science while gaining experience in applying data-science techniques to real-world issues.
- Our class exercises in problem-based learning subjects offer opportunities for discussions and analyses of current issues and problem-solving proposals, allowing students to obtain clear learning objectives through credit attainment. These exercises provided mainly in the first to third years of our programme allow students to develop their abilities and apply them towards their chosen graduation research topics.
- Our programme of required common foundation subjects, including three multidisciplinary subjects, physical education, foreign languages, information literacy, and data sciences, are designed to correspond to our university's other undergraduate programmes.
- Our programme also offers subjects related to Malaysian society and language, as stipulated by Malaysian higher education policy.

Firmly based in linking data science approaches, our programme is designed to provide students with knowledge and skills in foundation subjects for their majors by integrating fundamentals of natural sciences, humanities and social sciences, as well as Japanese language and Japanese studies. Students can then apply this knowledge and skill set to current issues analysis and solution exercises.

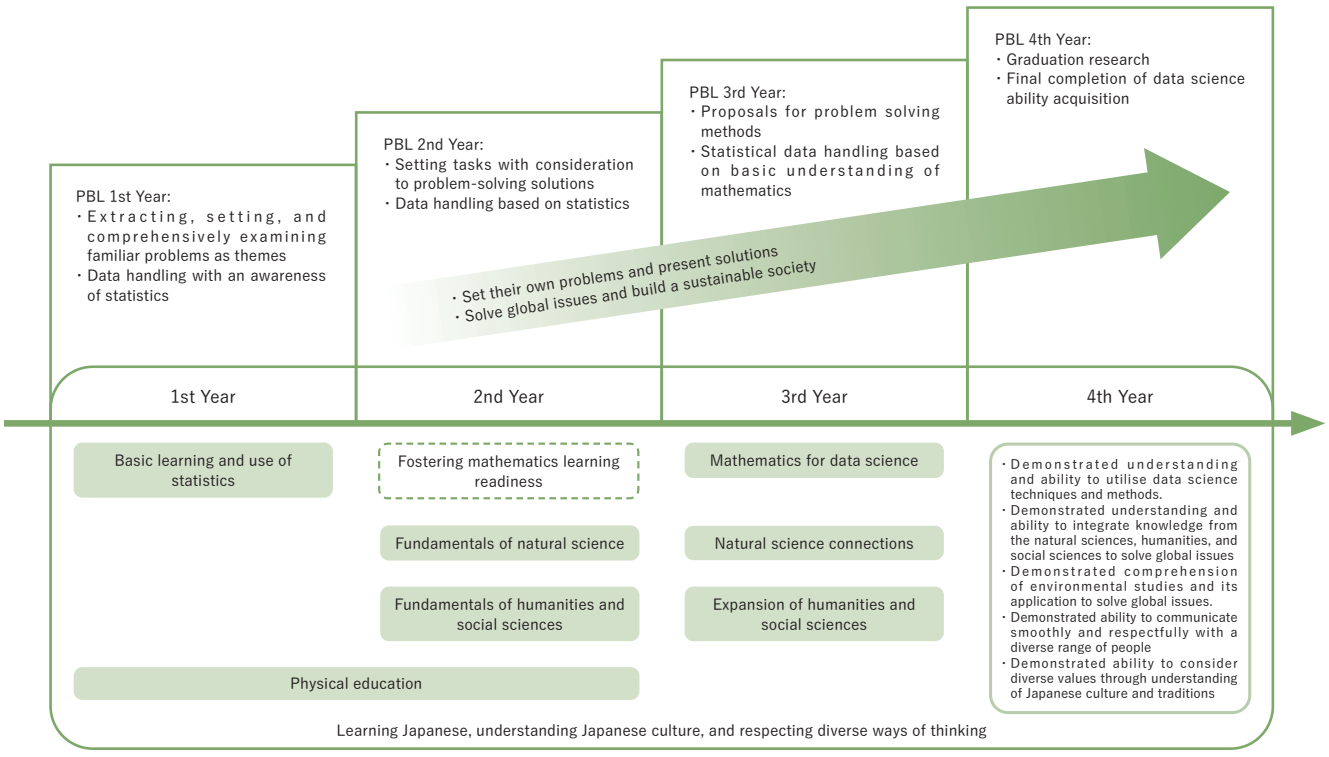
Students will present a visualisation of their progress on their learning outcomes in their problem-based learning and graduation research classes at the end of each academic year. Our faculty members evaluate each student's learning outcomes based on the content of such reports and presentations.

Characteristics

Our human resource development objective focuses on equipping students with basic skills in data science, and then providing opportunities for them to apply ideas and technologies from the natural sciences, humanities and social sciences to a wide range of environmental and social issues. This approach allows students to actually experience how engineering can be used to effectively contribute to solving global issues.

We have incorporated many problem-based learning approaches in our curriculum which correspond to using evidence-based data science techniques to identify and extract solutions to globalisation-related issues. This emphasis on practical problem-solving develops students' abilities to realise concrete and comprehensive solutions to today's complex real-world issues.

Curriculum centered on Problem-Based Learning (PBL)



School of Integrative and Global Majors

Bachelor' s Program in Global Issues

- Bachelor of Arts and Science

Bachelor's Program in Global Issues

■ Bachelor of Arts and Science

Educational purpose

This Degree Program is designed to cultivate those who possess a wide range of basic knowledge that sees the global issues overall from a higher perspective with the eagerness to seek required information and technologies in their own right to solve issues on people and the environment regardless of the area of expertise and make decisions to select the best suited solutions from many options.

Desired students

We seek those who have interests on the issues on the earth's environment (climate change, damage to nature, pollution, etc.) and human society (food, poverty, longevity society, etc.) and can apply the knowledge in arts and science in the future to contribute to the society in and outside Japan through a global company, international organization, etc. or contribute to innovations.

Measures to ensure and improve the quality of education

Operational system

Under the Education Council, which oversees the activities of the entire program, the Steering Committee is set. Under the Steering Committee, the Admissions Committee, Curriculum Committee, Public Relations Committee, Student Affairs Committee, and International Cooperation Committee are set to deal with various issues.

Education and teaching system

At Faculty Development (FD) and Staff Development (SD) training sessions, faculty members participating in the degree programs exchange opinions and engage in discussions on the degree program's human resources development objectives, curriculum policy, educational and teaching methods, grading, and other matters in order to conduct education with a common understanding. We also work to build cooperative relationships among faculty members involved in the degree programs and to further enhance student guidance activities.

Education and teaching

Classes are taught in English in small classes, and many classes are taught in the form of "problem-based learning." In addition, in cooperation with International Christian University (ICU), students can take basic courses (liberal arts courses) in English at ICU. Detailed course-taking guidance is given to students, including course-taking models shown to students before they select courses to take.

Reflecting student opinions

The program coordinators daily meet the students and thus have frequent opportunities to listen to the opinions of each student. Problems are discussed at each committee and improvements are made.

Specialty areas of the Bachelor's Program in Global Issues

Area	Pillar perspectives	Specialty area
Environment	Global environment	Environmental Studies, Geoscience, Geography, Social Science
	Risks and safety	Social Engineering, Safety System Science, Integrated Engineering
Human Studies	Diversity in society	Humanities, Social Sciences, Philosophy, Linguistics, Political Science
	Health and happiness of humans	Sports Science, Hygiene, Social Medicine

Bachelor of Arts and Science

Diploma Policy

A Bachelor of Arts and Science is granted to those who are admitted to have gained the knowledge and ability (Generic Competences) that should be gained based on the curriculum targets stipulated for the University of Tsukuba's undergraduate degree programs and who have been at school for the required semester years and have earned required number of credits as defined in the educational purpose of the Bachelor's Program in Global Issues. To graduate from this Bachelor's Program, students set their sights to meet the following requirements.

- Has gained a wide range of knowledge that can see global issues from a higher perspective with a standpoint of both arts and science.
(Relevant competence: Basic knowledge, Information analysis capabilities, Specialized knowledge)

- Possesses the systematic specialized knowledge about global issues and has gained the ability to work on solving issues by making a general analysis from various perspectives and by being imaginative and creative.
(Relevant competence: Basic knowledge, Information analysis capabilities, Specialized knowledge, Ability to find and solve problems)

- Possesses the flexible communication ability in the global society to assert one's own opinions logically and persuasively and at the same time listen to others enough, as well as the ability to contribute to the society by actively showing leadership under interindustry or intercultural circumstances.
(Relevant competence: Logical communication skills, Ability to find and solve problems, Proposal ability)

- Possesses a high ethical view and the comprehension of diversity in the global society.
(Relevant competence: Basic knowledge, Specialized knowledge, Ability to find and solve problems)

Curriculum Policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Arts and Science.

Curriculum organization policy

The curriculum is organized to help students gain the general knowledge with the clear purpose of seeing the global issues from a higher perspective and the active attitude to collect and analyze the information required to solve issues in students' own right and develop the global negotiation and management abilities.

General policy

Students acquire the attitude of working on global issues starting from familiar things with regard to the environment and people, learn the specialized knowledge and generic skills required to solve issues through seminars and workshops, and deepen their specialized research through diploma research or long-term training with information delivery capable of contributing to the society.

Course sequence policy

- In the first year, students learn a wide range of basic knowledge about the earth's environment and human society through Common Foundation Subjects and Foundation Subjects for Major.
- In the second year, students gain the basic knowledge and applied skills for the earth's environment, risk and safety, symbiotic society, and health issues through foundation seminars and workshops to cultivate the ability to analyze problems in communities, which are becoming globalized.
- In the third year, students deepen the specialized knowledge and applied skills for the earth's environment, risk and safety, symbiotic society, and health issues through applied seminars and workshops to cultivate the ability to analyze problems in the world.
- In the fourth year, each student works on a specific project through general seminars and workshops and diploma research or long-term

training to develop the abilities of making decisions and delivering information and thereby to prepare for the career after graduation.

Implementation policy

In the first year, students develop the common grounds for global issues with the cultivation of "global issue literacy". In the second and third years, students gain specialized knowledge and skills and generic knowledge and skills through the problem based learning and on-the-job training on the four major issues. In the fourth year, students draw up and carry out a highly specialized specific project that matches the aptitude of each student.

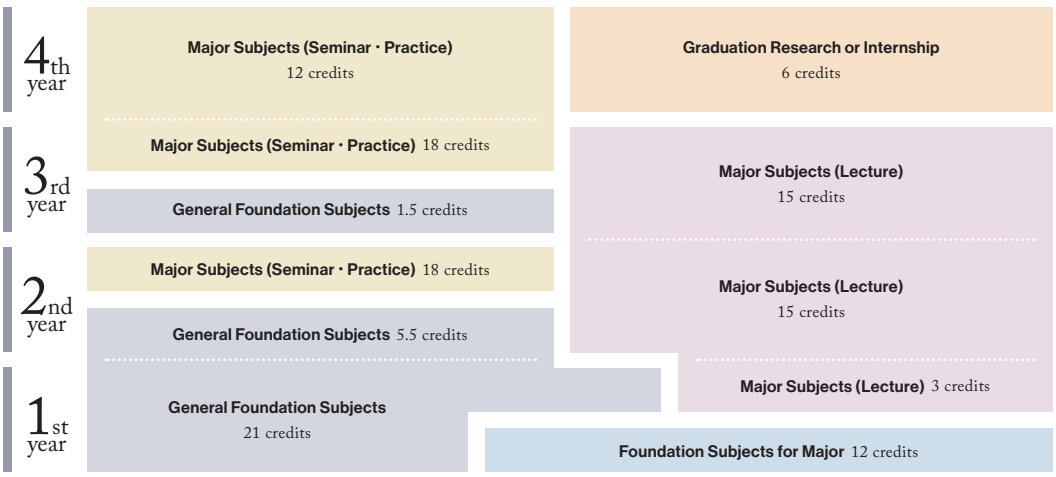
Policy for evaluation of learning outcomes

Students are evaluated with the credits earned from the subjects defined in the curriculum, the acquisition of generic and specialized competences, and the possession of the insight appropriate to a Bachelor of Arts and Science working on global issues, the ability to grasp from a higher perspective and the ability to lead issues to solutions. In diploma research or long-term training, the issue identifying ability, issue solving ability, research or practical ability, etc. are evaluated. In the diploma research presentation, the presentation and communication abilities, question response, etc. are checked to make a total evaluation for generic and specialized competences.

Characteristics

All courses in this program are taught in English in the form of problem-based learning. Students can take a wide range of courses for the specialized field from all schools and colleges. In addition, in cooperation with International Christian University (ICU), students can take basic courses (liberal arts courses) in English at ICU.

Structure of curriculum



Tsukuba Standards

The University of Tsukuba has formulated two sets of "Tsukuba Standards" for Undergraduate Schools and Colleges and the other for Graduate Schools and Programs, which are widely announced to the public as the University's educational declaration.

Tsukuba Standards for Undergraduate Schools and Colleges

In addition to setting forth the educational purpose of our bachelor programs and the university-wide measures for achieving them, it also clearly states the goals of the liberal arts education and the specific educational content for achieving them, the Diploma Policy and Curriculum Policy, and the measures for guaranteeing the quality of education in each educational organization.

Tsukuba Standards for Graduate Schools and Programs

In addition to setting forth the educational purpose of our graduate schools and programs and the university-wide measures for achieving them, the Diploma Policy and Curriculum Policy and the policy for guaranteeing the quality of education in each educational organization are clearly stated.

University of Tsukuba

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Tsukuba Standards for Undergraduate Schools and Colleges

Date of Issue	April 2025
Editing and publishing	Department of Educational Promotion University of Tsukuba

筑波大学

University of Tsukuba

2025.4