Tsukuba Standards for Graduate Schools and Programs

Co-creating New Knowledge and Unique Human Resources at TSUKUBA, a Hub of Knowledge

Based on our founding philosophy, we clarify our educational framework, including educational goals and methods for achieving them in our Graduate Schools and 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 a degree program

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 Goals of The University of Tsukuba Graduate School

Educational Goals of Doctoral Programs

- To cultivate researchers who will carry on and further academic studies, and researchers who will integrate different fields and open up new, cutting-edge fields

- To develop highly-skilled professionals who contribute to society with deep expertise, outstanding originality, and flexibility

- To nurture university faculty members with well-developed competencies in the areas of education, research, and organizational management

Educational Goals of Master's Programs

- To develop highly-skilled professionals who contribute to society by having both a global perspective and specialized practical skills

Educational Goals of Professional Degree Programs

- To develop highly-skilled professionals with the extraordinary abilities and profound knowledge necessary for careers that require a high level of expertise

The image of human resources to be developed through graduate education at the University of Tsukuba

- Human resources who are capable of exercising global leadership based on a keen international sense
- Human resources who are capable of creating knowledge that contributes to the future of human society with a rich culture and sense of ethics
- Human resources who pioneer professional careers based on matured intellect, emotion, and intellect combined with logical thinking and innovative creativity

Co-creating New Knowledge and Unique Human Resources at TSUKUBA, a Hub of Knowledge (Figure 1)

Figure 1 Co-creating New Knowledge and Unique Human Resources

Policy 1

Clear educational goals and high quality degree programs

Degree Program system with six Degree Programs in three Graduate Schools

In the 2020 academic year, the University's Graduate School was reorganized from 85 Programs in 8 Graduate Schools to 6 Degree Programs in 3 Graduate Schools, and we made a full transition to a degree program system. In the new organization, the traditional walls between majors were broken down, and faculty from a wide range of disciplines worked together on degree programs. In other words, the six Degree Programs are equivalent to the so-called majors, and all the faculty members are full-time faculty members in those schools. As a result, one faculty member can be responsible for more than one program within a Degree Program, and a system of cross-disciplinary and collaborative guidance is now possible (Figure 2). We have also clearly separated the Graduate Schools and Degree Programs from the system to which the faculty members belong. The programs established under the Graduate Schools and Degree Programs have established human resource development objectives based on social demands at the degree level (master's, doctoral) and in the discipline (research, professional, specialist) or field, and have clearly stated what skills should be acquired, and have systematically designed educational programs to acquire these abilities.

In addition to this, the "School of Integrative and Global Majors" has been established to implement and manage degree programs operated under university-wide cooperation.

Clarification of three policies and the establishment of competencies

With regard to all degrees awarded by the University, we have clarified the three policies of Diploma Policy, Curriculum Policy, and Admission Policy, as well as the knowledge and abilities ("competencies") that students should possess at the time of being awarded with a degree. Based on these policies, each educational organization and degree program organizes and implements its educational program. By clearly indicating the competencies that are suitable for degrees and assessing the degree of achievement of those competencies, the quality of degrees can be guaranteed, and the academic work results of graduate education at the University can be visible to society.

Competencies are divided into "Generic Competences," and "Specific Competences." Generic Competences are defined as general knowledge and abilities that support active roles in society and are common to all Master's Programs and Doctoral Degree Programs (Table 1). Specific Competences, as advanced knowledge and abilities in the major field, correspond to the human resource development objectives of each level of academic schools and research schools, and degree program, and are systematically organized around the three core competencies of "research abilities," "specialized knowledge," and "ethical view." By establishing competencies based on the characteristics and uniqueness of each degree program upon a common foundation at each level of the university, academic schools and research schools, the system enables students to cultivate not only deep specialization but also basic knowledge in related fields, a broad perspective, and with a comprehensive view.

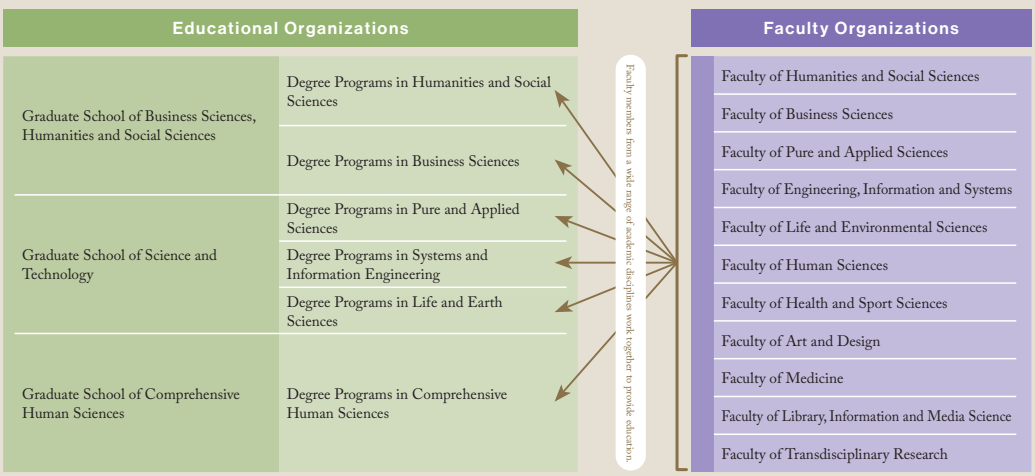


Figure 2 Collaborative teaching by faculty members from a wide range of fields

Systematized educational curriculum organization

In addition to a comprehensive intellectual foundation gained through the acquisition of highly specialized knowledge and interdisciplinary knowledge, the University defines "creative wisdom education" as an educational system to nurture highly-skilled intellectuals with well-balanced general knowledge and skills including ethics, humanity, logicality, internationality, communication skills, a rich physical and mental foundation, and management, planning and coordination skills. Based on this philosophy of creative wisdom education, each educational organization and degree program systematically structures and implements educational programs that enable students to acquire Generic Competences and Specific Competences in a well-balanced manner, as specified in the Diploma Policy. For this reason, we offer not only courses related to the major field of study of each degree program, but also Graduate General Education Courses organized across the entire university, Inter-disciplinary Foundation Courses organized by each graduate school, and Degree Programs' Common Courses. Graduate General Education Courses mainly correspond to Generic Competences, and we have established six courses to cultivate ethics, information transmission and communication skills, internationality, career management skills, a broad intellectual foundation, and a rich physical and mental foundation in a balanced manner. Inter-disciplinary Foundation Courses correspond to the Specific Competences of Graduate schools, and allow students to acquire basic knowledge in various specialized fields adjacent to their own. Through taking Graduate General Education Courses, Inter-disciplinary Foundation Courses, Degree Programs' Common Courses, and specialized courses in their respective fields of study, students will be able to acquire the ability to think logically from a holistic perspective, as well as acquire expertise in a wide range of fields beyond the confines of a single discipline.

Nurturing research and field skills to meet the demands of society

In today's society, which faces many complex issues, there is a strong demand to produce human resources with advanced and practical problem finding and solving skills, underpinned by deep specialized knowledge and research capabilities. In light of these circumstances, in addition to research skills appropriate for a master's or doctoral degree, the University has positioned degrees awarded by degree programs that place particular emphasis on the cultivation of "field skills" that meet the actual, tangible challenges of society as "Professional Research Degree" (Figure 3).

This is a degree system uniquely established by the University in order to proactively and accurately respond to specific issues in society. There is no difference in the status of the degrees (master's or doctoral) awarded under the law.

There are 16 degree programs that award a "Professional Research Degree," which are the current Master's/Doctoral Program in Business Administration, Master's Program in Service Engineering, and the Master's Program in Mountain Studies.

	Generic Competences
Master's Students	1. Knowledge application competence: Ability of contribute to society with advanced knowledge
	2. Management competence: Ability to appropriately address challenges from broader standpoints
	3. Communication competence: Ability of communication in expert knowledge with accuracy and clearness
	4. Teamwork competence: Ability to work with the team and actively contribute to the achievement of goals
	5. Internationality competence: Willingness to contribute to the international society
Doctoral Students	1. Knowledge creation competence: Ability to create new knowledge to be able to contribute to future society
	2. Management Competence: Ability to plan and implement measures to identify and solve challenges from a higher perspective
	3. Communication competence: Ability to express the true nature of academic findings positively and clearly
	4. Leadership competence: Ability to accomplish objectives under one' s leadership
	5. Internationality competence: High level of awareness and motivation to be internationally active and contribute to international society

Table 1 Generic Competences

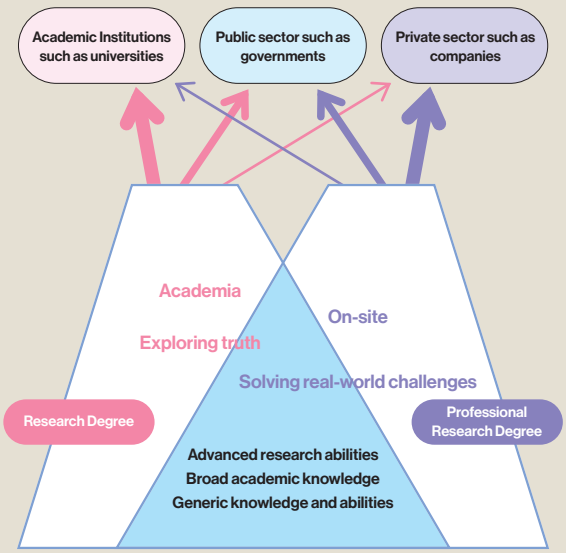


Figure 3 Professional Research Degree and Research Degree

Policy 2

Developing human resources to become global leaders

From Tsukuba to TSUKUBA

Since the establishment of the University, many international students and foreign faculty members have gathered here, and the students and faculty members who learn from each other beyond the boundaries of nationality and language have co-created TSUKUBA, a hub of knowledge that is not bound by the organization known as the "University of Tsukuba" or the region known as "Tsukuba City." In addition, as a comprehensive university with distinctive programs in physical education, Art, and medicine, the University provides holistic support for international students and foreign faculty members, including sports, the Art, and physical and mental health, thereby promoting the creation of a community where everyone can work together with peace of mind.

There are many foreigners residing in Tsukuba City and Tsukuba Science City. As a core institution, the university also functions as a hub to promote the internationalization of Tsukuba Science City (Table 2).

Internationalization in Everyday Life

One of the roles that the University must play in the 21st century is to develop human resources who will become global leaders. In order to realize this goal, the University has established 13 overseas bases in 12 countries and regions, and has concluded more than 300 exchange agreements (Fig. 4), and has achieved remarkable results in admitting excellent international students, sending current students abroad, and academic exchange among faculty members.

Through initiatives such as the Project for Establishing Core Universities for Internationalization (Global 30: 2009-2013 academic year) and the Global Human Resource Development Project (GGJ: 2012-2016 academic year), the University has been promoting the "internationalization in everyday life" of the campus. Top Global University Project (SGU: 2014-2023 academic year) is promoting Campus-in-Campus and other programs aiming to implement education and research that transcends national borders and institutional boundaries and actively utilizes resources from around the world.

In addition, office of International Exchange Support, Student Support Center, has been established as an on-campus organization that provides a one-stop service to promote "internationalization in everyday life" on campus and the sending of students abroad for "the world is a place of learning."

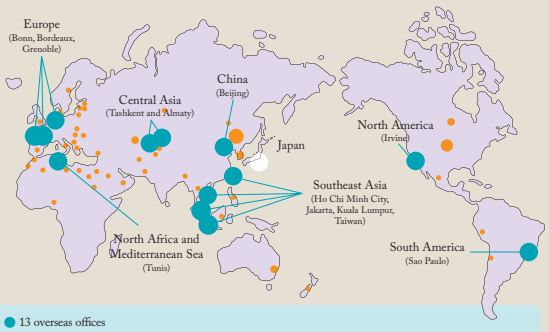
Developing global leaders

In order to develop human resources worthy of becoming international leaders, the University does not limit the place of learning to its campus, but adopts the motto of "the world is a place of learning" and, as a unique form of support, provides scholarships, classes, extracurricular activities, and various other university-wide initiatives (Table 3).

There are 9,457 foreigners from 137 countries living in Tsukuba City
(as of October 2020)

The University has 4,000 dormitory rooms,
where about 1,000 of the 2,200 international students live.

Table 2 Status of Foreign Residents in Tsukuba City and Tsukuba Science City



● 13 overseas offices
● 10 Campus-in-Campus agreements, 173 agreements at the university level and 194 at the department level with universities in 68 countries and areas.

Figure 4 Overseas Offices and Partner Organizations (as of October 2022)

Financial support (travel expenses support, accommodation expenses support, participation expenses support, etc.)

Graduate General Education Courses : International Research Project, International Internship

Tsukuba Scholarship : Support for international students

Study Abroad Support Programs : Partner University Exchange Students Support Program, Campus in Campus (CiC) Support Program, Overseas Study Tour Support Program (MUSHA-SHUGYO), Overseas Academic Conference Participation Support Program, Overseas Language Training and Academic Activity Support Program

Courses, Educational Programs, etc.

Graduate General Education Courses: Advanced Discussion Course by Japan Project-Industry Council JAPIC Advanced Discussion Course

Ph.D. Program in Human Biology
Ph.D. Program in Empowerment Informatics

Ph.D. Program in Humanics
(Doctoral Program for World-leading Innovative & Smart Education) (Adopted by WISE Program)

Transnational European and East Asian Culture and History, TEACH

The Nippon Foundation Central Asia-Japan Human Resource Development Project, NipCA Project (Granted by the Nippon Foundation)

ASEAN International Mobility for Students (AIMS) Program
Tsukuba Trans-Pacific Program

Program in Economic and Public Policy
(A master's program in English for young leaders in developing countries with the support and cooperation of the World Bank, etc.)

Area Studies Innovation Program (ASIP) Program

University of Tsukuba Global+ Leadership Education Program
A leadership education program open to the entire university to acquire knowledge of global scale issues (global), perspectives from emerging countries (local), and advanced English and local language skills.

Special Program in Japanese and Central Eurasian Studies
(A master's degree program in English established with the support of The Nippon Foundation Central Asia-Japan Human Resource Development Project, with the objective of developing human resources who can contribute to the achievement of the Sustainable Development Goals in the Central Asian region and to the resolution of issues faced by local communities)

Japan-Expert (bachelor degree) Program
Bachelor's Program in Global Issues
Bachelor's Program in Interdisciplinary Engineering
(New educational programs under the Top Global University Project)

Providing a forum

A forum for exchange between Japanese and international students :
Student Commons, Global Chat Program (G-Chat/Tsuku-chat/Language Exchange (GOTCHAT) etc.

A forum for exchange between citizens and international students
City Chat Café etc.

Table 3 Initiatives for developing global leaders

Policy 3

Realization of university-wide quality management for teaching and learning

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.

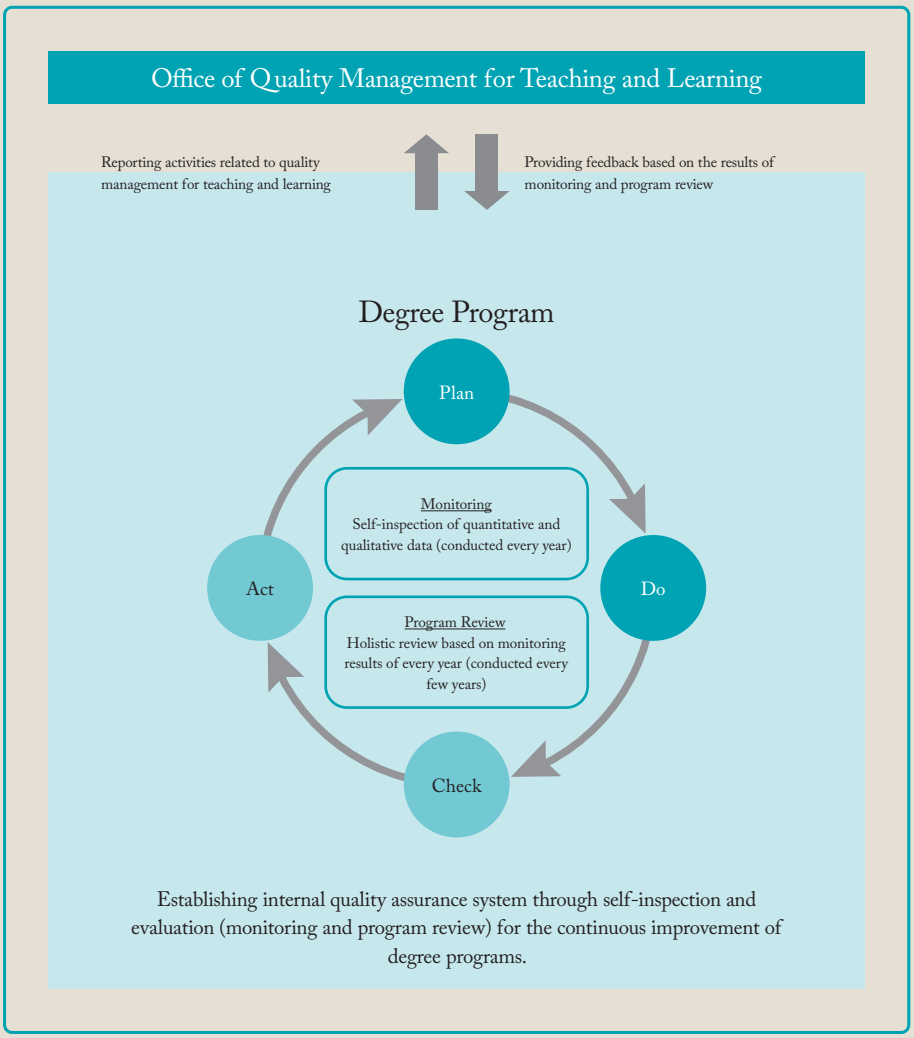



Figure 5 Image of quality assurance model comprised of monitoring and program review