

College of Medicine

■ Doctor of Medicine

Program Educational Objectives

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.

<p>Graduate Profile</p>	<p>We actively train physicians and medical researchers who can contribute to solving global issues and advancing life sciences. We promote cutting-edge and distinctive research, create new academic fields, and train next-generation leaders who can contribute to the development of medical technology and the improvement of medical standards. We develop new education that is diverse and flexible, and train physicians who can contribute to raising the standard of medical education in Japan and to globalization. We train physicians who can contribute to maintaining and improving regional medical care, including in Ibaraki Prefecture.</p>
<p>Career Paths after Graduation / Completion</p>	<p>Lifelong education is essential for physicians, and there are many different career paths available. Immediately after graduation, students undergo two years of clinical training followed by specialized training, with most students pursuing successful careers as physicians. Some students go on to graduate school to earn a degree, others continue into basic research, and some even go into government service at public health centers or the Ministry of Health, Labor and Welfare. Approximately half of graduates are employed within Ibaraki Prefecture. A follow-up survey of graduates showed that 90% of graduates specialized in clinical medicine, 4% in basic medicine, and 5% in social medicine. Among graduates 10 years or more after graduation, 65% had a degree and 90% had become certified physicians or specialists. In 2024, the percentage of hospitals where graduates will undergo training of residents was 16% at Tsukuba University Hospital, 84% at general training hospitals, and 1% at hospitals affiliated with other universities.</p>

Diploma Policy

A Bachelor of Medicine degree will be awarded to those who have acquired the knowledge and skills (general competence) based on the educational goals of the University of Tsukuba's undergraduate program, as well as the knowledge and skills (specialized competence) based on the College's human resource development objectives.

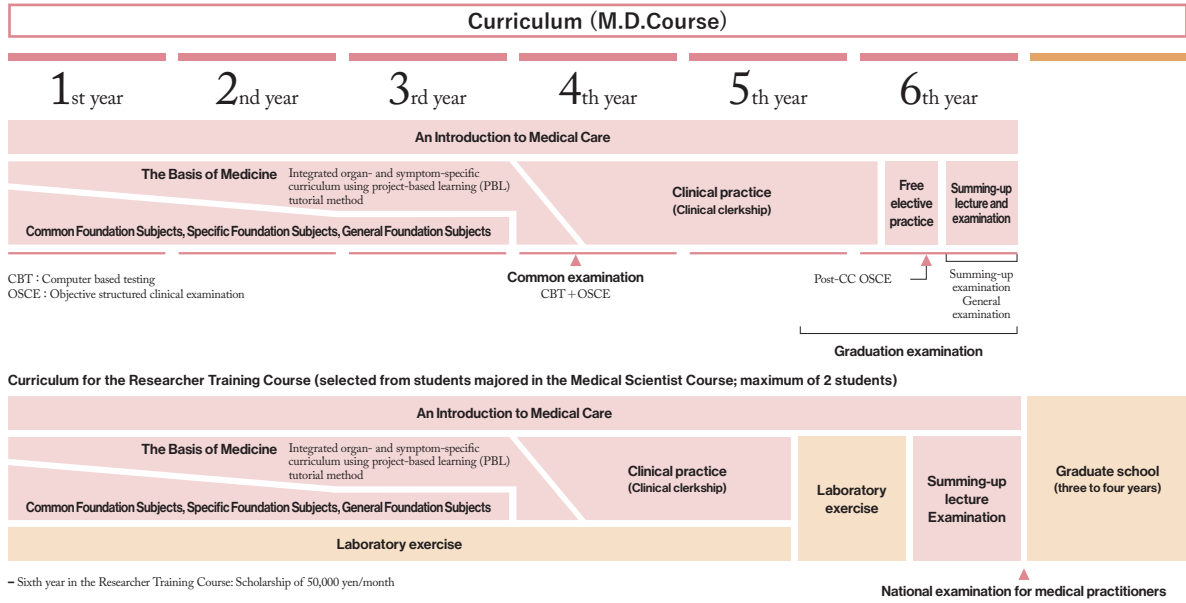
Knowledge and Skills (Specialized Competences)	1. Professionalism	One has well-rounded human nature, the deep appreciation for the sanctity of life and ethical view and are capable of practicing medicine with a sense of identity and responsibility as a potential doctor who preserves life and health. In addition, one always has aspirations and can reflect what he or she learns and continue self-improvement throughout his or her life.
	2. 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.
	3. 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.
	4. 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.
	5. 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.
	6. 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.
Guidelines for Assessing 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.	

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.

<p>Curriculum Design Framework</p>	<p>General policy As the nation's first medical school that adopted a program of six years, Tsukuba started its medical 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.</p> <p>Course sequence policy</p> <ul style="list-style-type: none"> - 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 medical 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). <p>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.</p>
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Teaching and Learning Methods	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.
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Admission Policy

Desired Student Profile	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.
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Student Evaluation and Selection	Individual Achievement Test First Round	<p>In addition to broad fundamental academic ability, applicants are evaluated on their proficiency in mathematics, science, and English. They are also comprehensively assessed on overall personal qualities, including motivation to pursue medicine, continuity and perseverance in academic study, aptitude, sensitivity, and social adaptability. [Regional Quota]</p> <p>In addition to the above, applicants are comprehensively evaluated on whether they possess a strong commitment to contributing to healthcare in Ibaraki Prefecture in the future.</p>
	Entrance Examination by School Recommendation	<p>Among applicants who demonstrate well-balanced and excellent achievement across all high school subjects, individuals with sufficient aptitude to become physicians are comprehensively evaluated through an essay examination and an aptitude test. [Regional Quota Recommendation]</p> <p>In addition to the above, applicants who possess a strong commitment to supporting healthcare in Ibaraki Prefecture in the future are comprehensively evaluated through an essay examination and an aptitude test.</p>
	Entrance Examination for Research-Oriented Students	<p>In addition to broad fundamental academic ability, applicants are evaluated on their ability to independently and continuously engage with scientific problems they have identified in the natural sciences, and on the high level of achievement attained through such efforts. Applicants are also comprehensively assessed on their motivation to pursue medicine, continuity of academic study, aptitude and qualities as a researcher, social adaptability, and overall personal qualities.</p>
	Entrance Examination for IB Students	<p>In addition to broad fundamental academic ability, applicants are evaluated on their proficiency in mathematics, science, and English, as well as on their overall personal qualities, including motivation to pursue medicine, continuity of academic study, aptitude, sensitivity, and social adaptability.</p>
	Entrance Examination for Students from Foreign Educational Programs	<p>In addition to broad fundamental academic ability, applicants are evaluated on their proficiency in mathematics, science, and English, together with their overall personal qualities, including motivation to pursue medicine, continuity of academic study, aptitude, sensitivity, and social adaptability.</p>
	Transfer examination	<p>In addition to broad fundamental academic ability, applicants are evaluated on their proficiency in mathematics, science, and English, as well as on their overall personal qualities, including motivation to pursue medicine, continuity of academic study, aptitude, sensitivity, and social adaptability.</p>

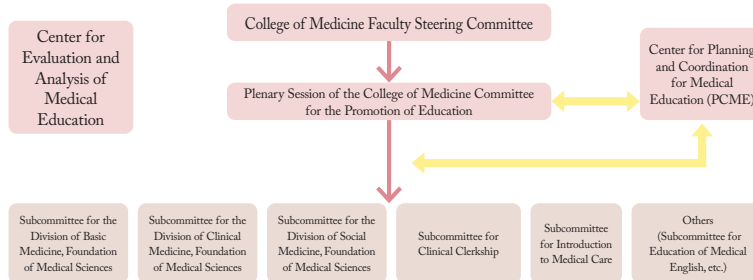
Learning Support Framework

Academic Support	The Student Affairs Committee was established to provide organized support for medical students regarding various issues related to their studies and daily lives. This committee handles support for students' studies and daily lives, financial aid, extracurricular activities, rewards and punishments, safety and health, and other tasks necessary to achieve its goals.
Opportunities for Peer Interaction	At the freshman orientation, there is a World Cafe-style event where students hold small group talks on a theme, with the goal of making this a “step towards building bonds” for all new students (URL: https://www.youtube.com/watch?v=rjD9-xiw_yA). And one of the distinctive features of the medical school's curriculum is the organ-specific integrated curriculum based on problem-based learning (PBL) tutorials for first to third years. These small group lessons, consisting of around eight students, provide opportunities for students to interact with each other and also contribute to enhancing their motivation to learn.
Opportunities for Student-Faculty Interaction	In the spring semester of the first year, students have the opportunity to experience basic research right from the start of their studies. From their first year, students can experience medical research by working in the research labs where actual research is being conducted, conducting experiments under the supervision of faculty members and participating in paper review meetings. Clinical Clerkship begins in the fall of their fourth year, and students will provide medical care as part of a team with faculty members. In addition to these, students will also receive tutoring from their homeroom teacher two to three times a year.

Approaches to Assuring and Enhancing Educational Quality

- 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.
- We have established the Medical Education Evaluation and Analysis Center as an independent evaluation department, which analyzes educational and learning outcomes and makes recommendations for educational improvement.
- 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.