



Graduate School

Graduate School of Medical Science

Master's Program

Established in April 2026, the Graduate School of Medical Science Master's Program

Cultivating high-level professionals who will shape the future of medical care based on the spirit of *Jin* (benevolence)

The Graduate School of Medical Science aims to cultivate personnel with both practical skills and an inquiring mind, based on the spirit of the university motto *Jin* (benevolence), which means “a heart that considers and cherishes others.” We have established master's courses in clinical laboratory technology and clinical engineering, with the objective of producing professionals and researchers capable of meeting the increasingly sophisticated and diverse needs of front-line medical care through their contributions to a wide range of fields, both within Japan and overseas.

Master's Course in Clinical Laboratory Technology

This course aims to develop human resources who have the practical ability to apply advanced clinical testing techniques based on scientific evidence, accurately understand pathological conditions, and contribute to improving the quality of testing techniques. We also focus on developing educators and researchers who can apply knowledge of clinical testing techniques and create new testing and educational techniques.

Master's Course in Clinical Engineering

This course aims to develop human resources who can contribute to the provision of safe and effective medical care by acquiring advanced expertise and skills in the operation and management of advanced medical equipment, including AI and ICT. It also supports students who aim to become educators and researchers involved in the development of new medical technologies and equipment, utilizing their specialized clinical engineering knowledge.



Graduate School of Medical Science (Curriculum and Learning Process)

From basic to applied, and on to advanced knowledge

The Master's Program consists of four courses: common basic courses, specialized basic courses, core elective courses, and research and thesis courses. Through a gradual and consistent curriculum,

students will systematically acquire specialized knowledge, skills, and ethics from their first year, ultimately aiming to complete a master's thesis.

A practical curriculum tailored to each specialty

Master's Course in Clinical Laboratory Technology

- Advanced Courses for Clinical Laboratory Analysis: Students conduct research into advanced laboratory analysis from the perspectives of clinical chemistry, immunology, genetics, and pathology, among others, in order to scientifically ascertain the pathology of diseases.
- Advanced Courses for Clinical Laboratory Technology: Students hone technical skills that will help to improve both the quality of laboratory technology and front-line laboratory environments, including data analysis using routine testing data and the development of new technology.

Master's Course in Clinical Engineering

- Core Clinical Engineering Courses: Students conduct fundamental research in clinical engineering that will serve as the foundations for creating new medical technologies.
- Innovative Clinical Engineering Courses: Students work on creative research aimed at developing medical devices and therapeutic apparatus.
- Advanced Clinical Engineering Courses: Students acquire the applied knowledge and skills required to use advanced technology safely and effectively in clinical settings.

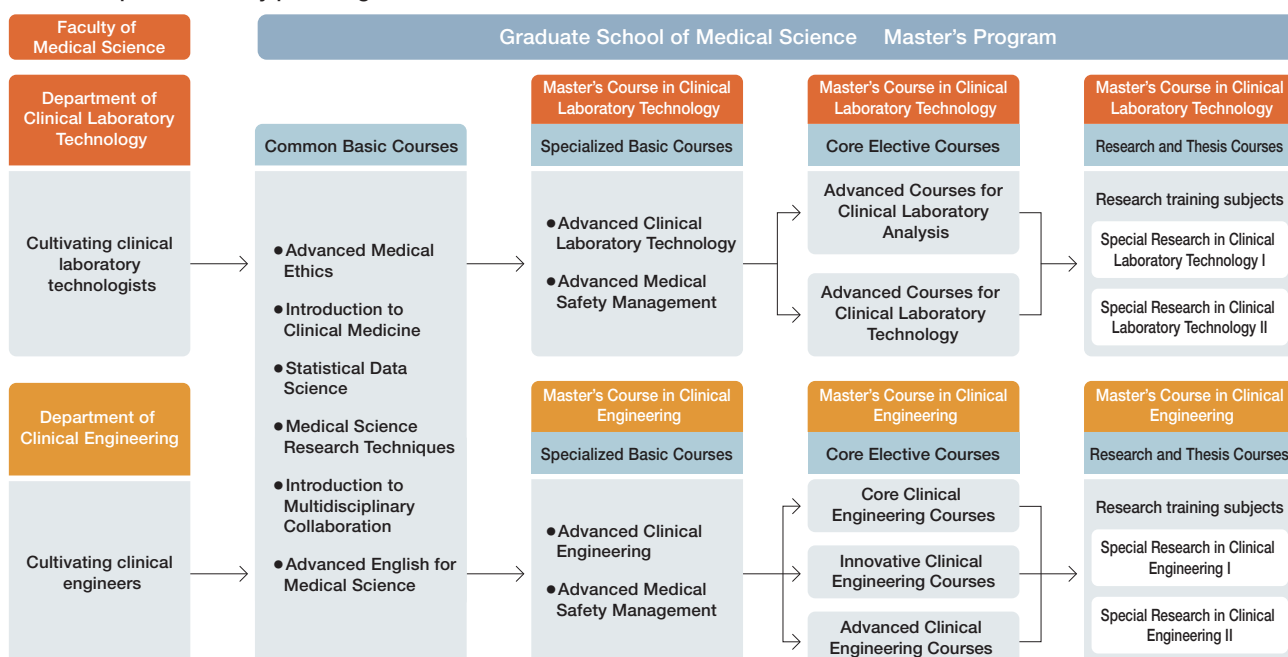
Meticulous research supervision and learning process

Faculty members provide close research supervision focused on the preparation of each student's master's thesis, offering phased support throughout the process from choosing the topic and analyzing prior research to conducting data analysis and presenting

the results. This support nurtures in students the ability to choose their own research topic grounded in issues faced in clinical settings, and to formulate research outcomes that will contribute to the advancement of medical care.

In this way, the practical education and systematic research support provided by the Graduate School of Medical Science fosters professionals and researchers who will be immediately effective in front-line medical settings, while also having the ability to open up new frontiers in future medical care.

Relationship to the faculty providing foundational education



Graduate School of Medical Science (Course Selection Models and Career Plans)

Master's Course in Clinical Laboratory Technology

With a view to post-graduation career paths, we have designed course selection models aimed principally at those who aspire to become teachers or researchers, and those who aim to become administrators or leaders at hospitals and other organizations. All students take common basic courses that teach them the fundamentals of medical science and basic core compulsory courses focused on the basics of clinical laboratory technology.

◆ Students then choose one of the following specialist domains according to their aspirations:

Advanced Analytics for Clinical Laboratory Technology:

Choosing between Pathological Analysis and Infectious Disease Analysis, students undertake in-depth study of advanced laboratory technology providing insights into the nature of pathological conditions or infectious diseases.

Advanced Technical Skills for Clinical Laboratory Technology:

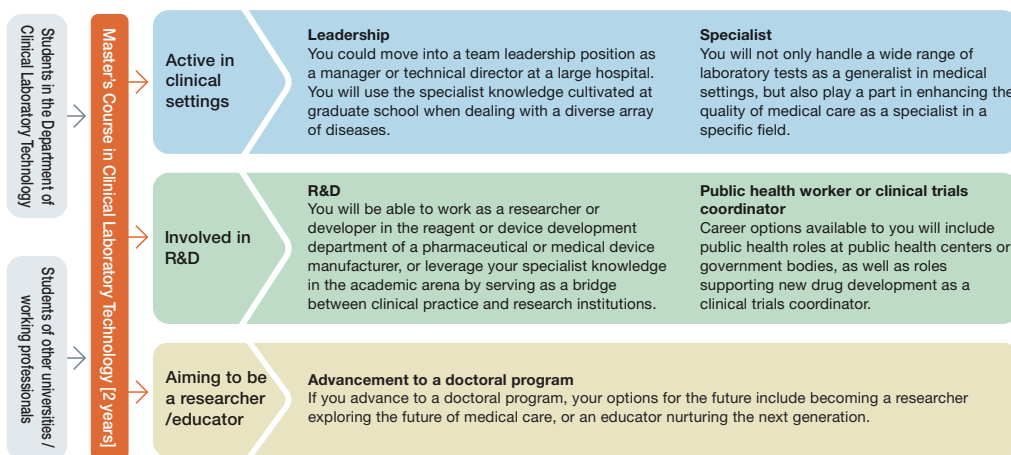
Choosing between Specialist Clinical Laboratory Technology and General Clinical Laboratory Technology Management, students undertake practical study of the clinical significance of day-to-day laboratory technology, along with laboratory management.

Research training subjects facilitate phased learning covering everything from the formulation of a research plan through to the authoring of papers, aiming to enable students to complete their master's thesis.

CAREER

Post-graduation career plans

A wide range of career plans supporting the medical care of the future will be available to graduates of this program, including specialist or team leader at a medical institution, educator, or researcher.



Master's Course in Clinical Engineering

With the objective of cultivating personnel who will contribute to technological innovation and team-based medicine, we have designed course selection models suitable for both those who aspire to become teachers or researchers, and those who aim to become administrators or leaders at hospitals and other organizations. All students take common basic courses that teach them the fundamentals of medical science and basic core compulsory courses focused on the basics of clinical engineering.

◆ Students then choose one of the following specialist domains in order to acquire more specialized knowledge and skills:

Core Clinical Engineering Courses:

Learn applied technologies underpinning the foundations of medical technology

Innovative Clinical Engineering Courses:

Take on the challenge of creating new medical devices and therapies

Advanced Clinical Engineering Courses:

Specialize in the operation of advanced devices and their clinical applications

CAREER

Post-graduation career plans

Graduates of this program will be able to aspire to important roles that contribute to the advancement of medical devices, including team leader at a medical institution, researcher, or educator.

