

Gunma University Program for Leading Graduate Schools

Program for Cultivating Global Leaders in Heavy Ion Radiotherapy, Science and Technology

Graduate School of Medicine,
Gunma University

Graduate School of Science and
Technology, Gunma University

Heavy ion cancer therapy is minimally invasive cancer treatment with the best QOL after treatment.

Gunma University is the first university in Japan with a graduate school doctoral course with its own heavy ion therapy equipment, and we conduct postgraduate education and research related to heavy ion radiotherapy.

In "the Program for Cultivating Global Leaders in Heavy Ion Radiotherapy, Science and Technology", we provide the integrated education environment of physical engineering, biology and medical science related to heavy ion radiotherapy. We aim to foster outstanding leaders in heavy ion radiotherapy who can play an active role across various fields of specialization, as globally respected leader scientists.

The number to be accepted Application qualification

Graduate School of Medicine (doctoral course) : Accept about four people per a year.

Six-year undergraduate graduates in medicine, dentistry, pharmacy and veterinary medicine, Other master's course graduates, etc.

Graduate School of Science and Technology (5 years' consistent system of master's course and doctoral course) : Accept about two people per a year.

Master course first grade, Graduate School of Science and Technology, Gunma University, etc.

Education curriculum

Graduate School of Medicine

Ph. D. Course, first year

Students learn through training in basic medical technologies and basic lecture courses.

Ph. D. Course, second year and third year

Students study major subjects and major specialist subjects in medical science and therapeutics/engineering leading graduate school. Additionally, students participate as necessary in the rotation of seminars for discussing research results. In the third year, basic research skills are tested through Qualifying Examinations (seminars for research presentations and debates). Internships in the advanced medical device development industry and educational and research related facilities both in Japan and abroad.

Ph. D. Course, fourth year (or third year)

Students write a thesis of the research results. The Ph.D. degree is given when completing the required credits and passing the thesis defense. Students have possible opportunities to have research supervision from an international advisory board of internationally prominent researchers.

Graduate School of Science and Technology

Master Course, first - second year

Students learn common subjects, core subjects, engineering management subjects and collaborated subjects such as Medical Engineering and Science. In addition, students will learn basic knowledge in medicine and heavy ion radiation therapy. Furthermore, students, who aim to be a medical physicist, will learn basic medical physics. The lectures will be opened in Kiryu or Showa Campus. Students must pass the Qualifying Examination of Master Course at the end of Master program.

Ph. D. Course, first year

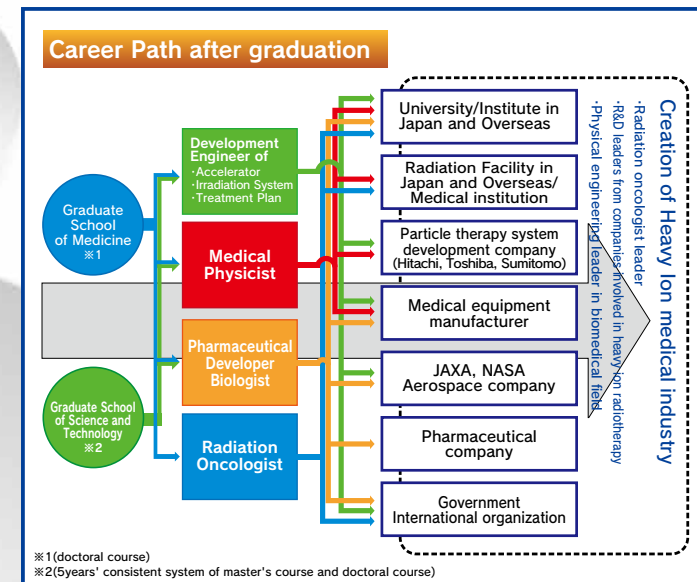
Students learn common subjects, collaborated subjects (such as Medical Engineering and Science) and core subjects. They also learn special exercise in laboratories, which study a related field to their own specialty, to get wide perspective. They also join internships or short-term training in medical industries or heavy ion radiation therapy facilities.

Ph. D. Course, second year

Students learn common subjects, collaborated subjects (such as Medical Engineering and Science) and core subjects. Students must pass Qualifying Examinations (seminars for the research presentation and discussions).

Ph. D. Course, third year (or second year)

Students write a thesis to get the Ph. D. The Ph.D. degree is given when they complete the required credits and pass the defense. Students have possible opportunities to have research supervision from an international advisory board of internationally prominent researchers.



<https://lphd.dept.showa.gunma-u.ac.jp/>