

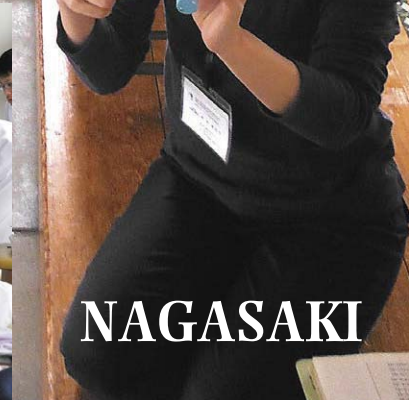
Nagasaki University / Fukushima Medical University Joint Graduate School

# Disaster and Radiation Medical Sciences Joint Master's Degree



A program born from the need to address complex disasters involving radiation exposure and restorative support.

**Providing nurses, medical, and rescue professionals with radiation disaster management skills and expertise**



FUKUSHIMA







# “THE DEVELOPMENT OF HUMAN RESOURCES TO CONTRIBUTE TO — S KILLS UNIQUE TO OUR NAGASAKI / FUKUSHIMA COLLABORATION

## We provide a specialized learning experience to prepare for emergencies and complex disasters.

Even with today's technological developments, we are constantly operating with risks in modern society, for example, the Tokyo Electric Power Company Fukushima Dai-ichi nuclear power plant accident in 2011. Since then, Nagasaki University and Fukushima Medical University have cooperated toward the reconstruction of Fukushima prefecture. Nagasaki University has also supported medical care for Atomic bomb survivors, International Hibakusha's Medical care and Fukushima Reconstruction Support, while Fukushima Medical University has led the reconstruction of Fukushima after the Fukushima Dai-ichi Nuclear Power Plant accident. In the future, preparations and provisions against nuclear disasters and radiation accidents will be urgent issues, not only in Japan, but also in foreign countries; especially, Asian nations. In April 2016, Nagasaki University and Fukushima Medical University founded a joint graduate school, Master's degree program specializing in medical science and nursing science. In our courses, the two universities utilize their experience and strengths to develop human resources essential for the field of disaster and radiation medical sciences, and produce those who can lead the way in the reconstruction and recovery from such disasters



**Atsushi Kawakami**  
Nagasaki University  
M.D / Ph.D, Dean

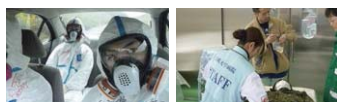
## Reasons for Establishing the Joint Graduate School



As a result of the Tokyo Electric Power Company Fukushima Dai-ichi nuclear power plant accident in March 2011, it was revealed that we currently face a shortage of experts, such as nurses and public health nurses, in the field of disaster and radiation medical sciences; emergency radiation exposure medical service professionals, and radiation health risk communication specialists. In the future, the spread of radiation diagnoses/therapies, and development of human resources in the field of disaster and radiation medical sciences will be an important challenge abroad, especially in other Asian countries where the construction of nuclear power plants is progressing. In 2016, Nagasaki University, which has had great success in radiation medical sciences and radiation risk sciences, and Fukushima Medical University, which gained valuable experience from the Great East Japan Earthquake, jointly established the "Division of Disaster and Radiation Medical Sciences" to take advantage of the best characteristics of each university to develop human resources in this field..

### Current Needs

Establishing the nuclear disaster medical facilities  
Monitoring environmental evaluation in the initial days after the accidents  
Implementating crisis communication  
Executing rescue operations for victims caught in earthquake and tsunami disasters



#### Immediately After the Disaster

- Engaging in radiation emergency medicine.
- Measuring and evaluating of environmental radiation and exposure levels.
- Executing rescue operations with medical expertise.

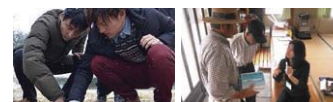
Transferring and admitting of hospitalized patients  
Supporting medical and healthcare management services in shelters  
Assessing internal levels of radiation exposure



#### From Chaos to Stability

- Engaging in health management of disaster victims living in shelters.
- Measuring and evaluating of environmental radiation and exposure levels.

Validating assessments for home return with the evaluation of radiation exposure levels  
Implementating of sustainable radiation health risk communications  
Providing long-term healthcare services for residents



#### Restoration

- Leading radiation health risk communication.
- Providing long-term support for disaster victims.

### Medical Science Course

(approximately five people per university)



This course will provide students with skills in medical treatment and crisis communication related to disasters. The focus will be on radiation disaster, pre and post disaster planning, and providing medical expertise so appropriate medical health care can be administrated.

**Desired applicants:** (ex.) clinical radiologists, fire fighters, police officers, international students.

Our program is designed to fulfill current and future needs.

### Nursing Course

(approximately five people per university)



This course is aimed at providing nurses and public health nurses expertise in the field of clinical radiation, radiation emergency exposure medicine, radiation health risk communication, and crisis communication with residents.

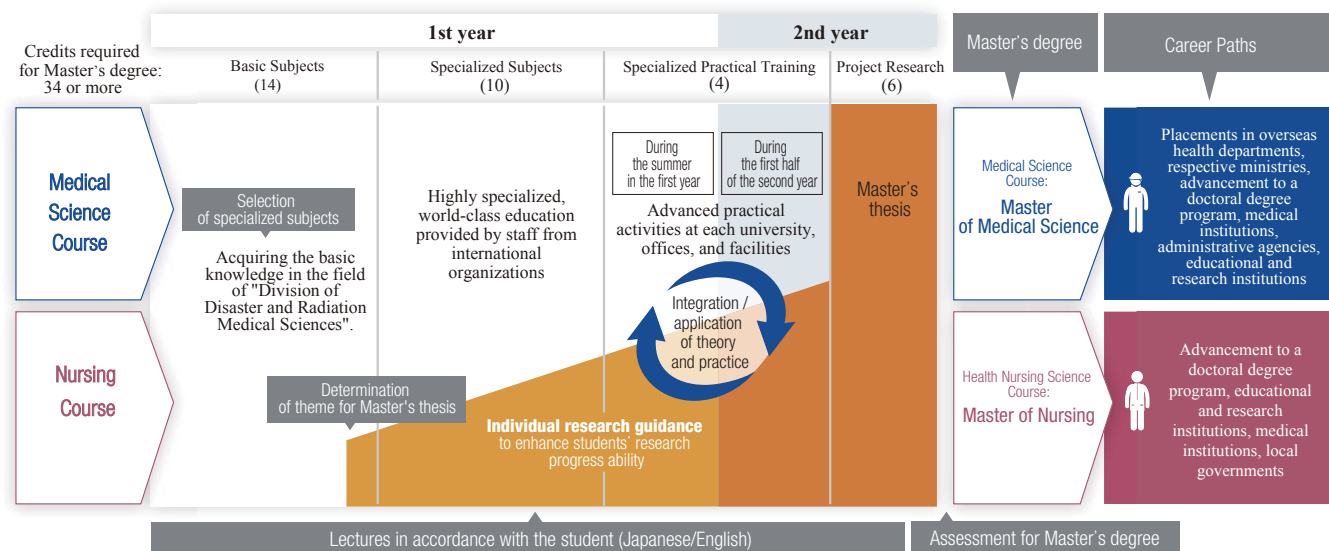
**Desired applicants:** (ex.) nurses, public health nurses.

Desired Applicants



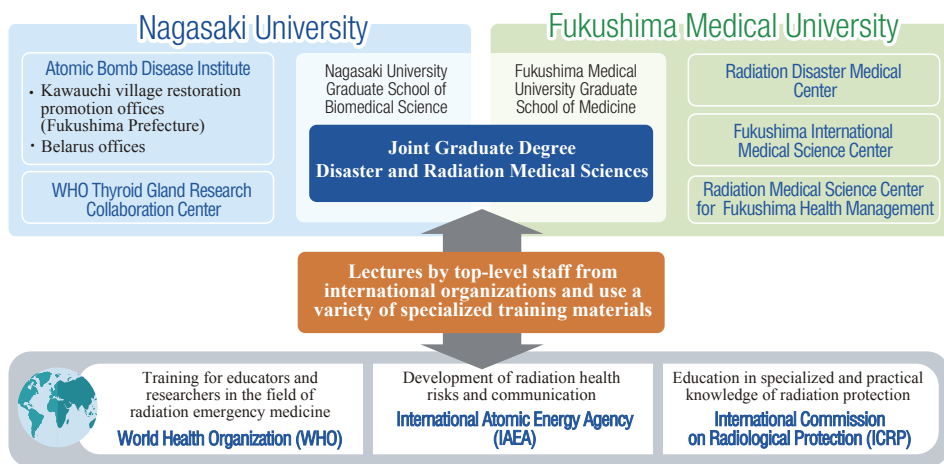
## Courses Designed to Train Professionals (Curriculum Map)

After enrollment, in the first year, students will enroll in the common, basic subjects that are requirements for both courses. Subsequently, they will take specialized subjects according to their respective courses. In the second year, students complete the specialized practical training program, conduct a research project, and write a Master's thesis.



## Supporting Systems for Training Professionals

We have gathered the faculties of disaster and radiation medical sciences from both universities and utilize Nagasaki University's Kawauchi village restoration promotion offices and Fukushima Medical University's Radiation Medical Science Center. In addition, we offer lectures in English by inviting faculty members from the World Health Organization (WHO), which plays a central role in the field of disaster medical sciences; the International Atomic Energy Agency (IAEA), a group of nuclear experts; and the International Commission on Radiological Protection (ICRP).



## Operating System for Joint Lectures

In our joint degree program, students are required to attend lectures at the Home University. In addition, students are required to take 10 or more credits from the partner university to complete the course. These partner university classes will use video conferencing systems. In principle, students need to pay the travel and accommodation expenses for practical training, but this burden can be reduced considering the training period or by staying at university accommodations.



## Student Application

Please check the application guidelines for each university in advance.

### Nagasaki University

General entrance examination, professional entrance examination, entrance examination for international students

Categories of Entrance Examinations

Preapproval of application qualifications will be required in some cases.

Preliminary Screenings for Qualifications

Applicants will be selected based on a comprehensive evaluation of their application documents, an academic examination, and an online interview.

Selection Process

### Fukushima Medical University

General entrance examination, professional entrance examination

Pre-evaluation application qualifications will be required in some cases.

Applicants will be selected based on the comprehensive evaluation of their essay, interview, and application documents.

**More Information on Application Guidelines** <http://www.fmu.nagasaki-u.ac.jp/>

## Tuition and Financial Aid

### Tuition

Admission fee: ¥ 282,000 Tuition: ¥ 535,800 / year

### Scholarships

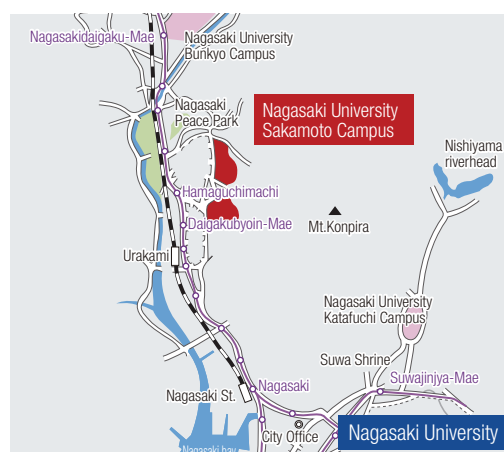
Graduate students can apply for scholarships from the Japan Student Services Organization (¥ 50,000 / m ~). If you cannot obtain this scholarship, you can apply for scholarships established independently by both universities. Please contact the university of your choice for more information.

### Tuition waivers

Students with excellent academic histories who have difficulty making tuition payments due to economic reasons may qualify for a tuition waiver. Please contact the university of your choice.

\* Japan Student Services Organization : <http://www.jasso.go.jp/>

## Campus Location



## Contact Information

Please contact the university of your choice.

### National University Corporation, Nagasaki University

Nagasaki University, Biomedical Science Administration Department, Nagasaki University  
Address: 1-12-4 Sakamoto, Nagasaki-City 852-8523, Japan  
Telephone: +81-95-819-7009 (Hours: 9:00 A.M. – 5:00 P.M. weekdays) E-mail: [dai\\_med@ml.nagasaki-u.ac.jp](mailto:dai_med@ml.nagasaki-u.ac.jp)

### Public University Corporation, Fukushima Medical University

Fukushima Medical University, Education and Training Support Division, Academic Affairs Section for School of Medicine  
Address: 1 Hikarigaoka, Fukushima-City 960-1295, Japan  
Telephone: +81-024-547-1095 (Hours: 9:00 A.M. – 5:00 P.M. weekdays) E-mail: [gakuseik@fmu.ac.jp](mailto:gakuseik@fmu.ac.jp)

<http://www.fmu.nagasaki-u.ac.jp/>