

「The International Priority Graduate Programs (PGP)」

～Advanced Graduate Courses for International Students～

Course Guide

【1. Outline of the Course】

① Course	Education and Research on Digital/Quantum ICT envisaging Beyond Society 5.0  (Ph.D. Program, 3 years)
② Degree	Ph.D.
③ Graduate School	Graduate School of Natural Science and Technology
	(Address) Kakuma-machi Kanazawa ISHIKAWA
④ Division	Division of Electrical, Information and Communication Engineering

## 【2. Contents of the Course】

### I. Aim of D/Q ICTbS5 Program

Graduate School of Natural Science and Technology, Kanazawa University will start “Program for Education and Research on Digital/Quantum ICT envisaging beyond Society 5.0 (D/Q ICTbS5 Program or simply ICTbS5 program)” from 2026. The aim of D/Q ICTbS5 Program is to educate Ph.D. students to become professionals of advanced Digital/Quantum ICT research & development for Society 5.0 and beyond so that they will have a chance to work all over the world. The students study mainly IoT, Cybersecurity, AI, Big Data, Data Science, Quantum Information and Information & Communication technologies.

### II. Curriculum of D/Q ICTbS5 Program

- 1) **Quota:** 4 MEXT scholarship students, 4 privately financed foreign students, 2 Japanese students ; 10 students in total.
- 2) **Screening:** The MEXT scholarship students are all screened, and the selected students are accepted as students of the ICTbS5 Program. Privately financed foreign students and Japanese students are screened and accepted as regular students. After joining the graduate school of Kanazawa University, the regular students can apply for the ICTbS5 Program. The applicants are screened, and selected students are allowed to join the ICTbS5 Program. Foreign students can get information about Japan and Kanazawa University through the university website.
- 3) **Official Language:** English  
Lectures that the ICTbS5 Program students take are given in English. Student research projects are directed and advised by professors in English.
- 4) **Requirements for Completing D/Q ICTbS5 Program:**
  - Get credits by taking courses in the Regular Program based on the classification of the ICTbS5.
  - Get at least one credit out of 2 courses “International Presentation” and “Fundamentals of Quantum Information”.
  - Publish research papers, including a substantial part of the Ph.D. thesis, in a peer-reviewed journal edited in English.
  - Give a Ph.D. defense in English.
  - Pass an examination of the Ph.D. thesis.
- 5) **Certificate of D/Q ICTbS5 Program:**  
ICTbS5 Program’s students satisfying the requirements receive a certificate of ICTbS5 Program, as well as the Ph.D. diploma
- 6) **Highlights:**  
Students of the ICTbS5 program can get deeper skills and knowledge associated with the ICTbS5 and also get to know about people working in the field by participating in events, ex educational/technical meeting/program. Regular ICTbS5 meetings are organized, too.

### III. Advising Students Research Projects and Examination of Ph.D. Thesis

If the student finds an advisor before enrolling in the Ph.D. course, s/he can receive preliminary advice through the internet. (After the enrollment, one main advisor and two vice-advisors direct and advise the student research project. A committee consisting of five professors examines the Ph.D. thesis.)