

Graduate School of Medical Sciences
Division of Pharmacy (Doctoral Program), Doctor of Philosophy in Pharmacy

Number of students: 4

● **Diploma Policy (DP)**

Basic policy on certification of completion and conferment of degrees

The objective of this course is to nurture human resources who possess advanced specialization, excellent research skills, and an international perspective through advanced pharmacy-related lectures needed by healthcare professionals and by engaging in the latest research about medicine and pharmacy.

Students are required to receive the necessary research guidance, earn at least the prescribed number of credits mainly from pharmaceutical research and pharmacy-related subjects, and meet the prescribed standards for the English proficiency test. Moreover, research findings need to undergo reviewed publication in an academic journal. After writing a thesis describing the research findings, giving an oral presentation, and discussing them, the content is examined, and the students who pass this examination are awarded a Doctor of Philosophy in Pharmacy.

- (1) Acquire a high sense of ethics, a sense of responsibility, cutting-edge specialized knowledge in medicine and pharmacy, broad knowledge, and research skills as a healthcare professional and pharmaceutical researcher.
- (2) Acquire skills in explanation, information collection, and communication as well as international awareness and English proficiency to be able to play an active role in the international community.
- (3) Being able to conduct cutting-edge pharmaceutical research in medicine and pharmacy as well as to take a leadership position in pharmaceutical research, from problem discovery to problem solving.

● **Curriculum Policy (CP)**

This course adopts a curriculum structure contributing to education and research that integrates medicine and pharmacy for advanced pharmaceutical therapy, which broadly enables the learning of not only pharmaceutical research and pharmacy-related subjects but also specialized English and the latest in medicine that is deeply connected with pharmacy.

1. Educational content

- (1) Acquire a high sense of ethics, a sense of responsibility, cutting-edge specialized knowledge, and broad knowledge required for carrying out research activities from a leadership position as an independent researcher.
- (2) Acquire English proficiency to be able to play an active role in the international community and cultivate skills in explanation, information collection, discussion, and communication.
- (3) Through cutting-edge research activities, acquire the research and leadership ability to carry out studies from problem formulation to problem solving from a pharmaceutical standpoint.

2. Teaching method

- (1) “Research Ethics for Ph.D. Researchers” is provided to acquire a researcher’s sense of ethics. “Initial Comprehensive Curriculum” for broadly learning about pharmacy and interdisciplinary research fields as well as specialized subjects taught by faculty members specializing in pharmacy are provided, along with “Elective Subjects of the Division of Pharmacy” to systematically acquire

cutting-edge knowledge, practical activities in clinical settings, academic knowledge, and research skills suited to the intended career path.

- (2) To cultivate specialized English proficiency to be able to play an active role in the international community, “Initial Comprehensive Curriculum (Introduction to Basic Medical Science 1, 2)” and “International Collaborative Research for Innovation” are provided.
- (3) Through cutting-edge research activities, “Seminar for Research Practice” is provided as a laboratory seminar and conferences to acquire literature reading comprehension, explanation skills, and research skills, along with “Research in Pharmacy” to write a thesis as well as “Exercise in Pharmacy” for practical exercises on presentations at academic conferences and similar topics.

Evaluation of learning outcomes

- (1) Standards and methods for evaluating learning outcomes are indicated in the syllabus for each course.
- (2) The three qualities and skills as well as learning outcomes listed in the Diploma Policy will be comprehensively evaluated through the reviewed publication of the research findings in an academic journal, the writing of a thesis describing the research findings, and an examination of the oral presentation and discussion of the thesis.

● Admission Policy (AP)

The objective of this course is to foster cutting-edge knowledge in the medical field with pharmacy at its core, practical research skills for medical professionals, a high sense of ethics, and an international perspective. In the interdisciplinary environment unique to the Graduate School of Medical Sciences, which is a cross-sectional collaboration between the three medical disciplines of pharmacy, medicine, and health administration, we train medical professionals with a high level of expertise in pharmaceutical education and research as well as with a background in the natural sciences and excellent academic research skills through education in a wide range of fields, from basic to clinical pharmacy. Specifically, we accept pharmacists who play a leading role in clinical practice, university faculty members working with pharmacy and taking the lead in medical and pharmaceutical education and research, administrative personnel in areas such as medical care, welfare, pharmaceutical affairs, and the environment, and researchers involved in drug discovery and clinical trials, all engaged in highly specialized work and wanting to play an active role on the front lines.

The basic policy for selecting students for admission will be to focus on those with a certain level of academic proficiency (academic major and English skills), possess understanding and enthusiasm for the research topics they have undertaken so far, and have a strong intention to work actively in the aforementioned fields in the future. Selection is based on basic academic ability, English proficiency, logical thinking ability, and comprehension of research topics.

● Anticipated careers

- Healthcare-related institutions (hospitals, pharmacies, etc.)
- Pharmaceutical or medical universities (faculty member)
- Governmental departments related to medicine and pharmacy
- Industrial research and development divisions (clinical development researcher, etc.)
- Industrial academic/business divisions (academic researcher, etc.)

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