

School of Medical-biosystematics

1. General Overview

The School of Medical-biosystematics was established as the Department of Bioinformatics in 2000, the first of its kind in Korean colleges. The current academic structure was settled in 2010. Medical-biosystematics encompasses biotechnology and information technology to explore fundamental nature and mechanisms of biological phenomena. The School mainly focuses on how to deal with the vast amount of bio-information such as the one on genome and proteome produced in bio-related disciplines. The School has received research grants from businesses and the government amounting to 9.2 billion won (5.3 billion won from the government). Students are engaged in lab experiments on bio-information, chemical information, and molecular information.

2. Educational Goals/Objectives

The School provides students with three focus-program options that help meet their career needs: life science, bioinformatics, and basic medical science. The life-science focus offers a training course for biosimilar technology; the bioinformatics focus offers a curriculum of bioinformatics and systems biology for personalized treatments; basic medical-science focus offers a wide variety of basic biological and medical subjects for students bound for medical school, dental school, and Korean medical school.

3. Areas of Specialization and/or Course Titles

- Life Science : Microbiology and Lab, Biochemistry Lab, Molecular Biology Lab, Instrumental Analysis Lab, etc.: a minimum of 18 credits required in this area.
- Bioinformatics : Computational Molecular Biology and Lab, Biostatistics, Biophysics, Functional Genomics, etc: a minimum of 18 credits required in this area.
- Basic Medical Science : A wide array of basic biological and medical subjects

4. Career Opportunities/Job Situation

Graduates will have their careers in biotechnology or they may go on to medical school, dental school, or Korean medical school. The following are some of the job opportunities for the graduates:

- research institute of bioscience and food, pharmaceutical and pesticide companies
- agricultural and livestock product traders, cosmetics manufacturer, scientific instrument manufacturer, environment- and medicine-related businesses
- local government and regional development institute

5. Related Licenses

Engineer Biological Classification, Engineer Biotechnology, Engineer Environment (Water, Air, Soil)