

Department of Oriental Medicinal Materials & Processing

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What is Oriental Medicinal Materials & Processing?

Healthy life is one of the greatest concerns for human beings, and it is widely recognized that oriental medicine has an important role in human health. Various oriental medicinal materials have been used for the prevention or remedy of diseases. The scientific interpretation of the pharmacological activity of the materials leads to effective uses for drugs. The identification of the principal components of medicinal materials, manifesting the efficacy, and adaptation of biotechnology make possible the development of new drugs. Finally, oriental medicinal materials and processing will show the best way to improve the health of human beings.

Oriental Medicinal Materials & Processing at Kyung Hee

It is widely recognized that oriental medicine is one of the most promising fields at Kyung Hee University and in Korea. The university endeavors to develop the field and draw the attention of the world. However, the availability of oriental medicinal materials is one of the prerequisite problems to solve. A stable supply of quality materials, the scientific interpretation of biological activity, and development of new drugs from medicinal materials should be fulfilled. Therefore, the major was established in 2002 to educate specialists in not only the production, breeding and processing of oriental medicinal plants but also in the development of novel active materials with the goal of serving to improve the health of human beings. Students are trained to have knowledge of oriental medicine, high technology of bioengineering, and fine chemistry. Many courses are related to oriental medicinal knowledge and biotechnology for scientific studies and practical utilization, such as herbal principles, human physiology, plant genetics, plant physiology, plant tissue culture, plant biotechnology and natural products chemistry.

Degree Requirements

To receive the Bachelor of Science in Oriental Medicinal Materials & Processing, a student must:

- complete a minimum of 130 credit units
- satisfy the general requirements of the School for professional degrees
- complete 15 units of required courses
- complete 34 units of technical electives for oriental medicinal materials & processing
- complete 42 units (maximum 56 units) stated in the common studies program and Humanities/Social Science Electives
- acquire the minimum English and Computer proficiency test score of TOEIC 650

Courses

Year 1

Introduction to Biology, Introduction to Chemistry, Introduction to Physics, Calculus, Introduction to Statistics, Biological Resources, Biology I, II, Chemistry I, II, Applied Botany

Year 2

Plant Genetics, Plant Physiology, Natural Products Chemistry, Introduction to Oriental Medicine, Organic Chemistry of Oriental Medicinal Plants, Herb Medicine and Health, Molecular Biology of Natural Product, Molecular Biology and Experiment of Natural Product, Plant Tissue Culture and Lab. Exercises, Human Physiology

Year 3

Herbology, Oriental Medicinal Pharmacology, Medicinal Applied Microbiology, Medicinal Plant, Oriental Medical Physiology, Quality control of Natural Products, natural products metabolomics experiment, Pharmacognosy

Year 4

Pharmacological and Instrumental Analysis Lab, Internship in Research 1, 2 (Oriental Medicinal Materials Processing), Internship in Oriental Medicinal Materials & Processing 1, 2, 3, Capstone design of Oriental medicinal materials 1,2, Herbal Cosmetics, Therapeutic effect of Natural Products, Oriental medicinal materials experiment

Careers and Graduate Destinations

Our students take part in education related to oriental medicinal materials and the processing and development of novel pharmacologically active resources. They can work as well in research institutes of the government, pharmaceutical companies, food manufacturing industry, and oriental medical institutes. Some active students pursue careers in the manufacture of functional foods and development of new drugs using oriental medicinal materials. We also strongly recommend students to enter graduate programs related to Oriental medicinal materials and processing.

Faculty

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