

Admission Requirement

• Program 1.1

1. Applicants must hold a master's degree in Science, Bioscience or other related fields enclosed with research back ground as thesis
2. Applicants should have at least one published article

• Program 1.2

1. Applicants must hold a bachelor's degree in Science, Bioscience or other related fields enclosed with research project
 2. Applicants should have GPA above 3.00 with excellent in research experience
- Indicate in division or field of interest you are applying for admission
 - Submit an abstract of research proposal of at least one page long on A4-size paper
 - Good command of spoken and written English is required for admission



Contact Information:

PO Box 1020 Kasetsart, Chatuchak District,
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Or

Graduate Program in Bioscience
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Fax: +66 2 942 8290

URL: www.sci.ku.ac.th (select "International Program")

E-mail: fscirpt@ku.ac.th



Kasetsart University
Faculty of Science

Ph.D. in Bioscience



**Doctor of Philosophy in
Biological Science
(International Program)**

www.sci.ku.ac.th

Bioscience @ Science_KU

รับผลิตไทย & ต่างชาติ

Doctor of Philosophy in Biological Science (International Program)

Faculty of Science, Kasetsart University has offered a degree of Doctor of Philosophy in Bioscience (International Program), XD22, an interdepartmental multidisciplinary non-course work graduate program (program 1.1 and 1.2) since 2005.

Students (Thais & Foreigners) can pursue their study and conduct a research in a broad spectrum of appropriated area in biological and physical sciences including Applied Radiation and Isotopes, Biochemistry, Botany, Earth Science, Genetics, Microbiology, Zoology, Chemistry, Physics, Material Science, Statistics and Computer Science.

Students are obligatory to study full-time to facilitate timely completion of their degree program. The Faculty of Science will provide financial assistance to high potential students who show evidence of adequate ability for collaborative research with abroad laboratory.

Curriculum (Non-course program)

Program 1.1– Non course with Thesis (M.Sc. to Ph.D)

1. Total credit not less than 48 credits
2. Learning Subjects:
 - 01406699 Thesis 48 credits
 - * 01406691 Advanced Research Techniques 3 credits
 - * 01406692 Bioethics 1 credit
 - * 01406697 Seminar 1, 1, 1, 1 credits.

Program 1.2– Non course with Thesis (B.Sc. to Ph.D)

1. Total credit not less than 72 credits
 2. Learning Subjects:
 - 01406699 Thesis 72 credits
 - * 01406691 Advanced Research Techniques 3 credits
 - * 01406692 Bioethics 1 credit
 - * 01406697 Seminar 1, 1, 1, 1, 1, 1 credits
- (* audit grading option)



Research Focus

Animal and Aquaculture Group

Aquatic animal nutrition
Biological studies and culture of freshwater pearl mussel
Animal research and development for commercialization (e.g. crocodile blood, deer velvet, etc)
Zoology for sustainable use (Animal molecular identification for reintroduction e.g. Siamese crocodile, snakes)

Environment and Bioremediation Group

Organic wastes digestion and management
Efficacy of some entomo-pathogenic fungi in controlling insect pests
Bioremediation of organic or hazardous wastes using microbial technology

Genetics and Protein Group

Aptamers based biosensor
Protein based drug design
Antimicrobial activity of nanoparticles
Developmental genetics of Drosophila
Biochemistry of bioactive peptides, lectins
Genetic diversity and improvement of forage crops
Evolutionary genetics of malaria and dengue vectors
Molecular genetics of Streptomyces and bioinformatics

Microorganisms related to Industry, Agriculture and Food Applications Group

Bioethanol from yeast isolated in Thailand
Production of monoclonal antibody for detection of pathogenic viruses in black tiger shrimp
Metabolic engineering for enhancing succinic acid production of *Corynebacterium glutamicum* CS176 from sugars derived from plant biomass

Plant Group

Orchid Biotechnology
Plant active substances studies
Plant cytogenetics, genetic diversity and molecular marker
Screening of herbal plants for anti-cancer & anti-HIV-1 drug
Plant biotechnology for secondary metabolites improvement

Renewable Energy Group

Microbial fuel cells
Bio-hydrogen production from algae
Biodiesel production from microalgae

(More detail at...<http://www.sci.ku.ac.th> (select "Research focus")