# Ph.D.

Microbiology and Microbial Technology

#### Graduate Elective Course

Trends and Technologies in Immune-Mediated Diseases Microbial Resources for Innovative Business Molecular Genetics and Biotechnology of Yeast Biological Aspects in Computational Biology Novel Trends in Applied Microbiology Biology of Intracellular Microbes Microbial Infection and Immunity Fungi and Mycotoxin in Food Microbial Alternative Energy Environmental Microbiology Virology of Aquatic Animals Fermentation Technology Microbiology for Industry Microbiological Products Bioprocess Technology **Bacterial Systematics** Microbiology of Food Medical Bacteriology Immunotechnology Microbial Enzymes Medical Mycology Soil Microbiology Yeast Genetics Bioremediation Plant Virology

## Curriculum [English]

Program	M.Sc.		Ph.D.			
Туре	Non- coursework	Coursework	Non- coursework		Coursework	
Coursework Credit	-	21	-	-	10	24
<ul> <li>Required Course</li> </ul>	_	9	_	_	_	9
• Elective Course	_	12	_	_	10	15
Dissertation Credit	39	18	48	72	38	48
Total Credit	39	39	48	72	48	72



Admission

Period: March & October

Online application via www.grad.chula.ac.th

### Contact

Department of Microbiology

16th Floor, Maha Vajirunhis Building Faculty of Science, Chulalongkorn University Phayathai Road, Wangmai, Pathumwan,

Bangkok 10330, Thailand

Tel: +66 2218 5070-1 Fax +66 2252 7576

Website: www.micro.sc.chula.ac.th







### Graduate Program

## Department of Microbiology

Faculty of Science Chulalongkorn University



# M.Sc.

Microbiology and Microbial Technology

#### Graduate coursework

- Research Methodology in Microbiology
- Current Techniques in Microbiology
- Advanced Microbial Physiology and Genetics
- Applied Microbiology in Industry

### Scholarship & Funding

Support for Tuition Fee
Teaching Assistant Fellowship
Scholarship for International
Graduate Students
Graduate Thesis Grant
and more...

For more details: www.grad.chula.ac.th

## Research

### FOOD & AGRICULTURE

Green molecular factories Mycotoxigenic fungi Silage fermentation

Microbial biocontrol
Mycotoxin detection
Lactic acid bacteria
Fermented Food

Animal feed Probiotics Microalgae

Vaccine
Microbiome
Viral therapy
Neutraceutical
Drug discovery
Genome mining
Rapid diagnosis
Precision medicine
Immune-mediated diseases

HEALTH

### INDUSTRY

Biomaterials for Packaging Fermentation technology Biochemical engineering Metabolic engineering

Microbial enzymes

Microbial products

Biosurfactant

Bioprocess

Biopolymer

Bioenergy
Bio-leaching
Cyanobacteria
Phytoremediation
Phototropic bacteria
Extremophile bacteria
Ready-to-use bacteria
Pollutant decontamination
Biodegradation & bioremediation
Microbial resources for biobusiness

**ENVIRONMENT**