

Master of Science Programme in Biopharmaceutical Science (International Programme)

หลักสูตร วิทยาศาสตร์มหาบัณฑิต

สาขาวิชา เกษัชศาสตร์ชีวภาพ (หลักสูตรนานาชาติ)(ภาคปกติ)

Faculty of Pharmacy

คณะเภสัชศาสตร์

1. Microbiology (วิชาเอกจุลชีววิทยา)	Admission No.	2	6	1	3	M	G	0	5
Number of students accepted	5 persons								
2. Biochemistry (วิชาเอกชีวเคมี)	Admission No.	2	6	1	3	M	G	0	6
Number of students accepted	5 persons								
3. Pharmacology (วิชาเอกเภสัชวิทยา)	Admission No.	2	6	1	3	M	G	0	7
Number of students accepted	3 persons								
4. Physiology (วิชาเอกสรีรวิทยา)	Admission No.	2	6	1	3	M	G	0	8
Number of students accepted	4 persons								

Admission Requirements

A candidate must:

1. Graduate / Final year student in Biology, Biomedical Sciences, Health Sciences and related areas
2. Have a minimum grade point average of 2.50;
3. pass the standard graduate entry requirement for a Master's in Science;
4. Have a TOEFL score of at least 480, TOEFL computer-based score of 157, TOEFL Internet-based score of 54, or IELTS score of 4.5 or pass the English Proficiency Examination arranged by the Faculty of Graduate Studies.

Those who do not have any of the test scores specified above will have to take the English Proficiency Examination of the Faculty of Graduate Studies on the specified examination day.

5. In case your qualification does not match to the admission criteria, candidates must prior attach A "Requesting Form for Examination" approved by the program director. The form must be submitted before making the application. Kindly download here:

http://www.grad.mahidol.ac.th/grad/admission/form_th.php

Exemptions from the above conditions may be granted by the Doctoral Programme Committee and the Dean of the Faculty of Graduate Studies.

Written Examination (For Microbiology) 2613MG05

(Applicants must attend the examination date accurately to your admission round.)

<u>First Round</u> January 17, 2015		<u>Second Round</u> May 16, 2015	
Subjects for examination	Time	Subjects for examination	Time
1. English	8.30 - 11.30 a.m.	1. English	8.30 - 11.30 a.m.
2. General Knowledge	11.30 - 12.30 p.m.	2. General Knowledge	11.30 - 12.30 p.m.
3. Microbiology	1.30 - 2.30 p.m.	3. Microbiology	1.30 - 2.30 p.m.

Examination Place
Mahidol University , Salaya , Nakhonpathom more details : www.grad.mahidol.ac.th or
Announcement at Faculty of Graduate Studies branches.

Written Examination (For Biochemistry) 2613MG06

(Applicants must attend the examination date accurately to your admission round.)

<u>First Round</u> January 17, 2015		<u>Second Round</u> May 16, 2015	
Subjects for examination	Time	Subjects for examination	Time
1. English	8.30 - 11.30 a.m.	1. English	8.30 - 11.30 a.m.
2. General Knowledge	11.30 - 12.30 p.m.	2. General Knowledge	11.30 - 12.30 p.m.
3. Biochemistry of Pharmacy	1.30 - 4.30 p.m.	3. Biochemistry of Pharmacy	1.30 - 4.30 p.m.

Examination Place
Mahidol University , Salaya , Nakhonpathom more details : www.grad.mahidol.ac.th or
Announcement at Faculty of Graduate Studies branches.

Written Examination (For Pharmacology) 2613MG07

(Applicants must attend the examination date accurately to your admission round.)

<u>First Round</u> January 17, 2015		<u>Second Round</u> May 16, 2015	
Subjects for examination	Time	Subjects for examination	Time
1. English	8.30 - 11.30 a.m.	1. English	8.30 - 11.30 a.m.
2. General Knowledge	11.30 - 12.30 p.m.	2. General Knowledge	11.30 - 12.30 p.m.
3. Pharmacology	1.30 - 4.30 p.m.	3. Pharmacology	1.30 - 4.30 p.m.
Examination Place Mahidol University , Salaya , Nakhonpathom more details : www.grad.mahidol.ac.th or Announcement at Faculty of Graduate Studies branches.			

Written Examination (For Physiology) 2613MG08

(Applicants must attend the examination date accurately to your admission round.)

<u>First Round</u> January 17, 2015		<u>Second Round</u> May 16, 2015	
Subjects for examination	Time	Subjects for examination	Time
1. English	8.30 - 11.30 a.m.	1. English	8.30 - 11.30 a.m.
2. General Knowledge	11.30 - 12.30 p.m.	2. General Knowledge	11.30 - 12.30 p.m.
3. Physiology	1.30 - 2.30 p.m.	3. Physiology	1.30 - 2.30 p.m.
Examination Place Mahidol University , Salaya , Nakhonpathom more details : www.grad.mahidol.ac.th or Announcement at Faculty of Graduate Studies branches.			

Curriculum Structure

	Credit
Core Courses	10
Required Courses	8
Elective Courses	6
Thesis	12

	Credit
Core Courses	
GRID 603 Biostatistics	3(3-0-6)
SCID 500 Cell and Molecular Biology	3(3-0-6)
PYID 668 Seminar in Biopharmaceutical Sciences	1(1-0-2)
PYID 669 Special Topics in Biopharmaceutical Sciences	1(1-0-2)
PYID 685 Research Methodology in Pharmacy I	2(2-0-4)
Required Courses	
Microbiology	
PYMI 690 Pharmaceutical Microbiology I	3(2-3-5)
PYMI 691 Pharmaceutical Microbiology II	3(2-3-5)
PYMI 693 Screening for Bioactivities	2(1-3-3)
Biochemistry	
PYBC 667 Current Topics in Biochemistry	2(2-0-4)
PYBC 668 Instrumental Research Techniques	3(2-3-5)
PYBC 669 Biopharmaceutical Biochemistry	3(3-0-6)
Pharmacology	
PYPM 680 Current Topics in Pharmacology	1(1-0-2)
PYPM 682 Systemic Pharmacology I	4(3-3-7)
PYPM 683 Systemic Pharmacology II	3(3-0-6)
Physiology	
PYPS 672 Cell Physiology	2(2-0-4)
PYPS 682 Human Physiological Regulation	3(3-0-6)
PYPS 683 Systematic Human Physiology	3(3-0-6)
Elective Courses	
Microbiology	
PYMI 664 Industrial Pharmaceutical Microbiology	3(2-3-5)
PYMI 665 Quality Assessment and Microbiological Control	3(2-3-5)
PYMI 694 Biomolecular Techniques for Biopharmaceutical Sciences	3(2-3-5)
PYMI 695 Basic Techniques in Animal Cell Culture	2(1-3-3)
Biochemistry	
PYBC 670 Human Metabolism	3(3-0-6)
PYBC 671 Biochemical Techniques for Drug Research and Development	2(0-6-2)
PYBC 672 Biochemical Technology Laboratory	2(0-6-2)
PYBC 673 Principle of Biomolecular Analysis	3(3-0-6)

Pharmacology		
PYPM 664	Essentials in Toxicology	3(2-3-5)
PYPM 666	Drug Screening Techniques I	3(2-3-5)
PYPM 678	Adverse Drug Actions	3(3-0-6)
Physiology		
PYPS 671	Membrane Transport	3(2-2-5)
PYPS 673	Current Topics in Pathophysiology	3(3-0-6)
PYPS 693	Aging and Anti-aging	3(3-0-6)
PYPS 695	Advanced Renal Physiology	3(3-0-6)
PYPS 696	Advanced Cardiovascular Physiology	3(3-0-6)
PYPS 697	Advanced Endocrine Physiology	3(3-0-6)
Thesis		
PYID 698	Thesis	12(0-36-0)
* These may change in cases where there are suggestions for the improvement of the curriculum		

Additional advantages of the programme

Major : Microbiology

Research focuses on medical microbiology, microbial genetics and biotechnology, targeted therapy and immunomodulation, development of immunological diagnostic assays for food and health safety, antimicrobial resistant mechanisms, development of novel natural and synthetic antimicrobial compounds using antisense technology, molecular modeling of biomolecule in drug discovery, *in silico* simulations of biopolymer as drug delivery system and molecular virology.

Major : Biochemistry

Readiness of equipment , research scholarships, and cooperation with leading national and international institutions from countries, such as Japan, U.K., Australia , and Singapore.

Major : Pharmacology

1. Many research areas available for students to acquire knowledge and experience
2. Academic staffs are expertises in various fields of Pharmacology

Major : Physiology

Research emphasizes on activities of medicinal plants in pathophysiological animal models.

Details of Scholarships

1. Scholarship of the 60th Year of the Supreme Reign of His Majesty King Bhumibol Adulyadej.

Application Process

Application is only available via online application at www.grad.mahidol.ac.th.

Required Documents

Prepare the following required documents to submit via online admission system or post :

- Four (2) recent photographs (1x1 inch in size)
- A copy of an applicant's degree certificate or a letter of graduation certification (for an applicant with a degree completion) 2 copies
- A letter certifying that an applicant is currently in the final year prior to graduation (for an applicant seeking for a degree) 2 copies
- A detailed transcript of a degree (for an applicant with a degree completion) 2 copies

- A grade report with course names and grades received from the first to the current semester prior to graduation 2 copies
 - A copy of identification card 2 copies
 - A copy of house registration certification 2 copies
 - A copy of Certificate of English score: TOEFL/IELTS/MU-Test (if any). See detail here: http://www.grad.mahidol.ac.th/grad/academicinfo/engstandard2553_th.php 2 copies
- Those who early submit a valid English score prior to the examination will be exempt from English test on the examination date.
- A copy of proof of payment.

Submitting documents via online admission system.

- All documents must be in pdf format (maximum size 2 MB)
- Recent photograph must be in jpeg format only (maximum size 2 MB)

Job option after graduation (for all)

- Technical staff in government private organization
- Researcher

Further information may be obtained from the Director of Graduate Studies,

Major : Microbiology ;

1. **Assoc.Prof.Primchanien Moongkarndi (E-mail : primchanien.Moo@mahidol.ac.th)**
Ratcharatana Building, Floor 2,
Department of Microbiology, Faculty of Pharmacy.
Tel: 0 2644 8692 Fax: 0 2644 8692

Major : Biochemistry ;

1. **Lecturer Dr. Montri Yasawong (E-mail : montri.yas@mahidol.ac.th)**
Room Department of Biochemistry, Rajaratana Building, Floor 7,
Department of Biochemistry, Faculty of Pharmacy.
Tel: 0 2644 8678 Fax: 0 2644 8693

Major : Pharmacology ;

1. **Assoc. Prof. Srichan Phornchirasilp (E-mail : srichan.pho@mahidol.ac.th)**
Department of Pharmacology, Rajaratana Building, Floor 6,
Faculty of Pharmacy.
Tel: 0 2644 8677-91 Ext 5630 Fax: 0 2644 8700

Major : Physiology ;

1. **Assoc. Prof. Dr. Wisuda Suvitayawat (E-mail : visuda.suv@mahidol.ac.th)**
Room 607, Rajaratana Building, Floor 6,
Department of Physiology, Faculty of Pharmacy,
Tel: 0 2644 8678-91 Ext ; 5602 Fax: 0 2644 8703
2. **Assoc. Prof. Dr. Penchom Peungvicha (E-mail : Penchom.peu@mahidol.ac.th)**
Room 607, Rajaratana Building, Floor 6,
Department of Physiology, Faculty of Pharmacy,
Tel: 0 2644 8678-91 Ext ; 5602 , 5607 Fax: 0 2644 8703

Notes

1. The program of Biopharmaceutical Science (Major ; Biochemistry) requires students to study the pre - requisite course:
 - SCID 500 Cell and Molecular Biology 3 Credits
2. For more education information : www.grad.mahidol.ac.th

For more information please contact The Student Admission Section.
Tel . 0 2441 4125 ext. 208-210 , 0 2441 9129, E-mail : gradthai@mahidol.ac.th