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Doctor of Philosophy Programme in Biopharmaceutical Sciences (International Programme)

Faculty of Pharmacy

Programme provided 4 majors

1. Microbiology
2. Biochemistry
3. Pharmacology
4. Physiology

Admission Requirements

A candidate must:

1. Graduated and Fourth year student (final year) in Biology, Biomedical Sciences , Health Sciences and related areas.
2. Have a minimum grade point average of 3.5
3. Meet the admission requirements of the Faculty of Graduate Studies;
4. Has to submit an abstract of 1-3 pages concerning the performed research or the proposed research topic 2 days before the interview (e-mail : surunchana.kae@mahidol.ac.th).
The interview will start with a 40- minute power point presentation by an applicant.
5. Have a TOEFL ITP score of at least 500, TOEFL Internet-based score of 61 or IELTS score of 5 .

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

Curriculum Structure

	Credit
For students with Master's degree	
Core Courses	3
Required Courses (vary by major)	6
Elective Courses no less than	3
Thesis	36
For students with Bachelor's degree	
Core Courses	12
Required Courses (vary by major)	6
Elective Courses no less than	6
Thesis	48

			Credit
Core Courses and Required Courses			
For students with Master's degree			
Core Courses			
PYID	667	Integrative Seminar in Biopharmaceutical Sciences	1(1-0-2)
PYID	679	Current Topics in Biopharmaceutical Sciences	2(2-0-4)
Required Courses (vary by major) students must enroll for only 1 major			
Microbiology			
PYMI	684	Applied Microbiology in Pharmacy	3(2-3-5)
PYMI	686	Pharmaceutical Biological Products	3(3-0-6)
Biochemistry			
PYBC	674	Advanced Biopharmaceutical Biochemistry	3(3-0-6)
PYBC	675	Biochemical Knowledge of Chemical and Biological Warfare	3(3-0-6)
Pharmacology			
PYPM	684	Special Topics in Pharmacology	3(3-0-6)
PYPM	685	Advanced Pharmacology	3(3-0-6)
Physiology			
PYPS	691	Physiological Control System	3(3-0-6)
PYPS	692	Special Topics in Physiology	3(3-0-6)
Core Courses and Required Courses			
For students with Bachelor's degree			
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 I	1(1-0-2)
PYID	679	Current Topics in Biopharmaceutical Sciences	2(2-0-4)
PYID	685	Research Methodology in Pharmacy I	2(2-0-4)
Required Courses (vary by major) students must enroll for only 1 major			
Microbiology			
PYMI	684	Applied Microbiology in Pharmacy	3(2-3-5)
PYMI	686	Pharmaceutical Biological Products	3(3-0-6)
Biochemistry			
PYBC	668	Instrumental Research Techniques	3(2-3-5)
PYBC	669	Biopharmaceutical Biochemistry	3(3-0-6)
Pharmacology			
PYPM	684	Special Topics in Pharmacology	3(3-0-6)
PYPM	685	Advanced Pharmacology	3(3-0-6)
Physiology			
PYPS	691	Physiological Control System	3(3-0-6)
PYPS	692	Special Topics in 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 667 Current Topics in Biochemistry	3(3-0-6)
PYBC 670 Human Metabolism	3(3-0-6)
PYBC 671 Biochemical Techniques for Drug Research and Development	4(4-0-8)
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 672 Cell Physiology	2(2-0-4)
PYPS 673 Current Topics in Pathophysiology	3(3-0-6)
PYPS 674 Human Physiological Regulation	3(3-0-6)
PYPS 675 Systematic Human Physiology	3(3-0-6)
PYPS 693 Aging and Anti-aging	3(3-0-6)
PYPS 695 Advanced Physiology in Renal System	3(3-0-6)
PYPS 696 Advanced Physiology in Cardiovascular System	3(3-0-6)
PYPS 697 Advanced Physiology in Endocrine System	3(3-0-6)

Thesis

PYID 699 Dissertation	36(0-108-0)
PYID 799 Dissertation	48(0-144-0)

* These may change in cases where there are suggestions for the improvement of the curriculum

Additional advantages of the programme

Pharmaceutical - related biological sciences and Health Sciences.

Details of Scholarships

1. Scholarship of the 60th Year of the Supreme Reign of His Majesty King Bhumibol Adulyadej.
2. Royal Golden Jubilee - PH.D. Program

Additional information for applicants

1. Oral presentation for interested research proposal
2. Should be submitted research proposal 1 week before oral presentation (4 pages)

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:

1. Completed an Online Application at www.grad.mahidol.ac.th which comprised with
 - Form A** : Application Form
 - Form B** : Background and Proposed Field of Study
 - Form C** : Recommendation Forms (directly submitted by at least 2 referees)
2. Two copies of Degree Certificate (with officially certified English translation)
3. Two copies of Academic Transcript (with officially certified English translation)
4. Two copies of Recent Photos (Passport size)
5. Two copies of Passport
6. Two copies of English certificate (TOEFL/ IELTS/ MU-Grad Test)

(For Doctoral Program)

- TOEFL ITP score of at least 500, TOEFL Internet-based score of 61, or IELTS score of 5

(For Master's Program)

- TOEFL ITP score of at least 480, TOEFL Internet-based score of 54, IELTS score of 5 or MU GRAD TEST score of 60.

Notes

- Only accept TOEFL ITP score from examination center arranged by Faculty of Graduate Studies, Mahidol University.
 - TOEFL ITP taken from other domestic and overseas institutes are invalid.
 - The test date must be within previous 2 years before application date
 - Applicant who obtained a valid English score must submit an **official score certificate** along with your application. Otherwise, your English score will not be considered.
 - Detail of English Competency Standard for Admission:
<http://www.grad.mahidol.ac.th/en/current-students/language-center.php>
7. Two copies of Curriculum Vitae
 8. Two copies of Statement of Purposes and Career Goals
 9. Two copies of Current bank statement / Scholarship letter (if any)
 10. Two copies of Concept paper / research proposal (recommended for all applicants)
 11. Two copies of additional documents may be requested by each program (such as letter of work experience / professional license/ related certificates and awards)

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

1. Biopharmaceutical scholars
2. Research and development of biological product
3. Biopharmaceutical technology and innovation
4. Biopharmaceutical professionals

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

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

Note 1. 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 : gradinter@mahidol.ac.th