Admission Number	2	6	2	0	M	G	0	0

Master of Science in Pharmacy Programme in Pharmacology and Biomolecular Science

(International Programme)

Faculty of Pharmacy

The program offers 2 concentrations:

1. **Pharmacology**
2. **Biomolecular Science**

Admission Requirements

candidates must :

1. hold a Bachelor's degree in Pharmacy and meet the requirements set by the Faculty of Graduate Studies;
2. have a minimum grade point average of 2.50 ;
3. Good command in English (reading, writing and speaking)
4. Have a TOEFL ITP score of at least 480, TOEFL Internet-based score of 54 or IELTS score of 5 or MU GRAD TEST score of 60.
   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. For Clinical Pharmacy course, candidate must obtain Pharmacy Council of Thailand or other Pharmacy License that the Programme Committee considers as equivalent;

Exemption from the above conditions may be granted by the Program Committee under exceptional circumstances.

Curriculum Structure

	Credit
Core Courses	7
Required Courses	12
Elective Courses	6
Thesis	12

Core Courses	Credit
GRID 603 Biostatistics	3(3-0-6)
PYPM 685 Seminar in Pharmacology and Biomolecular Science I	1(1-0-2)
PYPM 686 Seminar in Pharmacology and Biomolecular Science II	1(1-0-2)

PYID 685 Research Methodology in Pharmacy I	2(2-0-4)
Required Courses	
SCID 500 Cell and Molecular Biology	3(3-0-6)
PYID 696 Molecular Pharmacology and Biomolecular Science	3(3-0-6)
And take at least 6 credits of Required Courses in student's major field	
Major in Biomolecular Science	
PYBC 662 Drug Metabolism and Detoxification	3(3-0-6)
PYBC 670 Human Metabolism	3(3-0-6)
Major in Pharmacology	
PYPM 663 Principle of Drug Therapy	3(3-0-6)
PYPM 687 Advanced Pharmacology	3(3-0-6)
Elective Courses	
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)
PYBC 671 Biochemical Techniques for Drug Research and Development	4(4-0-8)
PYBC 672 Biochemical Technology Laboratory	2(0-6-2)
PYPM 664 Essentials in Toxicology	3(2-3-5)
PYPM 666 Drug Screening Techniques I	3(2-3-5)
PYPM 676 Receptor Pharmacology	3(3-0-6)
PYPM 678 Adverse Drug Reaction	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**	

Areas of study that a student may select for concentration: (New)

1. **Biomolecular Science**
    (1) Structural and Function Studies of Bioactive Protein and Peptides
    (2) Application of Engineering Technology in Biopharmaceutical Sciences
    (3) Stem Cell Biology
    (4) Cancer Cell Biology

2. **Pharmacology**

(1) Receptor Pharmacology

(2) Cardiovascular Pharmacology

(3) Neuropsychopharmacology

(4) Pain Management and Pain Signaling Pathway

(5) Receptor Endocytosis and Signaling Pathway

(6) Role of COX in Female Reproductive System

(7) Female Reproductive Pharmacology

(8) Gastrointestinal Pharmacology

(9) Pharmacological Effects of Herbal Plants

(10) Drug-drug Interaction

(11) Evidence-based Pharmacotherapy

(12) Biochemical Pharmacology

(13) Hepatotoxicity of Drugs

(14) Anioxidant Activities in Natural Products

(15) Binding of Phytoestrogen to Estrogen Receptor

Details of Scholarships

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

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.

<u>Notes</u>

- 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 <u>within previous 2 years</u> 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. Researcher , academic staff of government and private
2. Plearmacists working in liespitals, drugstores,
3. Pharmacist in drug industry , food and nutrition industry Cosmatic industry and other detatied industry

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

Pharmacology and Biomolecular Science

1. **Assoc. Prof. Dr. Srichan Phornchirasilp (E-mail : srichan.pho@mahidol.ac.th)**

   Room 614, Rajaratana Building, Floor 6,

   Department of Pharmacology, Faculty of Pharmacy.

   Tel: 0 2644 8677-91 Ext. 5630 Fax: 0 2644 8700

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