Admission Number

2 6 1 4 D G 0 0

Doctor of Philosophy Programme in Pharmaceutics (International Programme)

หลักสูตร ปรัชญาดุษฎีบัณฑิต สาขาวิชา เภสัชการ (หลักสูตรนานาชาติ) (ภาคปกติ)

Faculty of Pharmacy

คณะเภสัชศาสตร์

Expected number of students to be accepted year round: 10 Students

Admission Requirements

A candidate must:

- 1. Hold a Master's degree in Pharmacy or related fields or a Bachelor's degree in Pharmacy with honors;
- 2. Have a grade point average of at least 3.50;
- 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 slide or power-point presentation by an applicant.

- 5. Submit a certificate of English proficiency with minimum admission score:
 - IELTS at least 4 or
 - TOEFL INTERNET BASED at least 45 or
 - TOEFL ITP (test arranged by Faculty of Graduate Study, Mahidol University) at least 450

Important Notes:

- English proficiency score must be taken within 2 years up to the admission date.
- Application without submitting a valid English certificate will NOT be considered.
- MU English Competence Standards: www.grad.mahidol.ac.th
- MU English proficiency tests, please contact the Language Center, Faculty of Graduate Studies.
 Tel. 0-2441-4125 ext. 221-222
- Exemption from the above conditions may be granted by the Programme Committee under exceptional circumstances.

Written Examination

There is NO written examination for this program. Applicants must check their eligibility for interview upon the announcing date of the interview list which is scheduled for each admission round.

Curriculum Structure

Plan 2	Credit
For students with Master's degree	
Required Courses	6
Elective Courses no less than	6
Dissertation	36
For students with Bachelor's degree	
Required Courses	23
Elective Courses no less than	12
Dissertation	48
Plan 2	Credit
Required Courses	
For student with Master's degree	
PYPY 616 Drug Delivery Systems	3(3-0-6)
PYMP 632 Theoretical Aspects of Solid Dosage Forms	3(3-0-6)
For students with Bachelor's degree	
GRID 603 Biostatistics	3(3-0-6)

2(2-0-4)

1(0-3-1)

1(1-0-2)

1(1-0-2)

3(3-0-6)

3(3-0-6)

3(2-3-5)

3(3-0-6)

3(3-0-6)

PYID 685 Research Methodology in Pharmacy I

PYPT 601 Seminar in Pharmaceutics I

PYPT 602 Seminar in Pharmaceutics II

PYPY 601 Advanced Biopharmaceutics

PYMP 642 Advanced Industrial Pharmacy I

PYMP 632 Theoretical Aspects of Solid Dosage Forms

PYPY 660 Advanced Pharmaceutics I

PYPY 616 Drug Delivery Systems

PYMP 641 Instrumental Research Techniques in Pharmaceutics

Electives Courses

PYID 699 Dissertation

For student with Master's degree no less than 6 Credit

For students with Bachelor's degree no less than 12 Credit

PYPY 617 Transdermal Drug Delivery System	2(2-0-4)
PYPY 619 Advanced Pharmacokinetics	3(3-0-6)
PYPY 661 Advanced Pharmaceutics II	3(3-0-6)
PYPY 662 Cosmeceutical Sciences	3(2-3-5)
PYPY 663 Pharmaceutical Product Development I	3(2-3-5)
PYPY 664 Molecular Pharmaceutics	3(3-0-6)
PYPY 665 Nanotechnology in Drug Delivery	2(2-0-4)
PYPT 603 Special Problems in Pharmaceutics	2(0-6-2)
PYMP 633 Stability of Solid Dosage Forms	2(2-0-4)
PYMP 634 Manufacture of Sustained Release Pharmaceuticals	3(3-0-6)
PYMP 635 Packaging of Pharmaceuticals	2(2-0-4)
PYMP 640 Industrial Administration	2(2-0-4)
PYMP 641 Polymer Sciences in Pharmaceutics	3(3-0-6)
PYMP 642 Nasal and Pulmonary Drug Delivery	2(2-0-4)
PYMP 643 Advanced Industrial Pharmacy II	3(2-3-5)
PYMP 644 Unit Operations in Pharmacy	2(2-0-4)
PYMP 645 Manufacturing Process Analytical Technology	2(2-0-4)
PYMP 646 Pharmaceutical Product Development II	3(2-3-5)
PYMP 647 Manufacture of Natural Products	2(2-0-4)
Dissertation	

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

36/48(0-108/144-0)

Areas of study that a student may select for concentration:

1. Pharmaceutical Technology

- Development of Controlled Release Delivery Systems
- Nanotechnology in Drug Delivery: Nanoparticles, Liposomes, Micro emulsion, Nanoemulsion
- Drug Stability and Chemical Kinetics
- Transdermal Drug Delivery
- Efficacy Evaluation of Topical Products
- Development of Pharmaceuticals and Cosmetic Products and Natural Products
- Novel Drug Delivery Systems: Bioavailability and Efficacy Evaluations
- Pharmacokinetics and Biopharmaceutics

2. Industrial Pharmacy

- Physicochemical Characterization of Pharmaceutical Solids
- Development of Pharmaceutical Excipients
- Pharmaceutical Product Development : Solid and Sterile Dosage Forms
- Sustained and Controlled Release Dosage Forms
- Novel and Targeted Drug Delivery Systems
- Pharmaceutical Quality Assurance
- Pharmaceutical Engineering
- Pharmaceutical Manufacturing Science and Technology
- Dissolution, Bioavailability and Bioequivalence Studies of Pharmaceutical Products

Additional advantages of the programme

Readiness of equipments and research facilities, scholarships and cooperation with leading pharmaceutical manufacturers and international academic institutions. An excellent research in pharmaceutical formulations, drug delivery systems, pharmaceutical technology and industrial pharmacy.

Details of Scholarships

- 1. Royal Golden Jubilee (RGJ) Ph.D. Scholarship
- 2. Research and Researcher for Industry (RRi) Scholarship
- 3. Thailand Graduate Institute of Science and Technology (TGIST) Scholarship
- 4. Research Assistantship
- 5. MUPY Postgraduate Scholarship
- 6. Scholarship of the 60th Year of the Supreme Reign of His Majesty King Bhumibol Adulyadej.

Additional information for applicants

Please specify the field of study in the application form.

- 1. Pharmaceutical Technology.
- 2. Industrial Pharmacy.

Application Process

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

Required Documents

Applicants must upload all documents via online admission system. All documents must be in PDF format (maximum size 2 MB). Photograph must be in JPEG format

- 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)
- A letter certifying that an applicant is currently in the final year prior to graduation (for an applicant seeking for a degree)
- A detailed transcript of a degree (for an applicant with a degree completion)
- A grade report with course names and grades received from the first to the current semester prior to graduation
- A copy of identification card
- A copy of house registration certification
- A copy of Certificate of English proficiency: IELTS / TOEFL INTERNET BASED / TOEFL ITP
- A copy of proof of payment.

Job option after graduation

- 1. R & D pharmacists / researchers
- 2. Manufacturing & quality assurance pharmacists
- 3. University lecturer

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

Pharmaceutics - Pharmaceutical Technology:

1. Dr. Anchalee Jintapattanakit (E-mail: anchalee.jin@mahidol.ac.th)

Rajaratana Building, Floor 3, Department of Pharmacy, Faculty of Pharmacy.

Tel: 0 2644 8677 - 91 Ext. 5744 Fax: 0 2644 8694

Pharmaceutics - Industrial Pharmacy:

2. Assoc. Prof. Dr. Satit Puttipipatkhachorn (E-mail: satit.put@mahidol.ac.th)

Rajaratana Building, Floor 2, Department of Manufacturing Pharmacy, Faculty of Pharmacy.

Tel: 0 2644 8677 - 91 Ext. 1201, 5701 Fax: 0 2644 8702

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: gradthai@mahidol.ac.th