Admission Number
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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 : 4 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 : <u>surunchana.kae@mahidol.ac.th</u>). The interview will start with a 40- minute slide or powerpoint presentation by an applicant.
- 5. have a TOEFL score of at least 500, TOEFL computer-based score of 173, TOEFL Internetbased

score of 61, or IELTS score of 5.

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.

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

## 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)
PYID 685 Research Methodology in Pharmacy I	2(2-0-4)
PYMP 641 Instrumental Research Techniques in Pharmaceutics	1(0-3-1)
PYPT 601 Seminar in Pharmaceutics I	1(1-0-2)
PYPT 602 Seminar in Pharmaceutics II	1(1-0-2)
PYPY 601 Advanced Biopharmaceutics	3(3-0-6)
PYPY 660 Advanced Pharmaceutics I	3(3-0-6)
PYMP 642 Advanced Industrial Pharmacy I	3(2-3-5)
PYPY 616 Drug Delivery Systems	3(3-0-6)
PYMP 632 Theoretical Aspects of Solid Dosage Forms	3(3-0-6)
Electives Courses 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	
PYID 699 Dissertation	36/48(0-108/144-0)
* These may change in cases where there are suggestions for the imp	provement of the curriculum

## 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 Assistantship
- 3. MUPY Postgraduate Scholarship.
- 4. Scholarship of the 60<sup>th</sup> Year of the Supreme Reign of His Majesty King Bhumibol Adulyadej.

## Additional information for applicants

- 1. Areas of study that a student may select for concentration
  - 1.1 Pharmaceutics

## 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

#### Industrial Pharmacy

- Physicochemical Properties of Pharmaceutical Solids
- Formulation and Manufacture of Pharmaceutical Dosage Forms
- Pharmaceutical Processing and Control
- Controlled Release and Novel Drug Delivery Systems
- Dissolution and Bioavailability of Pharmaceutical Dosage Forms

#### **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 :

- Two (2) recent photographs (1x1 inch in size)
- A copy of an applicant's degree certificate or a letter of graduation certification 2 copies (for an applicant with a degree completion)
- A letter certifying that an applicant is currently in the last semester prior to graduation 2 copies (for an applicant seeking for a degree)
- 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 2 copies semester prior to graduation
- A copy of identification card 2 copies

2 copies

- A copy of house registration certification
- A copy of proof of payment.

Submitting documents via online admission system.

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

### 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, Floor3, Department of Pharmacy, Faculty of Pharmacy.Tel:0 2644 8677 - 91 Ext. 5744Fax: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. 1201,1202 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