

Course Detail

Master of Science in Pharmacy Program in Pharmaceutics (International Program)

Course Title: Master of Science in Pharmacy Program in Pharmaceutics
(International Program)

Master Degree: Master of Science in Pharmacy (Pharmaceutics)

Academic Institution: Faculty of Pharmacy, Departments of Pharmacy and
Manufacturing Pharmacy

Duration: B.E. 2563-2565

Background and Rational:

The patients in developing and underdeveloped countries have difficulty to access the quality medicines because those new medicines are expensive. Because new medicines that are currently in use are mostly imported from abroad, those new medicines are still under patent protection. The medicines are also important essential factor for national security. The solution to such problems is to develop alternatives which include the development of new drugs, new treatments, or new generics for patent expired medicines. However, the development of new drugs needs intensive investment. The development of high quality health herbal products, new generics, and also new drug delivery system are challenging and can be alternatives in patients' treatment. There are a quality processes and format to follow in the development for those quality alternatives worldwide and within the region such as ASEAN COMMON TECHNICAL DOSSIER (ACTD) FOR THE REGISTRATION OF PHARMACEUTICALS FOR HUMAN USE. The pharmaceutics is an important and fundamental knowledge for the development for those quality alternatives.

Graduate Programs in Pharmaceutics, offered by joint collaboration between Department of Pharmacy and Department of Manufacturing Pharmacy, Faculty of Pharmacy, Mahidol University. The graduate program has a long history since it first started in 1975 to offer M.Sc. degree. Since the first Master program in 1975, our graduate study programs have grown considerably and have now become known as one of the best graduate programs among the Faculties of Pharmacy in Thailand. Currently, the Faculty offers an international graduate program in pharmaceutics. The program has been continuously improved to increase the quality of graduate students training and to keep up with forefront knowledge and technology in the field of Pharmaceutics. The Pharmaceutics is the science of research and development of pharmaceutical products, thus the results of the research or application of research in this program are aim to improve the drug formulation, absorption/bioavailability, stability with better delivery system. The research theme includes topics in pharmaceutics, biopharmaceutics, generics formula development, bioequivalence, novel drug delivery system, Absorption Distribution Metabolism Excretion Toxicity (ADMET) properties of new medicines etc. The development are not only for medicines but also extended for health products, functional foods, medicinal herbs, cosmetics, pharmaceutical devices.

All our academic staffs have held Ph.D. degree and have background knowledge covering all in Pharmaceutics fields domestically and internationally (including U.S.A., Europe and Asia). Most of academic staffs have strong experience in academic teaching, post-doctoral research, and research investigation. The research experience of our staffs has been guaranteed by a load of publications with continuation from the past to the present. All academic staffs are allowed to attend scientific international conference and international training course to gain new and updated knowledge, exchange research experience with world class academic/research staffs and strengthen research competencies. The graduate program is formulated to enhance graduates' skills, initiative thinking and academic leadership so that they can transfer knowledge and research experiences to the domestic and international society.

Our graduate programs employ both in- and off-departmental facilities and equipment. All necessary equipment which supports all research work is distributed between the department of pharmacy and department of manufacturing pharmacy. Moreover, there are central laboratory research facilities where all the students can utilize. The teaching and learning facilities used for graduate study are adequate to support all the courses and scientific researches and are managed to meet the requirement of learning activities and scientific research for the lecturers and students in the program. The wireless internet can be reached for all of the rooms. The students have access to study areas for self-study according their convenience upon request.

Objectives:

The medicines and health products are one of the fundamentals of the living, the ultimate objective of the program is extended for the not just only the betterment for the whole international society through quality pharmaceutical product development. We will produce high calibre graduates for the international society who have the innovative thinking and will be responsible for quality pharmaceutical product development in their home countries.

Course Synopsis & Methodology:

1. Study plan:

Plan A2

Year	Semester 1			Semester 2		
1	GRID 603	Biostatistics	3(3-0-6)	PYPY 601	Advanced	3(3-0-6)
	PYID 685	Research Methodology In Pharmacy	2(2-0-6)		Biopharmaceutics	
	PYMP 641	Instrumental Research Techniques	1(0-3-1)	PYPT 601	Seminar in Pharmaceutics I	1(1-0-2)
	PYPY 660	Pharmaceutics Advanced	3(3-0-6)		Elective courses	8 credits
	PYMP 642	Pharmaceutics I Advanced Industrial Pharmacy I	3(2-3-5)			
		Total	12 credits		Total	12 credits

2	PYMP 602	Seminar in Pharmaceutics I	1(1-0-2)	PYPT 698	Thesis	6(0-18-0)
	PYPT 698	Thesis	6(0-18-0)			
	Total	7 credits				

7.2 Course Content/Study Topic:

1) Required courses	17	credits
2) Elective courses not less than	8	credits
3) Thesis	12	credits
Total not less than	37	credits

1) Required courses	17	credits
---------------------	----	---------

Credits (lecture–practice–self-study)

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)

Credits (lecture–practice–self-study)**2) Elective courses not less than 8 credits**

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)
PYPT 603	Special Problems in Pharmaceutics	2(0-6-2)
PYMP 640	Industrial Administration	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)

In addition to elective courses mentioned above, a student may register other courses in international program offered by other faculties' equivalent to graduate studies, Mahidol University or the ones offered by other universities according to the student's interest with the approval of the curriculum committee or the advisor.

Thesis

PYPH 698 Thesis	Credits (lecture – practice – self-study)	12(0-36-0)
-----------------	---	------------

Applicants Qualifications:

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. Pass the English Proficiency Examination (MU-GRAD TEST score ≥ 60) offered by the Faculty of Graduate Studies, Mahidol University, or TOEFL iBT 54 up or TOEFL ITP 480 up or IELTS 5.0 up
4. Exemption from the above conditions may be granted by the Programme Committee under exceptional circumstances.

Document Required:

Documents required for the applications include the copy of the following documents

1. Degree Certificate (English Translated)
2. Academic Transcript (English Translated)
3. Photo
4. Passport
5. Curriculum Vitae (CV)
6. Health Certificate
7. Recommendation Letters (to request via online admission system)
8. Additional documents:
e.g. Statement of Purpose, Letter of Work Experience, Professional License, Publications, Scholarship Letter, Research Proposal, Concept Paper, etc.
9. English Proficiency Score Report (directly sent by the test center)

Contacts:

1. Assoc. Prof. Satit Puttipipatkachorn
Department of Manufacturing Pharmacy, Faculty of Pharmacy,
Mahidol University
E-mail: satit.put@mahidol.ac.th
Telephone: +66 026448677-91 Ext. 1201 Fax: +66 023544326
2. Assoc. Prof. Korbtham Sathirakul
Department of Pharmacy, Faculty of Pharmacy, Mahidol University
E-mail: pyksk2001@yahoo.com.sg, korbtham.sat@mahidol.ac.th
Telephone: +66 026448677-91 Ext. 1300 Fax: +66 026448694

Program staff:

- Assoc. Prof. Satit Puttipipatkachorn
Department of Manufacturing Pharmacy, Faculty of Pharmacy,
Mahidol University
E-mail: satit.put@mahidol.ac.th
Telephone : +66 026448677-91 Ext. 1201 Fax:+66 023544326

For more information:

Bureau of International Cooperation on Human Resources Development
Thailand International Cooperation Agency (TICA)
Government Complex, Building B (South Zone), 8th Floor,
Chaengwattana Rd. Laksi District, Bangkok 10210 THAILAND
Tel. +66 (2) 203 5000 ext. 43305, 43306 Fax: +66 (2) 143 8451
E-mail: tipp@mfa.mail.go.th

***The application procedure will complete when TICA has received the hard copy of the application form and other related documents through the Royal Thai Embassy/Permanent Mission of Thailand to the United Nations/Royal Thai Consulate – General accredited to eligible countries/territories.