

Course Detail

Master of Science Program in Phytopharmaceutical Science

Course Title:	Master of Science Program in Phytopharmaceutical Sciences (International)
Master Degree:	Master of Science (Phytopharmaceutical Sciences)
Academic Institution:	Faculty of Pharmacy, Departments of Pharmacognosy, Pharmaceutical Botany, Pharmaceutical Chemistry, Manufacturing Pharmacy, and Physiology
Duration:	2 years: (August 2020 – June 2022)

Background and Rational

Nowadays, there is a global trend towards the use of phytomedicine in public health and primary health care. If any country has the capability in producing standardized phytopharmaceuticals which are acceptable by national, international towards the world community, this will increase the chance to promote health and also export herbal products. Thus, it is essential for every country to produce qualified scholars who are capable of developing innovation such as phytopharmaceutical products from medicinal plants which require the integration of indigenous knowledge with the scientific knowledge in Pharmaceutical Sciences. This would enable phytopharmaceutical products to meet national and international standards and receive worldwide acceptance. All the above reasons have prompted five departments of the Faculty of Pharmacy, Mahidol University which are Departments of Pharmaceutical Chemistry, Pharmaceutical Botany, Pharmacognosy, Manufacturing Pharmacy, and Physiology, to develop a multidisciplinary Ph.D. program in Phytopharmaceutical Sciences in 2003 and then afterwards M.Sc. program in Phytopharmaceutical Sciences in 2014. This program focuses on the isolation and evaluation of compounds from plants used in medical treatment derived from traditional medicine sources and activity testing and development of plant-based products.

Our program composes of 5 departments which have the experts in different field of phytopharmaceutical sciences and related fields. All teaching staff is Ph.D. holders with the ratio of staff:student = 5:1. The teaching and learning facilities and equipment are adequate and updated to support the Phytopharmaceutical educational program and research.

Students are able to analyze core knowledge in the field of the Phytopharmaceutical Sciences, apply new knowledge from herbal medicine to promote health, and develop research proposal or product to be presented and published in the academic proceeding or peer review journal.

Objectives:

To produce M.Sc. graduate knowledgeable in phytopharmaceutical sciences, able to integrate traditional knowledge with related sciences, able to contribute new knowledge to promote the use of phytopharmaceutical products to the society, and having good research ethics and morality.

Course Synopsis & Methodology:**Study plan:****Plan A2**

Year	Semester 1	Semester 2
1	PYID 685 Research Methodology in Pharmacy I 2(2-0-4) PYPB 605 Taxonomy of Medical Plants 3(3-0-6) PYPG 667 Phytochemistry 3(3-0-6) Elective courses 3 credits <p style="text-align: right;">Total 11 credits</p>	PYPH 670 Herbal Production and Formulation Development 3(2-3-5) PYPH 671 Alternative Medicinal Products 3(3-0-6) PYPH 672 Quality Assurance Guideline for Herbal Products 3(2-3-5) PYPH 601 Seminar in Phytopharmaceutical Sciences 1(1-0-2) Elective courses 2 credits <p style="text-align: right;">Total 12 credits</p>
2	PYPH 602 Seminar in Phytopharmaceutical Research 1(1-0-2) PYPH 698 Thesis 6(0-18-0) <p style="text-align: right;">Total 7 credits</p>	PYPH 698 Thesis 6(0-18-0) <p style="text-align: right;">Total 6 credits</p>

Course Content/Study Topic:

1) Required courses	19 credits
2) Elective courses not less than	5 credits
3) Thesis	12 credits
Total not less than	36 credits

1) Required courses		19 credits
		Credits (lecture–practice–self-study)
PYID 685	Research Methodology in Pharmacy I	2(2-0-4)
PYPB 605	Taxonomy of Medicinal Plants	3(2-3-5)
PYPG 667	Phytochemistry	3(3-0-6)
PYPH 670	Herbal Production and Formulation Development	3(2-3-5)
PYPH 671	Alternative Medicinal Products	3(3-0-6)
PYPH 672	Quality Assurance Guideline for Herbal Products	3(2-3-5)
PYPH 601	Seminar in Phytopharmaceutical Sciences	1(1-0-2)
PYPH 602	Seminar in Phytopharmaceutical Research	1(1-0-2)

2) Elective courses not less than		5 credits
PYMI 665	Quality Assessment and Microbiological Control	3(2-3-5)
PYPB 601	Traditional Thai Medicine	3(3-0-6)
PYPG 649	Development of Medicinal Plants I	3(2-3-5)
PYPG 655	Chemistry of Natural Products	3(3-0-6)
PYPH 673	Special Problems in Phytopharmaceutical Products	2(0-6-2)
PYPH 674	Herbal Products for Spa	3(1-6-4)
PYPH 675	Essentials in Disease Prevention and Health Promotion	2(2-0-4)
PYPH 689	Phytomedicine	3(3-0-6)
PYPH 693	Phytocosmeceuticals	3(2-3-5)
PYPH 694	Nutraceuticals	3(3-0-6)
PYPH 695	Applied Plant Biotechnology in Pharmaceutical Sciences	3(2-3-5)
PYPM 666	Drug Screening Techniques I	3(2-3-5)

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.

1) Thesis

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

Applicants Qualifications

Qualifications of Prospective Students: For Plan A2 Applicant

1. Holding a Bachelor degree in Pharmacy, Sciences or related fields.
2. Having cumulative GPA not less than 2.5
3. Pass the English Proficiency Examination (MU-GRAD TEST score \geq 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. Applicant with other qualifications may be considered by the Program committee under exceptional circumstances.

9. Document Required:

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
10. Age less than 40 years

Contacts:

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*** Please remind that the application will complete when TICA receive 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/territories.