

MASTER OF SCIENCES THAI TRADITIONAL PHARMACY



Faculty of Pharmaceutical Sciences
Khon Kaen University

Master of Sciences Program in Thai Traditional Pharmacy

Faculty of Pharmaceutical Sciences

General information

Program

Master of Sciences Program in Thai Traditional Pharmacy

Degree

M.Sc. (Thai Traditional Pharmacy)

Total credits

≥36credits (2 year program)

Studey plan

- 1.1 Type A1 Thesis only
- 1.2 Type A2 Course work and thesis

Language (Mode of teaching)

Thai and English

Program structure

	Programe structure	
	Type A1	Type A2
1) Compulsory	2*	12
2) Electives	-	12
3) Thesis	36	12
Total credits	36	36

*** Compulsory for Type A1 (audit)**

Code	Course	Credit
PS387 891	Seminar in Thai Traditional Pharmacy I	1(1-0-3)
PS387 892	Seminar in Thai Traditional Pharmacy II	1(1-0-3)

Compulsory for Type A2

Code	Course	Credit
PS387 811	Advance Thai Traditional Pharmacy	3(2-3-6)
PS387 812	Technical Academic Communication	2(2-0-4)
PS387 813	Research Methodology in Thai Traditional Medicine	2(1-3-4)
PS387 891	Seminar in Thai Traditional Pharmacy I	1(1-0-3)
PS387 892	Seminar in Thai Traditional Pharmacy II	1(1-0-3)
PS387 894	Special Problems in Thai Traditional Pharmacy	3(0-9-6)

Electives for Type A2

Code	Course	Credit
PS357 830	Quality Control of Products	3(2-3-6)
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PS357 834	Spectroscopic Method for Structure Elucidation	3(3-0-6)
PS357 833	Instrumental Analysis	4(2-6-8)
PS357 841	Biological Evaluation	2(1-3-4)
PS357 842	Medicinal Plant Tissue Culture	2(1-3-4)
PS387 839	Research from traditional and indigenous resources	3(2-3-6)

PS387 832	Crude Drugs Specification	2(1-3-4)
PS387 834	Pre-clinical and Clinical Study of Herbal Drug	2(2-0-4)
PS387 840	Formulation and Industrial Thai Traditional Pharmacy	3(2-3-6)
PS387 837	Botanical Biotechnology	2(2-0-4)

Thesis

Code	Course	Credit
PS387 898	Thesis	36 credits
PS387 899	Thesis	12 credits

Example of Study Plan

Year 1, Semester 1

	Credits	
	Type A1	Type A2
PS387 811 Advance Thai Traditional Pharmacy	-	3(2-3-6)
PS387 813 Research Methodology for Thai Traditional Medicine	-	2(1-3-4)
PS387 891 Seminar in Thai Traditional Pharmacy I	1(1-0-3)*	1(1-0-3)
PS387 898 Thesis	9	-
PS387 xxx Elective Courses	-	6
Total credits	9	9
Accumulate credits	9	9

Year 1, Semester 2

	Credits	
	Type A1	Type A2
PS387 894 Special Problems in Thai traditional pharmacy	-	3(0-9-6)
PS387 812 Technical Academic Communication	-	2(2-0-4)

PS387 892 Seminar in Thai Traditional Pharmacy II	1(1-0-3)*	1(1-0-3)
PS387 898 Thesis	9	-
PS387 xxx Elective Courses	-	6
Total credits	10	12
Accumulate credits	18	24

Year 2, Semester 1

Credits

	Type A1	Type A2
PS387 898 Thesis	9	-
PS387 899 Thesis	-	9
Total credits	9	9
Accumulate credits	27	33

Year 2, Semester 2

Credits

	Type A1	Type A2
PS387 898 Thesis	9	-
PS387 899 Thesis	-	3
Total credits	9	9
Accumulate credits	36	36

Course description

PS357 830 Quality Control of Health Products 3(2-3-6)

Prerequisite: No

Quality control of drugs, dietary supplements, cosmetics and herbal products; national and international standards and regulations; quality control of raw materials; stability and contamination of the products

PS357 833 Instrumental Analysis 4(2-6-8)

Prerequisite: No

Techniques of high technology instruments quantitative and qualitative analysis; UV-visible spectrometry, spectrofluorometry, atomic absorption and emission spectrometry, electrochemical, chromatographic method and flow injection analysis

PS357 834 Spectroscopic Method for Structure Elucidation 2 (2-0-4)

Prerequisite: No

Structure elucidation of organic compounds by spectroscopy ultraviolet-visible spectrometry, Infrared-spectroscopy, Mass spectrometry, Nuclear magnetic resonance spectrometry, interpretation of spectra.

PS357 841 Biological Evaluation 2 (1-3-4)

Prerequisite: No

Important of biological evaluation; conventional assessment of biological activity, modern concept and method in biological evaluation, selection criteria for biological evaluation methodologies; method development in biological evaluation, safety and precautions in biological laboratory, treatment of wastes, case studies

PS357 842 Medicinal Plant Tissue Culture 2(1-3-4)

Prerequisite: No

Basic principles and technique of plant tissue culture, composition, storage, selection, and preparation of nutrient media, control of the appropriate conditions for tissue culture, application of genetic engineering for improvement of plant tissue culture

PS387 811 Advance Thai Traditional Medicine 3 (2-3-6)

Prerequisite: No

Medicinal plant constituents and their pharmacological activities; relationship between herbal drug tastes , active ingredients and indications; interaction between crude drug in Thai traditional medicine and between herbal drug and modern drug; factor affecting stability of modern drug

PS387 812 Technical Academic Communication 2 (2-0-4)

Prerequisite: No

Significance of specific communication in social/academic field, effective presentation of writings, presentation of projects and articles mainly by writing and speech, communication through articles with related procedures, including thesis and other writing followed the curriculum specification, ethics and rights with respect to those projects

PS387 813 Research Methodology in Thai Traditional Pharmacy 2 (1-3-4)

Prerequisite: No

Process of research in Thai traditional pharmacy; types of research; research question setting; literature review; objective setting; statistics used in the research, research ethics; research proposal and research plan; data processing, data analysis and writing research report

PS387 832 Crude Drugs Specification 2 (1-3-4)

Prerequisite: No

Herbal drug specification and pharmacognostic profiles, chemical profiles and physico-chemical profiles; monograph of crude drugs in various pharmacopoeias

PS387 834 Pre-Clinical and Clinical Study of Herbal Drug 2 (2-0-4)

Prerequisite: No

Information necessary for pre-clinical and clinical study of herbal drugs, factors related to quality of herbal products, guideline and proposal writing for pre-clinical and clinical study of herbal drugs

PS387 837 Botanical Biotechnology 2 (2-0-4)

Prerequisite: No

DNA and basic techniques in molecular biology, plant bioinformatics, plant molecular systematic, plant authentication, plant genetic engineering

PS387 839 Research from Traditional and Indigenous Resources 3 (2-3-6)

Prerequisite: No

Traditional and indigenous knowledge, method for retrieving traditional, research methodology and research question development, involving traditional and indigenous knowledge

PS387 840 Formulation and Industrial Thai Traditional Pharmacy 3 (2-3-6)

Prerequisite: No

Dosage forms, principle and methods of drug formulation, preparation techniques, stability evaluation, industrial production and marketing strategy of Thai traditional medicine

PS387 891 Seminar in Thai Traditional Pharmacy I 1 (1-0-3)

Prerequisite: No

Selection, review and evaluation of literature on Thai traditional pharmacy, including presentation, discussion, report and teamwork skills

PS387 892 Seminar in Thai Traditional Pharmacy II 1 (1-0-3)

Prerequisite: No

Selection, review and evaluation of literature on Thai traditional pharmacy, including presentation, discussion in English and teamwork skills

PS387 898 Thesis 36 credits

Prerequisite: Permission from program committee

Research in Thai traditional Pharmacy emphasis on the self procedure of data analysis and synthesis including literature review, experimental design, planning, experimentation, compiling, interpretation, discussion and suggestion, reporting, presentation and publication ethics.

PS387 899 Thesis 12 credits

Prerequisite: Permission from program committee

Research in Thai traditional pharmacy through the skill improvement processes and essential basic research methodologies including literature review, experimental design, planning, experimentation, compiling, interpretation, discussion and suggestion, reporting, presentation and publication ethics.