

**Course Title****Master of Science Program in Agriculture****Master Degree:** Master of Science Program in Agriculture**Academic Institution:** Faculty of Agriculture, Khon Kaen University, Khon Kaen**Duration:** 2 years**Objective: .**

Mater of Science Program in Agriculture aims to produce graduates with the ability to conduct the research, apply new and emerging scientific findings, technologies and philosophy to benefit the development in agriculture through completion of high quality courses and/ or high quality research.

Upon the completion of the degree, students will have the following capabilities

1. A good understanding of principles and theory in agriculture and related fields and apply knowledge to enhance their professionals.
2. Apply research skill in obtaining new knowledge and to address local, regional, national and/ or global problems associated with agriculture.
3. Effectively communicate and disseminate research and technical information.
4. Function on multidisciplinary teams and become outstanding leaders.
5. An understanding of professional and ethical responsibility.

**Couse Synopsis and Methodology:**

Program offering

1. By course work (20 credits for course work and 18 credits for thesis)
2. By research (38 credits for thesis)

**Couse Content/Study Topic:**Sample Classes

1. Precision Agriculture
  - Simulation Model for Precision Crop Production
  - Smart Machineries for Crop Production

- Plant Factory Techniques for Food Security
  - Geographic Information Systems for Agriculture
  - Resource Management for Sustainable Agriculture
2. Organic Agriculture
    - Soil, Water and Environment Management
    - Biocontrol for Insect Pests
    - Biocontrol for Plant Disease
    - Organic Plant Production
    - Organic for Animal Production
    - Organic Seed Production
    - Law and Regulations on Organic Agriculture and Food Safety
  3. Sustainable Agriculture and Rural Development
    - System Theories and Concepts
    - Sustainable Agricultural and Rural Development
    - Analysis of Agro-ecosystems, Resource Systems and Community Systems
    - Project Planning and Evaluation
    - Management of Rural Development Project

**Qualification:**

1. Holding a Bachelor's degree or equivalent academic credentials in Agriculture, with a minimum undergraduate grade – point average (GPA) of 2.75. All GPSs are based on a 4.00 scale.
2. Every applicant whose native language is not English, or whose undergraduate score will not be accepted if it is more than two years old from the start of your admission term. The English proficiency tests are accepted for graduate admissions TOEFL/IELTS.

**Document required:-**

- Prospective students can obtain the information, application form, and reference forms from <http://gs.kku.ac.th/home/images/news/admission/eng/applicationpack.pdf>.
- Supplemental document, such as an essay about research interest, can be submitted with the application forms.

**Closing date for Nominations:** August, 2017

**Late or incomplete applications/document will not be considered.**

**Course Title**

**Master of Science Program in Bioscience for Sustainable Agriculture  
(International Program)**

**Master Degree:** Master of Science Program in Bioscience for Sustainable Agriculture  
(International Program)

**Academic Institution:** Faculty of Animal Sciences and Agricultural Technology,  
Silpakorn University, Phetchaburi IT Campus

**Duration:** 2 years

**Objective:**

The objective of the curriculum is to develop the graduate with the following qualifications:

1. The ability to comprehend both philosophy of sustainability and concept of sustainable agriculture.
2. The ability to analyze and identify both problems and strength of the mainstream agricultural development and propose measures to solve them.
3. The ability to transfer appropriate research outcome to other stakeholders working in sustainable agriculture.
4. The ability to recognize differences and work with others while maintaining leadership.
5. The ability to be responsible to oneself and to the society with integrity and professional morals.

**Course Synopsis and Methodology:**

This program requires the candidate to take courses no less than 24 credits plus the research which is equivalent to 12 credits. The degree shall be awarded when the students fulfill one publication in the international refereed journals.

**Course Content/Study Topic:**

**The First year**

First Semester

715501 Cell Science and Molecular Biology	3(3-0-6)
715502 Sustainable Agriculture and Marketing	3(2-0-6)

715503 Research Methodology and Statistical Techniques	3(3-0-6)
715504 Seminar	1(1-0-2)
<b>Total</b>	<b>10 credits</b>
<b>Second Semester</b>	
715505 Seminar 2	1(1-0-2)
715xxx Elective Course	3(x-x-x)
715xxx Elective Course	3(x-x-x)
<b>Total</b>	<b>7 credits</b>

### **The Second year**

<b>First Semester</b>	
715506 Seminar 3	1(1-0-2)
715xxx Elective Course	3(x-x-x)
715599 Thesis	6 credits
<b>Total</b>	<b>10 credits</b>
<b>Second Semester</b>	
715xxx Elective Course	3(x-x-x)
715599 Thesis	6 credits
<b>Total</b>	<b>9 credits</b>

### **Qualification:**

The applications must held a bachelor's degree or equivalent in Agriculture, Science or a related field, or another degree by the consent of the Curriculum Administration Committee, Faculty of Animal Sciences and Agricultural Technology Silpakorn University

### **Document required:-**

- Certified copy of transcript of record
- Certified copy of degree certified
- Copy of TOEFL, IELTS, TOEIC or equivalent test result
- Two letters of recommendations from the faculty members of the home institutes
- letter of permission from the Dean/Director/Rector/Vice Chancellor/President of the home institutes in case the candidate has been working as the staff member in the organizations

**Closing date for Nominations:** June 28, 2017

**Late or incomplete applications/document will not be considered.**



Students are required to choose at least 7 credits of graduate courses in an agricultural area and/or at least 3 credits from closely related field. Approval depends upon the decision of the student's advisory committee, and consent must be obtained from the student's Graduate Committee Chairperson, and the Dean of The Graduate School.

(2) Thesis: minimum 18 credits

01013599 Thesis 1-18

### Course Description

01013591 Research Methods in Tropical Agriculture 3(3-0-6)

Research principles and methods in tropical agriculture and problem analysis for research topic identification, data collection for research planning, identification of samples and techniques. Analysis, interpretation and discussion; of research result. Report writing for presentation and publication

01013592 Agriculture in the Tropics 3(3-0-6)

Bio-geography and biodiversity in the tropics. Agricultural technology and production systems, agroindustry, logistics, economics and marketing of agricultural products and produces. Impacts of climate change on food and energy security. Laws and regulations related to biodiversity, agriculture and trade. Field trip required.

01019597 Seminar 1

Presentation and discussion on current interesting topics in tropical agriculture at the master's degree level.

01013599 Thesis 1-36

Research at the master's degree level and compile into a thesis.

**Qualification:** Graduated with a bachelor's degree in Agriculture or related field

### Document required:

- Complete application form
- A copy of passport
- 3 photos 2" (size), Not older than 6 month
- Curriculum Vitae
- A conceptual proposal for graduate applicant (3-4 pages)







2016612 Urban Development and Planning (URB DEV PLANNING)

Factors influencing the location, role, and expansion directions of urban settlements at different levels of community, from small villages to metropolises; urban spatial relations, problems and prospects of urban growth trend; prevention and solutions to problems through urban planning.

2023502 Energy, Environment and Climate Change (ENGY ENV CC)

The linkage of energy, environment and climate change; concepts and philosophy of zero waste for sustainable development; maximizing recycling and minimizing waste; value management and sustainable consumption for greenhouse gases mitigation, international cooperation and market mechanisms to reduce greenhouse gases.

2023503 Renewable Energy Resources and Utilization (RENEW ENGY RES)

Introduction to renewable energy resources: biomass fuels, bio-fuels, solar energy, wind energy, hydro energy, geothermal energy and hydrogen energy; technology of converting and utilizing these forms of energy.

2023504 Energy Planning and Management (ENGY PLAN MGT)

Energy situation, demand, supply, transformation, and reserve; energy economy and index; principles of energy policy and planning; energy planning modeling to forecast energy demand and supply; implementation of energy policy and planning.

2023507 Climate Science, Impacts, Adaptation and Mitigation (CLIMATE SCI IAM)

Climate change science, impacts adaptation, mitigation and responses to climate change, climate modeling, climate change impacts, adaptation, mitigation and responses at local, regional and global levels.

2023508 Managing Biodiversity in a Changing Climate (MANAGE BIOD CC)

Importance of biodiversity monitoring for developing responses to climate change; evidence base of biodiversity management in a changing climate; positive and negative impacts of a changing climate on species and population of plants and animals; behavioral adaptation in changing animal population dynamics; practical methodologies for monitoring and evaluating impacts on and responses of biodiversity; ecosystem scale management implications for biodiversity.

2023509 Adaptation Policy Framework - Climate Change Impacts and Policy (AD POL FRAM CC POL) Formulating adaptation strategies to manage risk from climate impact; adaptation to short-term climate variability and extreme climate events as foundation for reducing vulnerability to

long-term climate change; adaptation policy to climate change and measures in a sustainable development context; adaptation and strategies at different levels and sectors in society to better manage future risk exploit possible opportunity from climate change impact; role of multi-stakeholders and process in adaptation policy development; prioritizing and selecting adaptation options.

2023510 Vulnerability Study for Sustainable Development Planning (VUL SCI SD PLAN)

Potential changes in future environmental condition and their implications on major systems and sectors; future risk and coping capacity to threat from impact of environmental change; defining vulnerability of systems and/or sectors under context of environmental change; components of vulnerability, sensitivity, exposure and coping capacity to environmental risk; using proxy indicators to identify and measure vulnerability of systems and/or sectors; assessing vulnerability to future environmental change; vulnerability indexing; multi-level and multiple agents to social vulnerability to environmental change.

2023511 Climate and Human Settlement (CLIMATE HUM SETT)

Relationship between climate and human settlements, both in rural and urban areas; effects of climate on settlement distribution, people way of life, their belief, culture and life style; impact of urbanization on climate due to changes in settlement patterns from rural to urban areas and from small towns to metropolis; case studies from different regions on impacts and human attempt to solve and prevent problems of such unbalanced interactions.

2023512 Urban Climate(URBAN CLIMATE)

Climate conditions in an urban area ; solar radiation, the surface temperature, wind conditions, evaporation rates, storage of heat and the turbulence; effect of human activities on urban climates and on air quality or air pollution in the atmosphere above cities; causes and effects of urban heat islands.

2023513 Strategic Environmental Assessment (STG ENV ASSES)

A systematic process for evaluating and anticipating the consequences of decisions taken prior to the project stage to ensure that environmental considerations and alternatives are addressed as early as possible and on a part with economic and social factors in policy, plan or program development; strategic environmental assessment methods and approaches for conducting environmental assessment of programs on regional/area and sector development programs; strategic environmental assessment of policies, plans and programs used as a tool in national environmental analysis.

**2023601\*** Research Methodology in Environment, Development and Sustainability (RES METH EDS)

System theory applied to linkage between environment and development; practical methodologies for linking at micro and macro scales; theories and interpretations of concept of sustainability; measurements based on the concepts critiques of concepts and measurement methodologies.

**2023602\*** Understanding Environment, Development and Sustainability (UNDERST EDS)

Concepts of global change under the context of development and globalization and impact on local environment; impacts on bio-physical and socio-economic conditions of various systems and sectors in society; approaches and theory to address their causes in international comparative perspective; concepts and methods of sustainable development; patterns of political, social and economic development under environmental conflicts and influence of globalization; exploring the adaptation options to cope with future changes for household, community, country and region; understanding of process in streamlining adaptation strategies into long-term development plans to achieve sustainability on environment and society.

**2023603\*** Sustainable Resource Management (SUS RES MGT)

A broad synthesis of three main pillars in the management of natural resources : economics, ecology, demography and society, with emphasis on resource planning and management taking into account ecological functions and restrictions demographical structure, and sustainable development.

**2023604\*** Advanced Issues in Environment, Development and Sustainability (ADV ISS EDS)

In-depth study of a specific topic or problem concerning global change and impact on environment and society, development and sustainability; presentation of integrated study results.

**2023605** Development: History, Theory, Policy and Practice (DEV HIST THEO)

Overview of the key debates in development theory and approach. Major social science theories and their contribution to development paradigms are covered, including liberalism, Marxism, modernism, postmodernism, sustainable development, alternative development, and post – develop - mentalism. Review of numerous case studies in Thailand, Southeast Asia and globally, which reflects connections between development theory and practice. Understanding and analysing contemporary debates about development and the environment, including the link between modernity and development, globalization, participation, empowerment, gender, identity, good governance, and the role of the development practitioners.

2023701 Seminar in Environment, Development and Sustainability (SEM EDS)

Theories and concepts of global changes, environment and balance in natural and human ecosystem; discourses on sustainable development; case studies on resource use and impact on environment and society including current preventive measures and solutions.

2023811 THESIS

2023816 THESIS

2440501 Society, Politics and Social Changes (SOC POL/SOC CHG)

Foundation critique of modern society, development and social, economic and political changes, social and political process of changes, analysis of state-society relations, inter-relationship of structure and agents in society and politics, implications of democracy on development, the roles of social and development organizations in social movements at local, national and transnational levels.

2440607 Development Project Management (DEV PROJ MGT)

Process of development from theory to practice; development project management as experiment and learning; principles and techniques of project management, budgeting, finance, and planning; problem determination and objectives of development projects including feasibility study, assessment of social, environmental and health impacts, and development project evaluation.

2440608 Environmental Politics and Policy (ENVI POL/POL)

Environmental policy as a complex and constantly evolving area of public policy; major concepts used to define contemporary environmental policy with the aim to understand developments in this field at the state, national, and international levels; application of these concepts to certain environmental issues with particular attention to the political dimension of environmental policy formulation and implementation; analytical skills needed to deal with a wide range of policy situations concerning the environment and natural resources.

(\*Compulsory Course)

**Course Content/Study Topic:**

A coursework Minimum Requirement of 36 credits

- Compulsory Courses	12	credits
- Elective Courses	12	credits
- Thesis	12	credits



**Course Title**  
**Master of Science Program in Disaster Management**  
**(International Program)**

**Master Degree:** Master of Science Program in Disaster Management (International Program)

**Academic Institution:** Faculty of Engineering, Naresuan University, Pitsanulok

**Duration:** 2 years

**Objective: .**

1. To produce graduates with the knowledge, skills and ability in the area of Disaster Management in order to increase the capacity to cope with disaster impacts.
2. To construct new knowledge related to Disaster Management in a context of the Asian region.

**Couse Synopsis and Methodology:**

No.	Description	Number of Credits in the new curriculum 2017, Plan A, Type A2
1	Course work - a minimum of 1.1 Core courses 1.2 Elective courses	24 9 15
2	Thesis	12
3	Required Non - credit	5
Total number of credits - a minimum of		36

**Couse Content/Study Topic:**

Disaster is defined as a serious disruption of the functioning of a community or a society. A disaster can interrupt essential services such as transportation, communications, electricity, health care and so on. Poor planning of responses can have a significant negative impact. Disaster Management is needed to substantially reduce disaster losses. Disaster Management can be defined as the organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, in particular preparedness, response and recovery in order to lessen the impact of disasters.

In order to meet these needs for a more holistic approach to Disaster Management, Naresuan University is offering a Master's program, based on the above philosophy.

Research Focus:

- GIS and Remote Sensing Application for Disaster Management
- Early Warning System
- Community – based Disaster Risk Reduction
- Climate Change Adaptation
- Hazard Mapping
- Disaster Resilience

Course:

Curriculum Plan A, Type A2

Course work - a minimum of 24 credits

1. Core Courses - Take all the following courses 9 credits

314501 Introduction to Disaster Management 3(3-0-6)

314502 Disaster Risk Management 3(2-0-6)

314503 GIS and Remote Sensing in Disaster Management 3(2-5-5)

2. Elective Courses

Select 9 credits within one of the following groups and any 6 credits from any following groups,

a) Science Technology

314511 Meteorological Hazards 3(2-2-5)

314512 Geological Hazards 3(2-2-5)

314513 Hydrological Hazards 3(2-2-5)

314514 Industrial Hazards 3(2-2-5)

314515 Fire Hazards 3(2-2-5)

314516 Hazards Forecasting and Early Warning Systems 3(3-0-6)

314517 Urban and Rural Planning and Hazards Mapping 3(2-2-5)

314518 Climate Change Adaptation and Mitigation 3(3-0-6)

314519 Selected Topics in Disaster Management 3(2-2-5)

(Science Technology)

b) Social Science	
314521 Disaster Resilience Leadership	3(3-0-6)
314522 Community – Based Disaster Risk Reduction	3(2-2-5)
314523 Earthquake Vulnerability Reduction	3(3-0-6)
314524 Legal and Policy in Disaster Management	3(3-0-6)
314525 Disaster Management in ASEAN Context	3(2-2-5)
314526 Role of Media in Disaster Management	3(2-2-5)
314527 Business Continuity Management	3(2-2-5)
314528 Selected Topics in Disaster Management (Social Technology)	3(2-2-5)
c) Health Science	
314531 Health Management	3(3-0-6)
314532 Nutrition in Emergencies	3(3-0-6)
314533 Public Health in Complex Emergencies	3(3-0-6)
314534 Public Health Response in Disasters	3(3-0-6)
314535 Selected Topics in Disaster Management	3(2-2-5)
3. Thesis	
314591 Thesis 1, Type A2	3 credits
314592 Thesis 2, Type A2	3 credits
314593 Thesis 3, Type A2	6 credits
4. Required Non – credits	
314594 Research Methodology in Science and Technology	3(3-0-6)
314595 Seminar 1	1(0-3-1)
314596 Seminar 2	1(0-3-1)

**Qualification:**

1. Students are required to have at least bachelor' degree in Engineering or Science or a relevant degree with the experiences in Disaster Management and a good level of the English Language proficiency.

2. Students are required to have the characteristics and academic qualifications according to the regulations for Graduate Studies and addition regulations of Faculty of Engineering.



**Document required:-**

- Educational background document/certificate of degree.
- Official closed transcript of records.
- An English proficiency score. Only the score of an English proficiency test obtained from these testing agencies: TOEFL or IELTS is accepted unless English is the official language of the country.
- Two official recommendation letters written in the letter head of referee's university.
- one page statement of purpose, which includes field and level of study that you would like to apply for.
- Photocopy of passport (bearer's details) or ID Card.
- One – page CV affixed with a recent photo.
- Less than 6 month medical examination result.

**Closing date for Nominations:** May 31, 2017

**Late or incomplete applications/document will not be considered.**

**Course Title****Master of Science Program in Renewable Energy  
(International Program)**

**Master Degree:** Master of Science Program in Renewable Energy  
(International Program)

**Academic Institution:** School of Renewable Energy Technology, Naresuan University,  
Pitsanulok

**Duration:** 2 years, start on August 2017

**Objective:**

The School aims to produce graduate student having characteristics as

1. To be knowledgeable, skillful, and experienced in advanced – level renewable energy fields and capable to integrate by emphasizing on progressive development of World's renewable energy knowledge.
2. To be capable of researching n renewable energy fields systemically.
3. To be full of merit, ethics, and continuously inquisitive.

**Couse Synopsis and Methodology:**

The course will be taught in English. The students must take coursework and write a thesis emphasizing high quality research.

**Couse Content/Study Topic:****The first year****First Semester**

852501 Research Methodology in Science and Technology	3(3-0-6) (Non - credit)
852504 Instrumental Techniques in Renewable Energy Research	3(2-3-5)
852505 Renewable Energy	3(2-3-5)
852506 Thermal – Fluids	3(2-3-5)
<b>Total</b>	<b>9 credit</b>

**Second Semester**

852507 Simulation, Design and Optimization of Energy System	3(2-3-5)
852xxx Elective Course	3(x-x-x)
852502 Seminar 1 (Non - credit)	1(0-3-1)
852591 Thesis 1, Type A2	3
<b>Total</b>	<b>9 credit</b>

**The second year****First Semester**

852xxx Elective Course	3(x-x-x)
852xxx Elective Course	3(x-x-x)
852503 Seminar 2 (Non - credit)	1(0-3-1)
852592 Thesis 2, Type A2	3
<b>Total</b>	<b>9 credit</b>

**Second Semester**

852xxx Elective Course	3(x-x-x)
852593 Thesis 3, Type A2	6
<b>Total</b>	<b>9 credit</b>

**Qualification:**Qualification for Admission

This program is open to applicants who have a degree in Engineering, Science, or are in the final semester of their study.

Requirement for Graduation

- 1) Complete all course requirement of the program
- 2) Satisfy the English proficiency requirement
- 3) Have at least one article published in journal or conference proceeding accepted by Naresuan University
- 4) Complete a dissertation of original research work and successfully defend it.

**Document required:-**

- Three (3) copies of TICA Application Form affixed with colored photographs.
- Two (2) letter of recommendation or references and two (2) copies of each.
- Educational certificates and two (2) copies of each.
- Academic transcript (Mark sheets) of studies in English and two (2) copies of each.
- English Language certificates e.g. TOEFL, IELTS and two (2) copies of each
- Three (3) copies of Personal Identify Card or Passport or Official Card.
- Document to certify change of name or surname and/or marital status (if any)
- Other supporting document.

**Closing date for Nominations:** May 31, 2017

**Late or incomplete applications/document will not be considered.**

**Course Title****Master of Science/Master of Engineering (Energy Technology and Management)****Master Degree:** Master of Science/Master of Engineering (Energy Technology and Management)**Academic Institution:** The Joint Graduate School of Energy and Environment, King Mongkut's University of Technology Thonburi, Bangkok**Duration:** 2 years

- Objective:**
- 1) To educate advanced level engineers and scientists equipped with a mix of fundamental knowledge in energy and environmental technology as well as management, analytical skills and communication skill in English, and a professional orientation
  - 2) To nature future energy and environmental engineers and scientists with a sound appreciation of the potential impacts on the environment due to energy production and use
  - 3) To contribute to the body of the knowledge and solutions of challenging energy related environmental problems in industry or at governmental level

**Couse Content/Study Topic:**

<b>A. Compulsory Courses</b>	<b>7 Credits</b>
Plan A – 1, Plan A – 2	
JEE 601 Seminar for M.Eng/M. Sc (Energy Technology and Management)	1 credit
JEE 613 Research Methodology	3 credits
JEE 625 Energy and Environmental Economics, Management and Policy	3 credits
 Plan B	
JEE 601 Seminar for M.Eng/M. Sc (Energy Technology and Management)	1 credit
JEE 631 Strategic Planning and Project Management	3 credits
JEE 625 Energy and Environmental Economics, Management and Policy	3 credits
 <b>B. Specific Compulsory Courses</b>	<b>9 credits</b>
Plan A – 1, Plan A – 2	
(Select at least 3 courses based on student research focus)	

- Advanced Fuel Processing Laboratory (AFPL)	
JEE 642 Fuels and Combustion	3 credits
JEE 643 Energy System Modeling	3 credits
JEE 657 Catalytic Processes and Reaction Engineering	3 credits
JEE 658 Renewable Energy Technologies	3 credits
JEE 659 Energy from Biomass	3 credits
- Building Energy Science and Technology Laboratory (BEST)	
JEE 633 Energy Management in Industry	3 credits
JEE 634 Climate Influence on Buildings and End – use Requirements	3 credits
JEE 635 Building Utility Design and Wasted Management	3 credits
JEE 636 Building Performance Assessment	3 credits
JEE 637 Daylighting Applications	3 credits
JEE 638 Advanced Topics in Building Energy Technology	3 credits
JEE 639 Building Economics and Finance	3 credits
JEE 647 Design of Suitable Urban Ecology	3 credits
- Tropical Climate Science Modeling Laboratory (TCSM)	
JEE 661 Tropical Climates and Boundary Layer Science	3 credits
JEE 664 Atmospheric and Air Quality Modeling	3 credits
JEE 666 Atmospheric Science	3 credits
JEE 669 Physical Oceanography and Ocean Modeling	3 credits
- Advanced Greenhouse Gases and Aerosols Research Laboratory (AGAR)	
JEE 673 Waste and Climate Change	3 credits
JEE 685 Climate Change: Physical Science Basis	3 credits
JEE 694 Carbon Mechanism Management and Business	3 credits
JEE 695 Greenhouse Gas Mitigation Technology	3 credits
JEE 696 Greenhouse Gas Measurement, Monitoring and Accounting	3 credits
- Life Cycle Sustainability Assessment Laboratory (LCSAL)	
JEE 667 Environmental Pollution Control Technology	3 credits
JEE 671 Life Cycle Assessment	3 credits
JEE 681 Environmental Chemistry and Toxicology	3 credits
JEE 682 Environmental and Health Risk Assessment	3 credits
JEE 683 Energy and Environment	3 credits
JEE 684 GIS and Remote Sensing	3 credits

- Energy and Environmental Policy Laboratory (EEPL)	
JEE 626 Energy and Environmental Econometric Modeling and Analysis	3 credits
JEE 627 Foundation of Economics	3 credits
JEE 628 Financial Analysis and Project Appraisal	3 credits
JEE 631 Strategic Planning and Project Management	3 credits
JEE 697 Energy Outlook and Green House Gases Emissions in ASEAN	3 credits
- Others	
JEE 603 Special Study 1	3 credits
Plan B	
JEE 623 Principle of Accounting and Financial Management	3 credits
JEE 624 Principle of Management and Administration	3 credits
JEE 629 Marketing Research	3 credits
<b>C. Elective Courses</b>	
Plan A – 1, Plan A – 2	3 credits
Elective as Recommended by Advisor	3 credits
Plan B	18 credits
JEE 634 Climate Influence on Buildings and End – Use Requirements	3 credits
JEE 651 Heat and Power Generation Technologies	3 credits
JEE 653 Solar Energy	3 credits
JEE 654 Oil and Natural Gas Technologies	3 credits
JEE 656 Energy Efficiency	3 credits
JEE 658 Renewable Energy Technologies	3 credits
JEE 689 Energy from Biomass	3 credits
JEE 671 Life Cycle Assessment	3 credits
JEE 674 Wasted to Energy	3 credits
JEE 698 Carbon Trading	3 credits
JEE 703 Selected Topics 1	3 credits
JEE 713 Selected Topics 2	3 credits
<b>D. Thesis/Internship/Research Study</b>	
Plan A – 1	21 credits
JEE 630 Thesis	
Plan A – 2	
JEE 610 Thesis	12 credits
JEE 616 Internship or JEE617 International Inturnship	9 credits

**Plan B**

JEE 618 Research Study

6 credits

**Qualification:**

- 1) The applicant must hold a first degree in Engineering, Science, Technology with the least final GPA of 2.75 or is placed in the top 25% of the class or being approved by curriculum committee
- 2) Applicant should pass English entrance examination conducted by KMUTT or pass standard English proficiency test standard TOEFL – PBT 500 score, TOEFL – iBTO 61 score, IELTS 5.5
- 3) It is recommended that applicants should consult with their would – be supervisor on the possible thesis topic before applying.

**Graduate required:**

- Complete all course requirements of the program.
- Satisfy the English proficiency requirement.
- Have at least one article published in National journal accepted by The Joint Graduate School of Energy & Environment.
- Complete a thesis of original research work and successfully defend it.

**Document required:**

- 1 recent photograph 1 inch size
- Transcript (if incompletes, must be submit certify letter)
- ID card or copy of passport (Bio page)
- 3 letters of recommendations
- Interview evaluation form (for an approach supervisor only)
- Tentative proposal
- Result of English performance test

**Closing date for Nominations:** first semester in May  
Second semester in November

**Late or incomplete applications/document will not be considered.**



### Course Title

#### Master of Science Program in Environmental Management Technology (International Program)

**Master Degree:** Master of Science Program in Environmental Management Technology  
(International Program)

**Academic Institution:** Faculty of Technology and Environmental, Prince of Songkla University,  
Phuket campus

**Duration:** Two (2) years academic years Master Course will start on August 2017.

**Objectives:** To emphasizes on producing graduates with knowledge and research skills for applying technological knowledge for protecting, problem-solving and managing natural resources and environment sustainably especially for monitoring and solving the climate change problem.

#### Course Synopsis/Methodology

The course will be taught in English. The students must take coursework and write a thesis emphasizing high quality research.

#### Course Contents/Studies Topic

The students must complete a minimum requirement of 36 credits to graduate. The course program is divided into 2 options:

Subject	Options (Credits)	
	A1	A2
Compulsory Course	-	12
Selected Topics	-	6
Dissertation for M.Sc.	36	18
Total	36	36

#### Option A1: Thesis for M.Sc. 36 credits

991-301	Thesis for M.Sc.	36
991-105	Seminar on Environmental Management Technology	S/U

**Option A2: Courses and thesis 36 credits**

991-101	Research Methodology	3
102-991	Integrated Environmental Problem Solving	3
991-103	Technology for Environmental Management	3
991-104	Environmental Systems	3
991-105	Seminar on Environmental Management Technology	S/U
991-XXX	Selected Topics	6
991-301	Thesis for M.Sc.	18

**Selected Topics**

Code	Subject	Credit
<b>I.</b>	<b>Environmental Technology and Management Module</b>	
991-541	Environmental Pollution: Prevention and Management	3(3-0-6)
991-542	Advanced Pollution Treatment Technology	3(3-0-6)
991-543	Environmental Chemistry and Ecotoxicology	3(3-0-6)
991-544	Mathematical Modelling on Environmental Applications	3(3-0-6)
991-551	Environmental Risk Assessment and Management	3(3-0-6)
991-552	Life Cycle Assessment of Products	3(3-0-6)
991-553	Climate Change and Environmental Management	3(3-0-6)
991-554	Green City	3(3-0-6)
991-555	Urban Environmental Management	3(3-0-6)

991-556	Decision Support System for Environmental Management	3(3-0-6)
<b>II.</b>	<b>Integrated Technology and Biological Environment Module</b>	
991-561	Integrated Coastal Zone Management	3(3-0-6)
991-562	Marine and Coastal Protected Areas	3(3-0-6)
<b>III.</b>	<b>Environmental Geoinformatics Technology and Modeling Module</b>	
991-531	Advance Remote Sensing	3(3-0-6)
991-532	Geographic Information System	3(3-0-6)
991-533	Geoinformatics and Risk Management	3(3-0-6)
991-534	Spatial Analysis in Environmental Problem	5-2-2(3)
<b>IV.</b>	<b>Sustainable Tourism and Socio-environment Module</b>	
991-571	Sustainable Tourism Product Development and Management	3(3-0-6)
991-572	Policy Planning and Participatory Approach	3(3-0-6)
991-573	Technology for Sustainable Tourism	3(3-0-6)
<b>V.</b>	<b>Special study and special topic</b>	
991-506	Special Study	3(0-0-9)
991-507	Special Topics I	3(3-0-6)
991-508	Special Topics II	3(3-0-6)

**Qualification:**

This program is opened to applicants who have a degree in Engineering or Science.

Note: The applicants should have required English score;

TOEFL score of at least 500,

TOEFL computer-based score of 173 or IELTS score of 5.5

**Requirement for Graduation**

1. Complete all course requirements of the program.
2. Satisfy the English proficiency requirement.
3. Have at least one article published in ISI journals
4. Complete a thesis of original research work and successfully defend it.
5. Have satisfied one of the following English proficiency requirements: TOEFL score of at least 500, TOEFL computer-based score of 173 or IELTS score of 5.5

**Document Required:**

1. Three (3) copies of the TICA Application Form affixed with colored photographs.
2. Two (2) letters of recommendation or references and two (2) copies of each.
3. Educational certificates and two (2) copies of each.
4. Academic transcripts (mark sheets) of studies in English and two (2) copies of each.
5. English language certificate e.g. TOEFL, IELTS and its two (2) copies.
6. Three (3) copies of Personal Identity Card or Official Staff Card.
7. Document to certify change of name or surname and/or marital status (if any).
8. Recommendation letter form advisor or supervisor.
9. Concept paper of research interest
8. Other supporting document.

**Closing Date for Nominations:** March 2017

**Late or incomplete applications/document will not be considered.**

**Course Title**

**Master of Science Program in Earth System Science**

**Master Degree:** Master of Science Program in Earth System Science

**Academic Institute:** Interdisciplinary Graduate School of Earth System Science and Andaman  
Natural Disaster Management, Prince of Songkla University, Phuket Campus

**Duration:** 1<sup>st</sup> semester : August – December

2<sup>nd</sup> semester : January – July

**Objective:** The Master of Science Program in Earth System Science aims to produce graduates, who are fully equipped with high-level knowledge and research skills in the field of Earth System Science, and can create new knowledge and integrate interdisciplinary knowledge for preventing and solving natural disaster problems and managing natural resources and environment.

**Course Synopsis & Methodology:**

- **Curriculum Structure** Total credits: 36

Selected Topics (2 courses)      S/U credits

Special Studies (2 courses)      S/U credits

Graduate Thesis                      36 credits

All courses are conducted in English. Selection of selected topic and special study courses is advised by the thesis advisor.

- **Graduation Requirements**

- 1) Have completed all required courses of the curriculum.
- 2) Have passed the qualifying examination.
- 3) Have passed the thesis proposal defense.
- 4) Have passed the thesis final defense.
- 5) Have the thesis published or have obtained acceptance of publication for a paper in a journal listed in the Scopus database or first two upper groups of the TCI database.

- 6) Have satisfied one of the following English proficiency requirements:  
TOEFL score not less than 550 (paper-based test) or 213 (computer-based test), or 80 (internet-based test)  
IELTS score not less than 6.0

**Course Content/Study Topic:**

Climate Change: Atmospheric model; Impact of Climate Change to organisms;

Groundwater; Sea Intrusion; Landslide; Estimation of Greenhouse Gas Amount; Carbon Credit; Carbon Footprint Assessment: Land Use Change; Water Footprint Assessment; Energy Consumption Assessment; Ecotoxicity Assessment

Conserve and sustainably use: Life Cycle Sustainability Assessment; Water Pollution; Air Pollution; Environmental Toxicology

**Qualification:**

1. The applicant must hold
  - a bachelor's degree within the 1st or 2<sup>nd</sup> quartile or
  - a graduate certificate with cumulative GPA not less than 3.00 or
  - a graduate diploma with cumulative GPA not less than 3.00 or
  - Must have a senior project or research study with very good quality.
  - All above must be obtained from universities approved by the PSU Interdisciplinary Graduate School Committee (IGSC).
  - Other applicants may be admitted on conditions that they receive approval from the PSU Interdisciplinary Graduate School Board.
2. The applicant must submit a TOEFL or an IELTS score.

**Document Required:**

A statement of purpose and CV. The statement of purpose should contain the followings.

- Your general information.
- Your purpose in graduate study.
- The area of study in which you wish to specialize.
- Your future use of your graduate study, your career goals.

- Your special preparation and fitness for study in the field. Your academic background, extracurricular experiences/achievements, and awards.

- Any problems or inconsistencies in your academic records. Indicate the areas that are your weak points or those needed improvement.

- The reasons you wish to attend ESSAND.

- An official transcript of academic records is required from each university you have attended. You are responsible for requesting the transcript(s) from the relevant University. Transcripts must be enclosed in an official SEALED envelope with its flap bearing the security seal of the university and the signature of the Registrar or representative. Graduates from PSU can submit copies of their result slips or transcripts.

- Applicants whose native tongue AND medium of university instruction is not completely in English have to submit the Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) as evidence of their proficiency in the English language. TOEFL/IELTS scores are valid for two (2) years from the test date. If it has been more than two years since you last took the test, you must take it again to have the scores reported.

- Recommendations from two academic referees are to be submitted to *essand-admission@phuket.psu.ac.th* You should check with your referees and obtain their institutional email address. Email addresses from domains other than ".edu" may be subject to additional screening and filtering. Alternatively, recommendations from your referees can be submitted via hardcopy. You should request your referees to return the recommendation form in a SEALED envelope, with its opening bearing their signatures across it.

- A copy of recent photograph of 1"x1" size

- A copy of citizen ID card/passport

- Please submit a copy of each of your publication(s), if any.

**Closing Date for Nominations:**

<b>Intake</b>	<b>Closing Date</b>
Semester 1 (August)	30 June
Semester 2 (January)	30 November

**Late or incomplete applications/document will not be considered.**

**Course title**

**Master of Science Program in Biology  
(International Program)**

**Master Degree:** Master of Science Program in Biology (International Program)

**Academic Institution:** Faculty of Science, Prince of Songkla University, Songkla

Duration: 2 years

**Objectives:** Students are able to conduct experiment, analyses and synthesize research in their selected fields, and be able to deliver such knowledge to public. The course will be emphasized on the current issue of climate changes, biodiversity, ecology and conservation.

**Course synopsis and methodology:**

Students need 36 credits including 2 credits of seminar I and II (core courses) and 14 credits (elected courses) for interested subjects, and 20 credits for thesis. We offer various courses covering all levels of biology studies from cells to ecosystem both in botany, zoology and ecology; and also in terrestrial, freshwater and marine ecosystems. Students will be provided with the essential courses to carry out their research such as experimental designs and scientific enquiries. Various tools in biological studies are also provided e.g. molecular techniques, field and laboratory techniques in various field of studies e.g. taxonomy and systematics, physiology and ecology.

**Course content/study topic:**

The study topics can range from taxonomy, systematic, biogeography, animal behavior plant-animal interactions, marine, freshwater and terrestrial ecology and conservation. In addition, there are a few number of research units that students could pick for their field of research e.g. plant research unit, physiology research unit, plankton research unit, coral research unit, seaweed and seagrass research unit, amphibian and reptile research unit, fish and crustacean research unit, bat and small mammal research unit. Those are with collaborations with Excellence Centre for Biodiversity of Peninsular Thailand and Prince MahaChackriSirindhorn Natural History Musuem.



**Qualifications:**

1. Hold BSc in Biology or equivalent with GPA 2.75 or >2 years experiences in biology -related work.
2. TOEFL (Paper Based) >500, TOEFL (Computer Based) >150, TOEFL (Internet Based, iBT) >64, IELTS >5.0

**Document required:** BSc transcript, CV and English test.

**Late or incomplete applications/document will not be considered.**

**Course Title**

**Master of Science Program in Food Safety and Quality Management  
(International Program)**

**Master Degree:** Master of Science Program in Food Safety and Quality Management  
(International Program)

**Academic Institution:** Faculty of Technology and Graduate School, Khon Kaen University,  
Khon Kaen

**Duration:** 2 years

**Objective: .**

This program will prepare food technologists who can apply fundamental scientific principles in addressing practical food industry situations, gain experiences and skills in food science and technology. Students will acquire the capacity, knowledge and skills with international perspective so that they can make a contribution towards the improvement of safety and quality of products and services. This will enhance the competitiveness of Thai products and services in the global and regional market place.

**Course Synopsis and Methodology:**

Program Plan:

- Plan A1 (Research plan) is for and applicant who holds a Bachelor's degree in Food Science and Food Technology, Food Engineering or Food Product Development with a Grade Point Average (GPA) of at least 2.75, or has experiences in food industry or any related area. Students will conduct a research for a total of 36 credits and participate in 2 required courses (graduate seminars 1 & 2, non - credit).

- Plan A2 (Research and Coursework plan) is for and applicant who holds a Bachelor's degree in Science of related fields, with a GPA of at least 2.50, or has experiences in food industry or any related area. Students have to enroll of 15 credits.

- Plan B (Independent Study and Coursework plan) is for and applicant who holds a Bachelor's degree in Science or Science of related fields, with a GPA of at least 2.50, or has experiences in food industry or any related area. Students have to enroll in several required and elective courses for 30 credits and conduct an independent study for a total of 6 credits.

Structure of the Curriculum:

To obtain a Master of Science degree in Food Safety and Quality Management, the student must choose to follow Plan A1, Plan A2 or Plan B below, and fulfill their requirements. Each requires a total of 36 credits.

Course	The Number of Credit Hours		
	Plan A1	Plan A2	Plan B
Required Course	2*	14	14
Elective Course	-	7	16
Thesis	36	15	-
Independent Study	-	-	6
Total	36	36	36

\* (non - credit) Food Safety and Quality Management Seminar 1 & 2

**Couse Content/Study Topic:**

Disaster is defined as a serious disruption of the functioning of a community or a society. A disaster can interrupt essential services such as transportation, communications, electricity, health care and so on. Poor planning of responses can have a significant negative impact. Disaster Management is needed to substantially reduce disaster losses. Disaster Management can be defined as the organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, in particular preparedness, response and recovery in order to lessen the impact of disasters.

Study Plan \* Non - credit

Course Code	Course Name	The Number of Credits Hours		
		Plan A1	Plan A2	Plan B
Year 1 Semester 1				
677771	Food Safety and Quality Management Research Methodology	-	3	3
677761	Safety Aspects of Food Production	-	3	3
677xxx	Elective (s)	-	5	5
672898	Thesis (Plan A1)	9	-	-
Total credits for this semester		9	11	11
Accumulated credits		9	11	11

Course Code	Course Name	The Number of Credits Hours		
		Plan A1	Plan A2	Plan B
<b>Year 1 Semester 2</b>				
677762	Quality Management Systems in Food Industry	-	3	3
677763	Risk Analysis in Food Industry	-	3	3
677xxx	Elective (s)	-	2	5
672891	Food Safety and Quality Management Seminar 1	1*	1	1
672898	Thesis (Plan A1)	9	-	-
<b>Total credits for this semester</b>		<b>9(1*)</b>	<b>9</b>	<b>12</b>
<b>Accumulated credits</b>		<b>18 (1*)</b>	<b>20</b>	<b>23</b>
<b>Year 2 Semester 1</b>				
677xxx	Elective (s)	-	-	6
677897/ 677898/ 677899	Thesis (Plan A1 or A2) Independent Study (Plan B)	9	7	3
<b>Total credits for this semester</b>		<b>9</b>	<b>7</b>	<b>9</b>
<b>Accumulated credits</b>		<b>27 (1*)</b>	<b>27</b>	<b>32</b>
<b>Year 2 Semester 2</b>				
677892	Food Safety and Quality Management Seminar 2	1*	1	1
677897/ 677898/ 677899	Thesis (Plan A1 or A2) Independent Study (Plan B)	9	9	3
<b>Total credits for this semester</b>		<b>9(1*)</b>	<b>9</b>	<b>4</b>
<b>Accumulated credits</b>		<b>36(2*)</b>	<b>36</b>	<b>36</b>

#### Research Areas

- Symbiotic systems (Probiotics and prebiotics)
- Stress response in food pathogens
- Analysis of chemical hazards in foods
- Emerging technology in food processing and analysis (DDC, Rheology, Image analysis, Minimal processing technology, Thermal and non-thermal processing)

- Physicochemical and functional properties of food products
- Functional foods (Antioxidants, Dietary fibers, Bioactive peptides, etc.)
- Product development techniques
- Food quality management systems
- Applications of microbiology in food industry
- Risk assessment for food industry

Courses:

1. Required Course

677761 Safety Aspects of Food Production	3 credits
677762 Quality Management Systems in Food Industry	3 credits
677763 Risk Analysis in Food Industry	3 credits
677771 Food Safety and Quality Management Research Methodology	3 credits
677891 Food Safety and Quality Management Seminar 1	1 credits
677892 Food Safety and Quality Management Seminar 2	1 credits

2. Elective Courses

677711 Food Agnatical Techniques in Safety and Quality Aspects	3 credits
677712 Food Toxicology	3 credits
677733 Functional Food Ingredients and Safety Aspects	3 credits
677721 Rapid Analytical Techniques in Food Microbiology	3 credits
677864 International Food Safety Policy and Regulations 1	2 credits
677765 Quality Monitoring, Verification and Improvement in Food Industry	3 credits
677773 Current Topics in Food Safety and Quality Management Systems	2 credits
677774 Logistic and Food Supply Chain Management	3 credits

3. Thesis/Independent Study

677897 Independent Study (Plan B)	6 credits
677898 Thesis (Plan A1)	36 credits
677899 Thesis (Plan A2)	15 credits

4. Required Non – credits

314594 Research Methodology in Science and Technology	3(3-0-6)
314595 Seminar 1	1(0-3-1)
314596 Seminar 2	1(0-3-1)

**Qualification:**

Admission Requirement:

1. Holding a Bachelor's degree or equivalent academic credentials, with a minimum undergraduate grade – point average (GPA) of 2.75 (Plan A1) or 2.50 (Plan A2/Plan B). All GPAs are based on a 4.00 scale. The applicant with experience in food industry or any associated area will also be considered.

2. Every applicant whose native language is not English, or whose undergraduate score will not be accepted if it is more than two years old from the start of your admission term.

The English proficiency tests are accepted for graduate admissions, and a minimum score should be as follows:

TOEFL (Paper - based)	475
TOEFL (Computer - based)	152
TOEFL (Internet - based)	52
IELTS	5

An applicant who cannot meet these criteria is required to take KKU English proficiency test and should consult the executive graduate program committee.

Evaluation and Graduation Requirement:

1. Students must take the Proposal Examination within the second semester of the first year of study. All examination committee is appointed by the Faculty.

2. Students must submit the research progress report every semester.

3. Students have to take a Thesis Defense according to the Code of Conduct of Graduate School, Khon Kaen University.

4. To graduate, student must have a Grade – Point Average (GPA) of at least 3.00 based on a 4.00 scale.

5. Students have to present their research work at the international or international conference (with full proceedings) or have at least 1 national or international publication (according to the Code of Conduct of Graduate School, Khon Kaen University).

**Document required:-**

- Two (2) letters of recommendation
- Official transcript (s) (original or Certified True Copies) of all academic records.

- All foreign documents must be accompanied with and English translation by an approved foreign credential evaluation service.
- A copy of a degree certificate in English
- Additional document needed for international students: A copy of a passport (profile page)

**Closing date for Nominations:** March, 2017

**Late or incomplete applications/document will not be considered.**

**Course Title****Master of Science Program in Food Technology**

**Master Degree:** Master of Science Program in Food Technology

**Academic Institution:** School of Agro-Industry, Mae Fah Luang University, Chiang Rai

**Duration:** Two (2) academic years; 1<sup>st</sup> semester: August - December  
2<sup>nd</sup> semester: January – May

**Objective:**

The Master's program in Food Technology is aimed at students who want to learn more about agricultural and food products and who want to collaborate in the future social innovation. The program covers the design and production of foods with safe, health and trends. This program is research-oriented and focuses on the interface between complex food matrixes and technical processes in the development and production of value-added agricultural, food and nutritional products. In this program, students acquire expertise in the advanced knowledge of food matrixes and technical processes of foods to develop processing techniques and/or appropriate formulas combined with a thorough understanding agricultural and food products with safe, health and trend issues. The creation of innovative products and technologies, followed by transferring the results of research, according to consumers or user's need are the importantly key aspects of this program.

**Course Synopsis and Methodology:**

The Master's program in Food Technology (2017-2021), focuses on the interface between complex food matrixes and technical processes in the development and production of value-added agricultural, food and nutritional products. All course are designed to provide advanced knowledge of complex matrixes and manufacturing processes for creation and investigation of properties and compositions to optimize quality in the development and production of value-added agricultural, food and nutritional products. Courses feature both theoretical and practical learning. The core courses include Advanced Statistics and Experimental Design, Research Methodology and Seminar 1-2. Students can choose their own elective courses that meet student's personal interests in 5 areas, including



- (1) Food Chemistry and Food Analysis,
- (2) Food Safety and Food Microbiology,
- (3) Food Biotechnology,
- (4) Food Processing and Food Engineering and
- (5) Food Product Development and Food Innovation.

Recommended course based on the program objectives include Advanced Food Chemistry and Food Analysis, Nutraceutical and Functional Food, Advanced Food Processing, Quality Control and Design, Food Innovation and Product Design, Experimental Design in Innovative Product Development, Sensory Evaluation, Advanced Food Microbiology and Food Safety and so on. This program is research-oriented and requires research Master's thesis to demonstrate student's ability to conduct independent scientific work in a field of Food Technology. A student usually works together with an advisor to develop course goals and requirements.

The instructional methods are implemented using Outcome Based Education (OBE) as a tool to stimulate the active learning environment. Students are engaged in class activities in order to construct and develop their knowledge, communication, and skills. Various techniques, such as lectures, practical, seminars, intensive tutorials, individually supervised project, brainstorming, role playing, mind mapping, collaborative or cooperative learning, problem-based learning and case-study learning are used for appropriate learning objectives, providing a clear way to deliver the course schedule and engage students in class. Various assessment methods is used via Outcome Based Assessment (OBA) based on class activities and designed courses. After completing the program, students will gain advanced knowledge, communication, and success skills which allow them to become efficient researchers in national and international universities or institutions, project management, quality assurance, and technical supervision in the Food industry and its related-industries.

#### **Course Content/Study Topic:**

The curriculum of Master of Science Program in Food Technology offers 2 study plans, plan A1: Thesis and plan A2: Coursework and Thesis.

#### **Plan A1 Thesis (36 Credits)**

The degree requirement includes 36 credits of research-intensive Master's thesis and two seminar courses. Research-intensive Master's thesis allows students to demonstrate ability to

conduct independent scientific work under the supervision and approval of the thesis defense committee. Research topic can be academic in nature, or developed within industry, based on individual interests and/or current research project of lecturers in the Food Technology program. The research can be carried out either in Mae Fah Luang University or our collaborated-partners in abroad.

#### Plan A2: Coursework (24 Credits) and Thesis (12 Credits)

Program structure includes core courses and elective courses. Core courses emphasize on Advanced Statistics and Experimental Design, Research Methodology and Seminar 1-2. Elective course cover a broad range of subjects intended to broaden the student's knowledge. In the first year of the program, the focus lies on core courses and major elective courses connecting soft matter science approaches with advanced knowledge necessary to understand all aspects of the processing of a complex food matrix. Students can choose elective courses according to individual interests and preferred areas of specialization. Students become familiar with scientific approaches such as advanced concepts in processing methods, instrumental methods, research methods and statistical methods, communication skills and practical skills during seminars, lecture and practical hours. In the second year of the program, knowledge and practical skills acquired in the first year are expanded by conducting research Master's thesis, allowing students to identify, analyze, solve a problem and demonstrate ability to conduct independent scientific work under the supervision and approval of the thesis defense committee. Research topic can be academic in nature, or developed within industry, based on individual interests and/or current research project of lecturers in the Food Technology program. The research can be carried out either in Mae Fah Luang University or abroad.

#### **Research focus areas**

Research in the fields of Food Technology at School of Agro-Industry, Mae Fah Luang University focus on characterization, technical/optimized process and development/innovation of valued-added agricultural, food and nutritional products with safe, health and trend issues. The research activities focus on the exploration and investigation of compositions, properties, interaction, and alterations of compounds, nutrients, ingredients, microorganisms or enzymes as well as contaminants in agricultural products, food and nutritional products during processing and storage. The research activities also focus on isolation, extraction and purification of functional ingredients from agricultural products to improve the quality of food products, formulate and develop innovative food products which have additional benefits for specific consumer groups.

## **Cooperation**

In order to further expand and improve successful ongoing research projects as well as to create sustainable synergies, program is engaged in successful and intense cooperation with excellent partners in both national and global academic realm, including; Chiba University, Shinshu University, Japan; Bogor Agricultural University, Indonesia; Universiti Teknologi Mara, Malaysia; Universiti Putra Malaysia, Malaysia; Hohenheim University, Germany; Mendel University in Brno, Czech Republic; and is part of the AIMS programs.

## **Occupational fields**

- Research groups in national and international universities or institutions
- Research and development, project management, quality assurance, and technical supervision in the following industrial sectors:
  - Food industry and its supplying industries
  - Biotech, Pharmaceutical and health care industry
  - Equipment, process, and packaging technology
  - Private and public research institutes
  - Business consulting

## **Reasons to Choose Food Technology, School of Agro-Industry, Mae Fah Luang University**

- Small degree programs with an excellent student-teacher ratio
- Degree programs focused on connecting research and teaching
- Students are encouraged to take part in meetings, conferences, and taskforces that provide unparalleled networking opportunities.
- Modern laboratories and practical course rooms with the newest equipment
- Technical centers with pilot plants for research and education provide the opportunity to design and test new technological devices and processing techniques
- Opportunities to take Double Degree Program and gain Double Master Degree with our partners.
- Opportunities to study aboard in the student-exchange program.

## **Qualification:**

Students with a bachelor's degree in Food Science, Biology, Chemistry, Biochemistry, Nutrition, Biotechnology, Agricultural and related fields with cumulative undergraduate GPA  $\geq 2.5$  and TOEFL score  $\geq 450$  are encouraged to join the program. The program admissions committee makes all admission consideration on case-by-case basis.

**Document Required:**

- Application affixed with photographs
- A copy of transcript from institutions attended;
- Evidence of English proficiency, TOEFL exam or others
- Statement of purpose
- Letters of recommendation from referee
- A copy of passport

**Closing Date for Nominations: May 2017**

**Late or incomplete applications/documents will not be considered.**

**Course Title**  
**Master of Public Health Program in International Health**  
**(International Program)**

**Master Degree:** Master of Public Health Program in International Health (International Program)

**Academic Institution:** Khon Kaen University, Khon Kaen

**Duration:** 15 months

**Objective:** Continuous and rapid development in sciences and technologies has made the borderless society which has impact on livelihood and health of people from various issue including free trade, migration, information sharing and transportation.

**Course Synopsis and Methodology:**

Study Tract

Tract 1: Non course work

Thesis	37 credits
Seminar in international health I, II	4 credits (audit)

Tract 2: Course work

Core course	16 credits
Seminar in international health I, II	4 credits (audit)
Elective course	9 credits
Thesis	12 credits

**Course content/Study Topic:**

Core course: 16 credits

Health research methodology, Biostatistics for health research, International epidemiology, International Health and public health problems in ASEAN, International health service system practicum and writing and presenting research papers.

Seminar courses: 4 credits (Audit)

Seminar international health I, Seminar in international health II

### Elective course

International health service system management, International community health development, International health policy and healthy public policy development, Health and behavior and international health promotion, International environmental health, International occupational health, Public Health, Public health management in international disaster, advanced multivariate analysis, Systematic review and quantitative synthesis.

### Thesis

The student will have about 9 months for their thesis which they could select to conduct their thesis in various setting either in Thailand, or in their home countries. They also could use secondary data sets from the Data Management Statistical Analysis Center (DAMASAAC).

### **Qualification:**

Applicants must satisfy the following criteria:

1. Posses a Bachelor's Degree for Public Health or equivalent in any related field
2. Proficient in English
3. At least three (3) years of professional experience in Public Health
4. Preferably not over 45 years of age

### **Document required:**

- Scan of original degree certificate and complete transcript of Bachelor's with authorized English translation (for graduate applicant)
- Scan of original high school transcript record or equivalent with authorized English translation (for undergraduate applicant)
- A recommendation letter from home institution ( IRO Form2)
- A scan of official transcript of your current degree in English language
- A scan of an official consent letter from home institution verifying you as and exchange student
- A scan of certified scholarship award letter with your name mentioned as a grant holder (if applicable)

**Closing date:** First round: 19 January 2017 – 31 March 2017

Second round 26 May 2017 – 14 June 2017

**Late or incomplete applications/document will not be considered.**

**Course Title**

**Diploma Course in Dermatology and Dermatosurgery**

**Master Degree:** Diploma Course in Dermatology and Dermatosurgery

**Academic Institution:** Institute of Dermatology, Bangkok

**Duration:** One (1) year academic training program started yearly on May to the following March calendar year.

**Objectives:** Providing knowledge in basic sciences, clinical dermatology and advanced technology in diagnostic approaches and managements, research methodology, broad clinical experience in general dermatosurgery, laser surgery, and cosmetic surgical techniques.

**Course Synopsis & Methodology:**

The course is divided to two (2) semesters and conducted in English. The Topics are integrated of basic sciences, clinical dermatology, laboratory practice, clinical research dermatosurgery, laser surgery, and cosmetic surgical techniques; and written and oral examination on theoretical, clinical and laboratory. The Diploma is presented to participant who attains an average score  $\geq 60\%$ .

**Course Content / Study Topic:**

**I. THAI LECTURERS**

**1. Theory**

**1.1 General**

- 1) Principle of dermatology
- 2) Basic, structure and function of the skin I, II
- 3) Papulosquamous diseases I, II
- 4) Parasitic skin diseases
- 5) Cutaneous skin diseases
- 6) Bacterial skin infection
- 7) Vasculitis
- 8) Acne and facial Dermatoses
- 9) Pediatric dermatology I, II
- 10) Sexually transmitted diseases

- 11) Skin manifestation in AIDS
- 12) Stem cell in the skin
- 13) Molecular biology I, II, III, IV
- 14) Leprosy
- 15) Drug eruptions
- 16) How to read paper & data mining
- 17) Vesiculobullous diseases & Diseases of mucous membrane
- 18) Skin signs in systemic diseases
- 19) Clinical research
- 20) Topical therapy I, II,
- 21) Clinical dermatology I, II, III
- 22) Tumors of the skin I, II
- 23) Skin Signs
- 24) Pigmentation
- 25) Dermatomes of pregnancy
- 26) Applied non-invasive techniques in practical dermatology
- 27) Geriatric dermatology
- 28) Fundamental in Dermato-Pharmacology
- 29) Medical important fungi: a guide to identification
- 30) Pit fall

## **1.2 Subspecialty**

### **1.2.1 Contact and occupational dermatology**

- 1) Eczema
- 2) Contact dermatitis
- 3) Non-eczematous contact dermatitis
- 4) Occupational dermatoses
- 5) Contact urticaria syndrome

### **1.2.2 Mycology**

- 1) Superficial mycoses
- 2) Subcutaneous mycoses
- 3) Systemic mycoses

### **1.2.3 Dermatopathology**

- 1) Terminology and normal structure of the skin
- 2) Inflammatory diseases I, II
- 3) Vesiculobullous diseases (Derm-path)



4) Vasculitis & Panniculitis

5) Tumors I-II

#### **1.2.4 Immunology**

1) Basic immunology

2) Basic immunodermatology

3) Immunodermatology

4) Vesiculobullous diseases

5) Connective tissue diseases

6) Urticaria

#### **1.2.5 Photodermatology**

1) Photoprotection and treatment of photoaging

2) Phototherapy and photochemotherapy

3) Photodiagnosis, solar urticaria

4) Phototoxic and photoallergy

5) Photodermatoses: Metabolic and genetic disorder

6) Sunscreen

#### **1.2.6 Hair and Nail**

1) Diseases of hair

2) Diseases of nails

#### **1.2.7 Dermatosurgery**

1) Introduction to dermatosurgery

2) Basic Principle of Laser in Dermatology

3) Electrosurgery, Cryosurgery, Live demonstration

4) Surgical treatment of skin Cancer & Surgical treatment of Vitiligo

5) Intense Pulsed Light, Live demonstration

6) Carbon dioxide Laser, Live demonstration

7) Pigment specific Laser, Live demonstration

8) Vascular specific Laser, Live demonstration

9) Management of Acne Scarring, Live demonstration

10) Hair removal Laser, Live demonstration

11) Non-ablative Skin Remodeling laser, Live demonstration

12) Radiofrequency for Skin Tightening , Live demonstration

13) Fractional Erbium:Glass Laser, Live demonstration

- 14) Fractional Erbium:Yag Laser, Live demonstration
- 15) Light-based Devices in Treatment of Acne Vulgaris
- 16) Procedural Approach in Melasma, Live demonstration
- 18) Dermal Fillers, Live demonstration
- 19) Botulinum Toxin in Dermatology 1, 2, Live demonstration

## **2. Clinical Practice**

### **2.1 Subspecialty**

- 1) Photobiology
- 2) Surgery
- 3) Contact and occupational dermatitis clinic & lab.
- 4) Mycology lab.
- 5) Immunology lab.
- 6) Microscopy lab.
- 7) Bacteriology lab.

### **2.2 Special clinic**

- 1) Genodermatoses
- 2) Immunology
- 3) Leprosy
- 4) Hair and Nails
- 5) Laser

### **2.3 Clinical demonstration**

### **2.4 Journal club**

### **2.5 Interesting case**

### **2.6 Topic Review**

### **2.7 Clinical Slide Conference**

### **2.8 O.P.D.**

**Inside :** Institute of Dermatology

**Outside :** O.P.D. visit to

- 1) Siriraj Hospital
- 2) Ramathibodi Hospital
- 3) Chulalongkorn Hospital
- 4) Rajvithi Hospital
- 5) Queen Sirikit National Institute of Child Health
- 6) Bangrak-STIs Cluster

## **2.9 I.P.D.**

### **2.10 Field study:**

- 1) Chiangmai University, Chiangmai Province
- 2) Trang Reginal Center of Tropical Dermatology, Trang Province

### **3. Others**

- 1) Orientation and Introduction to Institute
- 2) Group Activities
- 3) Country report
- 4) Final Examination
- 5) Oral examination

## **II. JAPANESES LECTURER (Theory)**

- 1) Basic Science in Dermatology
- 2) Biochemistry related to the skin
- 3) Infectious Disease in Dermatology
- 4) Molecular dermatology
- 5) Immunodermatology
- 6) Photodermatology
- 7) Laser surgery
- 8) Allergic skin diseases
- 9) Plastic Surgery

### **Qualifications:**

1. Doctor of Medicine graduation.
2. Below fifty (50) years of age.
3. At least 3 years (foreign doctor) and 3 years (Thai doctor) working experience.
4. Good command of spoken and written English.
5. Good health in physical and mentality - health certificate must be provided and signed by an authorized physician (form is available in the application).
6. Pregnancy is definitely disqualified to the course condition.

### **Documents Required:**

1. Application Form
2. Curriculum Vitae or Resume
3. Recommendation Letter 3 Letter (Workplace, University, Dermatologist)

4. Copy of your Identification Card or passport
5. Copy of Academic Degree & Transcript
6. Copy of Medical License
7. Health Certificate

**Note:** All enclosed documents, please address “certified true copy”.

**Closing Date for Nominations:** Yearly on 31 March

**Late or incomplete applications/documents will not be considered.**

**Course Title**  
**Master of Nursing Science**  
**(International Program)**

**Master Degree:** Master of Nursing Science (International Program)

**Academic Institution:** Chiang Mai University, Chiang Mai

**Duration:** 2 years

**Objective:** To produce expert nursing scholars skillful in knowledge development, knowledge management and research utilization for better health of population in rapid changing society.

**Course Synopsis and Methodology:**

A minimum of 36 credits; including 9 credits of core courses, 12 credits of specialty courses, 3 credits of an elective courses and 12 credits of thesis.

<b>Year 1</b>			
<u>Semester 1</u>		<u>Semester 2</u>	
Core courses	6 credits	Core courses	3 credits
Specialty courses	6 credits	Specialty courses	9 credits
<b>Year 2</b>			
<u>Semester 1</u>		<u>Semester 2</u>	
Elective course	3 credits	Thesis	6 credits
Thesis	6 credits		

**Course Content/Study Topic:**

Students can choose an area of concentration on one of the following; nursing administration, adult and gerontological nursing and maternal and child nursing (including breastfeeding)

**Qualification:**

- 1) Bachelor degree in nursing received from the relevant authorized organization in the applicant's country

- 2) Professional nursing license from relevant authorized organization in the applicant's country
- 3) At least 1 year work experience as a professional nurse
- 4) Minimum English examination score: TOEFL 500 ; IELTS band 5.5 or TEGs 65

**Document required:-**

- 2 copies of the completed application form
- Official transcripts in English with one of its copy
- 2 copies of degree certificates (with English translation if applicable)
- Two full – face photographs, 2.5 cm, less than 3 months old (affixed to the application form)
- 2 copies of passport
- letter of recommendation from 2 referees (send in a sealed envelope with the referee's signature across the seal)
- Official TOEFL/IELTS/TEGs score report

**Closing date for Nominations:** May 15, 2017

**Late or incomplete applications/document will not be considered.**

**Course Title**  
**Master of Public Health**

**Master Degree:** Master of Public Health

**Academic Institution:** College of Public Health Sciences, Chulalongkorn University, Bangkok

**Duration:** 1 year

**Objective:** The College's overall program has been designed to achieve the following human resource development objective:

1. To address emerging and/or critical public health needs through a postgraduate academic course that directly links education with research in applied setting using enquiry – problem – based approach;
2. To prepared public health manpower in response to current and emerging needs so as to complement objectives undertaken by other public health academic institutions;
3. To focus on alternative learning theories and processes that recognize existing educational constraints and opportunities;
4. To pursue the development of new method and technologies for learning in the context of the workplace;
5. To increase the relevance of content through integration of theory and practice by interrelating the research and educational activities of the College;
6. To facilitate continued learning by establishing a basis for such effort and providing active services after graduation, including short – term training, access to data bank and reference resource, joint research, etc.
7. To adopt long – term, broadly defined human resource development approaches in partnership with major consumer; and
8. To undertake research and educational program development through ongoing monitoring and evaluation of need, processes, content, outcomes and impacts.

**Couse Synopsis and Methodology:**

In the one – year programme, students are exposed to board interdisciplinary areas such as health system organization, critical thinking, health economics, health law, through their interest

to one of the four majors namely Health Policy and Management, Community Health Development and Reproductive Health, Environmental and Occupational Health, Urban and Global Health. In addition to more traditional practical tools and methods such as epidemiology, biostatistics, and research methodology. The programme prepares its student to make an effective contribution in either the public or the private sector.

**Course Content/Study Topic:**

Core courses (15 credits):

Health Problems, Determinants and Trends, Health Systems Development, Research Methodology in Public Health, Statistics in Public Health Research, Public Health Administration, Thesis Seminar (S/U)

Compulsory Course for the Major (6 credits):

1. Health Policy and Management: Policy and Strategic Planning, Implementation and Management
2. Community Health Development and Reproductive Health: Reproductive Health, Community Assessment
3. Urban and Global Health: Introduction to Urban and Global Health, Globalization and Contemporary Public Health
4. Environmental Health and Occupational Health: Introduction to Environmental and Health Risk Assessment
5. Health Behavior  
Health and Social Impact on Addiction, Community base and Individual Intervention, Prevention Intervention and Evaluation of health Behavior Module

Elective Courses (9 credits):

Health Development and Change, Health Financing, Resource Development, Seminar in Health Systems Development, Fundamental Skills in Sciences and Research, Fundamental Skills in Planning and Management, Health Services Organization and Management, Health Insurance System Management, Community Health Development, Global Health Impacts on Drug Use, Leadership and Organization Behavior, Behavioral Science Theories as a Basis for Health



Promotion, Urban Health Travel Medicine and Public Health, Environmental and Occupational Health Epidemiology, Law and Management of Environmental and Occupational Health, Directed Study, Advanced Skills in Science and Research, Practical Study I, etc.

### Thesis (12 credits)

#### **Qualification:**

1) Applicants must be working professionals in the public, private or international sectors related in public health and public health sciences such as hospital directors and managers, primary health center staff, administrators, policy makers and other officials or public health professionals.

2) Applicants must have at least a Bachelor degree in a related field such as medicine, nursing, public health, social work, physical therapy, pharmaceutical sciences, political sciences, sociology and anthropology.

3) Applicants must have at least one year working experience, a commitment to personal professional development, the support of their superiors, good English reading, writing, and speaking abilities, and other capabilities for successfully completing this course of studies, or have score a minimum of 450 on TOEFL (133 for computer – based) or 4.0 in IELTS within Last two years.

4) Applicants should be able to communicate effectively and able to use computer and other learning technologies.

5) The college encourages applications from people who, due to gender, age, geographic location, social group or other characteristics, have not previously had a fair and equal opportunity to undertake postgraduate studies.

6) Preference is given to those nominated as learning teams (consisting of at least four) by the Institute for Health Manpower Development, Ministry of Public Health, and international agencies or similar sponsoring authorities Individuals will also be specifically recruited through these agencies to participate in ongoing research that reflects their institutional needs as a theme for their studies.

#### **Document required:-**

- Application form affixed with photographs (2 inch size/blue Background)
- Two certified copies of your previous degree certificate(s).

- Two certified copies of your transcript of record (mark sheets) in English for subjects studied during your previous degree(s).
- Two Photocopy of applicant's passport
- Two copies of scores of TOEFL/IELTS test if taken with past two years.

**Closing date for Nominations:** Admission Deadline: March 31, 2017  
Interview: April 4, 2017  
Orientation Program: July 25, 2017  
Open Trimester: August 8, 2017

**Late or incomplete applications/document will not be considered.**

**Course Title**  
**Master of Science Program in Medical Informatics**  
**(International Program)**

**Master Degree:** Master of Science in Medical Informatics (International Program)

**Academic Institution:** Faculty of Medicine Siriraj Hospital, Mahidol University.

**Duration:** 2 years

**Objectives:** This Program aims to educate students in a multidisciplinary manner via collaboration of various departments, such that graduates can appropriately incorporate related science into medical informatics applications. They will also be capable of providing consultations on personalized medicine and be able to liaise and convey medical knowledge to layperson, be skilled in conducting research and systematically analyzing research data, have morality and ethics, both academically and professionally.

**Course content/Study Topic:**

Elementary Courses

SIRE 507 Fundamental Computer Science for Biologist	1(1-0-2)
SIRE 508 Fundamental Genetics for Computer Scientist	1(1-0-2)

Required Courses

SIRE 503 Medical Bioinformatics	3(2-2-5)
SIRE 504 Programming in Bioinformatics	3(2-2-5)
SIRE 505 Medical Genetics	2(2-0-4)
SIRE 506 Design and Analysis in Genetics Studies of Human Diseases	3(2-2-5)
SIRE 509 Seminar in Medical Bioinformatics I	1(1-0-2)
SIRE 510 Seminar in Medical Bioinformatics II	1(1-0-2)
SIRE 518 Generic Skills in Science Research	1(1-0-2)

Elective Courses

SIID 502 Personalized Medicine	3(1-4-4)
SIAN 506 Human Genetics	2(2-0-4)
SIBC 603 Biochemistry of Diseases	2(2-0-4)
SIBC 604 Statistics of Medical Genetics	1(1-0-2)
SIIM 612 Diagnostic Immunology	3(2-2-5)

SIIM 618 Molecular Biology Techniques 3	3(2-2-5)
ITCS 503 Design and Analysis of Algorithms	3(3-0-6)
ITCS 628 Data Mining and Knowledge Discovery	3(3-0-6)
ITCS 654 Parallel Computation	3(3-0-6)
GRID 521 Research Ethics	1(1-0-2)
Thesis SIRE 698 Thesis 12(0-36-0)	

\* These may be changed in case of curriculum revision

**Qualification:**

1. Graduated in or undertaking the final semester of a Bachelor's degree in Biology, biochemistry, microbiology, pharmaceutical Science, computer science, or another relevant field, from an academic institution recognized by Thailand Higher Education Commission
2. Student should receive a cumulative GPA of at least 2.050.
3. Have a TOEFL ITP score of at least 480, TOEFL Internet-based score of 54 or IELTS score of 5.

**Document Required:**

Prepare the following required documents to submit via online admission system or post:

1. Complete an Online Application at [www.grad.mahidol.ac.th](http://www.grad.mahidol.ac.th) which comprised with
  - Form A: Application Form
  - Form B: Background and Proposed Field of Study
  - Form C: Recommendation Forms (directly submitted by at least 2 referees)
2. Two copies of Degree Certificate (with officially certified English translation)
3. Two copies of Academic Transcript (with officially certified English translation)
4. Two copies of Recent Photon (Passport size)
5. Two copies of Passport
6. Two copies of English Certificate (TOEFL/IELTS), For Master Program – TOEFL ITP score of at least 480, TOEFL Internet-based score of 54 or IELTS score of 5.

Note: Only accept TOEFL ITP score from examination center arranged by Faculty of Graduate Studies, Mahidol university.

– TOEFL ITP taken from other domestic and overseas institutes are invalid.

– The test date must be within previous 2 years before application date.

– Detail of English Competency Standard for Admission:

<http://www.grad.mahidol.ac.th/en/current-students/language-center.php>

7. Two copies of Curriculum Vitae.
8. Two copies of Statement of Purposes and Career Goals.
9. Two copies of Current bank statement/Scholarship letter (if any).
10. Two copies of Concept paper/research proposal/topic interest (recommended for all applicants)
11. Two copies of additional documents maybe requested by each program (such letter of work experience/professional license/related certificates and awards). Submitting documents via online admission system. All documents must be in pdf format (maximum size 2 MB). Recent photograph must be in jpeg format only (maximum size 2 MB).

**Closing date: 30 April 2017**

**Late or incomplete applications/document will not be considered.**

**Course Title**

**Master of Arts Program in Health Social Science  
(International Program)**

**Master Degree:** Master of Arts Program in Health Social Science (International Program)

**Academic Institution:** Department of Society and Health, Faculty of Social Science and Humanities, Mahidol University.

**Duration:** 2 years

**Objectives:** At the end of the course, graduates will have knowledge and ethics pertaining to the Health Social Science.

1. Technical and professional ethics related to social and health policy makers and ethical academic researchers and good conduct and academic research.
2. Theoretical knowledge and applied social sciences and health research, both qualitative and quantitative analysis of the problem and potential solutions.
3. Build and integrate knowledge to solve health problems using academic health social science.
4. Ability to work as a group with leadership behavior base on morality, ethical practice, responsibility and have the skills to learn on their own.
5. Knowledge of numerical analysis and use of information technology in health sciences to relay communicate information.

**Course Synopsis and Methodology:**

Health, diseases, health system, migration, gender, ethic, economics, and disaster are intrinsically intertwined and interdependent. Health Social Sciences integrates multiple social science disciplines to address health issues. Through this integration, Health Social Science widens the base of knowledge available to student and expands the potential for areas of research. Equipped with trans-disciplinary knowledge, Health Social science professionals bridge the gaps between health condition and its context in their work for the betterment of society.

**Course content/Study Topics:**

Core course: 12 credits

Elective course: 12 credits

Thesis: 12 credits

Total: 36 credits

Core course: 12 credits

- SHSH548 Health Social Science Theories
- SHSH549 Application of Health Social Science knowledge
- SHSH553 Social Science Research in Health
- SHSH695 Seminar in Health Social Science

Elective course: 12 credits

- SHSH554 Social Science of Reproductive Health and Population Policy
- SHSH555 Globalization and Health
- SHSH556 Qualitative and Quantitative Data Analysis
- SHSH557 Gender, Sexuality and Health
- SHSH558 Principles of Social Determinant of Health, Health Rights and Equity
- SHSH559 Migration and International Health
- SHSH594 Health Sociology
- SHSH595 Medical Anthropology
- SHSH596 Health Psychology
- SHSH598 Health Economics
- SHSH603 Globalization and Emerging and Re-emerging Diseases
- SHSH604 Evaluation Research in Health
- SHSH605 Health Policy and Health System Research
- SHSH613 Social Inequity and Women's Health
- SHSH693 Social Sciences in tropical Diseases
- SHSH694 Social Psychology and Positive Psychology Seminar in Health and Related Current Issues

Thesis: 12 credits

- SHSH698 Thesis

**Qualification:**

1. Receive bachelor's degree in social sciences, health sciences and other related fields.
2. Have GPS 30. Or higher.
3. Good command in English (reading, writing and speaking)
4. Have a IELTS score of at least 3, TOEFL Internet-based score of 54 TOEFL ITP\* score of at least 400

**Document Required:** Prepare the following required documents to submit via online admission system or post:

1. Complete an Online Application at [www.grad.mahodol.ac.th](http://www.grad.mahodol.ac.th) which comprised with  
Form A: Application Form  
Form B: Background and Proposed Field of Study  
Form C: Recommendation Forms (directly submitted by at least 2 referees)
2. Two copies of Degree Certificate (with officially certified English translation)
3. Two copies of Academic Transcript (with officially certified English translation)
4. Two copies of Recent Photon (Passport size)
5. Two copies of Passport
6. Two copies of English Certificate

**Closing date: 30<sup>th</sup> April 2017**

**Late or incomplete applications/document will not be considered.**



**Course Title**  
**Master of Science Program in Immunology**  
**(International Program)**

**Master Degree:** Master of Science in Immunology (International Program)

**Academic Institution:** Faculty of Medicine Siriraj Hospital, Mahidol University.

**Duration:** 2 years

**Objectives:** The diversity of experts across various disciplines has uniquely strengthened and enriched this program. It adds more dimensions to the students' learning experiences and nurtures the abilities and skills required to solve complex scientific problems.

**Course Synopsis and Methodology:** Program curriculum structure for the master's degree

Required Courses	18	credits
Elective Courses no less than	6	credits
Thesis	12	credits
<u>Total</u>	36	credits

**Course content/Study Topic:**

Required Courses

\*study only 1 course

GRID603 Biostatistics*	3(3-0-6)
SCID 516 Biostatistics *	3(3-0-6)
SCID 500 Cell and Molecular Biology	3(3-0-6)
SCMI 602 Advanced Immunology	3(3-0-6)
SIIM 501 Immunology	2(2-0-4)
SIIM 611 Molecular Immunology	(2-0-4)
SIIM 612 Diagnostic Immunology	3(2-2-5)
SIIM 619 Immunology Seminar I	(2-0-4)

### Elective Courses

SIIM 614 Immunity and Infection	2(2-0-4)
SIIM 615 Molecular Biochemistry of Cancer	1(1-0-2)
SIIM 616 Stem Cell Science	3(3-0-6)
SIIM 617 Advanced Flow Cytometry	2(1-1-2)
SIIM 618 Molecular Biology Techniques	3(2-2-0)
Thesis SIIM 698 Thesis 12(0-36-0)* These may be changed in case of curriculum revision	

### Qualification:

1. Student must hold a bachelor's Degree in Science or an equivalent degree in Pharmacy, Dentistry, Veterinary Medicine, Medicine or those related to Immunology.
2. Receive a cumulative GPA of at least 2.50.
3. Have a TOELF ITP score of at least 480, TOEFL Internet-based score of 54 or IELTS score of 5.

### Document Required:

Prepare the following required documents to submit via online admission system or post:

1. Complete an Online Application at [www.grad.mahidol.ac.th](http://www.grad.mahidol.ac.th) which comprised with  
Form A: Application Form  
Form B: Background and Proposed Field of Study  
Form C: Recommendation Forms (directly submitted by at least 2 referees)
2. Two copies of Degree Certificate (with officially certified English translation)
3. Two copies of Academic Transcript (with officially certified English translation)
4. Two copies of Recent Photon (Passport size)
5. Two copies of Passport
6. Two copies of English Certificate (TOEFL/IELTS), For Master Program – TOEFL ITP score of at least 480, TOEFL Internet-based score of 54 or IELTS score of 5.

Note: Only accept TOEFL ITP score from examination center arranged by Faculty of Graduate Studies, Mahidol university.

– TOEFL ITP taken from other domestic and overseas institutes are invalid.

– The test date must be within previous 2 years before application date.

– Detail of English Competency Standard for Admission:

<http://www.grad.mahidol.ac.th/en/current-students/language-center.php>

7. Two copies of Curriculum Vitae.
8. Two copies of Statement of Purposes and Career Goals.
9. Two copies of Current bank statement/Scholarship letter (if any).
10. Two copies of Concept paper/research proposal (recommended for all applicants)
11. Two copies of additional documents maybe requested by each program (such letter of work experience/professional license/related certificates and awards). Submitting documents via online admission system. All documents must be in pdf format (maximum size 2 MB). Recent photograph must be in jpeg format only (maximum size 2 MB).

**Closing date: 30 April 2017**

**Late or incomplete applications/document will not be considered.**

**Course Title**  
**Master of Science in Health Systems Management**  
**(International Program)**

**Master Degree:** Master of Health Systems management (International Program)

**Academic Institution:** College of Health Systems Management ,Naresuan University.

**Duration:** 24 months (2 academic years)

**Objectives:**

The multidisciplinary master program Health Systems Management is designed to provide student with the skill and knowledge that are needed to understand the complexities of health system. It is also aimed enable students to develop into knowledgeable researcher, policy makers or manager in health care sector. Successful students will have the expertise to analyze and weigh up complex problems from various perspectives. They can apply their knowledge derive from various fields when solving problems. They know their way in leading and managing their complex systems to be better responsive and improve equity and level of health of their population effectively and defiantly.

**Course Synopsis and Methodology:**

Health systems management (HSM) is a unique multidisciplinary master program. It is specially designed students who are interested in fully understanding the context of health and health system issue and for those who wish to become health managers within health care organizations. Explore the complexities of health systems from different disciplinary perspectives. Scientific theories are closely intertwined with practical knowledge. The program is specially designed to give students an overview of the Thai health system and its application in a global context. Explore the complexities of health systems all over the world and be able to understand, analyze and deal with the current issue. Furthermore, students develop advanced skills for designing, carrying out and reporting academic research as well as set of professional competencies as leadership skills. Work with students and faculty from around the world to solve case studies and acquire valuable knowledge on health systems management.

The program has a clear international orientation. Health systems worldwide are facing various challenging issues to become more complex. Leadership and good management are vital to solving these increasing difficult issues in the health sector. The Master of Science in Health Systems Management fully equip you to live up with these challenges. During master you are trained to match knowledge from various academic fields with professional skills and come to a solution for just about any problem that you are encounter during your career as a health management professional. In this entire process you never lose focus on patient demands and needs.

The program is international in scope and participation. All courses, papers, exams, and the master thesis are in English. HSM attracts student from all over the world, employs teaching staff from foreign origin, and actively seeks international collaboration with the international universities and academic and professional institutions, both for students and staff exchange.

The master program alternates scientific theory and skills training through lectures, case discussion and projects. NUCHSM is keen for its teaching method of problem-based learning. This makes extensive use of case studies and requires students to participate actively

**Course content/Study Topic:**

Overall, the program amount 36 credits according to the Higher Education Commission System. It is delivered in a modular format, employing a range of learning approaches. The full-time program take two academic years of study. Students who enroll on research tract compulsorily study non-credit research methodology subject and attended seminars every semester and write a master thesis. It is required at least 2 publications published in peered academic journals for completing their graduation. For students who enroll in coursework tract study 6 mandatory subjects and 2 elective subjects and write a master thesis. It is required at least 1 publication published in peered academic journals in order to fulfill their graduation.

Within the HSM program students choose a specific stream, consisting of a pre-selected group of elective courses and a thesis with a theme. The streams are: Health Systems Management and Leadership (HSML); and Health Security, Financing, Management and Leadership (HSFML)

**Qualification:**

General Qualifications

- 1) Students are required to have graduated in a Bachelor's degree in Sciences; Technological Sciences or Health Sciences; Social Science, etc. from institutes approve by the Office of the Higher Educational Commission, Ministry of Education.
- 2) Have no record of court-ordered imprisonment except for a wrongdoing by recklessness or misdemeanor.
- 3) No record of dismissal on the grounds of misbehavior from any educational institutes
- 4) Healthy, with no diseases that can interfere with educational obligations
- 5) Other qualifications as specified by the Graduate School, Naresuan University
- 6) If there is some inconsistency between the conditions of No. 1-5 above, the students position will be considered by the Curriculum Committee

Specific Qualifications

Plan A Type A1

- 1) Students are required to have graduated in a Bachelor's degree or an equal level of education in Technological Sciences, Health Sciences or Social Science etc. from any institutions in Thailand or other countries approved by Ministry of Education with higher GPA than 2.5
- 2) Students who graduated from other fields of study apart from those stated No. 1 are required to be experienced in working or researching on Health Sciences or Social Sciences about health or health system for more than 1 year; or have a published an article in a journal approved by Naresuan University Regulations in the previous 5 years prior to the day of enrolment.
- 3) Student who cannot meet the requirement of No. 1 and No. 2 will be considered by the Curriculum Committee of Health Systems Management
- 4) Student are required to write an article about a relevant research project (no more than 5 pages of A4 paper)
- 5) Other qualifications as specified by Naresuan University Regulations for Graduate 2016: Title 5 Students Requirement (Information will be announced in appendix)

Plan A Type A2

- 1) Students are required to have graduated in a Bachelor's degree or an equal level of education in Technological Sciences, Health Sciences or Social Science etc. from any institutions in Thailand or other countries approved by Ministry of Education with higher GPA than 2.5
- 2) Student who graduated from other fields of study apart from those stated in No. 1 will be consider by the Curriculum Committee of Health Systems Management
- 3) Students are required to write an article about relevant research (no more than 5 pages of A4 paper)
- 4) Other qualifications as specific by Naresuan University Regulations for Graduate 2016; Title 5 Students Requirement (Information will be advised in appendix)

**Document Required:**

- 1) Education background document/certificate of degree
- 2) Official closed transcript of record (if you apply for Ph. D study, records of master and bachelor's degrees must be submitted)
- 3) An English proficiency score. Only the score of an English proficiency test obtained from these testing agencies: TOEFL or IELTS is accepted unless English is the official language of the country.
- 4) All applicants are required to submit a valid English test score which is not older than 2 years on the starting date of the admission.
- 5) Two official recommendation letters written in the letter head of referee's university or organization.
- 6) The statement of purpose, which includes field and level of study that you would like to apply for.
- 7) Concept paper on your proposed thesis study. (No longer than 3 pages of A4)
- 8) Photocopy of passport (bearer's details) or ID card.
- 9) A CV show you experiences on health management and/or research which includes a list of publications and affixed with a recent photo; and
- 10) A less than 6 month medical examination result.

**Closing date: 31 May 2017**

**Late or incomplete applications/document will not be considered.**