Course Detail
Master of Arts Program in Tourism and Hospitality Management

Course Title:	Master of Arts Program in Tourism and Hospitality Management
Master Degree:	Master of Arts Program in Tourism and Hospitality Management
Academic Institution:	Faculty of Business, Economics and Communications, Naresuan University
Duration:	2 years (June 2024 – March 2026)

Background and Rational:

Focus on building researchers in terms of tourism with intensive theory and practice as well as hospitality and other concerns to adapt research to build service innovation to respond to changes of landscape and the competitiveness of the international tourism industry.

Integrated teaching, learning, and the art of service in the time of disruption technology. Supporting creativity, service mindedness, and entrepreneurship in the tourism industry, such as travel agencies, hotel and aviation business, and MICE businesses, focusing on applying knowledge to real life situations.

Full-time and Associate Faculty's names and degrees which expert in tourism
- Asst. Prof. Dr. Siripen Dabphet, Head of Tourism Program, Thailand Research Fund Researcher
- Dr. Jaruwan Daengbuppha, Assistant Vice President, Thailand Research Fund Researcher
- Dr. Ketwadee Buddhabhumbhitak, Thailand Research Fund Researcher
- Dr. Petchsi Nonsiri, Naresuan University Researcher

Objectives:

Intensive tourism study which integrates theory and practice as well as outstanding Thai hospitality development with modern technology 4.0.

Course Synopsis and Methodology:

(1) Study plan

Instruction Model

Plan A type A2 (Monday-Friday)
- Core courses (15 credits)
- Elective courses (9 credits)
- Non-credit courses (4 credits)
- Thesis (12 credits)
- Depend on student

(2) Course Content

Plan A type A2 Total 36 credits
- Course not less than 24 credits
  - Core courses (**15** credits)
  - Elective courses (**9** credits)
- Thesis (**12** credits)
- Non-credit courses (**4** credits)

1) Course not less than 24 credits
1.1) Core courses (15 credits)
Tourism and Hospitality Industry Development
Multidisciplinary Studies in Tourism and Hospitality Industry Management
Tourist Behavior and Consumer Culture Analysis
Organizational Psycholofy and Human Resource Management in Tourism and Hospitality Industry
Strategic Marketing and Innovation in Tourism and Hospitality Industry

1.2) Core courses (15 credits)
Hospitality Education for Sustainability in Tourism and Hospitality Industry
Convention, Events and Exhibition Management
Hospitality Quality Management in Thai ways
Thai Hospitable Leader
Innovative Managerial under Crisis Circumstances in MICE Business
Urban Tourism and Creative Place-making
Strategic Management for Health Tourism
Multicultural Management in Tourism and Hospitality Industry
Digital Technology Management for Tourism Industry

2) Thesis (12 credits)
Thesis 1, Type A 2
Thesis 2, Type A 2
Thesis 3, Type A 2

3) Non-credit courses **(**4 credits)
Research Methodology in Social Sciences
Seminar in Tourism and Hospitality Management 1

Applicant Qualifications

- At least 1 year of work experience or the decision of the committee.
- English Proficiency Test:

Applicant must hold a minimum score of English proficiency from either TOEFL (paper based or internet based; not TOEFL ITP) or IELTS as shown in the followings:

- Paper-based TOEFL 417, 453 (International Program)
- Internet-based TOEFL 35, 46 (International Program)
- IELTS 5.0, 5.5 (International Program)

Document Required

- TIPP application form (Download at: https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3)
- Medical Report (If candidates had submitted other health certificates without the TICA medical report form, their application will not be accepted for consideration)
- Transcript of Bachelor's degree (to show the courses that you have learnt throughout Bachelor's degree) with at least GPA. 2.75
- Certificate of Bachelor's degree
- English test score (e.g. TOEFL (Paper based 417 or 453) (Internet based 35 or 46) or IELTS (5.0,5.5))
- Recommendation Letter (At least 3 people)
- Proposal and work experience certificate

Contact:

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

Course Deatail
Master of Engineering / Master of Science Environmental Technology and Management

Course Title:	Master of Engineering / Master of Science Environmental Technology and Management
Master Degree:	Master of Environmental / Master of Science
Academic Institution:	The Joint Graduate School of Energy and Environment (JGSEE), King Mongkut's University of Technology Thonburi (KMUTT)
Duration:	2 Years (August 2024 – July 2026)

Background and Rationale:
Graduates from the Master of Science/Master of Engineering program in Environmental Technology and Management will demonstrate professionalism through their technical and academic knowledge and capabilities in practical problem-based research, and their morals and ethics towards sustainability and self-sufficiency development pathway, and the society. They will be able to conduct collaborative research and/or technical works at the local, national, and regional (e.g. GMS, ASEAN, etc.) levels on energy related environmental issues, including air quality, acid deposition and regional haze pollution, and global warming and climate change. Their abilities and skills include energy and environmental data and information analysis, diagnosis, and synthesis in order to develop, adapt and select appropriate technologies, methods and approaches, enabling a country to go towards green economy and sustainable development. Their professionalism should significantly benefit countries in the Asia-Pacific region as well as others in the world that are on the way of rapid growth development under the context of globalization.

Objectives
- To produce graduate scientists and engineers who have acquired advanced theoretical and practical knowledge and skill in the fields of energy and environment, professionally capable to analyze and synthesize data into key findings to be disseminated to stakeholders in native language and in English.
- To produce graduate environmental scientists and engineers who possess capabilities to judge what impacts on the environment are related to energy production and use.
- To promote capacity building by hands-on research and energy related environmental issues and challenges solving for both public and private sectors.

Course Synopsis and Methodology:
1. Study plan 40 Credits

	Plan A2-1	**Plan A2-2**
Compulsory	7	7
Specific Compulsory	9	9
Elective	3	3
Thesis	21	12
Internship	-	9
Total	40	40

2. Course content

- Compulsory Courses

- Seminar
- Research Methodology
- Energy and Environmental Economics, Management and Policy

- Specific Compulsory Courses

- Environmental Pollution Control Technology
- Energy and Environment
- Specific Compulsory (As recommended by advisor)*

- Advanced Fuel Processing Laboratory (AFPL)

- Renewable Energy Technologies
- Energy from Biomass

- Building Energy Science and Technology Laboratory (BEST)

- Design of Suitable Urban Ecology

- Tropical Climate Science Modeling Laboratory (TCSM)

- Tropical Climates and Boundary Layer Science
- Atmospheric and Air Quality Modeling

- Advanced Greenhouse Gases and Aerosols Research Laboratory (AGAR)

- Waste and Climate Change
- Waste to Energy and Its Sustainable Mitigation
- Climate Change: Physical Science Basis
- Greenhouse Gas Measurement, Mitigation and Monitoring Technology

- Life Cycle Sustainability Assessment Laboratory (LCSAL)

- Life Cycle Assessment
- Environmental Chemistry and Toxicology
- Environmental and Health Risk Assessment
- GIS and Remote Sensing

- Other

- Special Study II
- Special Study III

3. Elective Courses

- Special Study II
- Special Study III
- Mathematical Techniques
- Clean Technologies for Solid Fuels
- Design of Suitable Urban Ecology
- Energy Entrepreneurship
- Solar Energy
- Energy Efficiency
- Renewable Energy Technologies
- Energy from Biomass
- Tropical Climates and Boundary Layer Science
- Atmospheric and Air Quality Modeling
- Life Cycle Assessment
- Waste and Climate Change
- Waste to Energy and Its Sustainable Mitigation
- Environmental Chemistry and Toxicology
- Environmental and Health Risk Assessment
- GIS and Remote Sensing
- Climate Change: Physical Science Basis
- Climate Change Policy
- Greenhouse Gas Measurement, Mitigation and Monitoring Technology
- Selected Topics I
- Selected Topics II

4. Thesis

Plan A 2-1

Thesis

Plan A 2-2

Thesis

5. Internship

Plan A 2-2

Internship

6. English Courses (Without Credit)

Foundation English for International Programs

Thesis Writing

Graduation Conditions:

- **Earning credits:** The students are required to pass all the subjects (40 Credits) with minimum grade of each subject must be above C and the total average grade (GPA) must be above 3.00
- **Publications and research results:** 1 National Journal Paper

Applicant Qualifications

M.Sc program must hold a first degree in engineering, science, economics, technology, agriculture or related fields. M.Eng program must hold in engineering only, with a minimum GPA of 2.50, or be ranked top 25% of the class. Applicants with other qualifications may be admitted on a case by case basis subject to the approval of JGSEE's Executive Committee.

Document Required

- TIPP application form (Download at: https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3)
- Medical Report (If candidates had submitted other health certificates without the TICA medical report form, their application will not be accepted for consideration)
- Transcript of Bachelor's degree (to show the courses that you have learnt throughout Bachelor's degree)
- Certificate of Bachelor's degree
- English test score (IELTS 6, TOEFL iBT 78, International program within 2 years)
- Recommendation Letter (At least 3 people)
- Thesis proposal or other documents (As university request)
- A copy of Passport (Bio page)
- Tentative proposal

Contact:

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  Academic Officer
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For more information:

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E-mail: tipp@mfa.go.th

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Course Detail
Master of Science Program in Innovative Food Science and Technology

Course Title:	Master of Science Program in Innovative Food Science and Technology
Master Degree:	Master of Science (Innovative Food Science and Technology)
Academic Institution:	School of Agro-Industry, Mae Fah Luang University
Duration:	2 years (August 2024 - May 2026)

Background and Rationale:

Agricultural and food industry is the basic source of the food supply of all the countries in the world. The demand for food is increasing at a fast rate, therefore, it is one of the important industries in the world and especially in Thailand. The prosperity of this industrial sector contributed considerably to fostering the economic advancement of the countries. It engenders income for the population who work in the relevant parts of the supply chain. Thailand aims to be the center of food production in ASEAN and has a gross food product of 1.42 trillion Baht or an increase of 4% per year. Currently, the total economic value of the food processing industry is more than 5 trillion baht each year. In 2019, Thailand was the 11th largest food exporter in the world. Throughout our history we can trace back development and research for better food supply, management, and safety as the world population has risen while our access to resources remains the same or in some areas has even decreased. In recent years, the world has witnessed a global food crisis which creates a knock-on effect on people, society, and the environment. Being aware of the importance of the issues, the United Nations has announced Sustainable Development Goal 2: to “end hunger, achieve food security, improve nutrition and promote sustainable agriculture”, all of this reflects well how the agricultural and food industry is a prerequisite for people’s wellbeing. Therefore, promoting research and development that requires knowledge in food science and technology will not only ensure food security but more importantly will drive the agricultural and food industry in Thailand to become a global market leader in the future.

Surrounded by flourishing agricultural communities, Mae Fah Luang University takes an active role in the agro-industry with pride. The Master of Science Program in Innovative Food Science and Technology focuses on applying basic scientific knowledge to strengthen the agricultural and food industry of the country through research, development, and innovation. Therefore, the curriculum has been designed and developed according to the constructivist educational approach where knowledge and skills of learners will be developed from within the learner through real practices. Therefore, the Master of Science program in Innovative Food Science and Technology aims to create and develop human resources in the agricultural and food industry with professional morals and ethics. Students can apply the knowledge to solve problems in industry or work with others to further develop the agricultural and food industry.

The Master of Science Program in Innovative Food Science and Technology provides you with an understanding of modern food production and prepares you to work in various aspects of food research and development. A wide range of learning environments is available to students, including lectures (small degree programs with an excellent student-teacher ratio), tutorials, modern laboratory, and pilot plant practicals, factory visits, visiting scholars, and academic activities. This degree has strong links to Thailand's food industry leaders. With input from industry partners, you’ll create new products, develop manufacturing processes, or design foods of the future with a focus on taste, health, sustainability, food quality, and food safety. Lecturers are active researchers who'll share the latest knowledge in food safety and quality management,

food chemistry, food microbiology, functional food and nutrition, food processing technology, food product development, future food, and Geographical Indications (GI) products. In order to further expand and improve successful ongoing research projects as well as to create sustainable synergies, the program is engaged in successful and intense cooperation with excellent partners in both the national and global academic realm, including; Chiba University, Shinshu University, Tokyo University of Marine Science and Technology, Kagoshima University, Japan; Korea University, Sejong University, Kyungnam University, Korea, Bogor Agricultural University, Indonesia; Universiti Teknologi Mara, Malaysia; Universiti Putra Malaysia, Malaysia; Hohenheim University, Germany; Mendel University in Brno, Czech Republic, and IUT Lyon 1 - site de Bourg en Bresse, AgroSup Dijon, France.

Objectives:

The aims of this program are to educate the students to have the knowledge, expertise, and potency in food science and technology; and to be able to apply their skills and advanced knowledge to a food-related workplace situation, as well as create knowledge, innovation, research and development of food products to the global challenges associated with feeding the world by contributing to meet the provision of high-quality, safe and nutritionally valuable food and food products; and be able to work with others in a multicultural society, realize morality, ethics, and professional ethics.

Course Synopsis and Methodology:

1. Study plan

Study Plan for Master of Science (Innovative Food Science and Technology) for Academic Year 2022

Plan A1 (Research only)
Plan A2 (Course works and research)
Plan B (Course works and research by independent study)

2. Course Content

1) Thesis

Thesis
Independent Study in Food Science and Technology

2) Core courses

Advanced Statistics and Experimental Design for Agro-Industry
Research Methodology for Agro-Industry
Emerging Food Processing Technologies
Advanced Food Analytical Techniques
Seminar 1
Seminar 2

3) Elective courses can be divided into 2 groups of subjects. Student can choose.

3.1) Food Industrial Technology and Innovation

Food Industrial Research Project
Professional Experience in Agro-Industry
Advanced Professional Experience in Agro-Industry
Big Data Analytics for Agro-Industry
Project Management Professional for Agro-Industry
Food Business Management
Quality Control Design in Food Industry
Food Safety and Standards for Global Market
Valorization of Food Processing By-products
Advanced Food Product Innovation
Shelf Life Prediction of Food Products

Innovations in Food Packaging
Consumer Trends and Technology
Tea Science and Innovation
Coffee Technology
Economical Northern Fruits and Vegetables Technology
Future Foods
Nanotechnology in Food
Perception and the Chemical Senses of Food Products
Starch and Hydrocolloids in Designing Food Products
Trends in Food Science and Technology
Principles of Food Science and Technology
Global Food Industry
Agricultural Logistics Management

3.2) Food Chemistry and Nutrition

Chemistry of Food Macronutrients
Functional Foods and Nutraceuticals
Applied Food Proteins Chemistry
Alternative Protein Food
Dietary Phytochemicals and Chemopreventive Role
Metabolomics in Food Research
Lifecycle, Nutrigenetics and Personalized Nutrition
Food Structures, Digestion and Health

Graduation Conditions:

- Complete all required courses
- Thesis oral defense
- Thesis submission
- English language: MFU-TEP 65 / TOEFL (IBT) 72 / TOEFL (ITP) 543 / IELTS 6 or English score from other sources (see the MFU announcement)
- Publication (s): Journal (with peer review) or Proceedings in the International Conference or Patent

Applicant Qualifications

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

Document Required

- TIPP application form (Download at: https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3)
- Medical Report (If candidates had submitted other health certificates without the TICA medical report form, their application will not be accepted for consideration)
- Transcript of Bachelor's degree (to show the courses that you have learnt throughout Bachelor's degree)
- Certificate of Bachelor's degree
- English test score (TOFEL ≥450, IETLS 5.0)
- Recommendation Letter (At least 3 people)
- Thesis proposal or other documents (As university request)
- A copy of passport

Contact:

Ms. Sriprai Pundach
Admissions (Graduate) & International Collaboration
Global Relations Division, Mae Fah Luang University
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Course Detail
Master of Science Program in Agricultural and Environmental Science

Course Title:	Master of Science Program in Agricultural and Environmental Science (International Program)
Master Degree:	Master of Science (Agriculture)
Academic Institution:	Faculty of Agriculture, Khon Kaen University
Duration:	2 Years (June 2024 - May 2026)

Background and Rational:

As the number of world populations has been increasing, it is a major challenge for an agricultural researcher or scientist to produce enough food to meet the needs of the world population. The production area expansion to increase production is also limited due to the expansion of urbanization and the industrial sector. Therefore, productivity improving is the only way to produce sufficient food to meet the growing global demand. However, today's productivity must be done under complex global changes both in terms of climate change such as hot weather, drought or flood, the emergence of new pests or the return of pest outbreaks as well as the degradation of natural resources due to intensive use.

According to the contexts mentioned above, the United Nations has adopted it as 1 of the 17 Sustainable Development Goals in order to develop sustainable world economy. The goals that are important and directly aligned with agriculture such as Goal 1, Elimination of Poverty (no poverty) and Goal 2, Zero Hunger, by ensuring everyone, especially the poor and the vulnerable, that they will be able to have safe, nutritious and sufficient food. Therefore, in order to improve agricultural productivity, we must have sustainable food production system and a good agricultural practice that protects ecosystems and improves the ability to adapt to climate change, drought, flood and other disasters. Moreover, land and soil must be developed continually and the genetic diversity of plants and animals must also be maintained. Besides, it is also aligned with Goal 12 Sustainable Consumption and Production.

Therefore, body of knowledge, research and innovation are required to achieve sustainable management and efficient use of natural resources, halve the world's food waste at retail and consumer levels, and reduce the loss from the production process and supply chain, including post-harvest losses, all chemicals and waste management using environmentally friendly process, and the reduction of waste emissions into the air, water and soil to minimize the negative impacts that will have on human health and the environment as much as possible.

Objectives:

To encourage the graduate to increase their research ability, develop new knowledge, increase knowledge management and application ability for agricultural development and/or solve agricultural problems efficiently and effectively as well as leading to the development of innovation.

Course Synopsis and Methodology:

Master of Science Program in Agricultural and Environmental Science (International Program) (Curriculum revised in 2022) focuses on Research Based Learning (RBL) in order to encourage the graduate to increase their research ability, develop new knowledge, increase knowledge management and application ability for agricultural development and/or solve agricultural problems efficiently and effectively as well as leading to the development of innovation.

Study plan

Course Structure	Number of Credit	
	Plan A Type 1	**Plan A Type 2**
1. Required Courses	5 (non-credit)	5
2. Elective Courses	-	15
3. Thesis	38	18
Total Credit	38	38

Course Content

Required Courses

- Statistical Methods in Agriculture
- Seminar in Agricultural Science and Environment I
- Seminar in Agricultural Science and Environment II
- Thesis

Elective Courses

- Soil Water and Plant Relationships
- Problem Soils and Integrated Management
- Remote Sensing and Image Processing in - Agriculture and Environment
- Ecological Risk Assessment and Remediation of Contaminated Land
- Water Security and Climate Change
- Geographic Information System in Agriculture and Environment
- Agricultural Pollution and Management
- Soil Biotechnology
- Advanced Agribusiness Management
- Agribusiness Economics
- Problem Solving and Decision Making in Agribusiness
- Statistics for Agribusiness
- Agricultural Extension Methodology
- Development and Administration in Agriculture
- System Theory and Community Analysis for Agricultural Development
- Communication and Psychology for Agricultural Development
- Biological Control of Insect Pests
- Biological Control of Plant Diseases
- Organic Agriculture
- Ecosystem Management in Organic Agriculture
- Sustainable Aquaculture Fish Breeding and Production Planning
- Fish Diseases and Diagnosis
- Fish Disease Control and Health Management
- Fish Nutrition
- Fish Feed and Alternatives
- Post-harvest Technology for Aquatic Animal
- Preservation and Value-addition Technology for Aquatic Animal
- Introduction to Precision Agriculture
- Precision Farming Hardware
- Soil, Water, Nutrient and Yield Variability
- Essentials in Molecular Biology
- Agricultural Biotechnology
- Applied Plant Breeding
- Applied Animal Breeding
- Population Structure and Quantitative Genetics
- Gene Mapping
- Fundamental of OMICS
- Agriculture Bioinformatics
- Animal Cell Biotechnology
- Plant Cell Biotechnology

Graduation Conditions:

- Earning the total number of credits mentioned in curriculum regulation
- Average of cumulative GPA of coursework is not less than 3.00
- Passed the standards English skills announced by the KKU Graduate School
- Thesis work or a part of thesis work must be published or accepted for publication in a quality academic journal (listed in TCI or SCOPUS or ISI)

At least 2 papers for Plan A Type 1
At least 1 paper for Plan A Type 2

Applicant Qualifications

- Graduates with a bachelor's degree or equivalent
- Additional properties:

Plan A Type 1 There are agriculture work experience /or approved by the curriculum committee.

Plan A Type 2 Average of bachelor's degrees GPA is not less than 2.50 out of 4.00 or equivalent /or approved by the curriculum committee.

Document Required

- TIPP application form (Download at: https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3)
- Medical Report (If candidates had submitted other health certificates without the TICA medical report form, their application will not be accepted for consideration)
- Transcript of Bachelor's degree (to show the courses that you have learnt throughout Bachelor's degree)
- Certificate of Bachelor's degree
- English test score (e.g. TOEFL (PBT 400) (IBT 64) or IELTS (4.5))
- Recommendation Letter (At least 3 people)
- Thesis proposal or other documents (As university request)

Contact:

Miss Sununtha Tinpana (International Relations Officer)
E-mail: sunuti@kku.ac.th

For more information:

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Course Deatail
Master of Science Program in Food Technology

Course Title: Master of Science Program in Food Technology

Master Degree: Master of Science (Food Technology)

Academic Institution: School of Food Technology, Institute of Agricultural Technology, Suranaree University of Technology

Duration: 2 years (August 2024 - July 2026)

Background and Rationale:

Master program in Food Technology at Suranaree University of Technology has been established since 1999. Our mission is to educate and develop graduate students for leadership roles in food industry in Thailand and worldwide. To achieve sustainable growth of food industry, knowledgeable personnel in science and technology is greatly needed for developing new knowledge, research and innovation. The program is designed to equip students with up-to-date core competency in Food Science and Technology. State of the art equipment and facilities allow students to learn and gain hand-on experience required for the global job market. Moreover, our program puts emphasis for training graduate students to be independent in scholarly endeavor with professional ethics.

Objectives:

1. To produce graduates who have expertise and competences in research and have the ability to apply knowledge for food science and technology development.
2. To create new knowledge and innovation for food industry for a rapidly changing world.
3. To produce graduates who have morality, ethics and domestics and international working ability.

Course Synopsis and Methodology:

Study plan

- **Study plan for Scheme A1**

Year	Trimester 1	Trimester 2	Trimester 3
1	IAT35 7901 Thesis Plan A Scheme A1	IAT35 7901 Thesis Plan A Scheme A1	IAT35 7901 Thesis Plan A Scheme A1
2	IAT35 7901 Thesis Plan A Scheme A1	IAT35 7901 Thesis Plan A Scheme A1	IAT35 7901 Thesis Plan A Scheme A1

- **Study Plan for Scheme A2**

Year	Trimester 1	credits	Trimester 2	credits	Trimester 3	credits
1	xxxxxx Electives	8	xxxxxx Electives	7	IAT35 6801 M.Sc.Seminar I	1
2	IAT35 7902 Thesis Plan A Scheme A2	10	IAT35 6802 M.Sc.Seminar II	1	IAT35 7902Thesis Plan A Scheme A2	8
			IAT35 7902 Thesis Plan A Scheme A2	10		

Course Content

1) Compulsory Courses

M.Sc. Seminar 1

M.Sc. Seminar 2

2) Foundation courses of Food Technology

A student who doesn't hold a Bachelor of Science Program in Food Industry, Food Science, Food Technology, Food Engineering, Food Product Development and Packaging Technology may need to complete the foundation course of Food Technology (Depending on agreement of school)

Principles of Food Microbiology

Principles of Food Chemistry

Principles of Food Processing

Principles of Food Engineering

*** Grade will be presented in "S" (Satisfactory) or "U" (Unsatisfactory) and the credit of this course do not count in the credit of Elective Courses**

3) Elective Courses

The elective course of Master's degree program includes

3.1 Elective course of School of Food Technology

- Food Biotechnology
- Nutraceuticals and Functional Foods
- Cell-Based Assays for Functional Foods
- Shelf-Life Evaluation of Biological Products
- Advanced Food Microbiology
- Microbial Metabolites for Food Industry
- Risk Assessment of Microbiological Safety in Food Industry
- Instrumental Analysis of Food
- Food Carbohydrates
- Food Proteins
- Food Enzymes
- Food Lipids
- Food Flavors Technology
- Advanced Food Nutrition
- Foods for Immune System
- Starch and Modifications
- Advanced Food Processing
- Food Colloidal and Emulsion Technology
- Food Rheological Technology
- Drying Technology for Agricultural Products
- Phase/State Transition in Foods
- Physical and Engineering Properties of Biomaterials
- Transfer Processes in Food and Bioprocess
- Food Process Evaluation and Improvement
- Statistics for Food Technology Research
- Sensory Evaluation Technology
- Selected Topics in Food Technology
- Special Problems

3.2 Thesis related Elective course of graduate program from other institutes in Suranaree university of technology (Depending on agreement of school)

3.3 The course of graduate program from the university that has Cooperative Agreement of Double Degree Program with School of food technology, Institute of Agricultural Technology, Suranaree University of Technology (Depending on agreement of school)

4) Thesis

IAT35 7901 Master's thesis Plan A Scheme A1 no less than 45 credits

IAT35 7902 Master's thesis Plan A Scheme A2 no less than 28 credits

According to Regulations for Graduate Studies, Suranaree University of Technology, 2560 B.E. (2017 A.D.), the student must present thesis proposal and get approval from Thesis Proposal Committee prior to thesis registration.

Graduation Conditions:

According to Regulations for Graduate Studies, Suranaree University of Technology, 2560 B.E. (2017 A.D.), chapter 14, Graduation.

Applicant Qualifications:

Master of Science in Food Technology

Plan A (1) Focus only on doing research or thesis work for cumulative credits of at least 48 credits without course work study.

Plan A (2) Focus on doing research or thesis work with course work study for cumulative credits of at least 48 credits. Students can register Food technological course or others with approval from the school of Food technology.

The thesis work can be done at SUT or at other university or institution within Thailand or abroad. The program structure of each plan is in Table 1

Document Required

- TIPP application form (Download at: https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3)
- Medical Report (If candidates had submitted other health certificates without the TICA medical report form, their application will not be accepted for consideration)
- Transcript of Bachelor's degree (to show the courses that you have learnt throughout Bachelor's degree)
- Certificate of Bachelor's degree
- English test score (IELTS > 4.0, or TOEFL (Paper) > 400 , International program within 2 years)
- Recommendation Letter (At least 3 people)

Contact:

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Course Detail

Master of Science Program in Management Innovation in Agricultural and food Enterprise

Course Title:	Master of Science Program in Management Innovation in Agricultural and food Enterprise
Master Degree:	Master of Science
Academic Institution:	Faculty of Agricultural Technology, Chiang Mai Rajabhat University
Duration:	2 years (June 2024 - May 2026)

Background and Rationale:

Graduates have expertise in the management of agriculture and food enterprises. They have knowledge and understanding of processes throughout the production chain, green value chain. They have innovative ideas and can integrate various science concepts to develop sustainable agriculture and food establishments with uniqueness and identity based on local wisdom.

Objectives

To produce a Master's Degree with academic excellence, with knowledge, abilities, and quality following standards, and desirable characteristics as follows:

1. Apply and integrate knowledge, understanding, ability, innovations in the management of agriculture and food enterprises.
2. Have high skills in planning, systematic management, work analysis, and troubleshoot enterprise of agriculture and food.
3. Have a moral and ethical code of the profession, and be a good role model t=in bringing changes to the community and upgrading agriculture and food enterprises.

Curriculum philosophy:

Educational management system

The educational arrangement is bi-semester, with an academic year divided into two regular semesters, and a regular semester has duration of not less than 15 weeks.

Plan A type A2

Compulsory courses

- Research Methodology and Statistics for Management of Agriculture and food Enterprise
- Development Innovation in Agriculture and food Enterprise
- Overview Innovation in Field Works
- Strategic Management for Agriculture and food Enterprise
- Seminar in Development Innovation of Agriculture and food Enterprise 1
- Seminar in Development Innovation of Agriculture and food Enterprise 2

Elective courses minimum

- Community Energy
- Green Business
- Quality and Safety Innovation of Agriculture and food Product
- Innovation and Technology for Value Added Agriculture and food Product
- Management of Supply Chain and Value Chain for Agriculture and Food
- Resource Management for Community Participatory Development of Agriculture and Food Enterprise
- Advanced Data Analysis for Agriculture and food Enterprise Development
- Management Production for Agriculture and food Enterprise

- Utilization Technology of Food and Agricultural Waste
- Planning and Evaluation of Agriculture and food Enterprise Development

Thesis

Plan B

Compulsory courses

- Research Methodology and Statistics for Management of Agriculture and food Enterprise
- Development Innovation in Agriculture and food Enterprise
- Overview Innovation in Field Works
- Strategic Management for Agriculture and food Enterprise
- Seminar in Development Innovation of Agriculture and food Enterprise 1
- Seminar in Development Innovation of Agriculture and food Enterprise 2

Elective course

- Community Energy
- Green Business
- Quality and Safety Innovation of Agriculture and food Product
- Innovation and Technology for Value Added Agriculture and food Product
- Utilization Technology of Food and Agricultural Waste
- Management of Supply Chain and Value Chain for Agriculture and Food
- Resource Management for Community Participatory Development of Agriculture and Food Enterprise
- Advanced Data Analysis for Agriculture and food Enterprise Development
- Production Management for Agriculture and food Enterprise
- Planning and Evaluation of Agriculture and food Enterprise Development

Independent

- Independent study

Additional courses

- Computer for Graduate Studies
- English for Graduate Studies
- Agriculture and food Science in New Normal

Qualifications of applicants

- Applicants graduated with a bachelor's degree or equivalent in any field from a higher education institution recognized by the Civil Service Commission.

Document Required

- TIPP application form (Download at: https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3)
- Medical Report (If candidates had submitted other health certificates without the TICA medical report form, their application will not be accepted for consideration)
- Transcript of Bachelor's degree (to show the courses that you have learnt throughout Bachelor's degree)
- Certificate of Bachelor's degree
- English test score (IELTS 6 or TOEFL (IBT 65), (PBT 400))
- Recommendation Letter (At least 3 people)
- Thesis proposal or other documents (As university request)
- A copy of Passport (Bio page)

Contact:
Internatioanl Affairs Office, Chiang Mai Rajabhat University,
Chiang Mai Thailand
Email: iao@cmru.ac.th

For more information:

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Course Detail
Master of Science Program in Social and Administrative Pharmacy

Course Title:	Master of Science Program in Social and Administrative Pharmacy
Master Degree:	Master of Science
Academic Institution:	Faculty of Pharmaceutical Sciences, Chulalongkorn University
Duration:	2 years (August 2024 - July 2026)

Background and Rational:

The program places strong emphasis on interdisciplinary and comparative knowledge as well as practical applications to health and drug system. It aims to equip students with solid foundation in theory, concepts, and tools, and prepare students with ability to acquire and develop new knowledge through conducting research that could response to the drug and health system.

Objectives:

The program aims to develop graduates that have knowledge and skills in social and administrative pharmacy discipline that could synthesize health evidences logically, rationally and systematically. With the skills and knowledge acquired from the program, graduates are expected to be able to generate health evidences to inform decision making at the national level, community level, organization level or patient level.

Course Synopsis and Methodology:

Study plan

	Credits		
	Course work	**Thesis**	**Total**
Non-Course Work (Plan A1)		36	36
Course Work (Plan A2)	18	18	36

Non-Course Work (Plan A1)

Semester 1
Thesis
Seminar in Social and Administrative Pharmacy 1
Semester 2
Thesis
Seminar in Social and Administrative Pharmacy 1
Semester 3
Thesis
Semester 4
Thesis

Course Work (Plan A2)

Semester 1
Drug System Analysis
Research Method in Social and Administrative Pharmacy
Applied Statistics in Social and Administrative Pharmacy I
Seminar in Social and Administrative Pharmacy I
Thesis

Semester 2
Seminar in Social and Administrative Pharmacy II
Thesis
Electives
Semester 3
Seminar in Social and Administrative Pharmacy II
Thesis
Electives
Semester 4
Seminar in Social and Administrative Pharmacy II
Thesis

Course Content
Core course (Plan A2)
Drug System Analysis
Research Method in Social and Administrative Pharmacy
Applied Statistics in Social and Administrative Pharmacy I
Elective course (Plan A2)
Patient-Centered Health Outcomes
Drug Use Behavior
Applied Statistics in Social and Administrative Pharmacy II
Pharmacoepidemiology
Special Problems in Social and Administrative Pharmacy
Rational Drug Use
Management of Pharmacy Services
Techniques for Pharmaceutical Policy and Management Decision
Comparative Drug Regulatory Systems
Consumer Protection
Pharmacy and Health Anthropology
Pharmacy Information Management
Advanced Pharmacy Information Management
Individual Study I
Individual Study II
Individual Study III
Pharmacoeconomics
Health Insurance Systems
Pharmaceutical Policy and Planning
Qualitative Methods in Health Care and Social Pharmacy Research
Systematic Review and Meta-Analysis
Decision Analysis in Economic Evaluation for health care program

Thesis
Non-Course Work (Plan A1)
Thesis
Course Work (Plan A2)
Thesis

Graduation Conditions:

The program offers 2 tracks for MS curriculum. Both tracks require 36 credits and take approximately 2 years. Graduation condition is different for both tracks.

- Non-coursework MS track: 36 thesis creditIn this track, students are required to

- Defend their thesis with their thesis committee
- Publish an article that are related to their thesis as a condition to graduate.

The publication must be in peer-reviewed journal listed by the guidance offered by the office of the Higher Education Commission

- Coursework MS track: 18 course work credit + 18 thesis credit
- Defend their thesis with their thesis committee
- Publish an article that are related to their thesis as a condition to graduate.

The publication must be in peer-reviewed journal listed by the guidance offered by the office of the Higher Education Commission or presented in an international conference through their proceeding

Applicant Qualifications

1. Hold a bachelor's degree in pharmacy or health sciences
2. Have an English proficiency test score (taken within 2 years of the date of admission to the program) meeting the university's requirement: IELTS: 4.0, or TOEFL: 450, or CU-TEP: 45.
3. Other qualifications per Chulalongkorn Graduate School's announcement in each academic year or the approval of the Program Committee.

Document Required

- TIPP application form (Download at: https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3)
- Medical Report (If candidates had submitted other health certificates without the TICA medical report form, their application will not be accepted for consideration)
- Transcript of Bachelor's degree (to show the courses that you have learnt throughout Bachelor's degree) with at least GPA. 2.75
- Certificate of Bachelor's degree
- English test score TOEFL (PBT 400+) or (IBT 32+) or IELTS 4.5+
- Recommendation Letter (At least 3 people)
- At least one page of a statement of purpose
- Copy of passport

Contact:

Master of Science Program Department of Social Pharmacy and Administration (International), Faculty of Pharmaceutical Sciences. 254 Phayathai Road, Wang Mai Subdistrict, Pathum Wan District, Bangkok 10330 Tel. 0-2218-8386

Miss Suchanun Pimpang

e-mail: suchanun.p@pharm.chula.ac.th

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Course Detail
Master of Science Program in Epidemiology

Course Title:	Master of Science Program in Epidemiology
Master Degree:	Master of Science (Epidemiology)
Academic Institution:	Epidemiology Unit, Faculty of Medicine, Prince of Songkla University (Designated as WHO Collaborating Centre for Research and Training on Epidemiology)
Duration:	2 years (June 2024 - March 2026)

Background and Rationale:

Epidemiology is defined as **"**the study of the distribution and determinants of health-related states or events (including disease), and the application of this study to the control of diseases and other health problems". Knowledge of epidemiology can be integrated into various kinds of research, such as medical or clinical, public health, social health, education or health economics, which can be applied with global health, clinical medicine, genetic epidemiology, health sciences or zoonosis. Therefore, this epidemiology program is useful for diverse health professionals and researchers who aim to systematically develop the research that fully impacts on health.

The epidemiology program has been organized around research-based knowledge and skills incorporating learning and teaching methods that integrate both theory and practice. This experience will help the students to achieve high levels of expertise as well-trained researchers who can conduct research of international standard that has a beneficial impact on public and global health. Strong point of the program is emphasized on the field work and training in research methodology and use of open source software for analysis of research data. This program is the first in the country to develop a package designed specifically to meet the need for epidemiological data. The program also provides the training in-class and online in the use of an epidemiological statistics package in open source software. To date, training has been provided numerous countries principally in Asia and Africa. The teaching staff of the program have extensive experience in different continents and are well recognized by the international research community. The staff also have extensive experiences of teaching, supervising and taking care of students from diverse cultural and educational background including both medical, public health and social science disciplines. To these activities, the program has a significant impact on development of human resources for health research both nationally and internationally. So far, 85 M.Sc. students have graduated from the program. They were accepted from their work places and have become leaders in research and academic activities in their country.

Objectives:

1. To conduct morally and ethically sound research.
2. To design studies in response to the needs of stakeholders.
3. To search information using skills in information technology.
4. To integrate theoretical health concepts in order to solve health problems systematically through critical appraisal of the evidence.
5. To conduct community-based, community-oriented, community-participating field research.
6. To appropriately interpret the analytical outputs, and discuss the findings amidst the evolving state of knowledge.
7. To demonstrate mastery of principles of epidemiology and statistics in relation to health research.
8. To collect and analyze data properly with clear presentation in academic fashion.
9. To produce research by integration of multiple disciplines, and interpret and apply the results in a stakeholder-friendly manner, leading to solutions for the organization or the community, and publish the findings as a research article.

Course Synopsis & Methodology:

1st Semester / 2024 academic year

Medical Statistics and Statistical Computing I
Epidemiological Methods I
Appraisal of Articles in Journals

2nd Semester / 2024 academic year

Seminars in Research Methodology
Epidemiological Methods II
Field Work Research
Biostatistics and Statistical Computing II

1st Semester / 2025 academic year

Thesis

2nd Semester / 2025 academic year

Thesis

Grand total 36 credits

Graduation Conditions: To fulfill the requirements, the student must follow the requirements of each graduate program.

Applicants Qualifications:

1. Direct collaboration between our institute and the institute of the applicant.
2. Research funding from the applicant's organization or a funding agency in the applicant's country which will provide administrative support for the data collection phase during the second year of study.
3. Previous work experience related to health.
4. Healthy and active.
5. Good command of English.
6. Age not more than 40 years (preferable).
7. Having publication in a peer review journal in local or international paper.

Document Required:

- TIPP application form (Download at: https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3)
- Medical Report which includes results of chest x-ray, complete blood count, urinalysis and HIV test. (If candidates had submitted other health certificates without the TICA medical report form, their application will not be accepted for consideration)
- Transcript of Bachelor's degree (to show the courses that you have learnt throughout Bachelor's degree)
- Certificate of Bachelor's degree
- Curriculum vitae, including a list of publications if available.
- English test score (TOFEL 500, IETLS 5.0)
- Recommendation Letter (At least 3 people)
- First page of all published articles (If any)
- Research description/plan
- A copy of Passport
- Statement of purpose (approximately 500-800 words)

Contact:

Ms. Peewara Noo-urai
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Course Detail
Master of Science Program in Biomedical Sciences

Course Title:	Master of Science Program in Biomedical Sciences
Master Degree:	Master of Science (Biomedical Sciences)
Academic Institution:	Faculty of Allied Health Sciences, Naresuan University
Duration:	2 years (June 2024 – May 2026)

Background and Rational:

-By focusing on basic research, clinical research, and development research to create innovation, a course focuses on creating a Master's degree with knowledge and expertise in Biomedical Sciences.

-An interdisciplinary health sciences and medical research program that focuses on combining medical, health, and other sciences knowledge.

-By preparing to be an academic or researcher, the course's teaching and learning method emphasizes expertise of conducting research, presenting, and publishing research findings in public venues.

-Graduates of this degree will be qualified individuals in the medical and health sciences and will be able to conduct cutting-edge research, innovate, translate, distribute, and exchange academic information both nationally and worldwide.

- Faculty of Allied Health Sciences provide teaching and learning approach, and laboratory practice are supported by professional staffs and facilities.

Objectives:

To provide a Master's degree with the following qualifications

- The ability to think, analyze, and synthesize data in a scientific ways in order to conduct research or develop new ideas.
- The ability to use what has been learned to conduct study or develop new ideas.
- Proficiency in English and technological development for studying and presenting academic knowledge at a national or worldwide.
- Ability to work as part of a team to conduct research and disseminate research findings while conforming to research ethics and morals.

Course Synopsis and Methodology:

1. Study plan

Program structure

items	**Study plan**	
	Plan A	
	Type A 1	**Type A 2**
1. **Course work** (not less than)	-	24
1.1 Core Course (not less than)	-	6
1.2 Elective Course (not less than)	-	18
2. **Thesis** (not less than)	36	12
3. **Core Course non-credit** (not less than)	6	6
Total (not less than)	**36**	**36**

Course for Study Plan A Type A 1

Course

Thesis **Total 36 credits**

Thesis 1, Type A 1
Thesis 2, Type A 1
Thesis 3, Type A 1
Thesis 4, Type A 1

Core Course non-credit **Total 6 credits**

Research Methodology in Health Sciences (Non- credit)
Writing Scientific Paper (Non- credit)
Seminar 1 (Non- credit)
Seminar 2 (Non- credit)

Course for Study Plan A Type A 2

Course work **not less than 24 credits**

Core Course **Total 6 credits**

Current Topic in Biomedical Sciences
Fundamental of Cell Biology and Cell Biochemistry
or
Biostatistics in Biomedical Sciences

Thesis **Total 12 credits**

Thesis 1, Type A 2
Thesis 2, Type A 2
Thesis 3, Type A 2

Core Course non-credit **Total 6 credits**

Research Methodology in Health Sciences (Non- credit)
Writing Scientific Paper (Non- credit)
Seminar 1 (Non- credit)
Seminar 2 (Non- credit)

Elective Course **Total 18 credits**

Specific Knowledge Major

Bioinformatics and Cybertools for Research
Cellular and Molecular Physiology of Cardiovascular System
Cellular and Molecular Radiation Biology
Molecular and Cellular Biology of Cancer
Drug Action
Human Biomedical System
Molecular Epidemiology
Anatomy and Physiology of the Eye and Visual System
Ocular Drug Delivery
Overview of Ocular Pharmacology

Research Techniques Major

Research Techniques in Immunology
Biomedical Science Research Instruments
Biomedical Sciences Research Laboratory
Research Techniques in Cardiovascular System
Gene and Recombinant DNA Technology in Biomedical Sciences
Cell Culture Techniques for Biomedical Research
Separation Techniques for Biomedical Research

Applied Knowledge Major
Laboratory Animal and Applications for Biomedical Research
Applied Microscopy for Biomedical Research
Applied Vision Science Research
Innovation in Biomedical Sciences

Graduation Conditions:

Naresuan University's Rules and Regulations for Graduate Studies 2016 in item 28.

Applicant Qualifications

Naresuan University's Rules and Regulations for Graduate Studies 2016 in item 5.
English Proficiency Test:
Applicant must hold a minimum score of English proficiency from either TOEFL (paper based or internet based; not TOEFL ITP) or IELTS as shown in the followings:

- Paper-based TOEFL 417, 453 (International Program)
- Internet-based TOEFL 35, 46 (International Program)
- IELTS 5.0, 5.5 (International Program)

Document Required

- TIPP application form (Download at: https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3)
- Medical Report (If candidates had submitted other health certificates without the TICA medical report form, their application will not be accepted for consideration)
- Transcript of Bachelor's degree (to show the courses that you have learnt throughout Bachelor's degree) with at least GPA. 2.75
- Certificate of Bachelor's degree
- English test score (e.g. TOEFL (Paper based 417 , 453) (Internet based 35 , 46) or IELTS (5.0 , 5.5))
- Recommendation Letter (At least 3 people)
- Curriculum Vitae
- Publication as a full paper in an International Journal

Contact:

Assistant Professor Pachuen Potup, Ph.D. Program director
Associate Dean for Research and Graduate Studies,
Faculty of Allied Health Sciences, Naresuan University, Phitsanulok Thailand
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Course Detail
Master of Nursing Science Program

Course Title:	Master of Nursing Science Program
Master Degree:	Full degree: Master of Nursing Science Degree in abbreviation: M.N.S.
Academic Institution:	The Faculty of Nursing, Burapha University, Chon Buri Province, Clinical practice will be held in hospitals/health care service institutions/communities in Chon Buri Province and nearby provinces
Duration:	2 Years (July 2024 - June 2026)

Objectives of the Curriculum

At the end of teaching and learning according to this course The master's degree will have competencies as follows:

1. Morality, ethics, public mind, moral decision-making skills and have ethics in the practice of nursing Have a good attitude towards the profession and have good health behaviors. to be a role model and able to work well
2. Having in-depth knowledge of the contents of nursing science and related sciences in nursing practice.
3. Be able to apply nursing science and related sciences. together with the use of evidence for efficient holistic practice of complex nursing care taking into account multicultural human values under the law and professional ethics
4. Have the ability to think critically synthetic thinking creative thinking and critical thinking
5. Have the ability to research and develop innovations. to improve the quality of nursing care
6. Have the ability to apply modern and appropriate information and digital technology in health
7. Have the ability to build relationships. and effective health communication
8. Possesses leadership and ability to manage and entrepreneurial skills
9. Have self-improvement and actively and continuously seeking knowledge throughout life

Implementation of the Curriculu

Qualifications of the Intakes

1. Meet the requirements set forth by Burapha University for graduate studies, as per the regulations in 2019.
2. Hold a bachelor's degree in nursing or its equivalent and possess a valid nursing license. Non-Thai nationals must have completed a bachelor's degree program in Nursing Science or its equivalent, hold a valid nursing license issued by their professional council or relevant organization in their home country, and be endorsed by their home country's Nursing Regulatory Authority.
3. Have at least one year of nursing experience as of the date of application.
4. Possess an English proficiency score that meets the university's requirements.
5. In the event that the qualifications do not meet the criteria outlined in clauses 1 to 4, the final decision will be made by the Course Management Committee.

Curriculum

Number of credit requirements

Plan A type A 2 not less than	36 credits

Curriculum Structure

Plan A type A 2	
Required Courses	21 credits
Elective Coures not less than	3 credits
Thesis	12 credits

Courses

Plan A type A 2

Required Course 21 credits

1. Core Courses 9 credits

- Nursing Theory and Concepts
- Applied Statistics for Nursing Research
- Policy and Health System
- Nursing Research and Research Utilization

2. Specialty Courses 12 credits

- Integrated Health Sciences in Nursing*

Students enroll 4 more courses from a specialty selected pathways 10 credits

Courses for Community Nursing Pathway

- Advanced Community Nursing I
- Advanced Community Nursing Practicum I
- Advanced Community Nursing II
- Advanced Community Nursing Practicum II

Courses for Maternity Nursing and Midwifery Pathway

- Advanced Maternity Nursing and Midwifery I
- Advanced Maternity Nursing and Midwifery Practicum I
- Advanced Maternity Nursing and Midwifery II
- Advanced Maternity Nursing and Midwifery Practicum II

Courses for Adult Nursing Pathway

- Advanced Adult Nursing I
- Advanced Adult Nursing Practicum I
- Advanced Adult Nursing II
- Advanced Adult Nursing Practicum II

Courses for Gerontological Nursing Pathway

- Advanced Gerontological Nursing I
- Advanced Gerontological Nursing Practicum I
- Advanced Gerontological Nursing II
- Advanced Gerontological Nursing Practicum II

Courses for Psychiatric & Mental Health Nursing Pathway

- Advanced Psychiatric & Mental Health Nursing I
- Advanced Psychiatric & Mental Health Nursing Practicum I
- Advanced Psychiatric & Mental Health Nursing II
- Advanced Psychiatric & Mental Health Nursing Practicum II

Courses for Pediatric Nursing Pathway

- Advanced Pediatric Nursing I
- Advanced Pediatric Nursing Practicum I
- Advanced Pediatric Nursing II
- Advanced Pediatric Nursing Practicum II

Courses for Nursing Administration Pathway

- Human Resource Management in Nursing Organization
- Leadership and Management in Nursing Organization
- Health Care Quality Management Practicum
- Health Service Management in Health Care Organization
- Nursing Administration Practicum

Elective course*not less than 3 credits

- Nursing Management
- Teaching in Nursing

- Advanced Practice Nursing Role Development
- Health Behavior and Heath Promotion and Prevention
- Family and Illness

Thesis 12 credits

- Thesis

Contact

- Ms. Rungnapa Yodchot
- International Affairs Staff,
- Faculty of Nursing, Burapha University
- Email : rungnapae@buu.ac.th

Document Required

- TIPP application form (Download at: https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3)
- Medical Report (If candidates had submitted other health certificates without the TICA medical report form, their application will not be accepted for consideration)
- Transcript of Bachelor's degree (to show the courses that you have learnt throughout Bachelor's degree)
- Certificate of Bachelor's degree
- English test score (e.g. TOEFL 400, IELTS 6.0)
- Recommendation Letter (At least 3 people)
- Thesis proposal or other documents (As university request)
- A copy of passport

For more information:

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Course Deatail
Master of Science Program in Occupational Medicine and Occupational Health

Course Title:	Master of Science Program in Occupational Medicine and Occupational Health
Master Degree:	Master of Science in Occupation Medicine and Occupational Health
Academic Institution:	Department of Community Medicine, Faculty of Medicine and Graduated School, Khon Kaen University, Khon Kaen, Thailand
Duration:	2 years (June 2024 - May 2026)

Background and Rational:

Worker's health is an important issue to support productivities of the countries. Only a small proportion of the global workforce has access to occupational health services for primary prevention and control of diseases and injuries caused or aggravated by work. The 60th World Health Assembly endorsed a Global Plan of Action on Workers' Health for 2008-2017 and urged WHO member states to devise national policies and plans for its implementation. Only one third of countries cover more than 30 percent of their workers with occupational health services. Policy- and standard-setting ministries lack capacity for enforcement and monitoring. One third of countries has no ministry of health staff dedicated to workers' health. While most countries have some human resources for health, academic training needs to be scaled up. Although half the countries have national workers' health profiles with data on occupational diseases, injuries, and legislation, information about communicable and noncommunicable diseases among workers and about lifestyle risks are the least covered topics. Most countries have national institutions carrying out research and training, but the distribution of such entities is uneven across country groups. Awareness about workers' health problems remains low, both in the media and among the general public. Workers' health issues feature in policies concerning management of chemicals, emergency preparedness and response, employment strategies, and vocational training. However, workers' health is seldom considered in policies regarding climate change, trade, economic development, poverty reduction, and general education. Although most countries had some strategies, standards, and targets for coverage of occupational health services, only one third covered more than 30% of their workers with such services. While ministries of health are traditionally strong in legislation, policy and standard setting for occupational health services, in most countries these ministries lacked sufficient capacity to deal with workplace inspection and monitoring of workers' health trends.

Human resources in occupational health and occupational medicine are limited, ministries of health had no staff dedicated to workers' health. Most countries had some human resources for occupational health. However, academic training in occupational health needs to be scaled up at both undergraduate and postgraduate levels. As expected, mostly those in the low income group, human resources for occupational medicine and occupational health were not at all sufficient. Several countries reported that occupational health was not included in undergraduate training in medicine (10%), nursing (16%), public health (10%), engineering (19%), and physical science (31%). In those countries where occupational health was included in undergraduate training, this training was usually rated as "insufficient." Only in the Western Pacific Region were satisfied with the level of inclusion of occupational health in undergraduate training in medicine.

The proportion of countries with occupational health degree programmes in medicine was highest in the European and American regions and lowest in the South-East Asian and African regions. As country incomes rose, so did the proportion of countries offering such programme. Therefore, several countries particularly, the developing countries need to build up occupational health and occupational medicine practice and that strengthening human resource capacity are a crucial issue.

Conducting postgraduate course –Master degree in Occupational Medicine and Occupational Health will fill a gap of lacking human resources particularly occupational physicians, occupational health doctors, some occupational health professions in developing countries.

To conduct this Master program will definitely gain experience for the academic department and faculties as well as the instructors. At the of the day, the reputation of the country. Following this, our department will be able to apply to be a collaborating center of some international agencies such as WHO.

Division of Occupational Medicine, Department of Community Medicine has incorporated well with various clinical specialties in the faculty and other public health and occupational health professions. There are 8 years of experience in conducting the Master degree in Occupational Medicine and the residency training programme in Preventive Medicine (Occupational Medicine). Together with 15 years of experience in running a short course in occupational health and safety management for hospital personnel. The course produced 3059 health workers (from 640 hospitals across Thailand). In addition, in 2002, we hosted the short course in Occupational Epidemiology supported by International Agency Research on Cancer (IARC/WHO, Lyon-France) and there were participants from 5 countries. In 2017, our division hosted the International Conference on Occupational Health for Health Workers, it was organized by Scientific Committee on Occupational Health for Health Worker under International Commission of Occupational Health (ICOH). For the facilities, the faculty is well equipped with classrooms, audiovisuals, telecommunication, e-learning and other learning materials. The division of Occupational Medicine has worked well with other departments such as the Dept of Medicine, Otolaryngology, Orthopaedics, Surgery, Psychiatry, Toxicology and etc. in both medical service, Master program and residency training. The department has three occupational medicine professions and one occupational health PhD degree together with PhD qualification in public health and epidemiology. Therefor our faculty and department contain several experts to run the Master program in Occupational Medicine and Occupational Health. In addition, such programs like this are very limited around Southeast of Asia and developing countries eve middle to upper middle developing countries.

Objectives:

Main objectives

(1) Thoroughly understanding of the principle of occupational medicine and occupational health, and applying the knowledge to research or working in advance professional.

(2) Understanding of the principle and the theory of occupational medicine and occupational health as a multidisciplinary.

(3) Having the skill of occupational medicine and occupational health management and service, analyzing the working-age health problems research.

(4) Having positive attitude toward the prevention of health problems on the treatment and attitude to be the leader of occupational medicine and occupational health with the skill to diagnose work-related or occupational diseases.

(5) Having an good interpersonal skill especially with the multidisciplinary professionals and having the professional responsibility

Minor objectives

(1) Having an ability to do the research or innovative academic project in occupational medicine and occupational health.

(2) Having an ability of analyzing, synthesizing, communicating, using the computer and information technology, and operating a modern management which lead to widespread knowledge development and application.

(3) Being an ethically academic professional and having leadership of promoting good manner in an academic and professional role.

Course Synopsis and Methodology:

Study plan

Academic term: 2 semesters per year

Course credits: Total 36 credits

Course Content

Subjects	**Credits**
1) Compulsory	18
2) Optional	6
3) Thesis	12

Subjects lists

Compulsory

- Clinical Occupational Medicine
- Occupational Epidemiology
- Occupational Hygiene and Risk Assessment
- Seminar in Occupational Medicine and Occupation Health I
- Occupational Medicine in Occupational Health Service
- Research Methodology and Statistics in Occupational Health
- Occupational Toxicology
- Occupational Health and Safety Management
- Seminar in Occupational Medicine and Occupation Health II

Optional

- Integration of Occupational Health for Health Worker and Quality of Health Care Service
- Field Practice in Occupational Hygiene
- - Direct reading and Personal sampling
- Occupational Ergonomics
- Clinical Preventive Medicine
- Application of Health Economics in Health Care Services
- Standard and Legal Aspects in Occupational Health
- Occupational Mental Health

Graduation Conditions:

Full thesis and one thesis publication to Thailand citation index at level TCI rank 2

Applicant Qualifications

1) Graduation bachelor degree in nursing science, occupational health and safety, Doctor of Medicine or other fields associated with GPA not less than 3.00
2) Already qualified to study in this course at the date of applying scholarship
3) Age not over 35 years old at the date of applying scholarship
4) At least 1 year professional working experience
5) Adequate English proficiency at least
   - TOEFL (IBT) 60
   - TOEFL (CBT) 173
   - TOEFL (paper) 500
   - IELTS 5.5
   - CU-TEP 60

6) For students who have commitment working in the company or organization after graduation would be first priority

Document Required

- TIPP application form (Download at: https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3)
- Medical Report (If candidates had submitted other health certificates without the TICA medical report form, their application will not be accepted for consideration)
- Transcript of Bachelor's degree (to show the courses that you have learnt throughout Bachelor's degree)
- Certificate of Bachelor's degree
- English test score (e.g. TOEFL (Paper based test 500) (Internet based test 60) or IELTS (5.5))
- Recommendation Letter (At least 3 people)

Contact:

Coordinator
Assoc. Prof. Naesinee Chaiear
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For more information:

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Course Deatail
Master of Chemistry

Course Title: Master of Chemistry

Master Degree: Master of Science (Chemistry)

Academic Institution: Faculty of Science, Mahidol University

Duration: 2 years (August 2024 - July 2026)

Background and Rationale:

The COVID-19 crisis has shown a big impact on the global economy, and it speeds up the disruptive technology for future productions. Together with an increasing influence of climate change, which constantly changes the landscape of natural resources and social challenges, contemporary chemistry education clearly needs an update in a timely manner.

The M.Sc. Program in Chemistry just completed its tenth year after its first use in 2013. The program is designed to not only cultivate students with in-depth knowledge in chemistry and related disciplines, but it also prepares them with skills and perspectives that bode well for their future career in a changing world.

Objectives

By the end of the study, students are able to

1. Graduates have good moral understanding and conform to scientific ethics and social responsibility.
2. Graduates possess adequate knowledge in chemistry.
3. Graduates show analysis and synthesis thinking and are able to solve problems, propose a solution, and create innovation in chemistry.
4. Graduates show good human relations, leadership, and responsibility.
5. Graduates attain analytical, communication, and information technology skills.

Course Synopsis and Methodology:

The core belief of this program is to provide our students with an education of high quality, on par with international standards. Both advanced principles in organic chemistry, analytical chemistry, inorganic chemistry, physical chemistry and chemical physics, chemistry for natural resources and waste, and catalysis science and technology as well as general skills are all an integral part of the teaching to instill professional capability, personal quality, and long-life learning that are competitive in the employment market and the society at large. Ethics and moral standard are also incorporated in the teaching to ensure that our graduates can fulfill Mahidol University's philosophical view of higher education, namely, "True success is not in the learning, but in its application to the benefit of mankind."

Course Content

First Semester	**Second Semester**
- Frontiers in Chemistry	- Seminar in Chemistry
- Chemical Safety and Risk Management	- Business Models in Chemical Industries
- Scientific Communications	- Research Progress in Chemistry
- State-of-the-Art of Instrumentation	- Thesis
- Research Project Development I	- Elective Courses
- Elective Courses	
- Thesis	- Thesis

Graduation Conditions:

Requirement	Plan A2
Time of study	The duration of study shall not exceed the study plan
Credit requirement	At least 24 credits of courses and 12 credits of thesis
GPA requirement	At least 3.00 upon completion of all courses
English proficiency	As required by the Faculty of Graduate Studies
Soft skills	Fulfill soft skill training in each of the following areas: language and communication, leadership, research, and information technology
Thesis examination	Pass proposal, open thesis defense
Publication from thesis work	At least 1 scientific conference proceeding

Applicant Qualifications

1. Obtained B.Sc. in chemistry or related fields from academic institutions recognized and attested by the Office of the Higher Education Commission; for Plan A2: Obtained a minimum GPA of 2.50;
2. Obtained an English Proficiency Examination score as required by the Faculty of Graduate Studies;

Document Required

- TIPP application form (Download at: https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3)
- Medical Report (If candidates had submitted other health certificates without the TICA medical report form, their application will not be accepted for consideration)
- Transcript of Bachelor's degree (to show the courses that you have learnt throughout Bachelor's degree)
- Certificate of Bachelor's degree
- English test score (IELTS 6, or TOEFL (IBT 6.5) , (PBT 400), International program within 2 years)
- Recommendation Letter (At least 3 people)

Contact:

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Course Detail
Master of Engineering Program in Artificial Intelligence and Internet of Things

Course Title:	Master of Engineering Program in Artificial Intelligence and Internet of Things
Master Degree:	Master of Engineering (Artificial Intelligence and Internet of Things)
Academic Institution:	Sirindhorn International Institute of Technology, Thammasat University, Rangsit Campus
Duration:	2 years (August 2024 - July 2026)

Background and Rational:

Nowadays, economy and society are rapidly changing in various aspects. To address these changes, it is necessary for SIIT to develop the Master of Engineering Program in Artificial Intelligence and Internet of Things curriculum that is up to date and enable graduates to professionally cope with current challenges in their working life with morals and ethics. The SIIT curriculums are established according to the aim of Thammasat University to produce skillful graduates who can bring their knowledge and ability to sustainably develop the country in terms of economy and society.

Objectives:

To educate graduate students to be able to conduct high quality and innovative research in engineering and related technological development.

Course Synopsis and Methodology:

1. Study plan

Number of the total credits not less than 39,36 credits

Plan A; A2 (Coursework and research plan)	**39**	**Credits**
- Compulsory Courses	15	Credits
- Compulsory Elective Course	3	Credits
- Technical Elective Courses	6	Credits
- Master's Thesis	15	Credits

2. **Course Content/Study Topic:**

Plan A2

Major: Artificial Intelligence and Internet of Things (AI&IoT)

- Software Concepts for Artificial Intelligence and Internet of Things
- Software Designs for Artificial Intelligence and Internet of Things
- Hardware Concepts for Artificial Intelligence and Internet of Things
- Hardware Designs for Artificial Intelligence and Internet of Things
- Research Methods and Communications
- Research Methodology
- Research Seminar

Compulsory Elective Course:

- Advanced Engineering Mathematics
- Theory of Computation
- Advanced Business Statistics
- Numerical Methods for Engineers
- Computer Applications for Engineers
- Computational Mathematics
- Decision Making and Optimization

Technical Elective Courses

- Communication Theory and Connectivity
- Digital Signal Processing and Internet of Things
- Data Science and Intelligent Processing
- Control Theory and Intelligent Control
- Current Topics in Information and Communication Technology
- Current Topics in Artificial Intelligence and Internet of Things

- Advanced Topics in Artificial Intelligence and Internet of Things
- Selected Topics in Artificial Intelligence and Internet of Things

Master's Thesis

Major: Applied Artificial Intelligence (Applied AI)

Fundamentals of Artificial Intelligence
Fundamentals of Machine Learning
Programming in Artificial Intelligence
Applications of Artificial Intelligence
Research Methods and Communications
Research Methodology
Research Seminar

Compulsory Elective Course,

Advanced Engineering Mathematics
Theory of Computation
Advanced Business Statistics
Numerical Methods for Engineers
Computer Applications for Engineers
Computational Mathematics
Decision Making and Optimization

Technical Elective Courses

Natural Language Processing and Its Applications
Computer Vision and Its Applications
Internet of Things, Signal Processing, and Its Applications
Robotics and Its Applications
Current Topics in Digital Technology
Current Topics in Applied Artificial Intelligence
Advanced Topics in Applied Artificial Intelligence
Selected Topics in Applied Artificial Intelligence

Master's Thesis

Graduation Condition:

Plan A2

1. Twenty-four credits of taught courses required by the curriculum with a cumulative GPA of at least 3.00. In addition, the grade of each of these courses must be at least "C."
2. Fifteen credits of thesis work and passing a thesis defense.
3. Approval of the thesis by the Thesis Committee.
4. Papers are published in one of the following:
   - At least one paper on thesis results must have been published or accepted for publication in a qualified international journal under the regulations on classification of academic journals for research publications by the Higher Education Commission and the SIIT Academic Committee, or
   - At least one paper on thesis results must have been published or accepted for publication in a qualified national journal under the regulations on classification of academic journals for research publications by the Higher Education Commission and the SIIT Academic Committee, or
   - At least one paper on thesis results must have been accepted and registered for presentation in an international conference and also for publication of a full paper in international conference proceedings.
5. Having satisfied one of the following English proficiency requirements:
   - IELTS score of not less than 6.5
   - Institutional TOEFL score of not less than 550
   - TOEFL (Internet-Based Test-IBT) of not less than 79, or TOEFL (Internet-Based Test-IBT) Home Edition of not less than 79, or TOEFL (Paper-Based Test-PBT) of not less than 550
   - TU-GET (Paper-Based Test-PBT) of not less than 550, or TU-GET (Computer-Based Test-CBT) of not less than 79
   - TOEIC score of not less than 750 and he/she must also pass an English efficiency evaluation by an SIIT native English speaking instructor
   - TU005 English 1 and TU006 English 2 grades of P (Pass)

The score must not be older than 2 years from the test date to the start of the academic semester prior to the student's first academic semester and must not be older than 2 years from the test date to the student's entrance examination date.

Exemption: An applicant who is a native English speaking student from Australia, Canada, New Zealand, United Kingdom, or USA may be exempted from the above English proficiency requirements if he/she passes an interview by an SIIT interviewing committee consisting of 3 native English speaking instructors.

Qualification:

Applicants' qualification	**Master of Engineering Program in Artificial Intelligence and Internet of Things**
	Plan A2
Education level	A bachelor's degree in engineering, science, or a related field that is accepted by the SIIT Executive Committee.
GPA	A top 20% class rank for a bachelor's degree, or a cumulative GPA of at least 2.75, or a research work published or accepted for publications, or a research experience, or a working experience, or qualifications specified by the SIIT Executive Committee.
Work experience	If any
Engineering and Technology research experience	If any
English language proficiency	An applicant must submit an official score for one of the following English language tests: • TOEFL score of not less than 400 (paper-based), or 32 (internet-based), or 32 (internet-based Home Edition) • Institutional TOEFL score of not less than 400 • IELTS score of not less than 4.5 • TU-GET score of not less than 400 (paper-based) or 32 (computer-based) • TOEIC score of not less than 500 The score must not be older than two years from the date on which it was issued to the date of the application for admission to the program. In the case of no English score or a score less than the above requirements, the applicant may be admitted with conditions that he/she must take SIIT English remedial courses and/or SIIT English proficiency tests, and meet the requirements set by the institute. Exemption: An applicant who is a native English speaking student from Australia, Canada, New Zealand, United Kingdom, or USA may be exempted from the above English proficiency requirements if he/she passes an interview by an SIIT interviewing committee consisting of 3 native English speaking instructors.
Special qualification	-

Document required:

- TIPP application form (Download at: https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3)
- Medical Report (If candidates had submitted other health certificates without the TICA medical report form, their application will not be accepted for consideration)
- Transcript of Bachelor's degree (to show the courses that you have learnt throughout Bachelor's degree) with at least GPA. 2.75
- Certificate of Bachelor's degree

- English test score TOEFL (PBT 400+) or (IBT 32+) or IELTS 4.5+
- Recommendation Letter (At least 3 people)
- At least one page of a statement of purpose
- Research papers, publications, or certificates (if any)
- A recent photograph (1x1.5 inches' size as .jpeg only)

Contact:

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Course Detail

Master of Science Program in Pharmaceutical Sciences and Technology

Course Title:	Master of Science Program in Pharmaceutical Sciences and Technology
Master Degree:	Master of Science (M.Sc.)
Academic Institution:	Faculty of Pharmaceutical Sciences, Chulalongkorn University
Duration:	2 years (August 2024 to July 2026)

Background and Rational:

Pharmaceutical Sciences and Technology (PST) is a world-class graduate program in Thailand (QS Top University Ranking in Pharmacy & Pharmacology: 150-200). It is administered by the Faculty of Pharmaceutical Sciences, Chulalongkorn University. Due to the University's policy to increase the number of graduate students and foster research achievements, the PST program was established in 2018 as a result of integration of several former departmental graduate programs to pave a way for a multidisciplinary program that incorporates several areas of pharmaceutical research from preclinical to clinical drug discovery and development pipelines under global academic and industrial collaborations.

PST has a strong and interactive group of faculty members and graduate students with research expertise and focus in different fields of Pharmaceutical Sciences – Pharmaceutics, Industrial Pharmacy, Medicinal Chemistry, Pharmaceutical Analysis, Pharmacology, Toxicology, Pharmacognosy, Pharmaceutical Biotechnology, Microbiology, Immunology, and others including Cosmetic Science, Food Chemistry and Medicinal Nutrition. Their multidisciplinary research provides an ideal foundation from which to pursue cutting-edge applications in addition to traditional fields in Pharmaceutical Sciences. The Faculty of Pharmaceutical Sciences has facilities, utilities, equipment, and instruments to support research works, e.g. those of departmental research laboratories, Pharmaceutical Research Instrument Center (PRICE) and Chulalongkorn University Drug and Health Products Innovation & Promotion Center (CU.D.HIP.).

The program provides Master's Degree in both coursework and non-coursework curriculum. Broad spectrum and advance pharmaceutical research are offered in 6 research tracks including (I) Drug Delivery System and Pharmaceutics, (II) Food Chemistry and Medicinal Nutrition, (III) Herbal Medicine and Natural Products (IV) Medicinal Chemistry and Pharmaceutical Analysis (V) Pharmaceutical Biotechnology and Microbiology (VI) Pharmacology and Toxicology.

The program is available for those holding Bachelor's degree in Pharmaceutical Sciences, Sciences or related fields. It is delivered in both Thai and English in a well-balanced international environment. To enhance their knowledge and research skills, our students learn from national and international experts. All graduates produce research outcomes in the form of world-class proceedings, research articles, and intellectual property.

Objectives:

To develop Master graduates in the Pharmaceutical Sciences and Technology that have knowledge, understanding, and ability to conduct research in their associated fields, with an ultimate aim to develop pharmaceutical scientists who are research leaders and experts in pharmaceutical and healthcare product industries (e.g. those of medicines, herbal medicines, biologics, dietary supplements, and cosmetics)

Course Synopsis and Methodology:

1. Study plan: Master Degree

Non-Course work (Plan A1)

Thesis/Dissertation 36

Total 36

Course work (Plan A2)

Course work 18

Thesis/Dissertation 18

Total 36

Non-coursework program (A1)

- Thesis

Coursework program (A2)

Course Content:

Required courses

Research Methodology in Biopharmaceutical Sciences
Principles in Drug Discovery and Development
Seminar in Pharmaceutical Sciences and Technology
Presentation and discussion on pharmaceutical sciences and technology research
Master Seminar in Pharmaceutical Sciences and Technology

Elective courses

Principles of Research Ethics

Other elective courses are categorized into 6 tracks

Drug delivery systems and pharmaceutics:
Food chemistry and medicinal nutrition:
Herbal medicines and natural products:
Medicinal chemistry and pharmaceutical analysis:
Pharmaceutical biotechnology and microbiology

Graduation Conditions:

To be eligible to receive a certificate or diploma, students must satisfy the following requirements.

- Students have earned the number of credit hours required by their program and maintain no less than a 3.0 grade point average.
- Students have observed the regulation about the duration of study: Master's program students are allowed up to four academic years to complete their studies.
- The thesis or part of the thesis has been published, accepted for publication or considered as having been published by the Graduate School Board.
- The research article, which is in partial fulfillment of the thesis requirement for a Master's program must have been published or accepted for publication in an academic journal or publication or has been presented at a conference with full proceedings.

Applicant Qualifications:

Plan A1 Thesis-only program

1. Applicants must hold a Bachelor's degree in Pharmaceutical Sciences or Sciences or related fields and approved by the academic program committee.
2. Applicants must have research experiences and must provide two recommendation letters.
3. Other qualifications are according to regulation of Graduate School, Chulalongkorn University.

Plan A2 Course and thesis program

1. Applicants must hold a Bachelor's degree in Pharmaceutical Sciences or Sciences or related fields or otherwise approved by the academic program committee.
2. Applicants must provide two recommendation letters.
3. Other qualifications are according to regulation of Graduate School, Chulalongkorn University.

Document Required:

- TIPP application form (Download at: https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3)
- Medical Report (If candidates had submitted other health certificates without the TICA medical report form, their application will not be accepted for consideration)
- Transcript of Bachelor's degree (to show the courses that you have learnt throughout Bachelor's degree) with at least GPA. 2.75
- Certificate of Bachelor's degree
- English test score TOEFL (PBT 400+) or (IBT 32+) or IELTS 4.5+
- Recommendation Letter (At least 3 people)

Contact:

For further information, please contact: Division of Graduate Studies and Lifelong Learning Affairs, Faculty of Pharmaceutical Sciences, Chulalongkorn University
Patanachai K. Limpikirati, Ph.D. (Program Secretary)
Khanitta Sakaew (Education Service Staff)
Email : PharSciTech@pharm.chula.ac.th

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Course Detail
Master of Engineering / Master of Science in Energy Technology and Management

Course Title:	Master of Engineering / Master of Science in Energy Technology and Management
Master Degree:	Master of Engineering / Master of Science
Academic Institution:	The Joint Graduate School of Energy and Environment (JGSEE), King Mongkut's University of Technology Thonburi (KMUTT)
Duration:	2 Academic Years (August 2024 – July 2026)

Background and Rationale:
Graduates from the Master of Science/Master of Engineering program in Energy Technology and Management will demonstrate professionalism through their technical and academic knowledge and capabilities in practical problem-based research, and their morals and ethics towards sustainability and self-sufficiency development pathway, and the society. The graduates will capable to conduct collaborative research and/or technical works at the local, national, international especially at regional (e.g. GMS, ASEAN, etc.) levels on energy critical issues, including energy security, energy efficiency, energy policy, and energy and climate change and its mitigation options. Their abilities and skills include energy and environmental data and information analysis, diagnosis, and synthesis in order to develop, adapt and select appropriate technologies, methods and approaches, enabling the country to go towards green economy and sustainable development. Their professionalism should significantly benefit countries in the Asia-Pacific region as well as others in the world that are on the way of rapid growth development under the context of globalization. On an aspect of smart urban development, this program focuses on advanced digital technologies, energy storage, and intelligent net-zero energy buildings to enhance energy efficiency and renewable energy use. For the sustainable bioeconomy viewpoint, this program develops biomass and waste technologies for energy production and GHG emission reduction.

Objectives:
- To produce graduate scientists and engineers who have acquired advanced theoretical and practical knowledge and skill in the fields of energy and environment, professionally capable to analyze and synthesize data into key findings to be disseminated to stakeholders in native language and in English.
- To produce graduate scientists and engineers specialized in energy related issues, who possess capabilities to understand and develop approaches or solutions to energy problems and their implications on the environment.
- To promote capacity building by hands-on research and problems/challenges solving for both public and private sectors.

Course Synopsis and Methodology:
Study plan 40 Credits

	Credits
Compulsory	10
Specific Compulsory	6
Elective	3
Thesis	12
Internship	9
Total	**40**

Course content

1. Compulsory Courses

- Seminar
- Research Methodology
- Energy and Environmental Economics, Management and Policy
- Energy Entrepreneurship

2. Specific Compulsory Courses

Advanced Fuel Processing Laboratory (AFPL)

- Fuels and Combustion
- Energy System Modeling
- Catalytic Processes and Reaction Engineering
- Renewable Energy Technologies
- Energy from Biomass

Building Energy Science and Technology Laboratory (BEST)

- Seminar
- Strategic Planning and Project Management
- Energy Management in Industry
- Climate Influence on Buildings and End-use Requirements 3 credits
- Building utility design and waste management
- Building Energy Performance Assessment
- Daylighting Applications
- Advanced Topics in Building Energy Technology
- Building Economics and Finance
- Design of Suitable Urban Ecology

Energy and Environmental Policy Laboratory (EEPL)

- Energy and Environmental Econometric Modeling and Analysis
- Foundation of Economics
- Financial Analysis and Project Appraisal
- Strategic Planning and Project Management
- Energy Outlook and Green House Gases Emissions in ASEAN

Other

- Special study I

3. Elective Courses Elective As recommended by advisor

4. Thesis Thesis for M.Eng/M.Sc Energy T&M

5. Internship

Internship

Graduation Conditions:

Earning credits: The students are required to pass all the subjects (40 Credits) with minimum grade of each subject must be above C and the total average grade (GPA) must be above 3.00

Publications or International Conference: 1 National Journal or 1 International Conference

Applicant Qualifications

M.Sc program must hold a first degree in engineering, science, economics, technology, agriculture or related fields. M.Eng program must hold in engineering only, with a minimum GPA of 2.50, or be ranked top 25% of the class. Applicants with other qualifications may be admitted on a case by case basis subject to the approval of JGSEE's Executive Committee.

Document Required

TIPP application form (Download at: https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3)

- Medical Report (If candidates had submitted other health certificates without the TICA medical report form, their application will not be accepted for consideration)
- Transcript of Bachelor's degree (to show the courses that you have learnt throughout Bachelor's degree)
- Certificate of Bachelor's degree
- English test score (IELTS 6, TOEFL iBT 78, International program within 2 years)
- Recommendation Letter (At least 3 people)
- Thesis proposal or other documents (As university request)
- A copy of Passport (Bio page)
- Tentative proposal

Contact:

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  Head of Academic Services Section
  Tel: 02-470-8338
  E-Mail: yuthasak.nga@kmutt.ac.th
- Mr. Adisorn Jeungprasopsuk
  Academic Officer
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Course Deatail
Master of Chemical and Process Engineering

Course Title:	Master of Chemical and Process Engineering
Master Degree:	Master of Engineering (Chemical and Process Engineering)
Academic Institution:	The Sirindhorn International Thai-German Graduate School of Engineering King Mongkut's University of Technology North Bangkok
Duration:	2 years (August 2024 - June 2026)

Background and Rationale:
The curriculum of CPE program is designed along the same principles as the RWTH Aachen University German version, at the same time adapted to support the industrial development in Thailand. It is meant to create postgraduate engineers not only with hands-on knowledge, but also with research skills and competencies for chemical industry.

Objectives:
1. Plan A1: Research only. This study plan is specifically designed for those who have some industrial experience and wish to emphasize on research and development. The students taking this plan will conduct research entirely for four semesters. Although coursework is not compulsory, they may be requested to sit-in some courses that will assist in their research work.
2. Plan A2: Coursework, Internship and Thesis. This intensive study plan is suitable for those who wish to master advanced knowledge as well as engineering skills and work competencies. The students will take ten advanced courses in the first year to strengthen their fundamental knowledge. In the second year, the students will learn how to apply their knowledge in a project-based internship and industrial research project.

Course Synopsis and Methodology:
Please see attached file
MASTER STUDY PROCESS FLOW (Plan A1 Starting 2020)
MASTER STUDY PROCESS FLOW (Plan A2 Starting 2020)

Study plan:
Plan A (1) of CPE (4 semesters) total 46 credits
Course : Master Thesis

Plan A (2) of CPE (4 semesters) total 46 credits
Course :
Semester I
- Heterogeneous Kinetics
- Molecular Thermodynamics and Interfacial Properties
- Chemical Product Design
- Elective
- Elective

Semester II

- Molecular and Interfacial Transport Phenomena
- Chemical Process Design
- Seminar on Modern Aspects of Chemical
- and Process Engineering
- Elective
- Elective

Semester III

- Industrial Internship (18 weeks)
- Semester IV
- Master Thesis

List of Electives of TGGS/CPE as approved by the TGGS Coordinators:

- Advanced Separation Technology
- Multiphase Flow
- Advanced Process Heat Integration
- Biochemical Engineering
- Membrane Technology
- Energy Technology for Chemical Engineer
- Catalytic Reaction Engineering
- Industrial Enzymology
- Selected Topics in Chemical and Process Engineering I
- Selected Topics in Chemical and Process Engineering II
- Biorefinery
- Process Modeling and Simulation

Graduation Conditions:

1. Complete 30 credits of Course work for Plan A (2) and complete 46 credits of Master Thesis for Plan A (1)
2. the student must complete 4 credits of industrial internship for Plan A (2);
3. the student must complete 12 credits of master thesis for Plan A (2);
4. the student must partially publish the thesis work in at least the International conference proceeding with a full paper or the International journal for Plan A (2) or the International journal for Plan A (1); and
5. the student must pass the English Proficiency Test with TOEFL 525+ (PBT), TOEFL 196+ (CBT), TOEFL 69+ (IBT), IELTS 5.5+ (Academic Module) or CU-TEP 69+ (120 Score)

Applicant Qualifications

1. Bachelor degree in engineering or related fields, awarded by an internationally recognized university
2. Minimum GPA of 3.00 (or 2.50 plus adequate work or research experience)
3. Good reading, writing, and communication skills in English and submit English Proficiency Test Score

Document Required

- TIPP application form (Download at: https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3)
- Medical Report (If candidates had submitted other health certificates without the TICA medical report form, their application will not be accepted for consideration)
- Transcript of Bachelor's degree (to show the courses that you have learnt throughout Bachelor's degree)
- Certificate of Bachelor's degree
- English test score (IELTS 6, or TOEFL (IBT 6.5) , (PBT 400), International program within 2 years)
- Recommendation Letter (At least 3 people)

Contact:

Ms. Piyatida Rakangthong (TGGS International Affairs Officer)
Email: piyatida.r@tggs.kmutnb.ac.th

For more information:

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Course Deatail
Master of Science Program in Data Science and Artificial Intelligence)

Course Title:	Master of Science Program in Data Science and Artificial Intelligence
Master's Degree:	Master of Science (Data Science and Artificial Intelligence) M.Sc. (Data Science and Artificial Intelligence)
Academic Institution:	Walailak University
Duration:	1 Year 6 Months (June 2024 - May 2026)

Background and Rationale:

Master Program in Data Science and Artificial Intelligence is a unique combination program of data analysis and AI methods and techniques to understand, use and improve intelligent systems for different kinds of complex data and decision-making. Within 2 years of program, you will have solid skills in data science, machine learning and A1 which highly demanded everywhere nowadays.

Our program provides various fields, so you are free to choose your own interest of research.

Objectives: Program Learning Outcomes (PLO)

PLO1 Understand proficiently in theory of data science and artificial intelligence.

PLO2 Ability to apply theory in data science and artificial intelligence to manage the big data that exists in the 4.0 era skillfully and cause the most benefit for the development of the country.

PLO3 Ability to create a thesis and publish the research that is internationally recognized.

PLO4 Understand moral and ethical according to the philosophy of "Sufficiency Economy"

Course Synopsis and Methodology:

Type A2: Research and Coursework (Total 39 credits)

Course Description

- Data Science and Artificial Intelligence and their Applications
- Data Modeling and Management
- Business Intelligence and Analytics
- Computer Programming for Data Science and Artificial Intelligence
- Machine Learning
- Artificial Intelligence: Natural Language Understanding
- Research Internship
- Seminar in Data Science and Artificial Intelligence
- Multivariate Analysis and its Applications in Data Science
- Multicriteria Optimization and Decision Analysis
- Statistical Data Analysis
- Modern Statistical Computing
- Stochastic Processes and their Applications
- Artificial Intelligence: Knowledge Representation and Reasoning
- Human Computer Interfacing
- Artificial Neuron Networks and Deep Learning
- Internet of Things
- Big Data and Cloud Computing

- Applications of Machine Learing in Banking and Finance
- Applications of Deep Learning in the Natural Sciences
- Real-World Applications of Machine Learning in Healthcare
- Artificial Intelligence and Machine Learning in E-Learning
- Data Visualization on Super Resolution Wall Display
- Thesis 1
- Thesis 2
- Independent Study

Study plan: Plan A2 Research-based with coursework

Graduation Conditions:

1. The student must satisfy all the graduation requirements specified in the Regulation of Walailak University on Graduate Study B.E. 2563.
2. One paper at international standard should be published.

Applicant Qualifications

1. Holding a bachelor's degree in science or equivalent in related programs
2. Having GPA of at least 3.25 from the maximum of 4.00 (or lower plus adequate research experience)
3. Good reading, writing and communication skills in English.
4. To obtain the M.Sc. in Science Degree, TOEFL 450 or equivalent must be passed during the study period.

Document Required

- TIPP application form (Download at: https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3)
- Medical Report (If candidates had submitted other health certificates without the TICA medical report form, their application will not be accepted for consideration)
- Transcript of Bachelor's degree (to show the courses that you have learnt throughout Bachelor's degree)
- Certificate of Bachelor's degree
- English test score (IELTS 6 , or TOEFL (IBT 6.5) , (PBT 400), International program within 2 years)
- Recommendation Letter (At least 3 people)

Contact:

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Course Deatail
Master of Engineering Program in Biomedical Engineering (Interdisciplinary)

Course Title:	Master of Engineering Program in Biomedical Engineering (Interdisciplinary)
Master Degree:	Master of Engineering (Biomedical Engineering) (Type 2 (Plan A Type A2))
Academic Institution:	Biomedical Engineering Institute, Chiang Mai University
Duration:	2 Years (June 2024 - March 2026)

Background and Rationale:

Biomedical Engineering is an integrated knowledge between engineering, health science, physical science, mathematics, statistics, computer science, information technology and the future trend technologies. This integration can be implemented through analysis, research, communication, and innovation development in biomedical engineering area. This form of integration innovation can be applied or used in any real circumstances in the nation or international cases. This knowledge can be used to improve or enhance the quality of life of the present and the future humanities following the United Nations (Sustainable Development Goals; SDGs).

Hence, the Biomedical Engineering program (Master of Engineering: International program/Interdisciplinary) aims to produce new quality researcher/scientists in a field of Biomedical Engineering. This program is designed to have learning process in theoretical aspects of Engineering, Health Science, and Science in lecture rooms and laboratories. This program is emphasizing in using the engineering knowledge in medical science applications. The program emphasizes in Medical Imaging, Medical Image Processing, Medical Signal Processing, Bioinformatics, Biomechanics, Cell and Tissue Engineering, Cardiac Electrophysiology and Biomaterials. The Biomedical Engineering program will also help in the process of developing and maintaining biomedical engineering devices. These developed devices will be more suitable to physical body of Thai people and the environment in Thailand.

Objectives:

1. To produce university postgraduates who have knowledge in theoretical and practical aspects in the field of Biomedical Engineering emphasizing in Medical Imaging, Medical Image Processing, Medical Signal Processing, Bioinformatics, Biomechanics, Cell and Tissue Engineering, Cardiac Electrophysiology and Biomaterials by applying the engineering knowledge to health science applications. In addition, these university postgraduates should be able to do research leading to the any health science application.
2. To produce quality and moral university postgraduates who can serve the country by utilizing their knowledge in developing effective medical devices.
3. To produce university postgraduates who have abilities in doing research in the area of Biomedical Engineering that will be the basis of self-supported technology in the future.

Course Synopsis and Methodology:

Course Content

Type 2 (**Plan A Type A 2**)

Degree Requirements **a minimum of** **36 credits**

A. **Coursework**

1. Graduate Courses

1.1 Field of Specialization

1.1.1 Required courses

Required placement courses

For Engineering or Science graduated student

Human Anatomy and Physiology for Biomedical Engineering
Introduction to Biomedical Engineering Laboratory

For Health Science graduated student

Engineering Fundamentals for Biomedical Engineering
General required courses
Mathematics for Biomedical Engineering
Research Methodology in Biomedical Engineering
Cellular and Molecular Physiology for Biomedical Engineering
Seminar in Biomedical Engineering

1.1.2 Elective courses .

Digital Signal Processing for Biomedical Engineering
Genetic Algorithms
Evolutionary Computation
Computational Intelligence for Biomedical Engineering
Medical Imaging
Biomedical Image Processing and Analysis
Fluid Biomechanics
Solid Biomechanics
Biomedical Instrumentation
Introduction to Musculo-skeletal Biomechanics
Mechanics of Bone
Finite Element Modeling of Biological Engineering
Cardiopulmonary Biomechanics
Cardiac Mechanics
Introduction to Tissue Engineering
Cell Biology and Tissue Engineering
Biomaterial for Biomedical Engineering
Biosensor for Biomedical Engineering
Nanotechnology for Biomedical Engineering
Biomimetic Material
Controlled-Release Drug Delivery System
Selected Topics in Biomedical Engineering
Selected Topics in Medical Imaging
Selected Topics in Bioinformatics
Selected Topics in Biomechanics
Selected Topics in Cell and Tissue Engineering
Selected Topics in Biomaterial
Selected Topics in Biomedical Engineering 1
Selected Topics in Medical Imaging 1
Selected Topics in Bioinformatics 1
Selected Topics in Biomechanics 1
Selected Topics in Cell and Tissue Engineering 1
Selected Topics in Biomaterial 1

NOTE A student may enroll in some graduate courses outside the list above but these courses have to be in related areas to enhance his/her capability in conducting his/her research according to the advisor with the approval of the Graduate Program Administrative Committee. These courses can be counted as elective courses toward the degree. However, a student must enroll in elective courses of the Biomedical Engineering at least 9 credits.

1.2 Other courses

A student may enroll other graduate courses(s) according to the program administrative committee.

2. Advanced Undergraduate Courses (if any)

In case the student lacks some basic knowledge, which is necessary for education, the student must enroll some advanced undergraduate courses(s) under the recommendation of program administrative committee.

B. Thesis

C. Non-credit Courses

1. Graduate School requirement: - a foreign language -
2. Program requirement - none

D. Academic Activities

The whole or part of a thesis must be published/ accepted for at least 1 international publication in ISI, Scopus, IEEE, PubMed, or Web of Science databases with the student's name as the first author. OR the whole or part of a thesis must be presented in an international conference with proceedings at least 1 full academic paper (peer-reviewed) with the student's name as the first author.

Graduation Conditions:

1. A student must pass the foreign language requirement as set by the Graduate School.
2. A student must have met all of the requirements set by the study program.
3. Earning accumulated grade point average (GPA) of at least 3.00 for all courses taken, and GPA of not less than 3.00 for the chosen of specialization.
4. A student must successfully defend a thesis. The Thesis's defend allows general public to attend.
5. The whole or part of a thesis must be published/accepted for at least 1 publication in ISI, Scopus, IEEE, PubMed, or Web of Science databases with the student's name as the first author. OR the whole or part of a thesis must be presented in an international conference with proceedings at least 1 full academic paper (peer-reviewed) with the student's name as the first author.
6. A student has met the qualifications as outlined in the Chiang Mai University regulation on Student Honors in order to receive the degree or diploma or higher diploma level, 2007.

Applicant Qualifications

1. To be in accordance with the Chiang Mai University Announcement on Admission in each academic year.
2. Earn a Bachelor of Engineering, Bachelor of Science bachelor degree in Health Science or Bachelor degree in Medical Science or equivalent degree.
3. Be able to study in the courses that are taught in English.
4. Other characteristics are to be considered by the Graduate Program Administrative committees.

Document Required

- TIPP application form (Download at: https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3)
- Medical Report (If candidates had submitted other health certificates without the TICA medical report form, their application will not be accepted for consideration)
- Transcript of Bachelor's degree (to show the courses that you have learnt throughout Bachelor's degree)
- Certificate of Bachelor's degree
- English test score (IELTS 6, TOEFL (IBT 6.5) , (PBT 400) , International program within 2 years)
- Recommendation Letter (At least 3 people)

Contact: Ms. Sawanya Amonpongraksa
- Tel. 053-942083 ext.13
- Email : bmei@cmu.ac.th

For more information:

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Course Detail
Master of Science Program in Logistics and Digital Supply Chain

Course Title:	Master of Science Program in Logistics and Digital Supply Chain
Master Degree:	Master of Science (Logistics and Digital Supply Chain)
Academic Institution:	Faculty of Logistics and Digital Supply Chain, Naresuan University
Duration:	2 years (June 2024 – June 2026)

Background and Rational:

Faculty of Logistics and Digital Supply Chain (NU-Logistics), Naresuan University is the first public university that is established for multi-disciplinary education, research and public consulting services in the area of logistics and supply chain. It is intended to produce leading academics and professionals in order to support the sustainable research and development.

Logistics and Digital Supply Chain program attracts business professionals from across the ASEAN to experience its unique combination of master's level coursework, professional development, and industry interaction. It is designed to equip students to meet current and future needs in the supply chain management profession by creating and sustaining competitiveness in the supply chain through quality and efficiency. This program provides its graduates with proficiency in both problem solving and change leadership. They are now practicing these skills in a wide variety of industries, including consulting, manufacturing, retail, logistics, distribution, and software.

Our aim is to produce expert logistics and supply chain professionals who will take their skills developed at Naresuan University and make a significant difference in the marketplace.

Objectives:

1. Focusing on shaping determined and creative researchers and academic staff in logistics and digital supply chain.
2. Teaching by lecturers bearing high academic capabilities and industrial experiences to deliver the best learning experience to learners.
3. Having close connections with national and international private professionals and academic sectors to strengthen networks and cooperation in logistics and supply chain.

Course Synopsis and Methodology:

1) Number of credit 36 credits
2) Structure of the Program **Plan B Independent Study**

Coursework	30
- Core Course	15
- Electives	15
Required Non-credit Course	5
Thesis	-
Independent Study	6
Total	36

Course Content

Core Courses (Compulsory) 15 credits

- Introduction to Logistics and Digital Supply Chain Management
- Inventory Planning and Control
- Supply Chain Process Improvement
- Transportation and Distribution Management
- Logistics Quantitative Analysis

Elective Courses (Choose 3 units) 15 credits

- Smart Transportation System Management and Regulations
- Digital Technology in Supply Chain Management
- Packaging for Transportation
- Public Transportation Management
- Quality Management
- Case Studies in Logistics and Supply Chain Management
- Smart Agricultural Logistics and Supply Chain Management
- Warehouse Design and Operations
- Multimodal Transportation Systems
- Lean Management and Manufacturing
- Strategic Procurement
- Current Issues in Logistics and Supply Chain
- Sustainable Logistics and Supply Chain
- Human Resource Management

Required Non-credit Courses

- Seminar 1
- Seminar 2
- Research Methodology in Science and Technology

Independent Study 6 credits

- Independent Study 1
- Independent Study 2
- Independent Study 3

Graduation Conditions:

1. English Proficiency **(**Students must pass one of the following English levels**)** test**.**

	Requirement	**score**
1	Paper-based TOEFL	417
2	Internet based TOEFL (Internet base)	35
3	International Language Testing System (IELTS)	5.0
4	Chulalongkorn University Test of English Proficiency(CU-TEP)	54
5	Cambridge English Placement Test (CEPT)	B1 (37)

2. Pass Comprehensive Examination**.**
3. Publish 1 full paper proceeding in English**.**
4. Finish 1 Independent Study report and pass the final defense**.**
5. The minimum GPA requirement is B (3.00), and students must pass all courses**.**

Applicant Qualifications:

Bachelor's degree or equivalent from and accredited institution in any fields
English Proficiency Test:
Applicant must hold a minimum score of English proficiency from either TOEFL (paper based or internet based; not TOEFL ITP) or IELTS as shown in the followings:

- Paper-based TOEFL 417, 453 (International Program)
- Internet-based TOEFL 35, 46 (International Program)
- IELTS 5.0, 5.5 (International Program)

Document Required:

- TIPP application form (Download at: https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3)
- Medical Report (If candidates had submitted other health certificates without the TICA medical report form, their application will not be accepted for consideration)
- Transcript of Bachelor's degree (to show the courses that you have learnt throughout Bachelor's degree) with at least GPA. 2.75
- Certificate of Bachelor's degree
- English test score (e.g. TOEFL (Paper based 417 , 453) (Internet based 35 , 46), IELTS (5.0 , 5.5))
- Recommendation Letter (At least 3 people)
- Copy of passport
- CV
- Formal Photograph

Contact:

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