

Course Detail

Master of Science Program in Environmental Management and Technology

Course Title: Master of Science Program in Environmental Management and Technology (International Program)

Master Degree: Master of Science (Environmental Management and Technology)

Academic Institution: Faculty of Environment and Resource Studies, Mahidol University, Thailand

Duration: 2 years (August 2022 – May 2024)

Background and Rational:

In highly competitive job market internationally, graduates with the environmental management skills and knowledge have distinctive vision and interdisciplinary approach to harnessing the sustainability of natural resources and environmentally friendly. Several international conventions relevant to environmental exploitation across the globe have been embedded into a single national policy for further implementation including climate change or UNFCCC. Those evolve aspects of sharing resources and technologies including responsibilities and accountabilities on environmental problems among countries all over the world. In particular the environmental transboundary problems that become a common debate in the international meetings with an attempt to have global cooperation on several kinds of projects such as a goal-set for greenhouse gas reduction. Aside, all societies have similar social problems from local to international level that related to the environment such as pollution, natural resources deterioration, environmental justice, etc. With this respect, the principles of environmental management and technology can help graduates to learn how to systematically think and integrate all disciplinary to achieve sustainability in environmental exploitation.

The program of environmental management and technology is a pathway for graduates to learn and eventually transfer their knowledge and apply their skills to internationally enhance the better environmental conditions. Especially, the program also aware on the global paradigm shift with sustainable development goals (17 SDGs) which is embedded in the National Strategic Plan 20 years for Thailand (B.E. 2560-2580) and the National Plan of Economic and Social Development 13 (B.E. 2565-2569). Thus, courses provided by our program have been developed based on multidisciplinary approach by integrating between scientific and socio-economic approach from strong experience experts both at the faculty and from other international organizations. Students will learn how to plan, collect data in the field, analyze

data statistically and reliably, as well as well communicate and select appropriate technology to transfer environmental information to all stakeholders.

Our program has well equip and standard certified laboratory as well as other facilities e.g. computer pool, license software for study, a common room for students, etc. In addition, the Covid-19 pandemic has been an experience for a “New Normal” to be concerned along with the development in three major aspects: 1) balancing between human and nature; 2) balancing the relationship among people in societies; and 3) building the sufficient growth. Therefore, we have well adapted to online educational system, in case of locking down against pandemics, with necessary facilities including software for classroom teaching e.g. Microsoft team, Google classroom, Zoom, Webex, etc. We aim to serve environmentalist who have strong disciplines and competencies in environmental management and technology that wish to support the vision of Faculty of Environment and Resource Studies to be the number one institution for environmental study in Thailand by 2025, and the top three in ASEAN by 2031. This is also to full fill Mahidol’s mission to enhance graduates to integrate knowledge and skills of environmental management and technology to excel in health and sciences with integrity for the benefit of humankind.

Remark: The measures for teaching-studying management model under COVID-19 pandemic prevention/control will be followed the regulations and announcements by Faculty of Graduate Study and Mahidol University

Objectives:

To produce graduates who have the characteristics, knowledge and skill as follows:

6.1 They must be leaders with integrity who are devoted to public service and are able to perform their duties professionally;

6.2 They must have knowledge and professional skills in the field of environmental management and technology, system approach, and green industry at both the national and global levels;

6.3 They must have the analytical skills, creative thinking, and cognitive ability to evaluate and contribute to developing the knowledge of environmental management and environmental technology and science-related green industry;

6.4 They must have skills in working on the foundation of knowledge from different fields in order to manage conflicts and continuously improve. They must have a passion for knowledge and believe in lifelong learning;

6.5 They must have skills to apply technology and information technology for greater performance in research as well as presentation.

Course Synopsis and Methodology:**1. Study plan****Table 1 Preparation, Require, and Elective Courses for study in Plan A**

| Plan A, A2 | | | |
|--|--|--|---|
| Preparation course | | | |
| ENMT 630 1(1-0-2) | Fundamental of Environmental and Natural Resource Management | | |
| Total = audit | | | |
| 1st semester/ Year 1 | | 2nd semester/ Year 1 | |
| ENMT 631 3 (3-0-6) | Industrial Ecology and System Approach | ENMT 635 3 (0-6-3) | Environmental Management and Technology in Practicum |
| ENMT 632 3 (3-0-6) | Environmental Risk Management | ENMT 636 3 (3-0-6) | Integrated Research for Environmental Management and Technology |
| ENMT 633 3 (3-0-6) | Applied Economics for Natural Resource Sustainability | ENMT 6XX 3 (3-0-6) | Elective_1 |
| ENMT 634 3 (3-0-6) | Holistic Resources Inventory and Environmental Survey | ENMT 6XX 3 (3-0-6) | Elective_2 |
| Total=12 credits | | Total=12 credits | |
| 1st semester/ Year 2 | | 2nd semester/ Year 2 | |
| ENMT 698 9 (0-36-0) | Thesis | ENMT 698 3 (0-12-0) | Thesis |
| Total=9 credits | | Total=3 credits | |
| TOTAL=36 CREDITS | | | |

Table 2 Thesis Plan and Tentative Schedule/Activities

| Activities | Year 2 | | | | | | | |
|--|-----------------------|---|---|---|-----------------------|---|---|---|
| | Semester 1 (4 months) | | | | Semester 2 (4 months) | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1. Appointment for initial advisor | ✓ | | | | | | | |
| 2. A proposal development | ✓ | ✓ | | | | | | |
| 3. Proposal defense and committee appointment | | | ✓ | | | | | |
| 4. Data collection | | | ✓ | ✓ | ✓ | | | |
| 5. Thesis writing | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 6. Attending in the international conference and published a full paper proceeding | | | | | | | ✓ | ✓ |
| 7. Thesis defense | | | | | | | ✓ | ✓ |
| 8. Submission required documents for graduate and other processes | | | | | | | ✓ | ✓ |

Remark: Thesis is recommended to be in accordance with the philosophy of the program and related to climate change issue but not limited to other environmental issues.

2. Course Content

2.1 Preparation course (Audit)

Audit (lecture-practice-self-study)

ENMT630 Fundamental of Environmental and Natural Resource Management 1(1-0-2)

Fundamental of natural resources and environmental management, critical issues or problems, limitation of the natural resources exploitation, environmental management edges, ASEAN and international development impact on regional natural resources and environment, measures for sustainable development of natural resources and environment

2.2 Require course

Credit (lecture-practice-self-study)

ENMT 631 Industry Ecology and System Approach

3 (3-0-6)

Concept and principle of industrial ecology, natural system dynamic, components and functions of system, goal of system; boundary and characteristics of a system, system dynamics, system analysis, relationships of society to industry and development, material and energy flows in industrial and ecological systems, material flow analysis, life cycle assessment, supply chain management, clean technology, waste minimization, eco-efficiency; eco-design; carbon label and carbon footprint; eco-industry; green in industry

ENMT 632 Environmental Risk Management

3 (3-0-6)

Environmental risk assessment concepts and processes; risks affecting environment, community, stakeholder analysis; organizations; economic performance and professional reputation; risk assessment techniques; framework and a process for managing risk; risk control and treatment; risk management standard and clauses; related standards, guidelines for internal or external audit programs; principles for effective management and corporate governance; risk management practices

ENMT 633 Applied Economics for Natural Resource Sustainability

3 (3-0-6)

Concept of economics for natural resources; population and environment, agriculture and food; scarcity and abundance of resources; energy sector; renewable resources using in the fisheries and forestry sector; policy and industrial ecology; trade and development impacts to water resource; institutions for sustainable development and sufficiency economy; sustainable development goals; application of the principles of sustainable economic management to environmental and resource issues

ENMT 634 Holistic Resources Inventory and Environmental Survey

3 (3-0-6)

Learning process and integration of multidisciplinary and interdisciplinary; integration of theory and resources inventory and environmental survey; geography, geology and geomorphology; pedology; hydro- meteorology; forest and wildlife; socio- economic and population; sustainability of resource use issues; integrated approaches and survey methods; practical exercise

ENMT 635 Environmental Management and Technology in Practicum 3 (0-6-3)

Learning process and integration of concepts, principle and theory approach to environmental management and technology; field investigation and survey; natural resources and environmental quality analysis; investigation of the growth and development or change in the short-term and long-term of human and ecology; Instrument approach; procedure; systematic survey; analysis of natural resources and environment quality; field study

ENMT 636 Integrated Research for Environmental Management and Technology 3 (3-0-6)

Multi-disciplinary of research methodology for environmental management and technology; types of research, observational research, experimental research, qualitative research; research design; problem analysis; research question and hypothesis; data collection, data management and analysis; research proposal development; literature review; research ethics; ethics of environmentalist; the art of communication and presentation

2.3 Elective course**Credit (lecture-practice-self-study)****ENMT 637 Environmental Management Systems 3 (3-0-6)**

Principle of environmental management systems (EMS); environmental aspect assessment; environmental legislation; environmental management systems standard and clauses; related standards; audits-definition and principles; audit planning; pre-audit process; audit review; conducting the main audit; audit report and follow-up; accreditation; certification and auditor competence; eco management and audit scheme regulation requirements

ENMT 638 Energy Management System Standard 3 (3-0-6)

Energy use and consumption; Tackle climate change; Conserve resources and integrated energy management; Development of an energy management system; Efficient use of energy policy development; Energy performance; Energy efficiency; Energy management systems standard and clause, related standards; Guidance for small and medium enterprises/ SMEs implementing energy management and efficiency measures; Management system model

ENMT 639 Occupational and Health Management System **3 (3-0-6)**

International occupational and health/ OH&S management system and development; importance and benefits; organizational performance enhancing challenges and improvement of stakeholder satisfaction; occupational and health management systems standard and clauses; related standards; an apply occupational and health management system for organization

ENMT 640 Food Safety Management System **3 (3-0-6)**

Food chain and aspects; the safety of the global food supply chain; food safety and its stated food safety policy; planning, implementation, operating; maintenance and updating a food safety management system; evaluating and assessment of customer requirements and satisfaction; effective communicating food safety issues to their suppliers; customers and relevant interested parties in the food chain; food safety management systems standard and clauses; related standards

ENMT 641 Sustainable Forest Management Standard System **3 (3-0-6)**

Concept of sustainable forest management standard system; the core values of the forest management or forest management system/ FM; systems and performance approach to FM certification; benefits of forest certification; indigenous peoples' rights; social and environmental impacts; high conservation value forests; stakeholder identifying and analysis; forest management systems standard and clauses; related standards, the role of auditors; auditing work; relating findings to standard elements; selecting sites for the field audit; compiling the audit documentation and the FM certification report; raising corrective action requests/ CARs; controlled wood in forest management; audit planning; follow up on CARs

ENMT 642 Social Responsibility Standardization and Sustainable Development Goals **3 (3-0-6)**

Concepts, terms and definitions related to social responsibility; background, trends and characteristics of social responsibility; principles and practice; the core subjects and issues of social responsibility; integrating, implementing and promoting socially responsible; identifying and engaging with stakeholders; internal and external communication; performance and other information related to social responsibility; sustainable development goals; social responsibility contribute to the sustainable development goals

ENMT 643 Sustainable Events Standard**3 (3-0-6)**

Concept and benefit of sustainable events; green meetings guideline and sustainable events; managing and communicating sustainable events; implementing sustainable events; Climate neutral and climate friendly events; generating of significant waste impact to local communities; socio-economic and environmental impact from sustainable events; sustainable events standard, clause and approach; sustainable events checklists and report; best practice of sustainable events

ENMT 644 Environmental communication for Social Change**3 (3-0-6)**

Concepts and elements in environmental communication; relationships between communication and environment; environmental communication psychology; communication for environmental and social change; sustainability communication; diffusion and adoption of environmental innovations; communication for low carbon society; climate change communication; integrated marketing communication and green industry; communication for environmental and natural resources conflict resolution

ENMT 645 Solid and Hazardous Waste Management**3 (3-0-6)**

Characteristics of solid and hazardous waste; principles of integrated waste management; waste minimization; reuse/ recycle, collection, storage, transfer and transport, separation, incineration, composting; disposal, landfill site selection; design, operation, monitoring; landfill closure; treatment processes for hazardous waste; regulation and techniques associated with the management of solid and hazardous waste; special waste management; construction and demolition waste management; disaster waste management

ENMT 646 Technology for Water Quality Management**3 (3-0-6)**

Fundamentals of organic chemistry in the environment; water quality and problems; water quality standard; laws and regulations for water quality management; water treatment system and design; wastewater treatment; technologies for water quality management; advance of wastewater treatment technologies; innovation treatment technologies

ENMT 647 Soil Resource and Land Use for Sustainable Industry**3 (3-0-6)**

Problems of soil resources; soil forming factors and processes; the human impact on soils; theories of land use; industrial location models; structure and location; Industry change; the

effects of rapid industrialization; industry and the environment; ecological and environmental impact of industrial land use; the concept of sustainable industrial land use; modeling of industrial land use planning; analysis and evaluation process of sustainable industrial land use

ENMT 648 Biodiversity Conservation and Management **3 (3-0-6)**

Concepts and theories of biodiversity; biodiversity value; threats to biodiversity; habitat loss; exotic species; disease; population ecology overexploitation, small population; biodiversity management, protected area management and establishing, biodiversity conservation outside protected areas; biodiversity conventions, laws and regulations

ENMT 649 Ecosystem Restoration **3 (3-0-6)**

Concepts and theories of ecosystem restoration; impacts of human on ecosystems; habitat destruction, degradation, and pollution in ecosystems; measurement and monitoring on ecosystem changes; rehabilitation in aquatic; forest and wetland ecosystems; wildlife captive breeding techniques and reintroduction; techniques in reforestation and corridor construction; project measurement and monitoring; synthesis on case study of ecosystem restoration

ENMT 650 Sustainability and Ecosystem Health **3 (3-0-6)**

Principle conceptual of ecosystem health and sustainable human society based on the fluctuation of ecosystem health; flexibility of sustainable development by monitoring ecosystem health under the complex social adaptability; social adaptation to the vulnerable and changes in ecosystem health; indicators of human society sustainability reflected by the good health ecosystem

ENMT 651 Climate Change and its Impact **3 (3-0-6)**

Climate change; natural forcing and human activities; industrial evolution, climate rapidly changed, natural phenomena; El Niño-La Niña; volcanic eruption, convention and protocol; impact on climate change to human being, natural resources and environment, mitigation options, adaptation and vulnerability

ENMT 652 Disaster Management **3 (3-0-6)**

The evolving approaches in disaster management; global disaster trends; natural disaster trends, technological disaster trends, factors influencing disaster trends; paradigm shifts in

understanding and managing disasters; disaster management models; ethics; values and accountability; hazard assessment; vulnerability and capacity assessment; early warning system; disaster risk information system; public awareness and disaster risk communication; disaster management and development

2.4 Thesis

Credit (lecture-practice-self-study)

ENMT 698 Thesis

12 (0-48-0)

Research topic identification for environmental management and technology of research objectives; literature review; research design; validity and reliability of the research; data collection, data analysis and synthesis; research writhing; research presenting and publishing in standard journal or academic publication or presenting on the academic conference; ethics of academic presentation

Graduation Conditions:

8.1.1 Total time of study should not exceed the study plan.

8.1.2 Students must complete at least 24 course credits as stated in the curriculum as well as a thesis (12 credits) for a total of 36 credits with a minimum CUM-GPA of 3.00.

8.1.3 Students must meet the English Competence Standard of Graduate Students, Mahidol University defined by the Faculty of Graduate Studies, Mahidol University.

8.1.4 Students must participate in soft skill development activities of the Graduate Studies, Mahidol University.

8.1.5 Students must submit a thesis and pass a thesis defense by following the Regulations of Mahidol University on Graduate Studies.

8.1.6 These are required to be published in an international academic journal or a full paper of proceeding in international conference that is listed and accepted by the Faculty of Graduate Studies, Mahidol University.

Applicant Qualifications:

9.1 Hold a Bachelor's degree in any field of study;

9.2 Have a cumulative GPA not less than 2.50;

9.3 Have an English Proficiency Examination score as the requirement of Faculty of Graduate Studies;

9.4 Applicants with other qualifications may be considered by the Program Director, committee, and the Dean of Faculty of Graduate Studies.

Document Required:

Additional required documents for the program application are as follows:

1. A concept paper expected to do research (should be relevant to the philosophy of the program and/or Climate Change issues)
2. A motivation letter or purpose of study
3. A job expectation after graduate
4. Expectation from the program excluding financial issues
5. IELTS or TOEFL scores (If any)
6. Transcript (provide by TICA)
7. Recommendation Letter (provide by TICA)
8. English proficiency test (provide by TICA)
9. Application form (provide by TICA)

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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 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 2022 – May 2024)

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)

| Year 1 | | | | | |
|----------------------------|--------------|------------|----------------------------|--------------|--------------|
| Semester 1 (Aug-Dec, 2022) | | | Semester 2 (Jan-May, 2023) | | |
| Course code | Course title | Credit | Course code | Course title | Credit |
| 1403798 | Thesis | 6 (0-18-6) | 1403794 | Seminar 1 | 0 (1-0-2) |
| | | | 1403798 | Thesis | 12 (0-36-12) |
| Total (credits) | | 6 | Total (credits) | | 12 |

| Year 2 | | | | | |
|----------------------------|--------------|--------------|----------------------------|--------------|------------|
| Semester 1 (Aug-Dec, 2023) | | | Semester 2 (Jan-May, 2024) | | |
| Course code | Course title | Credit | Course code | Course title | Credit |
| 1403798 | Thesis | 12 (0-36-12) | 1403798 | Thesis | 6 (0-18-6) |
| 1403896 | Seminar 2 | 0 (1-0-2) | | | |
| Total (credits) | | 12 | Total (credits) | | 6 |

* Submit and present thesis proposal within Dec, 2022 and start conducting research from Jan, 2023 to April, 2024. Defend thesis within May, 2024

Plan A2 (Course works and research)

| Year 1 | | | | | |
|----------------------------|---|-----------|----------------------------|--------------|-----------|
| Semester 1 (Aug-Dec, 2022) | | | Semester 2 (Jan-May, 2023) | | |
| Course code | Course title | Credit | Course code | Course title | Credit |
| 1401704 | Advanced Statistics and Experimental Design for Agro-Industry | 3 (3-0-6) | 1403799 | Thesis | 3 (0-9-3) |
| 1401705 | Research Methodology for Agro-Industry | 3 (3-0-6) | 140xxxx | Elective 1 | 3 (x-x-x) |
| 1402813 | Advanced Food Analytical Techniques | 3 (2-3-5) | 140xxxx | Elective 2 | 3 (x-x-x) |
| 1403801 | Emerging Food Processing Technologies | 3 (3-0-6) | 140xxxx | Elective 3 | 3 (x-x-x) |
| 1403794 | Seminar 1 | 0 (1-0-2) | | | |
| Total (credits) | | 12 | Total (credits) | | 12 |

| Year 2 | | | | | |
|----------------------------|--------------|------------|----------------------------|--------------|-----------|
| Semester 1 (Aug-Dec, 2023) | | | Semester 2 (Jan-May, 2024) | | |
| Course code | Course title | Credit | Course code | Course title | Credit |
| 1403799 | Thesis | 6 (0-18-6) | 1403799 | Thesis | 3 (0-9-3) |
| 1403896 | Seminar 2 | 0 (1-0-2) | | | |
| 140xxxx | Elective 4 | 3 (x-x-x) | | | |
| Total (credits) | | 9 | Total (credits) | | 3 |

* Submit and present thesis proposal within May, 2023 and start conducting research from June, 2023 to April, 2024. Defend thesis within May, 2024.

Plan B (Course works and research by independent study)

| Year 1 | | | | | |
|----------------------------|---|-----------|----------------------------|--------------|-----------|
| Semester 1 (Aug-Dec, 2022) | | | Semester 2 (Jan-May, 2023) | | |
| Course code | Course title | Credit | Course code | Course title | Credit |
| 1401704 | Advanced Statistics and Experimental Design for Agro-Industry | 3 (3-0-6) | 140xxxx | Elective 3 | 3 (x-x-x) |
| 1403801 | Research Methodology for Agro-Industry | 3 (3-0-6) | 140xxxx | Elective 4 | 3 (x-x-x) |
| 1403794 | Seminar 1 | 0 (1-0-2) | 140xxxx | Elective 5 | 3 (x-x-x) |
| 140xxxx | Elective 1 | 3 (x-x-x) | 140xxxx | Elective 6 | 3 (x-x-x) |
| 140xxxx | Elective 2 | 3 (x-x-x) | | | |
| Total (credits) | | 12 | Total (credits) | | 12 |

| Year 2 | | | | | |
|----------------------------|---------------------------------------|-----------|----------------------------|--|-------------|
| Semester 1 (Aug-Dec, 2023) | | | Semester 2 (Jan-May, 2024) | | |
| Course code | Course title | Credit | Course code | Course title | Credit |
| 1402813 | Advanced Food Analytical Techniques | 3 (3-0-6) | 1403898 | Independent Study in Food Science and Technology | 6 (0-18-18) |
| 1403801 | Emerging Food Processing Technologies | 3 (2-3-5) | | | |
| 1403896 | Seminar 2 | 0 (1-0-2) | | | |
| Total (credits) | | 6 | Total (credits) | | 6 |

2. Course Content

1) Thesis

1403799 Thesis 12 (0-36-12)

Research on a food science and technology topic pertinent to individual interest under the supervision and approval of advisory committee; research progress presentation every semester of the thesis enrollment; thesis defense; thesis submission; thesis or part of the thesis published in an academic conference proceeding or accepted for publication in an academic journal with peer review.

1403898 Independent Study in Food Science and Technology 6 (0-18-18)

Independent study on an approved food science and technology related topic pertinent to individual interest under the supervision and approval of advisory committee; research defense and submit after completion; prepare research output for publishing in the proceedings format of national/international conference and/or manuscript for peer review national/international journal publication.

2) Core courses

1401704 Advanced Statistics and Experimental Design for Agro-Industry 3 (3-0-6)

Principles of experimental design and statistical analysis for Agro-Industry; techniques in experimental design including completely randomized design (CRD), randomized complete block design (RCBD), factorial design, fractional factorial design, Latin square design, split plot design, and balance incomplete block design (BIB); multiple linear regression, discrete model regression, multivariate analysis, principal component analysis, and cluster analysis.

1401705 Research Methodology for Agro-Industry 3 (3-0-6)

Concepts and approaches for research project for food industry; research ethics; planning and management of the research project; research process and techniques; industrial problem-based proposal development; data collection, analysis and assessment; intellectual property management; report and article writing for publication; technology transfer to manufacturers; review and evaluate innovation and advance for food industry; presentation and report submission.

1403801 Emerging Food Processing Technologies 3 (3-0-6)
Principles of recently developed food processing including thermal processes e.g. ohmic heating, radio frequency, infrared frequency, pressure assisted temperature sterilization and microwave assisted thermal sterilization; non-thermal processes e.g. high pressure processing, cold plasma, pulse electrical fields, electron beam, membrane separation, supercritical fluid extraction, aseptic system; automatic control and artificial intelligence for food industry; industrial visit.

1402813 Advanced Food Analytical Techniques 3 (2-3-5)
Theory and advanced concept of food analysis by modern analytical techniques; electrochemistry; biosensor; spectrophotometry, Fourier transform infrared, near infrared, UV-visible, atomic spectrophotometry, inductively couple plasma; mass spectrometry; chromatography, liquid chromatography, gas chromatography; hyphenated techniques; comprehensive chromatography, recent and trends of modern analytical techniques.

1403794 Seminar 1 0 (1-0-2)
Study and selection of currently interesting research issues in food science and technology or related area; scientific data searching; oral presentation; report submission.

1403896 Seminar 2 0 (1-0-2)
Literature search, discussion and thesis progress presentation.

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

3.1) Food Industrial Technology and Innovation

1403701 Food Industrial Research Project 6 (0-18-6)
Study, analyze, and find the source of problems in agri-food business; literature review for designing an experiment; solve the problems related to food science and technology under guidance of the student's advisor; equivalent of a 6-credit laboratory subject workload for all activities.

1403702 Professional Experience in Agro-Industry 3 (0-9-3)
Experienced in a food factory, government sector or other organizations related to agro-industry for at least 1 year; a written report and oral presentation to the committee on the topic related to students' knowledge and experiences.

1403703 Advanced Professional Experience in Agro-Industry 6 (0-18-6)
Experienced in a food factory, government sector or other organizations related to agro-industry for at least 3 years; a written report and oral presentation to the committee on the topic related to students' knowledge and experiences.

1403704 Big Data Analytics for Agro-Industry 3 (3-0-6)
Big data definition; collection of big data; data storage analysis; data visualization; application of big data in food safety; application of big data in food processing and engineering; application of big data in food product development and marketing.

1403705 Project Management Professional for Agro-Industry 3 (3-0-6)
Project initiation and planning; plan and define project scope; validate and control scope; define and sequence activities; develop the project schedule; creating a project budget; planning quality management; quality methodologies and standards for project management; plan and acquire resources; plan and manage communications; monitor project communications; project risk analysis; planning stakeholder; managing stakeholder engagement.

- 1406702 Food Business Management 3 (3-0-6)**
Supply chain and logistic management in food business; consumer insight and analytics; food business model development and creativity; business model canvas; strategic marketing management; cost structure and strategy management; global food business trade and retail marketing management; business pitching strategy; entrepreneurship and food business startup; e-commerce.
- 1405701 Quality Control Design in Food Industry 3 (3-0-6)**
Overview of food quality; concepts of quality management systems; quality control; quality design; quality policy and business strategy; quality audit; quality cost; patterns of quality control and management in food industry; trends in food quality control.
- 1405702 Food Safety and Standards for Global Market 3 (3-0-6)**
General and global food standards; standards related with export and import food products; Free Trade Area (FTA); food safety and standard trends, The Global Food Safety Initiative (GFSI), The Safe Quality Food (SQF), Global Aquaculture Alliance Seafood Processing, Global Red Meat Standard (GRMS), Japan Food Safety Management Association (JFSM), etc.
- 1403706 Valorization of Food Processing By-products 3 (3-0-6)**
The most recent advances in the field of food processing by-products; the urgent need for sustainability within the food industry; wastes in food sector and how to minimize; the handling and management of by-products; waste and by-products valorization; value added ingredients recovered from by-products; the success stories and solutions of different food processing by-products utilization as food and feed ingredients; regulatory issues and concerns of valorization of food processing by-products.
- 1403795 Advanced Food Product Innovation 3 (2-3-5)**
Consumer concept for food product development; accelerating food product design and development; new tools for food product development; appropriate design strategy; optimizing new food product design, design quality in food product development process; business plan.
- 1404760 Shelf Life Prediction of Food Products 3 (2-3-5)**
Quality of food and shelf life stability; quality tests; factors affecting shelf life of food products; diffusion theory of particles; role of water activity and accelerated food shelf life testing techniques; sorption isotherm; reaction kinetics occurring in foods; testing and prediction of product shelf life using mathematical models.
- 1404761 Innovations in Food Packaging 3 (2-3-5)**
New technologies in food packaging; mass transfer of gas and solute through packaging materials; quality of packed foods; active packaging research and development; smart packaging technologies; edible and biodegradable coating and films; commercial aspects of new packaging technologies.
- 1406770 Consumer Trends and Technology 3 (3-0-6)**
Principles of consumer science; consumer behavioral models; consumer perception, learning, memory, motivation, and attitude; consumer decision making process and group influence; effect of income, social class, subculture and culture on consumption; methods of data collection; application of qualitative, quantitative and mixed method for designing and planning of consumer data collection; use of consumer questionnaires; consumer study design; case study for food industry.

- 1403707 Tea Science and Innovation 3 (2-3-5)**
Tea processing, tea biochemistry and analysis, tea and health benefit, tea flavor, tea brewing, tea tasting, tea extract process, tea extract innovation and its application.
- 1403708 Coffee Technology 3 (2-3-5)**
History of coffee; types and coffee variety; coffee planting and farm management; primary coffee processing; secondary coffee processing; roasting; brewing; storage and packaging; flavor profile and cupping; coffee chemistry; quality control and analysis; global trends and marketing; emerging technology and current issues.
- 1403709 Economical Northern Fruits and Vegetables Technology 3 (2-3-5)**
Important economical Northern fruits and vegetables in Thailand, garlic, potato, onion, shallot, longan, pomelo, tangerine, pineapple; production situation; consumption trends; problems and obstacles in the global market; important postharvest technology, current and novel technology; related quality systems and standards; principles of logistics management; case studies in the production and processing; industrial visit.
- 1403710 Future Foods 3 (3-0-6)**
Future trends in food consumption; innovative food formulations (synthetic food, genetic engineering, 3D food printing, biotechnology approaches); alternative protein source (plant-, insect- and cell-based protein); food for specific needs; brain and beauty foods; regulation for novel foods; challenges of food science and technology in future foods.
- 1403719 Nanotechnology in Food 3 (3-0-6)**
The fundamentals of nanotechnology from historical development; concepts and principles to nanomaterial; property characterization; the application of nanotechnology in food.
- 1406759 Perception and the Chemical Senses of Food Products 3 (3-0-6)**
Anatomy, physiology, psychophysics and genetics of the chemical senses related to food perception; relation between the chemical senses and food intake; chemical senses in special populations (infants, children, elderly, athletes and clinical populations).
- 1403720 Starch and Hydrocolloids in Designing Food Products 3 (2-3-5)**
Role of starch and hydrocolloids in designing food products; functionality and molecular structure of starch and hydrocolloids; interactions of starch and hydrocolloids in food systems; structure-function relationship of starch and hydrocolloids in food products; modification of food properties using starch and hydrocolloids; factors influencing properties of starch-hydrocolloids blended systems; starch and hydrocolloids applications in designing the desirable food product properties.
- 1402703 Trends in Food Science and Technology 3 (3-0-6)**
Review and evaluate critical current issues in food science and technology; presentation, discussion and report submission.
- 1402702 Principles of Food Science and Technology 3 (3-0-6)**
Introduction; principles in food chemistry, food microbiology, food engineering and food processing; related issues in food science and technology; case studies.
- 1403721 Global Food Industry 3 (3-0-6)**
Food industry overview; important food industry sectors (cereal and bakery, meats, fish, poultry, fruits and vegetables, sugars and other sweets, non-alcoholic and alcoholic beverages, fats and oils and dairy products); world leaders in food industry; current situation and trends in food industry; industrial visit.

1409701 Agricultural Logistics Management**3 (3-0-6)**

Agricultural supply chain; agricultural forecasting; crop planning and scheduling; warehousing and inventory management for perishable products; transportation management and material handling systems; partnership systems in the agricultural supply chain; information management in the agricultural supply chain.

3.2) Food Chemistry and Nutrition**1402732 Chemistry of Food Macronutrients****3 (2-3-5)**

Composition, structures, reactions and functional properties of proteins, carbohydrates and lipids in food systems; analytical techniques, isolating, identifying, quantifying of these compositions; mechanisms of the effect of processing and storage conditions on the properties of proteins, carbohydrates and lipids; interactions among these components in foods; roles on interactions on food stabilization; related current technology.

1402814 Functional Foods and Nutraceuticals**3 (3-0-6)**

Definition and classification of functional foods and nutraceuticals; sources, and health benefits of bioactive components; nutraceutical extraction and isolation; impact of processing on the bioavailability of functional and nutraceutical ingredients in foods; novel technology to retain activity in the food; development and marketing of functional foods; efficacy and safety of functional foods and nutraceuticals; functional foods and nutraceuticals regulations.

1402815 Applied Food Proteins Chemistry**3 (2-3-5)**

Food proteins; amino acids, peptides, and proteins; physical, chemical and processing-induced changes in proteins; functional properties of food proteins; biologically active peptides from food proteins; protein and peptide-based antioxidants; nutraceutical aspects of food proteins.

1402704 Alternative Protein Food**3 (2-3-5)**

Overview of food proteins; alternative protein sources; the issue of protein fractionation and isolation; technofunctionality and application scenarios; mimicking fat systems, texture and mouthfeel; nutritional aspects; the consumer view and adoption behavior; current status and future trends of alternative protein food.

1402705 Dietary Phytochemicals and Chemopreventive Role**3 (3-0-6)**

Phytochemicals in food; bioaccessibility and bioavailability of phytochemicals; carcinogenesis; cancer chemoprevention mechanisms (in vitro and in vivo study); chemopreventive role of phytochemicals; drug interaction; current research of dietary phytochemicals.

1402706 Metabolomics in Food Research**3 (2-3-5)**

GC/MS-, LC/MS- and NMR- based metabolomics; Experimental design; sample preparation; data acquisition; pre-processing; metabolite analysis; chemometrics; practical laboratory on plants and microbial metabolite analysis.

1402707 Lifecycle, Nutrigenetics and Personalized Nutrition**3 (3-0-6)**

Nutrition throughout the life cycle; introduction of nutrigenetics; the effects of nutrients on genome, proteome and metabolome; the relation between the genetic factors and disease development such as chronic-degenerative, osteoporosis, neurological, obesity, insulin resistance and cardiovascular disease; the role of lifestyle factors in various chronic diseases, including cancer, bone disease, obesity and diabetes; personalized nutrition; current issues.

1402708 Food Structures, Digestion and Health

3 (2-3-5)

Food structures in natural and processed foods and their behavior during processing; impact of food structures and matrices on nutrient uptake and bioavailability; modelling of the gastrointestinal tract; food development to meet the modern challenges of human 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:

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

Contact:

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For more information:

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E-mail: tipp@mfa.mail.go.th

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

Course Detail
Master of Science in Agricultural Research and Development

Course Title: Master of Science in Agricultural Research and Development
(International Program)

Master Degree: Master of Science (Agricultural Research and Development)

Academic Institution: Faculty of Agriculture at Kamphaeng Saen, Kasetsart University,
Kamphaeng Saen Campus

Duration: 2 years (4 semesters) (August 2022 – July 2024)

Background and Rational

1. Agricultural Research and Development Program is the research study which response to national and international development strategy for food security and sustainable agricultural development

2. Agricultural development

Global climate change affects soil fertility, water shortage, the reduction of agricultural product quality, pest outbreak. These cause effects to food security, health, energy and the reduction in a strategy of self-reliance. Thus, we need to develop human resources with agricultural knowledge and research skill.

Objectives:

1. To develop human resources with knowledge and research skill in agricultural development in relation to industrial agriculture, sustainable agriculture, self-sufficient agriculture, application of traditional knowledge in agriculture and development of a unique agricultural product of a local community.

2. To cover the whole range from agricultural production through consumer need which would lead to the security of food, society, and the country as a whole. Integration of a modern bioscience, agricultural science, and other technologies is emphasized in the learning process.

3. The program consists of various fields including **Entomology, Agricultural Machinery, Soil Science, Agronomy, Horticulture, Plant Pathology, Animal Science and Agricultural Extension and Communication.**

Course Synopsis and Methodology:**1. Study Plan**

Plan A1: total credits minimum of 36

| FIRST YEAR / 1st semester | | |
|--|---|----------------|
| Course code | Course Title | Credits |
| 02047591 | Research Methods in Agricultural Research and Development | (3) |
| 02047599 | Thesis | 6 |
| | Total | 6 |
| FIRST YEAR / 2nd semester | | |
| Course code | Course Title | Credits |
| 02047597 | Seminar | (1) |
| 02047599 | Thesis | 10 |
| | Total | 10 |
| SECOND YEAR / 1st semester | | |
| Course code | Course Title | Credits |
| 02047597 | Seminar | (1) |
| 02047599 | Thesis | 10 |
| | Total | 10 |
| SECOND YEAR / 2nd semester | | |
| Course code | Course Title | Credits |
| 02047599 | Thesis | 10 |
| | Total | 10 |

2. Course Content / Study Topics**Curriculum**

Plan A1: A research oriented program

| | | | |
|-------------------------------------|---|-----------|--------------|
| Total credits | minimum | 36credits | |
| - Major courses | minimum | 5 | audits |
| (without credits counting in total) | | | |
| o Seminar | | 2 | audits |
| o Compulsory courses | | 3 | audits |
| - Thesis | minimum | 36 | credits |
| Details of the Curriculum | | | |
| - Major courses | minimum | 5 | audits |
| 02047591 | Research Methods in Agricultural Research and Development | | 3(3-0-6) |
| 02047597 | Seminar | | 1,1 |
| - Thesis | minimum | 36 | credits |
| 02049599 | Thesis | | 1-36 credits |

Course Description:

| | | |
|----------|--|----------|
| 02047591 | Research Methods in Agricultural Research and Development Research principles and methods in agricultural research and development, problem analysis for research topic identification, data collecting and research planning, identification of samples and techniques, research analysis, result explanation and discussion, report writing, presentation and preparation of journal publication. | 3(3-0-6) |
| 02047597 | Seminar Presentation and discussion on current interesting topics in agricultural research and development at the master's degree level. | 1 |
| 0204599 | Thesis Research at the master's degree level and compile into thesis. | 1-36 |

Graduation Conditions:

1. Students are required to submit their thesis and successfully pass a final oral examination conducted by a committee appointed by The Graduate School. The final oral examination must be held openly and interested people can attend the examination.
2. Students achieve either publication, or at least approval for publication of thesis, or parts thereof, in acceptable national or international journals as announced by the Office of the Higher Education Commission on "The Criteria of Academic Journal for Publication Consideration"
3. Students are required to pass the English language examinations set forth by The Graduate School in at least one of the following choices:
 - 3.1 The Graduate School permits a transfer of both written and oral examinations for master's degree students from KU-EPT, TOEFL, IELTS, or other examinations as required by The Graduate School. *or*
 - 3.2 Enrollment in an English class as required by The Graduate School and need to pass the pertinent examinations.

Application Qualifications:

1. Applicant must hold a bachelor's degree in agriculture or the relevant fields with good academic background and a potential to conduct research and meet the university's admission requirements.
2. Qualification requirements of applicants are subject to Kasetsart University Regulations on Graduate Studies of The Graduate School, Kasetsart University.

Document Required:

1. Application form (<http://www.grad.ku.ac.th/en>)
2. Certificate of Bachelor's degree indicating graduate date.
3. Transcript record of Bachelor's degree indicating graduate date.
4. Curriculum Vitae.
5. Conceptual proposal of research interested.
6. Recommendation Letter.

Contact:

Contact persons for Academic

- Asst.Prof. Buppa KONGSAMAI (agrbpk@ku.ac.th)
- Ms. Lalida MASIRI (fagrlm@ku.ac.th)

For more information:

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Course Detail

Master of Public Health Program

| | |
|------------------------------|---|
| Course Title: | Master of Public Health Program |
| Master Degree: | Master of Public Health: MPH |
| Academic Institution: | College of Public Health Sciences, Chulalongkorn University |
| Duration: | 1 year (August 2022 – July 2023) |

Background and Rational:

The Master of Public Health program focuses on the development of public health personnel. And related fields to have knowledge and ability to develop the health system of the population in society, both national and international Have systematic problem solving skills Focus on specialization Which can be applied in conjunction with modern academics Both administrative And research for development Along with co-operation between personnel in various fields Related to public health Leading to problem solving National and international public health Both in the prevention of disease And sustainable promotion of good health of the people By offering specialties in Public Health and Management, Community and Reproductive Health, Urban and Global Health, Environmental and Occupational Health, the trimester-based program provides a variety of types and duration of study to respond to students' needs as follow:

Health Policy and Management Program is committed to training and inspiring the next generation of health care leaders. Our students and faculty are passionate about making the world a better place by improving health and health care. We work on compelling and important problems, from making the delivery of care safer and more efficient, to expanding health insurance coverage and eliminating disparities, to designing and improving the performance of entire health systems

Community Assessment and Reproductive Health is designed to provide an understanding of community health and reproductive health and population issues as well as the knowledge necessary for understanding community health needs and reproductive health interventions. The program will also explore and examine community, national and global challenges relating to the social, cultural and economic context influencing community health and reproductive health.

Community Assessment consists of Basic Concepts of Community, Community Structure, How to Approach Community, Community Mapping, Social Mapping, Social and Cultural Characteristic of the Community , Community Participatory Appraisal, Community Assessment, and Prioritization of Community Problems.

The Reproductive Health is composed of Introduction and Enhancing Access to Reproductive Health, Family Planning, Maternal and Child Health, Adolescent Health, Unwanted Pregnancy and Abortion, Preventing HIV/AIDS in Young People, Cancer of Reproductive system, and Aging Care.

Urban and Global Health puts an effort to gear students, both M.P.H and Ph.D, toward a plethora of urban and global health topics, ranging from economics, politics, social, cultural, and environmental aspects. Specializing in Urban and Global Health key courses will enable the students to become continuing life-long self-learners when coping with public health issues in one's areas of responsibility in an integrated manner.

Environmental and Occupational Health focuses on environmental issues and management that improve public health and minimize adverse human impacts. These impacts of exposure to environmental pollution are the number one public policy issue in the Kingdom of Thailand and several countries. The public, private, and academic sectors are all striving to improve the ability to understand our environments and to protect them. The integrated course consists of Environmental and Occupational Health, Environmental Epidemiology, Exposure Assessment, and Human Impact Assessment. Consequently, the primary goal of the program is to train qualified professionals with expertise in environmental and occupational health. This includes the hazard identification, the recognition of at-risk populations and the prevention of exposure. Many kinds of toxic agents are encountered both in the community and in the workplace, but there are significant differences in the circumstances and magnitude of exposure and, therefore, on the strategies used for controlling exposure and preventing disease. At the CPHS, Master and Doctoral research for the Public Health degree is multidisciplinary and broad, ranging in scope from local to international. Our faculty members are active as advisors on Public Health issues nationally and internationally.

The Health Behavior Branch is designed for research careers in academic, non-profit, and governmental settings and for leadership roles. Students will learn the importance of health behavior contributed to current public health problems, ranges of factors that influence behaviors, nutrition, physical activity, obesity, alcohol drinking, smoking, addictive substance abuse. Concept and theory related to health behavior and risk factors are included.

The students should develop research on health behavior into populations with whom they have worked or will work in the future. They may also conduct research and intervention on alcohol, substance abuse and HIV/AIDS population including developing laboratory techniques in detecting alcohol and substance abuse in body fluid.

Objectives:

1. To produce graduates with knowledge and ability to search, analyze, solve problems, as well as have research capabilities. And empirical knowledge and theory in the development of public health in 5 disciplines to meet the needs of manpower in public health In the era of stepping into the one health And change of the world society And health determinants As well as the medical system And public health adjustments from both the public and private sectors
2. To produce research and create new knowledge in public health for planning in Management level, solving problems, developing organizations and developing public health work of the country and region Effectively

Course Synopsis and Methodology:**1. Curriculum Plan**

| Course | Plan A2 (Credits) |
|-------------------------------|-------------------|
| Core Courses of public health | 15 |
| Major Compulsory Courses | 6 |
| Elective Courses | 3 |
| Thesis | 12 |
| Total (Credits) | 36 |

1.1 Study plan

Plan A2 Trimester System
 Aug-Nov Dec-Mar Apr-July
Start 1st Admission: Apply: March & April Study: August

| 1st Semester | 2nd Semester | 3rd Semester |
|---|---|--|
| Health Determinant Health System Dev Public Health Admin Statistic Research Methodology | Elective Course Compulsory Course 1 Compulsory Course 2 Thesis Seminar Thesis Proposal Exam | No Class Thesis Thesis Exam |

Minimum 1Year Program Student Study in campus by the Schedule

1.2 Thesis Research Plan

Summited Proposal Request within Feb
 Proposal Exam within March
 Data Collection During April to July
 Thesis Exam within June
 Summited full paper within July
 Graduated in August

2. Course Content

| A. Core courses (15 Credits) | |
|--|------------|
| 5300501 Health Problems, Determinants, and Trends | 3 Credits |
| 5300505 Health Systems Development | 3 Credits |
| 5300506 Research Methodology in Public Health | 3 Credits |
| 5300507 Statistics in Public Health Research | 3 Credits |
| 5300508 Public Health Administration | 3 Credits |
| 5300893 Thesis Seminar | S/U Credit |
| B. Compulsory Courses for the Major (6 Credits) | |
| Health Policy and Management | |
| 5300503 Policy and Strategic Planning | 3 Credits |
| 5300504 Implementation and Management | 3 Credits |
| Community and Reproductive Health | |
| 5300526 Reproductive Health | 3 Credits |
| 5300527 Community Assessment | 3 Credits |
| Urban and Global Health | |
| 5300528 Introduction to Urban and Global Health | 3 Credits |
| 5300529 Globalization and Contemporary Public Health | 3 Credits |
| Environmental Health and Occupational Health | |
| 5300538 Introduction to Environmental Health | 3 Credits |
| 5300541 Environmental and Health Risk Assessment | 3 Credit |

| | |
|---|-----------|
| Health Behaviors | |
| 5300544 Health Behavior | 3 Credits |
| 5300545 Social and Cultural Determinants of Health | 3 Credits |
| C. Electives Course (3 Credits) | |
| 5300503 Policy and Strategic Planning | 3 Credits |
| 5300504 Implementation and Management | 3 Credits |
| 5300512 Health Development and Change | 3 Credits |
| 5300513 Health Financing | 3 Credits |
| 5300514 Resource Development | 3 Credits |
| 5300515 Seminar in Health Systems Development | 3 Credits |
| 5300521 Fundamental Skills in Sciences and Research | 3 Credits |
| 5300522 Fundamental Skills in Planning and Management | 3 Credits |
| 5300523 Health Services Organization and Management | 3 Credits |
| 5300524 Health Insurance System Management | 3 Credits |
| 5300525 Community Health Development | 3 Credits |
| 5300526 Reproductive Health | 3 Credits |
| 5300527 Community Assessment | 3 Credits |
| 5300528 Introduction to Urban and Global Health | 3 Credits |
| 5300529 Globalization and Contemporary Public Health | 3 Credits |
| 5300530 Global Health Impacts on Drug Use 3 Credits | 3 Credits |
| 5300534 Behavioral Science Theories as a Basis for Health Promotion | 3 Credits |
| 5300536 Urban Health | 3 Credits |
| 5300537 Travel Medicine and Public Health | 3 Credits |
| 5300538 Introduction to Environmental Health | 3 Credits |
| 5300539 Environmental and Occupational Health | 3 Credits |
| Epidemiology | 3 Credits |
| 5300540 Law and Management of Environmental and Occupational Health | 3 Credits |

| | |
|--|-----------|
| 5300541 Environmental and Health Risk Assessment | 3 Credits |
| 5300542 English for Public Health | 3 Credits |
| 5300543 Sexual Behavior and Socio-cultural Issues in Sexuality and Reproductive Health | 3 Credits |
| 5300544 Health Behavior | 3 Credits |
| 5300545 Social and Cultural Determinants of Health | 3 Credits |
| 5300546 Addictive Behavior | 3 Credits |
| 5300547 Health and Social Impact on Addiction | 3 Credits |
| 5300548 Community Based and Individual Intervention | 3 Credits |
| 5300549 Prevention, Intervention and Evaluation of Health Behavior Module | 4 Credits |
| 5300550 Directed Studies | 3 Credits |
| 5300570 Field Study | 3 Credits |
| 5300571 Business Administration in Health | |
| 5300670 Practical Study I | |
| 5300572 Medical and Public Health Communication | |
| 5300573 Transnationalism and Public Health | |

Graduation Conditions:

- Pass Standard of English (CUTEP 45 / IELTS 4.5 / TOEFL 450)
- Pass Proposal & Thesis Examination
- 1 international Publication or Proceeding
- Submitted Full paper & CU I Thesis to Graduate School
- Completed Register of Graduation

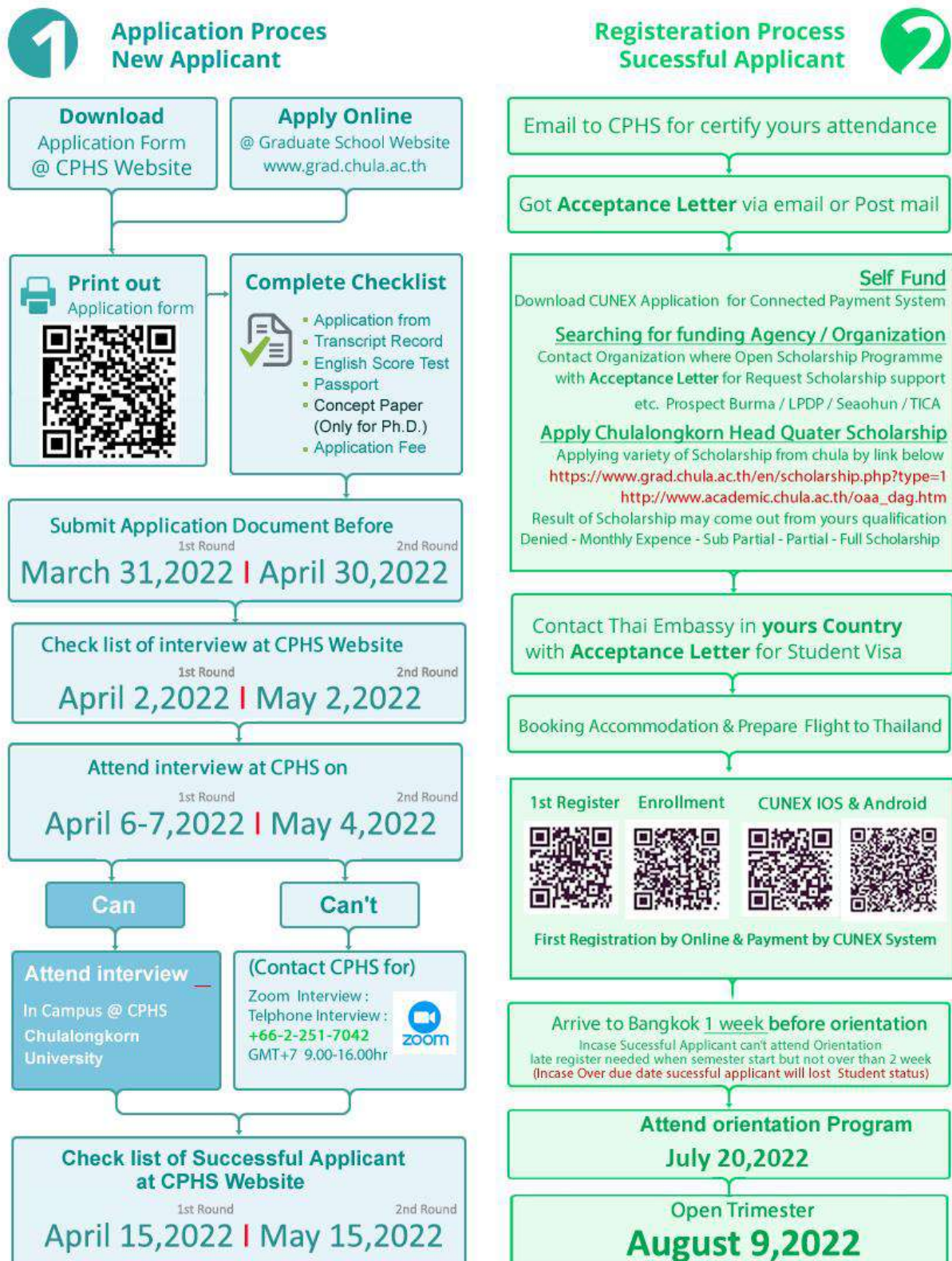
Applicant Qualifications:

An interested person with good command of English and bachelor degree in any fields

Document Required:

- Transcript
- Recommendation Letter
- English Test
 - **CU-TEP 45**
 - **IELTS 4.5**
 - **TOEFL 450**
 - **Certify document Graduated from University where certify by OCSC or Study in English Official Language Country**

- Application form of Chula
<http://www.cphs.chula.ac.th/index.php/component/phocadownload/file/298-application-form>
- Statement of purpose and area(s) of interest (1 page)
- A copy of your identification document (Passport).



Contact:

1. **Academic Administrator** : Mr. Poohmerat Kokilakanishtha (Pooh)
Mobile: 66892552395 **email:** Poohmerat.k@chula.ac.th/ Poohmerat@gmail.com
2. **Director, Academic Administrative Section** : Ms. Sukarin Wimuktayon (L)
Tel: 6622188191 **email:** sukarin.w@chula.ac.th / academic_cphs@chula.ac.th

Alliance / Partnership & Network

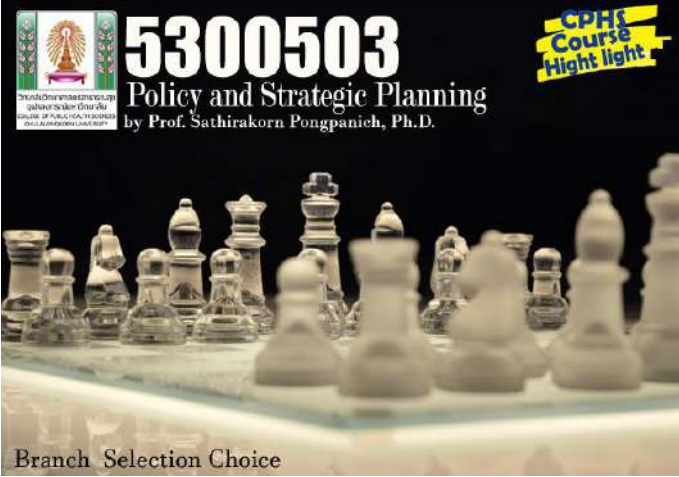

Rutgers University, USA; The University of Medicine and Dentistry of New Jersey (UMDNJ), USA; University of Health Sciences, LAO PDR; National University of Singapore; Hong Kong Baptist University; Curtin University, Australia; Ottawa University, Canada; University of California at Los Angeles, USA; Johns Hopkins University, USA; Institute of Urban Environment, Chinese academy of Sciences, China, University of Florida, USA; The University of Tokyo, Japan; Kyoto University, Japan; Teikyo University, Japan; Harvard TH Chan School of Public Health, USA; Minnesota University, USA; University of Amsterdam, the Netherlands; Emory University, USA; University of Washington, USA; University of New South Wales, Australia; St. Elisabeth University, Slovakia; Australia; Adelaide University, Australia; University of Indonesia, Indonesia; Faculty of Medicine, University of Yangon, Myanmar; University of the Philippines, the Philippines; Brunei Darussalam University, Brunei Darussalam, World Health Organization (WHO), World Health Organization (WHO / Thailand, World Health Organization (WHO/SEARO), Fogarty International Center, National Institutes of Health (NIH), UNFPA, ILO, FAO, USAID, US NAS, UNICEF, SEAHUN, IOM

Instructor & Expertise

| | | | |
|---|---|--|---|
|  | Prof. Dr. Sathirakorn Pongpanich Expertise: Health Economics, Health Policy and Management and Health Administration |  | Prof. Surasak Taneepanichskul, MD. Expertise: Obstetrics and Gynecology, Reproductive Health, Medicine, Clinical Science, Public Health, Preventive Medicine |
|  | Assoc. Prof. Dr. Ratana Somrongthong Expertise: Public Health, Community Health, Adolescent Health, Aging, Reproductive Health |  | Assoc. Prof. Dr. Wattasit Siriwong Expertise: Environmental Health, Human Health Risk Assessment, Exposure Science |
|  | Assoc. Prof. Dr. Chitlada Areesantichai Expertise: Substance Abuse including Alcohol and Tobacco, HIV/AIDS |  | Assoc. Prof. Dr. Khemika Yamarat Expertise: Gender and Sexuality, Reproductive health, Women's Health, Sex education, Elderly |

| | | | |
|---|---|--|---|
|  | <p>Asst. Prof. Dr. Nutta Taneepanichskul Expertise: Urban health, Environmental and Occupational Health, Indoor air quality, Housing and built environment, Sleep disorder, Neuropsychiatric disorders</p> |  | <p>Dr. Montakarn Chuemchit Expertise: Violence Against Women and Children, Intimate Partner Violence, Sexual and Reproductive, Health and Rights, Gender and Sexuality, Women's Health</p> |
|  | <p>Prof. Mark Gregory Robson, Ph.D., M.P.H., Dr.P.H. Expertise: Environmental Health, Exposure Science</p> |  | <p>Alessio Panza, M.D. Expertise: Adolescent Health, Reproductive Health, Obesity, HIV and AIDS, Health Systems</p> |
|  | <p>Dr. Wandee Sirichokchatchawan Expertise: A One Health approach to – Food safety, AMR, Infectious diseases and Zoonosis</p> |  | <p>Dr. Pokkate Wongsasuluk Expertise: Environmental Management and Policy, Health Risk Assessment, Biomarkers, Heavy Metals, Technology and Application, Covid-19</p> |
|  | <p>Dr. Pramon Viwattanakulvanid Expertise: Aging populations, patient support group, patient empowerment, traditional Chinese exercise (Qigong), and health care access</p> |  | <p>Dr. Kraiwuth Kallawicha Expertise: Bioaerosols, Indoor Air Quality, Air Pollution, Environmental and Occupational Health, Environmental and Occupational Epidemiology, GIS and Health</p> |


Interesting Course

| | |
|--|--|
|  <p>Branch Selection Choice</p> | <p>5300503 POLICY AND STRATEGIC PLANNING</p> <p>Course Description: Principles, methodologies and techniques for decision making and creative problem solving; principles of policy-making; legal and ethical issues pertaining to public health policy and practice; health care financing; information requirements for policymaking; strategic planning principles, methods, and techniques; strategic planning practice and threats.</p> |
|  <p>Branch Selection Choice</p> | <p>5300504 IMPLEMENTATION AND MANAGEMENT</p> <p>Course Description: Principles, methodologies and techniques for decision making and creative problem solving; principles of policy-making; legal and ethical issues pertaining to public health policy and practice; health care financing; information requirements for policymaking; strategic planning principles, methods, and techniques; strategic planning practice and threats.</p> |

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|  <p>CPHS Course Highlight</p> <p>STRENGTHS WEAKNESSES NEED ASSETS</p> <p>Community Assessment 5300527</p> <p>Branch Selection Choice Dr.Montakarn Chuemchit, Dr.Ratana Somrongthong</p> | <p>5300527 COMMUNITY ASSESSMENT</p> <p>Course Description: How to identify community's strengths, weaknesses, needs, and assets? “Community Assessment” is an answer, this course introduces basic concept of community, community structure, how to approach community, community mapping, social mapping, social and cultural of the community, community participatory appraisal, community assessment prioritization of community problems and writing community report.</p> <p>Course Highlight: Community visit and guest speaker</p> |
|  <p>CPHS Course Highlight</p> <p>Elective Choice 5300543</p> <p>Sexual Behavior and Socio-Cultural Issues in Human Sexuality and Reproductive Health</p> <p>Dr.Montakarn Chuemchit, Dr.Khemika Yamarat, Dr.Peter Xenos, Dr.Pramon Viwattanakulvanit</p> | <p>5300543 SEXUAL BEHAVIOR AND SOCIO-CULTURAL ISSUES IN SEXUALITY AND REPRODUCTIVE HEALTH</p> <p>Course Description: Though biology plays an important role, the way in which behavior and sexuality are expressed and acted upon is highly influenced by social and culture. This course introduces important socio-cultural factors influencing sexual and reproductive behaviours such as norms, values, traditional health beliefs, communication, gender-related issues, sexual diversity, sexual harassment and abuse, sex/gender discrimination, ethics and law related to sexuality and reproductive health.</p> <p>Course Highlight:</p> |

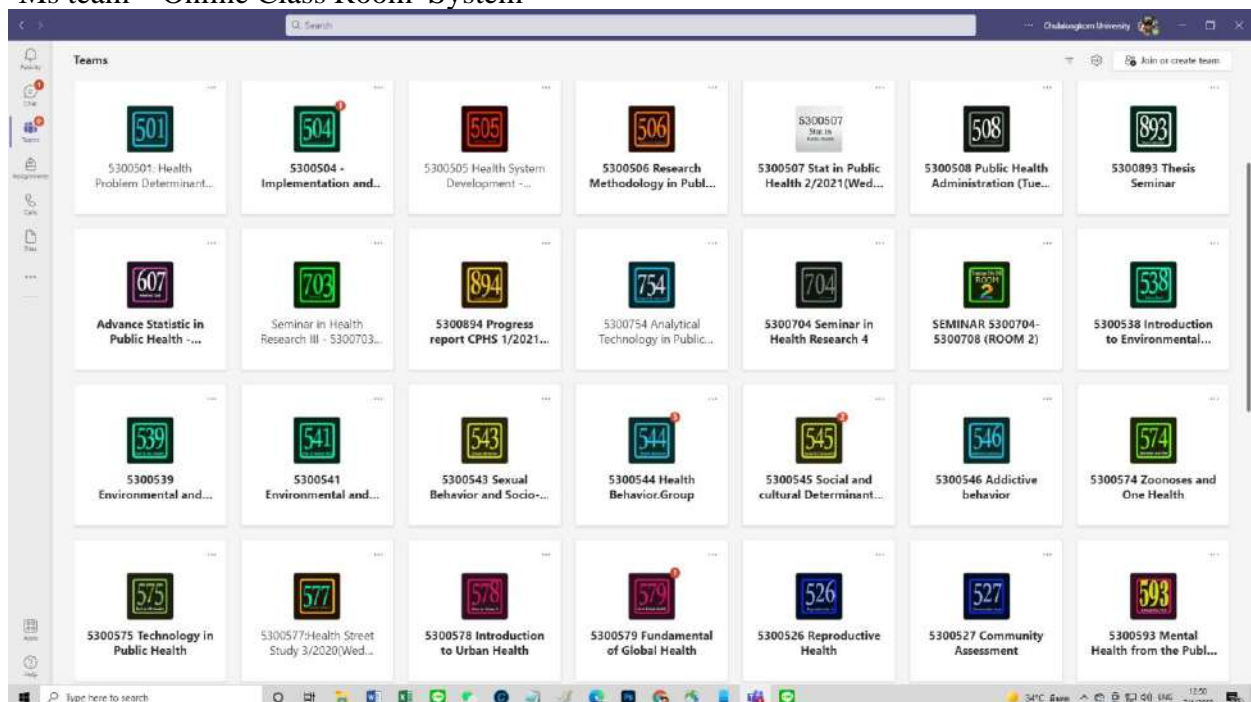
| | |
|--|---|
| | Learning from discussions, short movies, film, guest speaker and field visit |
|  <p>CPHS Course Highlight</p> <p>5300544 HEALTH BEHAVIOR</p> <p>Branch Selection Choice Assoc. Prof. Chitlada Areesantichai, Ph.D., Asst. Prof. Usaneya Permporn, Ph.D.</p> | <p>5300544 HEALTH BEHAVIOR</p> <p>Course Description: Problems of health behaviors and risk behaviors, range of factors that influence health behaviors, nutrition, physical activity, obesity, alcohol drinking, smoking, addictive substance use, concept and theory related health behavior and risk factors, communication skill, behavior change and self regulation.</p> |
|  <p>CPHS Course Highlight</p> <p>5300545 Social and Cultural Determinants of Health <i>Because We Connect - Because We Care</i></p> <p>Branch Selection Choice Dr. Montakarn Chuemchit, Dr. Khemika Yamarat, Dr. Peter Xenos</p> | <p>5300545 SOCIAL AND CULTURAL DETERMINANTS OF HEALTH</p> <p>Course Description: The context of people's lives determine their health. Social and Cultural determinants of health are conditions that influence one's health and well-being. This course introduces how are social and cultural factors related to personal behavior and health such as gender, race, culture, education, income, housing, environment, access to health care, health disparities, health inequalities, the social gradient etc.</p> <p>Course Highlight: Learning from discussions, short movies, film, guest speaker and field visit</p> |

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|  <p>5300570 Field Study A real field experience without comparable</p> <p>CPHS Course Highlight</p> <p>โรงพยาบาลบ้านหมี่ Elective Choice</p> <p>Dr. Montakorn Chaiyomvit, Dr. Wandee Sirichekchaitawan, Dr. Pokkate Wongsasuluk, and Dr. Anucholee Prasansuklab</p> | <p>5300570 FIELD STUDY</p> <p>Course Description: 5-day course in the field to learn Thailand health care system, to know the community better, to observe and conduct a rapid community assessment in the studied areas.</p> <p>Course Highlight: 5 days in the field, Team work for community assessment, and better understanding on Thailand health care system</p> |
|  <p>5300575 Technology in Public Health</p> <p>CPHS Course Highlight</p> <p>Pokkate Wongsasuluk, Ph.D. Elective Choice</p> | <p>5300575 TECHNOLOGY IN PUBLIC HEALTH</p> <p>Course Description: Digital Era, Technology and Innovation; Internet Network/Application/AI/Robots/Big Data</p> |
|  <p>URBAN HEALTH</p> | <p>5300578 INTRODUCTION TO URBAN HEALTH</p> |
|  <p>5300579: FUNDAMENTAL TO GLOBAL HEALTH</p> | <p>5300579 FUNDAMENTAL OF GLOBAL HEALTH</p> |

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|  | <p>5300581 FUNDAMENTAL SKILLS IN SCIENCE AND RESEARCH</p> <p>Course Description: Identifying needs of public health problems for social innovation solutions; designing social innovation in public health through “design thinking” process; designing social innovation appropriate for a specific setting to solve public health problems in a sustainable manner; developing integrated body of knowledge of social entrepreneurs to solve public health problems</p> <p>Course Highlight: Social Innovation and Public Health / Marketing in Public He</p> |
|---|--|

Online Learning Support

-Ms team – Online Class Room System



Bulletin Board for Class Communication

The screenshot shows a Microsoft Teams chat window. The chat is titled "5300507 Stat in Public Health 2/...". The chat history shows several messages:

- A message that has been deleted.
- A message from Pramon Viatana: "Welcome to the new batch of students 2nd Semester of Academic Year 2021. Look forward to seeing you on December 8th, 2021 (9.00-12.00 am). Please stay safe and take care." This message has 3 replies.
- A message from Pramon Viatana: "so we need to wait for TA open the room...". This message has 3 replies.
- A message: "New channel meeting started". This message has 15 replies.
- A message from Pramon Viatana: "New conversation" button.

The chat window also shows a search bar, a "Meet" button, and a "New conversation" button at the bottom.

Hang up Class Material Online

The screenshot shows a Microsoft Teams chat window. The chat is titled "5300507 Stat in Public Health 2/...". The chat history shows a list of class materials:

| Name | Modified | Modified By |
|---|-------------------|---------------------|
| Session 01 Introduction to Statistics | August 11, 2021 | Parkaeun Tahirat... |
| Session 02 Descriptive statistics | December 14, 2020 | Pramon Viatana... |
| Session 03 Probability & Sampling Distribut... | December 23, 2020 | Bidhuwan Panti |
| Session 04 Analysis of 1-2 means | December 30, 2020 | Pramon Viatana... |
| Session 05 Analysis of several means | January 5, 2021 | Pramon Viatana... |
| Session 06 Non parametric by AJ Chittada | January 12, 2021 | Pramon Viatana... |
| Session 07 Non parametric by AJ Chaveen... | January 10, 2021 | Pramon Viatana... |
| Session 09 Design in Epidemiology | February 3, 2021 | Nitta Tevesarich... |
| Session 10 Linear regression and logistic re... | February 28, 2021 | Pramon Viatana... |
| Session 12 Sample size calculation | February 25, 2021 | Pramon Viatana... |
| Session 14&15 STATA | March 9, 2021 | Pramon Viatana... |
| Session 8 Correlation and Simple regressio... | February 1, 2021 | Pramon Viatana... |
| 242755.jpg | February 2, 2021 | Pramon Viatana... |
| 242756.jpg | February 2, 2021 | Pramon Viatana... |
| 242772.jpg | February 2, 2021 | Pramon Viatana... |
| 79f79e03d212af2f2612d761c1094fc.png | February 2, 2021 | Pramon Viatana... |
| Ch_line_groupChittada.sav | February 2, 2021 | Pramon Viatana... |
| Ch_Two groups_Chittada SPSS_Chittada.sav | February 2, 2021 | Pramon Viatana... |

The chat window also shows a search bar, a "Meet" button, and a "New conversation" button at the bottom.

Live Lecture Broadcast (Thai time GMAT -7) – Study From Everywhere

The screenshot shows a Zoom meeting window with a Microsoft Excel spreadsheet in the foreground. The spreadsheet is titled 'BINOM.DIST' and contains the following data:

| | A | B | E | F | G |
|----|-------------------|--------|--------------------|-----------------------------|--------|
| 1 | | | FALSE | TRUE | |
| 2 | | X=#+ve | Pr(X) | Pr(X=α) | |
| 3 | Phi(π) =.05 | 0 | =BINOM.DIST(B3,10) | Mean of X=n*Phi | 0.5000 |
| 4 | n=10 | 1 | | Variance of X=n*Phi*(1-Phi) | 0.4750 |
| 5 | | 2 | | SD of X | 0.6892 |
| 6 | | 3 | | Median | 0 |
| 7 | | 4 | | Mode | 0 |
| 8 | | 5 | | | |
| 9 | | 6 | | | |
| 10 | | 7 | | | |
| 11 | | 8 | | | |
| 12 | | 9 | | | |
| 13 | | 10 | | | |

The function arguments dialog box for BINOM.DIST is open, showing the following values:

- Number: 1
- Trials: 10
- Probability: 0.05
- Cumulative: FALSE

The Zoom meeting interface shows several participants in a grid view on the right side of the screen.

Recording Lecture Every Class for Re Watch Study

The screenshot shows a OneDrive file explorer window displaying a list of meeting recordings. The recordings are listed in a table with columns for Name, Modified, and Modified By.

| Name | Modified | Modified By |
|--|----------------------|-------------------|
| General-20220105_090434-Meeting Record... | Wednesday at 11:5... | Chi Pyae pyae han |
| Meeting in _General_-20211222_085221-M... | December 22, 2021 | Ghina Nur Afa |
| Meeting in _General_-20211222_085230-M... | December 22, 2021 | Tay Za Kyi Win |
| Meeting in _General_-20211229_090021-44... | December 29, 2021 | Chi Pyae pyae han |

The OneDrive interface includes a left sidebar with navigation options like 'All Teams', 'S300507', and 'Channels'. The top of the window shows the 'General' channel name and various file management icons.

Physical Experience When Study in Thailand

VDO Promo updated Old location Dec 2021 – Aug 2022

** CPHS will move to New Building every facility will be more better and very innovation from 2022 Academic Year

<https://www.youtube.com/watch?v=AnCedfsEBC4>

For more information:

Human Resources Development Cooperation Division
Thailand International Cooperation Agency (TICA)
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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 Detail

Master of Science Program in Social, Economic and Administrative Pharmacy

| | |
|------------------------------|--|
| Course Title: | Master of Science Program in Social, Economic and Administrative Pharmacy (International Program) |
| Master Degree: | Master of Science (Social, Economic and Administrative Pharmacy) |
| Academic Institution: | Mahidol University, Faculty of Pharmacy, Department of Pharmacy, Division of Social and Administrative Pharmacy |
| Duration: | 2 years (August 2022 – May 2024) |

Background and Rational:

The changes in economics, society, and culture affect the social structure and the way of people's lives in every country. These factors contribute to the continual change in health conditions and health system. Accordingly, the management of the public health system must be developed at all times. In this regard, the education system that produces healthcare personnel is required to be active as well as be continuously monitored and developed. The development of this curriculum is mainly based on the development situation of socioeconomic, cultural, and health system. The content of the curriculum focuses to prepare for the changes in the health and drug systems. It also aims to respond to social and cultural issues that affect people and personnel as the social, economic and administration dimensions are substantially important. The curriculum development focuses on the personnel development by integrating related sciences of public policy on drug and health as a whole and the management in both the public and private sectors. This would lead to the drug system development under the health system in the various dimensions and contexts of the society. Students are provided with knowledge related to public policy and health system administration. Students can also build relationships that lead to the development of public policy to influence the health system development in a holistic manner. According to a demand analysis in Thailand and other countries, many overseas pharmacy institutions require the development of pharmacy education in the area of social, economic and administrative pharmacy. These institutes would like to send their personnel to study in this program. Additionally, this program is a part of the supporting project for international postgraduate students, named the Thailand International Postgraduate Program (TIPP).

The program has a plan to accommodate teaching and learning resources according to the students' needs. As a part of planning, there are meetings of related people for analyzing the demand for textbooks, reference books, documents, other instructional equipment, and other electronic media as well as allocating the resources to meet the needs of students and other users.

The program holds student orientation to provide academic advice, teaching plan in the curriculum, suggestions on how to study, and explanation about the advisory schedule of each advisor. There are activities to promote the student development such as welcoming new students by instructors and senior students in each program. The senior students are assigned to run the event in order to practice their management skills.

The student advisory system is provided to advise and assist students in studying and/or suggest students for other possible problems. The number of students per advisor is in accordance with the criteria of the Faculty of Graduate Studies.

Philosophy and Objectives:

Master of Science Program in Social, Economic and Administrative Pharmacy believes in an outcome-based education and active learning. The Program adopts Prince Mahidol's philosophy, "the true success is not in the learning, but in its application to the benefit of mankind". It focuses on inspiring the students to learn, explore, and create the knowledge for the broad society with philanthropic mind and strong passion. Real experiential learning is the key concern. This program emphasizes on producing high-quality graduates with knowledge of social, economic, and management who possess moral, academic ethics, and professional ethics. The graduates must be able to integrate the knowledge of social, economic, and management for improving drug and healthcare systems.

After completion their study, students will have characteristics, which comply with Thailand Quality Framework standard as follows:

1. Have appropriate behavior and commit to upholding and embracing the highest ethical and professional standard in academic and practice.
2. Possess knowledge in implementing policy. Provide evidence-based information for policy formulation, management, and administration, and be able to understand, describe, define and explain relevant knowledge related to economic and drug policy leading to an improvement in the drug and health systems.
3. Be able to analyze, apply and design social science, economic, epidemiology and management research, which lead to the development of drug and health care systems.
4. Have good human relation, social responsibility, and leadership skill.
5. Have numerical analysis skills, and information technology skills, which can be applied for drug and health systems

Program Learning Outcomes (PLOs)

1. Ethics

- 1.1 Respect the principle of intellectual property rights.
- 1.2 Embrace ethics and professional ethics.

2. Knowledge

- 2.1 Understand, describe, define and explain the principle and method of public health, social sciences, and management related to drug and health systems.
- 2.2 Understand, describe, define and explain research techniques that are accepted in the development of drug and health systems.

3. Intellectual skill

3.1 Analyze the socio-economic and administrative issues related to drug and health systems.

3.2 Apply knowledge in the context of drug and health systems.

3.3 Design a research related to social pharmacy, economics and administration by using an appropriate research methodology.

4. Interpersonal skill and responsibility

4.1 Interact (persuade) properly with colleagues and stakeholders.

4.2 Enthusiastically work as a team member and demonstrate leadership attributes.

4.3 Perform and participate in socially responsible activities.

4.4 Have a responsibility in achieving an assignment.

5. Numerical analysis skills, communication, and information technology

5.1 Use IT to search, manage, analyze and present qualitative/ quantitative academic data.

Course Synopsis and Methodology:**Course Content/ Study topic:****Program Structure***Credit Requirements*

Credit requirements of the program were set according to the Ministry of Education Announcement titled “Standard Criteria for Graduate Studies 2005,” with specified plan 2 curriculum.

| | |
|--------------------------------|-------------------|
| 1. Required Courses | 12 credits |
| 2. Elective Courses (at least) | 12 credits |
| 3. Thesis | 12 credits |
| Total no less than | 36 credits |

Courses in the curriculum**(1) Required Courses 15 credits****Credits (Lecture-Practice-Self Study)**

| | | |
|----------|--|----------|
| GRID 603 | Biostatistics | 3(3-0-6) |
| PYSP 671 | Research Methodology in Social Science I | 2(2-0-4) |
| PYSP 674 | Drug and Health System Management | 2(2-0-4) |
| PYSP 675 | Health Economic Evaluation | 2(2-0-4) |
| PYSP 676 | Pharmacoepidemiology in Public Health | 2(2-0-4) |
| PYSP 688 | Seminar in Current Research on Social, Economic and Administrative Pharmacy | 1(1-0-2) |
| PYSP 690 | Seminar in Research Methods on Social, Economic and Administrative Pharmacy | 1(1-0-2) |
| PYSP 710 | Strategic Management in Health System | 2(2-0-4) |

(2) Elective Courses: Not less than 9 credits

Apart from the elective courses mentioned below, students are allowed to register for other courses offered by the Faculty of Graduate Studies, Mahidol University, or other universities based on students' interests. However, it must be approved by their academic advisors or the program administrative committee.

| | | |
|-------------|--|----------|
| PYSP 672 | Social and Cultural Aspects Relating to Health | 3(3-0-6) |
| PYSP 677 | Health Outcome Assessment | 3(3-0-6) |
| PYSP 678 | Pharmaceutical Anthropology | 3(3-0-6) |
| PYSP 679 | Cost Analysis in Health Care | 3(3-0-6) |
| PYSP 680 | Hospital Pharmacy Administration and Practice | 3(3-0-6) |
| PYSP 683 | Cost-Effectiveness Modelling in Health | 3(3-0-6) |
| PYSP 695 | Evaluation of Pharmacy and Health Care Program | 3(3-0-6) |

5

(3) Thesis 12 credits**Credits (Lecture-Practice-Self Study)**

| | | |
|----------|--------|------------|
| PYSP 698 | Thesis | 12(0-36-0) |
|----------|--------|------------|

Course Synopsis & Methodology:**Study Plan; Plan 2 (A2) (Course work and thesis)**

| Year | Semester 1 | | Semester 2 | |
|------|--|----------|---|-----------|
| 1 | GRID 603 Biostatistics | 3(3-0-6) | PYSY 676 Pharmacoepidemiology in Public Health | 2(2-0-4) |
| | PYSP 671 Research Methodology in Social Science I | 2(2-0-4) | PYSY 710 Strategic Management in Health System | 2(2-0-4) |
| | PYSP 674 Drug System Management | 2(2-0-4) | PYSY 690 Seminar in Research Methods on Social, Economic and Administrative Pharmacy | 1(1-0-2) |
| | PYSP 675 Health Economic Evaluation | 2(2-0-4) | Elective courses | 6 credits |

| Year | Semester 1 | Semester 2 |
|-------------|---|---|
| | PYSP 688 Seminar in Current Research on Social, Economic and Administrative Pharmacy Elective courses 3 credits Total 13 credits | Total 11 credits |
| 2 | PYSP 698 Thesis 6(0-18-0) Total 6 credits | PYSP 698 Thesis 6(0-18-0) Total 6 credits |

Remark: Students have to pay for the field-trip study fee as part of PYSP 674 Drug and Health System Management.

Research Projects of the Program

Guidelines for conducting a research project are as follows:

- (1) Research in social sciences and humanities related to drug and health systems
- (2) Pharmacoepidemiological studies
- (3) Health outcomes research
- (4) Cost analysis in health care
- (5) Health economics and health technology assessment
- (6) Drug and system management at international, national, and hospital levels
- (7) Drug and health policy analysis
- (8) Analyzing, planning, and managing of health care personnel
- (9) Strategic planning and organization management
- (10) Development of tools and methodology for drug and health systems
- (11) Research on consumer protection and laws at national and international levels

Applicants Qualifications:

1. Hold a Bachelor's degree in the area of medical and public health from institutions of Higher Education in Thailand or foreign countries accredited by the Office of the Higher Education Commission (OHEC) with a minimum cumulative GPA of 2.50 or equivalent.

A candidate with the degree specified above but has a GPA less than 2.50, the candidate must have experience in management related to drug and health systems, be involved with drug management in public or private sectors or has research publications related to drug system.

2. Have an English proficiency test score as the requirement of Faculty of Graduate Studies

3. Other exceptions may be considered by the Program Director and the Dean of the Faculty of Graduate Studies, Mahidol University.

Document Required:

1. Application form
2. Transcript
3. Certificate of English of proficiency
4. Statement of purpose

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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 Detail

Master of Science Program in Nutraceuticals and Functional Foods (International Program)

| | |
|------------------------------|--|
| Course Title: | Master of Science Program in Nutraceuticals and Functional Foods (International Program) |
| Master Degree: | Master of Science (Nutraceuticals and Functional Foods) |
| Academic Institution: | Departments of Pharmacy, Faculty of Pharmacy, Mahidol University |
| Duration: | 2 years (August 2022 – May 2024) |

Background and Rational:

Nutraceuticals and Functional Foods are the group of products which gain increasing popularity every year. There was a report on the growth of global market for Functional Foods at 6% between 2011-2015. Kasikorn Research Center reported on August 24, 2015 that the value of the market of Functional Foods in Thailand was 161,000 million THB and continues to grow at 6% per year. The market of Functional Foods shares approximately 60% of health food market. For nutraceuticals, or generally assigned to dietary supplements, the value of the global market was 122,080 million USD in 2015. The major target customer is adult around 55.5%. The value continues to grow at 7.4% per year. The same trend is occurred worldwide including Thailand. The industries related to Nutraceuticals and Functional Foods are important for the countries which have rich sources of herbal plants. At present, many countries around the world are facing the health problems from the growing number of aging societies. These population are one of the groups of customers looking for the health products especially nutraceuticals and functional foods in order to maintain good health or lower the risk of chronic diseases. Thus, it is a great opportunity for all-level of entrepreneurs in these industries. However, there was an urgent need for personnel with knowledge in Nutraceuticals and Functional Foods products in order to fill the positions in production, analysis, importing, exporting or quality controlling of the products. And since herbs with potentials were available in Thailand, with the expertise in herbs, foods, and modern drugs, Faculty of Pharmacy should be a good institute to research and produce Nutraceuticals or Functional Foods products with supported evidence in relevant activities and analyses.

The program was submitted for approval, as a new graduate program in 2012, and was approved in principle by the Mahidol University Board on July 18, 2012. And the first semester started on Semester I, Academic Year 2013. Since then, the program has been creating the successful graduates to fulfil the positions in production, analysis, importing, exporting or quality controlling of the products in the related industries. The philosophy of the program is to create the graduate in Nutraceuticals and Functional Foods who has quality, morality, ethics, and knowledge concerning research, development, and delivery academic information of Nutraceuticals and Functional Foods.

Objectives:

After completion their study, students will have characteristics which comply with Thailand Quality Framework standard as follows:

1. Possess moral, ethics and professional ethics, including ethics for human research and research code of conduct
2. Possess knowledge that is relevant to Nutraceuticals and Functional Foods
3. Possess cognitive skills in searching, analyzing, synthesizing relevant information and effectively conducting research relevant to Nutraceuticals and Functional Foods
4. Possess social responsibility, interpersonal and interactive skills, express opinions, possess creative ideas and time-management skills
5. Possess appropriate communication skill and informative technology utilization for various groups in both academic and professional sectors along with ability to use information technology to analyze and present research data effectively at international level

Expected Learning Outcomes

On successful completion of the program students will be able to:

1. Understand and describe principles and theories regarding Nutraceuticals and Functional Foods.
2. Able to apply and update the knowledge in the field of Nutraceuticals and Functional Foods.
3. Develop, analyze, and solve problems and make decision systematically. Conclude the principle and synthesize the content of Nutraceuticals and Functional Foods.
4. Understand and select methods in the processing, analyzing and searching information of Nutraceuticals and Functional Foods.
5. Design experiments/ research work, discuss and conclude the results, create new knowledge or new product in Nutraceuticals and Functional Foods.
6. Be responsible to his/her assigned work, also those as a group. Co-operate with others as a team, show different creative opinion. Organize and manage the time efficiently. Develop his/her potential and colleagues, share knowledge and experience.
7. Use new technology to search information, collect, analyze, and interpret data, using scientific principles or tools correctly and appropriately. Communicate, transfer, and present the results both in the form of scientific article, lecture, and discussion correctly at the international level.
8. Refer to sources of information, carry out the production of Nutraceuticals and Functional Foods honestly and fairly. Obey and follow the rules and regulations of MU.

Course Synopsis & Methodology:

Study plan:

| Year | Semester 1 | Semester 2 |
|------|---|---|
| 1 | PYFC 602 Functional Foods I 3(3-0-6) PYFC 603 Bioactive compounds 3(3-0-6) PYID 685 Research Methodology in Pharmacy I 2(2-0-4) PYFC 607 Biological, Pharmacological, Epidemiological, and Clinical Studies 3(2-3-5) Elective course 0-4 credits Total credit 11-15 credits | PYFC 601 Nutraceuticals I 3(3-0-6) PYFC 605 Product Development of Nutraceuticals and Functional Foods 3(2-3-5) PYFC 676 Seminar in Nutraceuticals and Functional Foods I 1(1-0-2) Elective course 2-6 credits Total credit 9-13 credits |

| | | | | |
|--------------------|--|----------------------------|--|----------------------------|
| 2 | PYID 698 Research M.Sc. Thesis Total credit | 6(0-18-0) 6 credits | PYID 698 Research M.Sc. Thesis Total credit | 6(0-18-0) 6 credits |
| Thesis examination | | | | |

Course Content/Study Topic:**Program Structure***Credit Requirements*

Credit requirements of the program were set according to the Ministry of Education Announcement titled “Standard Criteria for Graduate Studies 2005,” with specified plan 2 curriculum.

- | | |
|--------------------------------|-------------------|
| 1. Required Courses | 18 credits |
| 2. Elective Courses (at least) | 6 credits |
| 3. Thesis | 12 credits |
| Total not less than | 36 credits |

Required Courses

| <u>Course ID</u> | <u>Course Name</u> | <u>Credit(s)</u> |
|------------------|--|------------------|
| PYFC 601 | Nutraceuticals I | 3 (3-0-6) |
| PYFC 602 | Functional Foods I | 3 (3-0-6) |
| PYFC 603 | Bioactive Compounds | 3 (3-0-6) |
| PYFC 605 | Product Development of Nutraceuticals and Functional Foods | 3 (2-3-5) |
| PYFC 607 | Biological, Pharmacological, Epidemiological, and Clinical Studies | 3 (2-3-5) |
| PYFC 676 | Seminar in Nutraceuticals and Functional Foods I | 1 (1-0-2) |
| PYID 685 | Research Methodology in Pharmacy I | 2 (2-0-4) |

Elective Courses

Elective courses can be any graduate-level courses offered within Mahidol University or other universities with approval from the program director, major advisor, or program administrative committee. Listed below are examples of elective courses offered by the Faculty of Pharmacy, Mahidol University.

| <u>Course ID</u> | <u>Course Name</u> | <u>Credit(s)</u> |
|------------------|--|------------------|
| GRID 603 | Biostatistics | 3 (3-0-6) |
| PYFC 604 | Food Chemistry | 2 (2-0-4) |
| PYFC 606 | Sensory Evaluation Methods | 2 (1-3-3) |
| PYFC 608 | Nutraceuticals II | 2 (2-0-4) |
| PYFC 609 | Functional Foods II | 2 (2-0-4) |
| PYFC 610 | Quality Assurance in the Industries of Nutraceuticals and Functional Foods | 2 (1-3-3) |
| PYFC 611 | Processing of Functional Foods | 2 (1-3-3) |
| PYFC 612 | Packaging for Nutraceuticals and Functional Foods | 2 (2-0-4) |
| PYFC 615 | Marketing Principles of Nutraceuticals and Functional Foods | 2 (2-0-4) |
| PYFC 617 | Special Problems in Nutraceuticals and Functional Foods | 2 (0-6-2) |

Thesis

| <u>Course ID</u> | <u>Course Name</u> | <u>Credit(s)</u> |
|------------------|--------------------|------------------|
| PYFC 698 | Thesis | 12 (0-36-0) |

Applicants Qualifications:

1. Degree holding and cumulative GPA Graduated with Bachelor Degrees in Science or related fields from programs accredited by the Office of Higher Education Commission (OHEC) with GPA of at least 2.50
2. Have an English proficiency test score as the requirement of Faculty of Graduate Studies
3. Other exceptions will be considered by the Program Director and the Dean of Faculty of Graduate Studies, Mahidol University.

Document Required:

1. Application form
2. Transcript
3. Certificate of English of proficiency
4. Statement of purpose

Contacts:

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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 Detail

Master of Arts Program in Asia Pacific Studies

| | |
|------------------------------|---|
| Course Title: | Master of Arts Program in Asia Pacific Studies (International Program) |
| Master Degree: | Master of Arts (Asia Pacific Studies) |
| Academic Institution: | Thammasat Institute of Area Studies (TIARA), Thammasat University |
| Duration: | 18 months (August 2022 - January 2024) 3 semesters + 1 summer semester |

Background and Rational:

Master of Arts in Asia-Pacific Studies (MAPS) Program is an interdisciplinary graduate program that is designed for internationally – focused students who wish to obtain an in-depth understanding of the Asia-Pacific region through multi-faceted and inter-disciplinary lenses.

MAPS is the first graduate program in Thailand which examines the entire Asia-Pacific region in all its complexities. The Asia-Pacific region is one of the most dynamic and diverse regions in the world. It is the home of more than 4.3 billion people and accounts for more than half of global economic activities. Trade and development have given rise to international economic cooperation, ranging from small regional forums to large-scale collaborations such as APEC (Asia-Pacific Economic Cooperation) and ASEAN.

MAPS program provides students with the opportunity to deepen their knowledge not only on the said academic disciplines. Students will also study various contemporary issues related to sustainable development in the region. The program adopts multidisciplinary approach that allows them to integrate study of economics, law, international relations, and public policies to give students an understanding of contemporary regional issues. These issues are directly related to the following **Sustainable Development Goals**: Goal 2 (Zero hunger), Goal 4 (Quality education), Goal 5 (Gender equality), Goal 8 (Decent work and economic growth), Goal 9 (Industry, innovation and infrastructure), Goal 10 (Reduced inequalities) and Goal 13 (Climate change).

The Asia-Pacific region is also the home of 700 million youth whose ambitions and abilities can contribute to the prosperous, peaceful, and sustainable future of the region. Investing in youth is an investment for the future. Our students will be trained and empowered for a sustainable future that requires a better understanding of their needs, interests, challenges, and potential may it be domestically or internationally.

MAPS is a truly international program with more than 80 per cent of international students. Students at MAPS program come from ASEAN member states and countries in the Asia-Pacific such as Bhutan, Japan, and China. The majority of them works in public and higher education sectors, that is, civil service officers at Ministry of Foreign Affairs and university lecturers. When they graduate, they will go back and become the driving force for sustainable developments in their countries.

Followings are examples of the Thesis studies by MAPS graduates. These theses are related to SDGs Goal.

- **Goal 2—Zero hunger:** End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
 - The Evaluation of Japanese ODA to Vietnamese Farmers
 - Effects of Agricultural Policies on Rice Industry in Myanmar
- **Goal 4—Quality education:** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
 - Education Reform in Myanmar: A Case of Two Technological Universities
- **Goal 5—Gender equality:** Achieve gender equality and empower all women and girls.
 - Study on the Role of Entrepreneurship in the Textile Sector Industry in Bhutan
 - Women and Career Advancement in Brunei Darussalam: A Case Study of Women Working in Brunei Darussalam Government Sectors
- **Goal 8—Decent work and economic growth:** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
 - Community- based Tourism in Creating Impacts for Rural Communities: A Case Studies Nglanggeran Tourist Village in Yogyakarta, Indonesia
 - Challenges Faced by Brunei’s Micro and Small Entrepreneurs on the Utilization of Social Media as Online Marketing
 - The Effect of the Royal Decree on Managing the Work of Aliens B.E. 2560 (2017) on Myanmar Migrant Workers in Factories: Case Study of Four Selected Companies in Samut Sakhon Province
 - Factors Affecting Foreign Direct Investment (FDI Inflows to Lao PDR
 - Factors Attracting Investors to Invest in Laos: Case Study of Savan Seno Special Economic Zone
 - Corporate Social Responsibility in Vietnam State-owned Enterprises: A Comparative Analysis of PVEP and VTC
 - The Influence of Government Policy on the Return of Overseas Vietnamese in the Information and Communication Technology Sector
- **Goal 9—Industry, innovation and infrastructure:** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
 - Determinant Factors of Tuna Canneries Performance in Indonesia and Thailand: A Comparative Perspective
 - Analysis of the Effect of the Trans-Pacific Partnership Free Trade Agreement on the Vietnamese Apparel Industry
- **Goal 10—Reduced inequalities:** Reduce inequality in and among countries.
 - Refugee Status Determination (RSD) Practices in Thailand
 - Inequality and Economic Development in Lao PDR since the 1986 Economic Reform
- **Goal 13—Climate change:** Take urgent action to combat climate change and its impacts.
 - Disaster Management in Cambodia: Community- based Disaster Risk Management in the Case of Drought in Oral District

MAPS program allows the exchange of first-hand knowledge and experiences from international students particularly from APEC and ASEAN member countries. After graduation, graduates are equipped with knowledge of situations, phenomena, contemporary issues, and sustainable development in the Asia-Pacific region which can be applied to their careers in the public sector, diplomatic service, academic consultancies, international organizations, and sustainable development related career domestically and internationally.

MAPS Program are offered and administered by Thammasat Institute of Area Studies or TIARA at Thammasat University. TIARA starts off from a single center namely Thai APEC Study Center which works to foster research and academic discussions supporting the broader APEC mission of regional economic integration and a means to building networks of academic professionals in the region. TIARA has developed not only experience, but it also extends in term of networks, collaborations, academic exchanges and many more. At present, TIARA is a home to five Area Studies Centers – Thai APEC Study Center, the Australian Studies Centre, India Studies Center, Russia and CIS Study Center, and the ASEAN Study Center. These centers have their own academic focuses and networks. This gives TIARA more resources and room to do academic activities within the context of ‘Area Studies’ and not limited to country or regional studies. For that reasons, TIARA becomes the institution with expertise in conducting academic and policy research, organizing seminars, trainings, workshops, and international conferences on issues in the Asia-Pacific region. Our knowledge and expertise have been continuously building up since the year 2000.

With its networks in Thailand and around the world, TIARA utilizes all resources and networks to benefit MAPS program. The program regularly welcomes visiting professors and guest lecturers as well as experts in the field to teach our students especially those institutes that signed MOUs with TIARA. These become a unique characteristic and strong point of the program in terms of teaching and research making MAPS a quality program that produce international standard quality graduates to fulfill MAPS’s mission and vision, that is, to provide high quality graduate education, academic resources, training and professional developments as well as foster cultural learning and exchanging opportunities for graduate students and professional in the intellectual diverse environment.

The MAPS curriculum emphasizes interdisciplinary studies from professors, scholars, and professionals with high expertise in their fields. Students will learn to look deeper into topics from all aspects and perspectives, foster critical thinking and analytical ideas including to tackle topics from new directions, which will transform into a lifelong learning. Please see an attachment named List of MAPS Guest Lecturers (*attachment 1*) for your reference.

In addition to our human resources, MAPS had its own facilities. MAPS students are given the access to a dedicated research and study space to help fostering intellectual exchange and collaboration beyond the classroom.

1. Asia-Pacific Resource Center – the Resource Center, as our students called it, houses a relevant and accessible collection of Asia-Pacific related resource materials. The center provides space for information and cultural exhibition as well as acquired information and dissemination manuals, information and research about countries in the Asia-Pacific region. The center also provides modern, adequate, and efficient information center services, appropriate and comfortable learning environment on the use of resources for individual and group study for individual and group study.

2. MAPS Common Room – MAPS Common Room located at the 1st Floor of the Social Science Complex next to the Asia-Pacific Resource Center, is designed specially for MAPS students. It is primary space for students to hang out – whether for work on project or to spend time with each other. The MAPS Common Room is created with comfortable and welcoming environment features wireless internet access and lockers for student use. MAPS Common Room is divided into three Zones with different functions; 1 small classroom seated classroom style with the capacity of 40 people, 2 rooms with flexible furniture configuration with capacity for 20 people for group gathering or informal group meeting.

3. MAPS Classroom – a small fully equipped classroom with capacity for 20-25 students

4. MAPS co-working space – located in front of MAPS Classroom with capacity for 20-25 students

For more information about MAPS Program, course syllabus, and other related matters, please see an attachment named Introduction to MAPS Program (*attachment 2*).

Previous record of the graduation of students under MAPS Program are shown in the Table below.

| Academic Year | Total number of Students | Total number of Students who graduated | % |
|---------------|--------------------------|--|-----|
| 2015 | 13 | 12 | 93 |
| 2016 | 17 | 13 | 77 |
| 2017 | 12 | 11 | 92 |
| 2018 | 11 | 11 | 100 |
| 2019 | 9 | 5 | 55 |

Objectives:

Master of Arts in Asia- Pacific Program aims to prepare students for future challenges in sustainable manners and integrate knowledge of international economics, international relations, and international laws to the sustainable development as well as to promote sustainability mindset and encourage students and graduates to play their roles in fulfilling UN' SDG Goals, may it be in the domestic or international arena.

Course Synopsis and Methodology:

1. Program Information

| | |
|-----------------------|--|
| Program Length | 18 months full-time/ 3 full semesters and 1 summer semester |
| Medium of Instruction | English Language |
| Class Size | 20 |
| Campus | Most courses are taught at Rangsit Center |
| Facilities | Asia-Pacific Resource Center and MAPS Common Room. Students will be given the access to dedicated research and study space to help foster intellectual exchange and collaboration beyond the classroom |

2. Program Plan

| Plan A | Credit | Plan B | Credit |
|---|---------------|---|---------------|
| Required courses | 21 | Required courses | 21 |
| Elective Courses | 6 | Elective Courses | 12 |
| Thesis | 12 | Independent Studies | 6 |
| Thesis Defense | - | Written Comprehensive Exam | - |
| Postgraduate International Conference (TU-CAPS) | - | Postgraduate International Conference (TU-CAPS) | - |
| Total | 39 | Total | 39 |

Plan A**Semester 1 Year 1: 4 Subjects 12 credits**

| | | |
|--------|---|-----------|
| APS600 | Foundation Asia-Pacific Studies | 3 credits |
| APS612 | Economic Development in ASEAN | 3 credits |
| APS621 | Political, Security, and Defense Strategies in the Asia-Pacific Region | 3 credits |
| APS6xx | Elective Course: between Comparative Politics and Governments in the Asia-Pacific Region/ International Relations and Foreign Policy in the Asia-Pacific Region | 3 credits |

Semester 2 Year 1: 4 Subjects 12 credits

| | | |
|--------|---|-----------|
| APS611 | Economic Integration in the Asia-Pacific Region | 3 credits |
| APS631 | International Law and Regional Architecture in the Asia-Pacific Region | 3 credits |
| APS681 | Research Methodology | 3 credits |
| APS6xx | Elective Core Course: choose between Contemporary Issues in the Asia-Pacific Studies/ Public Policy Studies | 3 credits |

Summer Semester: 1 Subject 3 credits

| | | |
|--------|--------|-----------|
| APS800 | Thesis | 3 credits |
|--------|--------|-----------|

Semester 1 Year 2: 2 Subjects 12 credits

| | | |
|--------|---|-----------|
| APS6xx | Elective Course: between Comparative Politics and Governments in the Asia-Pacific Region/ International Relations and Foreign Policy in the Asia-Pacific Region | 3 credits |
| APS800 | Thesis | 9 credits |

Plan B**Semester 1 Year 1: 4 Subjects 12 credits**

| | | |
|--------|---|-----------|
| APS600 | Foundation Asia-Pacific Studies | 3 credits |
| APS612 | Economic Development in ASEAN | 3 credits |
| APS621 | Political, Security, and Defense Strategies in the Asia-Pacific Region | 3 credits |
| APS6xx | Elective Course: between Comparative Politics and Governments in the Asia-Pacific Region/ International Relations and Foreign Policy in the Asia-Pacific Region | 3 credits |

Semester 2 Year 1: 4 Subjects 12 credits

| | | |
|--------|---|-----------|
| APS611 | Economic Integration in the Asia-Pacific Region | 3 credits |
| APS631 | International Law and Regional Architecture in the Asia-Pacific Region | 3 credits |
| APS681 | Research Methodology | 3 credits |
| APS6xx | Elective Core Course: choose between Contemporary Issues in the Asia-Pacific Studies/ Public Policy Studies | 3 credits |

Summer Semester: 1 Subjects 3 credits

| | | |
|--------|--|-----------|
| APS6xx | Elective Course: Selected Topics in Asia-Pacific Studies (Countries Studies) | 3 credits |
|--------|--|-----------|

Semester 1 Year 2: 2 Subjects 6 credits

| | | |
|--------|---|-----------|
| APS6xx | Elective Course: between Comparative Politics and Governments in the Asia-Pacific Region/ International Relations and Foreign Policy in the Asia-Pacific Region | 3 credits |
| APS6xx | Elective Course: | 3 credits |

Semester 2 Year 2: 1 Subjects 6 credits

| | | |
|--------|---------------------|-----------|
| APS6xx | Independent Studies | 6 credits |
|--------|---------------------|-----------|

Applicants Qualifications:

- A bachelor's degree in any field with a cumulative GPA of 2.5 and above from an accredited university. For those who wish to apply for a scholarship, applicants should at least have a cumulative GPA of 3.00 with an above average grade on the relevant subjects.
- Requirement for English Proficiency

| No. | English requirements | Minimum score |
|-----|--|---------------|
| 1 | Paper based TOEFL | 500 |
| 2 | Internet-based TOEFL | 61 |
| 3 | International English language Testing System (IELTS) | 6.0 |
| 4 | Paper based Thammasat University Graduate English Test (TU-GET) | 500 |
| 5 | Computer-based Thammasat University Graduate English Test (TU-GET) | 61 |

- Applicants can be accepted with conditions in the case of
 - IELTS: $6.0 \geq 4.5$
 - TOEFL: $500 \geq 400$
 - TU-GETS: $500 \geq 400$
- Applicants who cannot meet the minimum score of the above can reply to the program and submit the required score to the university before the registration day. English test results must not exceed 2 years by the time the applicants submit the results to the university.

- Test results submitted with the admission application are valid evidence for graduation.
- Please note that Thammasat University requires all students who have not submitted their English Proficiency Test Score to meet the minimum requirement score to submit their Official English Proficiency Test score before the final Thesis defense
- 4th year bachelor students who expect to graduate may apply by submitting a certified letter of expected date of graduation.
- Complete applications and submitting all required documents.
- As one of graduate requirement from Thammasat University, graduate students are required to present their thesis work at the International Conference. MAPS students are entitled to present their works at TU-CAPS, the annual international conference hosted by Thammasat Institute of Area Studies, Thammasat University.

Document Required:

- Completed Online Application Form (at www.maps-tu.org)
- Official Academic Transcript (English version only)
- Statement of Purpose (as appear in Online Application Form)
- Proof of English Language Proficiency (IELTS, TOEFL, TU-GETS)
- Two letters of Reference
- Copy of Passport
- ID Photo (Passport size)
- Other additional supporting documents an applicant may want to submit such as certificates of training, letter of employment, etc.

Contact:

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Programme Coordinator:

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MAPS Program Coordinator
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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 Detail
Master of Arts Program in Diplomacy and International Studies

Course Title: Master of Arts Program in Diplomacy and International Studies (International Program)

Master Degree: Master of Arts (Diplomacy and International Studies)

Academic Institution: The Institute of Diplomacy and International Studies (IDIS), School of Politics, Economics, and Globalization, Rangsit University

Duration: 2 years (August 2022- December 2024)

Background and Rational:

IDIS was established on 22 of March, 2006, with an aim to meet the challenge of globalization and the increasing demand for world-class professionals in International affairs in Thailand and the Asian region.

IDIS with its multi-disciplinary approach, became the first institute of its kind in Southeast Asia. The establishment of IDIS is an important step in the implementation of Rangsit University's Road Map to excellence strategy, which created qualified graduates for the region and the world at large.

Objective:

Many career opportunities are open to IDIS graduates, especially in Southeast Asia and broader Asia where there is significant demand for graduates knowledgeable in politics, international relations and development studies. Opportunities include positions in government ministries, international organizations, non-governmental organizations, think tanks, the media, international businesses and educational institutions. To increase their opportunities many of our undergraduate students progress to postgraduate study at IDIS or at other universities across the globe.

Course Synopsis and Methodology:

Master of Arts Program in Diplomacy and International Studies (International Program)

1st Year

| PLAN A (Academic subjects, and Thesis) | PIAN B (Academic subjects, and Interdepend Studies) |
|--|--|
| <p>Semester 1</p> <p>IDS 602 Foreign Policy Analysis 3(3-0-6)</p> <p>IDS 603 International Politics and Security 3(3-0-6)</p> <p>IDS 607 Negotiations and Conflict Resolution 3(3-0-6)</p> <p>IDS 661 Research Methodology 3(3-0-6)</p> <p style="text-align: right;">Total 12 credits</p> | <p>Semester 1</p> <p>IDS 602 Foreign Policy Analysis 3(3-0-6)</p> <p>IDS 603 International Politics and Security 3(3-0-6)</p> <p>IDS 607 Negotiations and Conflict Resolution 3(3-0-6)</p> <p>IDS 661 Research Methodology 3(3-0-6)</p> <p style="text-align: right;">Total 12 credits</p> |
| <p>Semester 2</p> <p>IDS 605 International Economics and 3(3-0-6) International Business</p> <p>IDS 608 Political Economy of Asia 3(3-0-6)</p> <p>IDS 611 Asia Diplomacy 3(3-0-6)</p> <p>IDS 612 International Organizations and 3(3-0-6) Human Rights</p> <p style="text-align: right;">Total 12 credits</p> | <p>Semester 2</p> <p>IDS 605 International Economics and 3(3-0-6) International Business</p> <p>IDS 608 Political Economy of Asia 3(3-0-6)</p> <p>IDS 611 Asia Diplomacy 3(3-0-6)</p> <p>IDS 612 International Organizations and 3(3-0-6) Human Rights</p> <p style="text-align: right;">Total 12 credits</p> |

2nd Year

| PLAN A (Academic subjects, and Thesis) | PIAN B (Academic subjects, and Interdepend Studies) |
|---|--|
| <p>Semester 1</p> <p>IDS 699 Thesis 6(0-12-6)</p> <p>Total 6 credits</p> | <p>Semester 1</p> <p>IDS xxx Elective 3(x-x-x)</p> <p>IDS xxx Elective 3(x-x-x)</p> <p>Total 6 credits</p> |
| <p>Semester 2</p> <p>IDS 699 Thesis 6(0-12-6)</p> <p>Total 6 credits</p> | <p>Semester 2</p> <p>IDS 697 Comprehensive Examination 0(0-0-0)</p> <p>IDS 698 Independent Studies 6(0-12-6)</p> <p>Total 6 credits</p> |
| <p>Total 36 Credits</p> | <p>Total 36 Credits</p> |

Applicant Qualifications:

The program is open to students with or without prior knowledge of politics and international studies who wish to increase their understanding of globalization and current events in international affairs. Students will gain a comprehensive understanding of various aspects of diplomacy and international relations, and also have the option to write a thesis/ an Independent Study in their chosen area of research.

Document Required:

| | |
|------------------------|-----------------------------|
| Identification Card | House Registration |
| Passport (for foreign) | 4 Photographs (1 Inch size) |
| Certificates Degrees | Transcripts |

English Language Requirement (TOEIC score minimum 640, IELTS score minimum 5.5)

Contacts:

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Nipa Arkarin (Administration): nipa.a@rsu.ac.th

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Course Detail

Masters of Arts Program in Social Innovation and Sustainability

| | |
|------------------------------|--|
| Course Title: | Masters of Arts Program in Social Innovation and Sustainability (International Program) |
| Master Degree: | Masters of Arts (Social Innovation and Sustainability) |
| Academic Institution: | School of Global Studies, Thammasat University |
| Duration: | 1 year (August 2022 – July 2023) Semester 1 August – December Semester 2 January – May Summer June - July |

Background and Rational:

The Masters of Arts in Social Innovation and Sustainability is a unique graduate-level program that defines sustainability and social innovation from a socio-political perspective. It combines innovation, sustainability analysis and business management within the context of cross-sector collaboration and inter-regional and international capacity building.

The program is administered by the School of Global Studies, which is committed to the promotion of international collaboration in education and research by creating and sustaining partnerships based on the principles of equity, transparency, inquiry, mutual interest and respect, all of which are embedded in the master's program.

Using the case study method, the principles of sound business management and the development of practical applications to real-world problems, the program is tailor-made for collaborative learners and innovative thinkers who appreciate cultural diversity, interdisciplinary understanding and creative problem-solving. The program has as its focus on global sustainability, development, management and the challenges of human security through social innovation and human-centred design.

The Master's program in Social Innovation and Sustainability has been specifically designed to enhance the learner's knowledge, ability and skills to navigate and succeed in today's increasingly complex and interconnected world.

In a rapidly changing and interconnected world, students will gain critical skills to increase your competitive edge for employment mobility in the future global job market. Our classroom and non-classroom environments ensure learning that instils competencies, including critical thinking, leadership, communication, time management, teamwork ability, problem-solving, creativity, adaptability, and business skills.

The School of Global Studies is a new and innovative academic initiative within Thammasat University and a front-runner in global health and social innovation within Thailand, Southeast Asia and beyond. It has a track record of excellent research on determinants of the public's health, student-centred teaching, and academic service relevant to community needs.

The school enjoys a unique position of being a national, regional and global focal point for global studies, human security and wellbeing with collaborative relationships with academic and professional communities.

Instructors in the program are experienced academics, mostly holding PhDs in their field of expertise. They have a wide range of backgrounds and draw on extensive research as well as professional experience.

The program will be held at the Tha Prachan campus of Thammasat on the weekend and evenings to enable working professionals to join the program as students.

Objectives:

1. The program has the following objectives:
2. Understand the challenges facing the world from a global and local level.
3. Learn how to apply approaches to social innovation to address pressing social issues.
4. Develop the necessary critical thinking skills to identify and solve social problems.
5. Develop skills in sustainability analysis and learn how to develop and implement sustainability in practices in organizations.
6. Learn how to apply human-centred design to develop products and services that respond to social needs and sustainable development goals.
7. Develop leadership, management and collaboration skills necessary for creating cultures of innovation.

Course Synopsis and Methodology:**1. Study plan****Study Plan for Plan A (A2)**

| The first year: Semester 1 | |
|---|------------------|
| GS601 Sustainability and the Global Political Economy | 3 Credit |
| GS603 Approaches to Social Innovation | 3 Credit |
| GS611 Research and Design Thinking | 3 Credit |
| GS613 Designing Organizations for Impact | 3 Credit |
| GS621 Seminar on Social Innovation and Sustainability | 3 Credit |
| Total | 15 Credit |

| The first year: Semester 2 | |
|--|------------------|
| GS741 Research Method for Social Innovation and Sustainability | 3 Credit |
| GS742 Prospectus Development | 3 Credit |
| GS743 Introduction to Philosophy of Social Science | 3 Credit |
| GS800 Thesis | 6 Credit |
| Total | 15 Credit |

| Summer | |
|---------------|------------------|
| GS800 Thesis | 6 Credit |
| Total | 36 Credit |

Study Plan for Plan B

| The first year: Semester 1 | |
|---|------------------|
| GS601 Sustainability and the Global Political Economy | 3 Credit |
| GS603 Approaches to Social Innovation | 3 Credit |
| GS611 Research and Design Thinking | 3 Credit |
| GS613 Designing Organizations for Impact | 3 Credit |
| GS621 Seminar on Social Innovation and Sustainability | 3 Credit |
| Total | 15 Credit |

| The first year: Semester 2 | |
|--|------------------|
| GS731 Project Management and Impact Assessment | 3 Credit |
| GS752 Behavioral Economics for Sustainability | 3 Credit |
| GS753 Strategic Leadership for Social Transformation | 3 Credit |
| 2 Subject of Prescribed Elective Course | 6 Credit |
| Total | 15 Credit |

| Summer | |
|-------------------------|------------------|
| GS790 Independent Study | 6 Credit |
| Total | 36 Credit |

2. Course Content

Course Descriptions

1) Compulsory Courses

GS601 Sustainability and the Global Political Economy 3 (3-0-9)

Using the UN SDG framework, the course examines the major global and local sustainability challenges and pathways towards achieving the SDGs. Students examine the role of various state and non-state actors in creating a sustainable world. Moreover, students learn to apply theories and frameworks to understand the political-economic dimensions of global and local sustainability challenges and how state and non-state actors can navigate them to achieve the SDGs. Strong consideration is given to the challenges and opportunities that emerge from global interconnection.

GS603 Approaches to Social Innovation 3 (3-0-9)

This course introduces students to the theories, strategies, and processes of social innovation and social change. Students learn about sociological and anthropological theories of social change while also learning about various strategic approaches to societal change. Importantly, the course also draws on business theories of innovation such as disruptive innovation and platform business models and examines their potential for driving social change through market mechanisms. Through case studies, students study individuals, groups and organizations who have catalyzed positive social change through the market, government, and non-profit organizational channels.

GS611 Research and Design Thinking 3 (3-0-9)

This course provides students with the foundational skills of social science research and design thinking to prepare students to conduct academic research as well as research for practical social innovation research projects. Students learn about qualitative and quantitative research methods and tools to design and execute research projects. Students develop skills in ethnographic methods and conceptual tools used to engage in place-based social inquiry. The course will also provide a theoretical and practical explanation about the research, sampling, data collection, field-visit, interviewing, and details about ethical issues, questionnaires, data analysis and other relevant issues.

GS613 Designing Organizations for Impact 3 (3-0-9)

Students study the structure and dynamics of organizational systems and learn to design organization structures and create impactful cultures aligned with strategic goals. Consideration is given to the external environment, technology, organizational structure (and their interrelationship), organizational culture and change management. The course also covers innovative business models, financing organizations, and innovation culture. Students learn to recognize, manage and overcome bottlenecks hampering organizational growth, achievement of strategic organizational, and delivering social impact. Students also learn about enterprise models and innovative financing mechanisms that support social impact projects.

GS621 Seminar on Social Innovation and Sustainability 3 (3-0-9)

In this course, students develop practical skills for understanding sustainability challenges and developing social innovations through a variety of workshops and practical experience. To complement the academic and theoretical knowledge and skills acquired in other courses, students engage in practical design and entrepreneurial workshops to produce social innovation and sustainable solutions. They have the opportunity to engage with and learn first-hand from social entrepreneurs and innovators who are active in creating solutions for pressing societal and environmental challenges.

2) Only for students Plan A**GS741 Research Method for Social Innovation and Sustainability 3 (3-0-9)**

The goal of 'Research Methods for social innovation and sustainability' is to learn how research is being done, and to put that knowledge into practice. Students will learn how to apply a great number of tools and techniques, draw conclusions from the research. It will describe both qualitative and quantitative research, their design, problems and tools to investigate. As a general course on research methodology, it will provide the theoretical and practical explanation about the research, sampling, data collection, field-visit, interviewing, and details about ethical issues, questionnaires, data analysis and other relevant issues. It is expected that this course will enable the participants to take advanced research with sound technical knowledge about methodology.

GS742 Prospectus Development 3 (3-0-9)

Prospectus Development enables students to read and discuss academic publications of their choice related to their thesis topic. Readings are analyzed and critiqued through regular class discussions and presentations. Students learn to move from analysis of literature to the development of research questions and the formulation of a research proposal.

GS743 Introduction to Philosophy of Social Science 3(3-0-9)

The introductory course provides an overview of ontological and epistemological traditions and their implications for contemporary social science. It covers paradigmatic traditions-programmatic and methodological standpoints. The course also provides an overview of methodological implications and strategies. The course illustrates the building blocks of social science, descriptive strategies, traditions of interpretation, forms of aggregation and strategies of inference, forms of explanation and explanatory strategies. The course concludes with the controversies within the field of philosophy of science.

3) Only for students Plan B

GS731 Project Management and Impact Assessment 3 (3-0-9)

This course equips students with the fundamentals skills, tools and concepts of project management so students can successfully develop, execute and manage an impactful project. Students learn to skillfully manage their resources, schedules, risks, and scope to produce the desired outcome. In this course, students explore project management with a practical, hands-on approach through case studies and class exercises. Students also learn various methods of monitoring and evaluating projects. Moreover, they develop a critical understanding of environmental and social impact assessment tools so the outcome of social innovation projects can be anticipated and measured.

GS752 Behavioral Economics for Sustainability 3 (3-0-9)

In this course, students are introduced to Behavior Economics and learn how to apply to shape sustainable practices at an individual, community and organisational level. Through this course, students also develop skills in applied social psychology and cross-cultural communication. Case studies of successful interventions are examined. For the course project and major assessment, students develop a sustainable behaviour change intervention using concepts and tactics studied in the course.

GS753 Strategic Leadership for Social Transformation 3 (3-0-9)

In this course, students develop strategic leadership skills. They learn how to create and articulate a strategic vision for organisational and social change. The course examines the tasks, skills and strategic competencies that enable a strategic leader to guide social transformation while navigating the tensions between stakeholders and short and long term needs and goals.

4) Prescribed Elective Course

GS762 Seminar on Sustainability Practices 3 (3-0-9)

In this course, students acquire competencies in sustainability defined as “the capability of an organization to transparently manage its responsibilities for environmental stewardship, social well-being, and economic prosperity over the long-term while being held accountable to its stakeholders.” Through this course, students learn how to develop and execute sustainable organisational practices through studying a range of case studies. Students are expected to study local enterprises and learn first-hand from corporate leaders endeavouring to develop sustainable enterprises.

GS763 Technology for Sustainable Development 3 (3-0-9)

The aim of this course is to examine the role of technology in fostering sustainable development in emerging economies. The course focuses on digital technologies and new enterprise models powered by digital technologies. Students examine digital divides and how to create more inclusive digital economies. Additionally, through various case studies, students learn how to leverage digital technologies such as new media, blockchain and platform technologies to solve various societal and environmental challenges. Students will examine how various Thai and Southeast Asian NGOs, social enterprises and start-ups use technology to achieve their impact goals.

GS772 Design Skills for Projects 3 (3-0-9)

This course is a dive deep into the personal and cultural leadership essentials required to implement effective innovation and design thinking initiatives. Students will explore transferable tools and contemporary conversations about the opportunities and challenges of driving change in the 21st century. This course will specifically focus on internal and external dimensions for design and innovation leadership including: the role of self-awareness and empathy, creative innovation mindsets, effective facilitation methods to unlock insights among stakeholders, creative confidence, and project management for complex organizational systems (from hyper-local to globally distributed teams). Students will gain a sharpened set of strategic skills and insights ready for immediate application to their daily life at work and home.

GS773 Design for Impact and Disruption 3 (3-0-9)

Designers can contribute to the social and environmental challenges. In this course, the students will be exposed to and applied methods that are utilized to expand creative possibilities in products, services and systems in a responsible manner. Students will be equipped with design tools in a train-the-trainer format across a series of workshop style classrooms with real-world case studies.

GS782 Reengineering CSR 3 (3-0-9)

CSR assumes many forms from shared value, social and corporate governance (ESG), corporate citizenship, ethical corporation and etc. It has a significant role in sustainability in a globalized world not only within the organization but extends to national context and beyond. This course will trace how the concept of CSR has evolved and adopted in the business sector as well as viewed by society at large. This course will explore how CSR can fulfill its landscape in the sustainability arena for the greater goods among practitioners in private sector, government and non-governmental organization.

GS783 Ethical Decision Making 3 (3-0-9)

Poor moral judgment can ruin a manager's career. It can even sink an entire company. Accordingly, in today's volatile and fiercely competitive business environment, a manager must possess not only technical and communication skills. He or she must also be able to identify and effectively resolve ethical issues that inevitably arise in the pursuit of business (and career) objectives. That is, a manager must be able to make business decisions that are defensible ethically as well as economically. This course is designed to enhance students' skills in moral reasoning as it applies to managerial decision-making. This course will also include issues of ethics and corporate culture. In many cases, the unethical behavior is due in part to a "toxic" corporate culture. The attitudes, values, and practices that prevail in the organizations induce otherwise ethical employees to take actions that violate widely shared norms of conduct. The course will bring concepts of behavior, its impact and alternative to the attitude of "only results matter".

5) Elective subject**GS666 Digital and Social Media Strategy 3 (3-0-9)**

Digital/social platforms present firms with enormous opportunities for creating and enhancing value for both themselves and stakeholders such as customers. How these communications technologies can—and should—be used for strategic value-generating purposes, however, is not straightforward. This course grapples with this challenge, with the primary aim being to help students understand how to unlock the value in digital/social platforms across a variety of business contexts and for a number of markedly different purposes. The role that digital/social platforms can play goes well beyond marketing, or as a new vehicle for (or substitute to) advertising. Thus, this is not, strictly speaking, a “marketing” course. Rather, it is a course about how digital and social media can be used to enhance business value.

GS677 Communication for Innovation 3 (3-0-9)

This course will examine the relationships between communication and innovation and highlights the importance of communication as a precursor to innovation and sustainable change. The course will also structure the principles of communications and relate with the global changes. In a specific way, it will link with marketing and entrepreneurship while emphasizing the techniques and principles of human relations, leadership and business communication both oral and written and new communication tools. Through the use of active learning tools, students will enhance their skills in communicating the designing processes to their stakeholders including the skills in conversations.

GS685 Dialogues for Competitive Advantage 3 (3-0-9)

Creating change that disrupts the status quo may pose challenges in leveraging its influence among key stakeholders. Communicating the outcomes and their impact requires a set of skills beyond the common communication techniques. This course will equip the students with negotiation techniques in order to engage in effective dialogues with stakeholders. Through the use of verbal communication, problem solving and interpersonal skills, the students will learn to be an effective influencer. Adopting active learning tools, the students will develop negotiation skills across different scenarios.

GS688 Managing the Nonprofit Sector and Philanthropy 3 (3-0-9)

The course includes the management of Nonprofit Sector. Managing an NGO is an especially challenging endeavor as it requires not only interpersonal skills to deal with a wide range of people (stakeholders), but it also requires a broad knowledge of how communities and society work. It is not just about doing good, but also making sure actions do not cause unintended consequences and the organization remains sustainable. This course will give you an overview of 31 the many facets an NGO manager must face each day. The course is divided into two basic sections: Theory and Practice. Theory will cover a broad range of topics to give you a firm understanding of how things go wrong, the different sectors in society, how managers prioritize requests on their time and resources (stakeholder theory), and lastly how to apply business planning to an NGO.

6) Thesis
GS800 Thesis

12
Credit

The thesis, under Plan A, is an individual student project to demonstrate his/her ability to formulate, investigate, and analyse a problem in a practice setting. Students choose a topic, relevant to the field of sustainability, social innovation, development or business. The research with specific study focus, will be advised and approved by the advisors, who would agree to supervise and evaluate the students' work. The thesis project includes research design, field level research, desk research, application of various research methodologies and tools, and extensive analysis of acquired data. Participation in seminars and academic conference is an integral part of students' thesis work. Students need to defend their thesis proposal prior to conduct the research. The project has to meet the academic criteria of clear knowledge contribution, neutral framing, objective investigation and ethical approach.

7) Independent Study
GS790 Independent Study

6 Credit

The independent study is a continuation of the capstone experience for students in Plan-B of the MASS program, which uses the knowledge and skills acquired during the course of study leading to the Master's degree. This study is designed to introduce students to the process of reporting on their independent study projects and practical activities. Students will formulate an appropriate report on their independent study project. Seminars will afford students the opportunity for peer review and instructors' feedback.

Graduation Conditions:

Plan A (A2)

- 1) Complete all subjects following the course structure and have cumulative credits at least 36 credits.
- 2) GPA not less than 3.00
- 3) Pass (P) an English language exam following Thammasat University criteria before thesis examination.
- 4) Thesis proposed and passed the interview session (speaking test) by School of Global Studies committee upon opening system for people who interested.
- 5) Get "S" level for thesis exam and submit the complete thesis which following a university regulation concerning thesis, thesis paper and independent research.
- 6) Thesis or part of thesis must be published or implementing thesis or part of thesis to be accepted for publication in qualify international journal, following Office of Higher Education Commission announcement entitled "Consideration criteria for academic journal for academic work publication or nominated to international academic conference" with full-paper article which published in the conference report.
- 7) Following both School of Global Studies and Thammasat University regulations.
- 8) All the payment being paid to a university.

Plan B

- 1) Complete all subjects following the course structure and have cumulative credits at least 36 credits
- 2) GPA not less than 3.00
- 3) Pass (P) the Comprehensive Examination
- 4) Pass (P) an English language exam following Thammasat University criteria before independent research interview (speaking session)
- 5) Independent research proposed and passed the interview session (speaking test) by School of Global Studies committee upon opening system for people who interested
- 6) Get "S" level (Fair) for independent research exam and submit complete independent research which following a university regulation concerning thesis, thesis paper and independent research.
- 7) Independent research report or part of independent research report must publish on website or some way that can be reached
- 8) Following both School of Global Studies and Thammasat University regulations.
- 9) All the payment being paid to a university

Applicant Qualifications:

1. Bachelor's degree in all branches of social sciences, humanities, science and technology, applied science and hygiene in Thailand or educational institutions abroad which endorsed by the university council.
2. GPA at least 2.75
3. Applicants must qualify as appeared in Thammasat University Regulations on Graduate Studies, 2018.
4. English efficiency: can be obtained from one of the following criteria.
 - 1) TOEFL paper-based (PBT) 550
 - 2) TOEFL Internet-based (IBT) 79
 - 3) TOEFL Institutional Testing Program (ITP) 550
 - 4) IELTS 6.5
 - 5) TU-GET paper-based (PBT) 550
 - 6) TU-GET computer-based (CBT) 79
5. Internship and education support experiences would be appreciated.

Document Required:

- TIPP Application and Medical Report: <https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3>
- Transcript
- Recommendation Letter
- English Test
- Financial Statement (only for international applicants)
- Visa (only for international applicants)
- identification (copy of a passport)

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 Detail
Master of Arts in Environment, Development and Sustainability

| | |
|------------------------------|--|
| Course Title: | Master of Arts in Environment Development and Sustainability (International Program) |
| Master Degree: | Master of Arts (M.A.) in Environment, Development and Sustainability |
| Academic Institution: | Graduate School, Chulalongkorn University |
| Duration: | 2 years (August 2022 – 2024) |

Background and Rational:

EDS Program, Chulalongkorn University is unique among degrees from post-graduate institutions in both country and regional levels that provides an integrated approach to topics like sustainable development and relevant aspects (i.e. environmental and socio-economic development). Regarding to the Twelfth National Economic and Social Development Plan (2017-2021) which is designed based on the 20-year National Strategy framework (2017- 2036) and the country's Sustainable Development Goals (SDGs), the directions and strategies of country development are to achieve the objectives of "Security, Prosperity, and Sustainability" as the Thailand 4.0 national policy. In this context, instead of focusing only on environment and development studies, the EDS studies also cover the following research areas: Sustainable Development Goals (SDGs) and its Challenges, Business and trade strategies for Environmental Management, Self Sufficiency Economy, Energy Planning, Poverty Reduction, Natural Resource Management, Sustainable Consumption and Production, Waste Management, Green Building and Urban Development in addition to core Climate Change Mitigation, Resilience and Adaptation even as all Ecosystem related topics like Green Industry, Soil degradation, Biological Diversity , Pollution, and so on. Apart from this, looking at the global, regional, and local scales of development, lecturers from universities and institutions from around the world share their experiences from working with groups as large as the United Nations and as small as community-driven initiatives.

Objectives

The EDS Program's objective is to broaden the horizons of students to integrate their studies across various sub-disciplines in both the natural and social sciences so that their results lead to sound public policy and good governance in driving the SDGs in all national, regional and global levels.

Course Synopsis and Methodology:**Study Plan**

| | |
|----------------------------------|------------|
| A Required Minimum of 36 Credits | |
| Course Work | 24 Credits |
| - Compulsory Course | 12 Credits |
| - Elective Course | 12 Credits |
| Thesis | 12 Credits |
| Totally | 36 Credits |

Course Content/ Study Topic**Required Courses (12 Credits)**

| | |
|---|-----|
| 2023601 Research Methodology in Environment, Development and Sustainability | (3) |
| 2023602 Understanding Environment, Development and Sustainability | (3) |
| 2023603 Sustainable Resource Management | (3) |
| 2023605 Development: History, Theory, Policy and Practice | (3) |

Elective Courses (12 Credits)

For 4 Elective Course student have to choose form Courses list in 2nd Semester -

Thesis (12)

2023811 Thesis (12 Credits)

Graduation Conditions:

Completed all credits of EDS Course works (See 7.1 - 7.2)

The research has been published according to the requirements of Graduate school Chulalongkorn University

The EDS thesis has been published according to the requirements of Graduate school Chulalongkorn University

Applicants Qualifications:

1. Hold a Bachelor's degree in any discipline
2. An English proficiency test of a CU-TEP, IELTS or TOEFL score is at least 60, 5.0 or 500
3. Other particular qualifications will be based on an approval of the program committee

Document Required:

One-page statement of intent in English (~200 words), describing present activities, publications, research interests, academic achievements, and future plans

A printed application form with a 1-inch photograph attached*

An official transcript of academic records

A photocopy of identification card/passport

A score of English proficiency test CU-TEP, IELTS or TOEFL f22-26

Two letters of recommendation

Contacts:

Academic Lecturers:

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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.