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

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

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

### **Programme Objectives for Plan A (2):**

To produce graduates who have acquired the knowledge, skills, and ethical behaviors as follows:

- 1. Be able to apply theoretical knowledge and important principles on environmental and resources management and technology appropriately, and to develop research related to environmental management and technology
- 2. Be able to analyze and critique regional and international environmental problems and give the directions for the solutions, including indicate needs for environmental study in society and community areas
- 3. Be able to communicate and present the knowledge on environmental and resources management and technology using appropriately and efficiently various media and processes. Have teamwork skills and can handle the conflict in the appropriate way, have interpersonal relationship, perform as a team leader and supporter in different situations, and have self-responsibility and social responsibility.
- 4. Have academic and profession moral and ethical behaviors, and be able to deal with environmental management and technology problems with fairness.

### **Programme Objectives for Plan B:**

To produce graduates who have acquired the knowledge, skills, and ethical behaviors as follows:

- 1. Be able to apply theoretical knowledge and important principles on environmental and resources management and technology appropriately, and to develop research related to environmental management and technology
- 2. Be able to analyze and critique regional and international environmental problems and give the directions for the solutions, including indicate needs for environmental study in society and community areas
- 3. Be able to communicate and present the knowledge on environmental and resources management and technology using appropriately and efficiently various media and processes. Have teamwork skills and can handle the conflict in the appropriate way, have interpersonal relationship, perform as a team leader and supporter in different situations, and have self-responsibility and social responsibility.
- 4. Have academic and profession moral and ethical behaviors, and be able to deal with environmental management and technology problems with fairness.

#### **Course Synopsis & Methodology:**

Graduates from the Master of Science programme in Environmental Management and Technology will demonstrate moral and ethical behavior with academic knowledge and abilities, including multidisciplinary research. They will be able to collaborate at the regional level on environmental and natural resources management and related technologies in analysis, diagnosis, and choose a right method for environment and natural resources management with appropriate technology that is related to economic development trends based on sustainability and self-sufficiency. Their efforts in this regard will be beneficial to the country, Asia-Pacific region, and other regions in the world.

# Course Content/ Study Topic: Study Plan

Year	Plan A(2)	Plan B
1	Semester 1	Semester 1
	<b>ENMT 601</b> Industrial Ecology and Environment	<b>ENMT 601</b> Industrial Ecology and Environment
	<b>ENMT 602</b> System Approach and Cybernetics	<b>ENMT 602</b> System Approach and Cybernetics
	<b>ENMT 603</b> Humankind and Global Environment	<b>ENMT 603</b> Humankind and Global Environment
	<b>ENMT 604</b> Techniques and Tools in	<b>ENMT 604</b> Techniques and Tools in
	Environmental Management and Technology	Environmental Management and Technology
	Total 12 credits	Total 12 credits
	Semester 2	Semester 2
	ENMT 605 Research Methodology and	<b>ENMT 605</b> Research Methodology and Advanced
	Advanced Statistics	Statistics
	<b>ENMT 606</b> Practices of Environmental	<b>ENMT 606</b> Practices of Environmental
	Management and Technology	Management and Technology
	Elective courses 6 credits	Elective courses 6 credits
	Total 12 credits	Total 12 credits
2	Semester 1	Semester 1
	ENMT 698 Thesis 9 credits	Elective courses 6 credits
		<b>ENMT 697</b> Thematic Paper 3 credits
	Total 9 credits	Total 9 credits
	Semester 2	Semester 2
	ENMT 698 Thesis 3 credits	<b>ENMT 697</b> Thematic Paper 3 credits
	Total 3 credits	Total 3 credits

# **Required Courses**

ENMT 601	Industrial Ecology and Environment	3(3-0-6)
ENMT 602	System Approach and Cybernetics	3(3-0-6)
ENMT 603	Humankind and Global Environment	3(3-0-6)
ENMT 604	Techniques and Tools in Environmental Management and Technology	3(3-0-6)
ENMT 605	Research Methodology and Advanced Statistics	3(3-0-6)
ENMT 606	Practices of Environmental Management and Technology	3(0-6-3)

# **Elective Courses**

Elective Courses				
ENMT 610	Biodiversity Management	3(3-0-6)		
ENMT 611	Integrated Coastal Management	3(3-0-6)		
ENMT 612	Conservation Biology Management	3(3-0-6)		
ENMT 613	Ecosystem Restoration	3(3-0-6)		
ENMT 614	Climate Change and its Impact	3(3-0-6)		
ENMT 615	Natural Disaster Management	3(3-0-6)		
ENMT 616	Solid and Hazardous Waste Management	3(3-0-6)		
ENMT 617	Sustainable Industrial Landuse	3(3-0-6)		
ENMT 618	Networking and Communication for Environmental Changes	3(3-0-6)		
ENMT 619	Technology for Water Quality Management	3(3-0-6)		
ENMT 620	Space Technologies and Applied Geo-Informatics in Resource and	3(3-0-6)		
	Environment			
ENMT 621	Wetlands Management Technology	3(3-0-6)		
ENMT 622	Statistics for Environmental Pollution Monitoring	3(3-0-6)		
ENMT 623	International Rivers in Mainland Southeast ASIA: Mekong and Salween	3(3-0-6)		
ENMT 624	Problem Soils and Management	3(3-0-6)		
ENMT 625	Environmental Management Systems	3(3-0-6)		
ENMT 626	Environmental and Resource Economics	3(3-0-6)		

ENMT 627	Industrial Hygiene and Safety		3(3-0-6)				
ENMT 628	ENMT 628 Environmental Education and Education for Sustainable Development		3(3-0-6)				
ENMT 629 Quantitative Analysis for Environmental Management		3(3-0-6)					
Thesis							
ENMT 698	Thesis	12(0-48-	-0)				
Thematic Paper							
ENMT 697	Thematic Paper	6(0-24-0	0)				

\* These may change in cases where there are suggestions for the improvened of the curriculum

#### **Qualifications:**

#### Plan A (2)

- 1. hold a Bachelor's degree in any field of study
- 2. have a grade point average of at least 2.50
- 3. have a TOEFL score of at least 480, TOEFL computer-based score of 157, TOEFL Internetbased score of 54, or IELTS score of 4.5 or pass the English Proficiency Examination arranged by the Faculty of Graduate Studies.

#### Plan B

- 1. hold a Bachelor's degree in any field of study
- 2. have a grade point average of at least 2.50
- 3. have at least 3 years environmental experienced related
- 4. have a TOEFL score of at least 480, TOEFL computer-based score of 157, TOEFL Internet-based score of 54, or IELTS score of 4.5 or pass the English Proficiency Examination arranged by the Faculty of Graduate Studies.

Those who do not have any of the test scores specified above will have to take the English Proficiency Examination of the Faculty of Graduate Studies on the specified examination day.

Exemptions from the above conditions may be granted by the Programme Committee under exceptional circumstances

#### **Document Required:**

- 1) Four (4) recent photographs (1x1 inch in size)
- 2) A copy of an applicant's degree certificate or a letter of graduation certification 2 copies (for an applicant with a degree completion)
- 3) A letter certifying that an applicant is currently in the last semester prior to graduation 2 copies (for an applicant seeking for a degree)
- 4) A detailed transcript of a degree (for an applicant with a degree completion) 2 copies
- 5) A grade report with course names and grades received from the first to the current 2 copies semester prior to graduation
- 6) A copy of identification card 2 copies
- 7) A copy of house registration certification 2 copies
- 8) A copy of a work experience certifying letter (for plan B) 2 copies
- 9) A copy of proof of payment
- 10) a 500 word concept paper in an area of interest or chosen topic in Environmental Management and Technology

#### Number of Participant: 3

#### **Eligible Countries:**

Afghanistan, Bangladesh, Cape Verde, Comoros, Eritrea, Fiji, Ghana, Indonesia, Iran, Jordan, Lesotho, Malaysia, Maldives, Mauritania, Nepal, Nigeria, Pakistan, Papua New Guinea, Philippines, Republic of Seychelles, Rwanda, Senegal, Solomon Island, South Sudan, Sudan, Sri Lanka, Timor-Leste, Togo and Vanuatu.

#### **Closing Date for Nominations:**

March 2016

#### **Contact:**

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