Master Degree: Environmental Science

Academic Institution: Chiang Mai University

Duration: Two (2) years academic years

Objectives: To produce graduates who have:

1. Knowledge and skills in environmental monitoring, assessment and problem solving by using appropriate sciences and technology for specific area and circumstance.
2. Knowledge and skills for systematic and effective planning and conduct researches in a field of environmental science with morals and ethics.
3. Responsibility, teamwork strategy approach, and skills in communication and information technology.

Course Synopsis & Methodology:

The new curriculum of the Environmental Science (ES) Program was developed to be relevant with the 11th National Economic and Social Development Plan of Thailand, which one of its main strategies is "sustainable management of natural resources and environment. This strategy mainly focuses on conservation, restoration and stability of natural resources and environment, pollution control and reduction, and development of an effective system for management of natural resources and environment under the transparent and equality principles". The quality of study courses as well as research projects concerning environmental science issues are expected to be unique and acceptable in international level. One of the identities of the ES program is the use of bioindicators for monitoring of environmental quality. Current environmental issues such as global warming and climate change, natural disasters i.e. earth quake and land slide, are also considered. Studies of tropical ecosystems as well as ASEAN environmental issues are in focus for the upcoming AEC in 2015.

Course Content/Study Topic:

Degree Requirements	*Total*	*a minimum of*	*36 credits*
A. Coursework		a minimum of	24 credits
1. Graduate Courses		a minimum of	24 credits
1.1 Field of concentration courses		a minimum of	18 credits
1.1.1 Required courses			12 credits
213703 Environmental Science Concepts			3 credits
213704 Environmental Monitoring			2 credits
213705 Integrated Technology for Environmental Monitoring			2 credits
213711 Environmental Impact Assessment			3 credits
213791 Seminar in Environmental Science 1			1 credit
213792 Seminar in Environmental Science 2			1 credit
1.1.2 Elective courses		a minimum of	6 credits

Student can choose from the following courses and any other graduate level courses with the approval of the advisors

202770 Tropical Plant Ecology	3 credits
202773 Limnology	3 credits
202786 Basic and Applied Tropical Ecology	3 credits
202833 Statistics for Bioscience Research	3 credits
202873 Wildlife Conservation	3 credits
203750 Environmental Analytical Chemistry	2 credits
203851 Environmental Toxicology and Residue Analysis	3 credits
205808 Contaminant Hydrogeology	4 credits
213701 Environmental Studies 1	3 credits
213702 Environmental Studies 2	3 credits

213712 Standards and Regulations in Environmental Law		1 credit
213713 Environmental Modeling		2 credits
213714 Environmental Risk Assessment		2 credits
213715 Health Impact Assessment		2 credits
213779 Selected Topics in Environmental Science		2 credits
1.2 Other courses	a maximum of	6 credits
1.2.1 Required courses		None
1.2.2 Elective course	a maximum of	6 credits

Student can choose from the following courses and any other graduate level courses with the approval of the advisors

253731 Environmental Health and Sanitation	3 credits
253732 Advanced Air Pollution Control	3 credits
253734 Resource Recycling Technology	3 credits
253735 Advanced Solid Waste Management	3 credits
253741 Water Quality Management	3 credits
253747 Hazardous Waste Management	3 credits
253751 Industrial Pollution control	3 credits
366722 Spatial Information Systems for Resource	3 credits

B. Thesis

213799 M.S. Thesis	12 credits

Course Description of the required courses

213703 ENVIRONMENTAL SCIENCE CONCEPTS

Principles of ecology and environmental science, abiotic and biotic component of ecosystem, biogeochemical cycles, human and the environment, environmental pollution, environmental management.

213704 ENVIRONMENTAL MONITORING

Introduction to environmental monitoring, geo-environmental monitoring, urban ecosystem monitoring, terrestrial ecosystem monitoring, aquatic ecosystem monitoring.

213705 INTEGRATED TECHNOLOGY FOR ENVIRONMENTAL MONITORING

Environmental sampling: some climatic factors, maps, compasses and GPS use, geo-environmental monitoring, urban ecosystem monitoring, terrestrial ecosystem monitoring, aquatic ecosystem monitoring, social science method for environmental science study, field trip

213711 ENVIRONMENTAL IMPACT ASSESSMENT

Introduction to Environmental Impact Assessment (EIA), essential EIA components, EIA project and procedure.

Qualifications:

1. The applicants must be holders of a bachelor degree or equivalent of science, technology, engineering and health science or other relevant fields.
2. The applicants must have English proficiency in listening, speaking, writing in good level and must have an English proficiency test result (not exceeded 2 years) as follows:
   - TOEFL not less than 475 (paper-based) or 153 (computer-based) or 53 (internet-based)
   - IELTS not less than 5.5
   - TEGS or e-TEGS not less than 65

Document Required:

1. the applicants previous academic record
2. letters of recommendation
3. proficiency in English

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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