

The Joint Graduate School of Energy and Environment

Master of Science Program in Environmental Technology (International Program)

Master of Science Program in Environmental Technology (International Program)

M.Sc (Environmental Technology)

The Joint Graduate School of Energy and Environment, King Mongkut's University of Technology Thonburi has the founding philosophy to be a national center of excellence for education and training in energy technology. It aims to produce high caliber human resources for science and technology related to energy and environment as a result of the impact of the production and utilization of energy. The Master of Science in Environmental Technology is intended to produce graduates with international standard. This program also meets the school's philosophy to produce high quality personnel with professional ethics and social responsibility. The graduates can effectively solve practical problems occurring in industrial and government sectors.

Objectives:

- 1. To produce leading edge professional researchers who have integrated knowledge in environmental theories and practices and understand the impact of the production and utilization of energy. It also aims at producing graduates with integrated knowledge in new technology as well as understanding energy technology and its impact as a result of the production and utilization of energy together with problem analysis and new knowledge synthesis, in addition to good communication in English in order to work professionally. The graduates can also apply the knowledge to develop research studies in energy technology and environment and can communicate well in English in the profession.
- 2. To produce new researchers with conscious mind who understand the impact of the production and utilization of energy.
- 3. To promote a body of knowledge creation and solve environmental problems as a result of the impact of energy production and utilization in government and private sectors as well as disseminate such knowledge in the form of academic articles.

Qualifications of a prospective candidate:

1. Has a bachelor's degree with a GPA not less than 2.75 from tertiary institutes approved by the Office of Civil Service Commission or the University Council or has other qualifications as stipulated by JGSEE, or



The Joint Graduate School of Energy and Environment

Master of Science Program in Environmental Technology (International Program)

- 2. Has a graduate diploma with a GPA not less than 3.5 from tertiary institutes approved by the Office of Civil Service Commission or the University Council or has other qualifications as stipulated by JGSEE, or
- 3. Has a bachelor's degree from tertiary institutes approved by the Office of Civil Service Commission or the University Commission with at least two years of work experience and the institutes' program faculties have considered appropriate for studying in the program.
- 4. Has English proficiency according to the level required by JGSEE.
- 5. Has other qualifications as stipulated by JGSEE for JGSEE application.

Professions after graduation:

- 1. Scientists, researchers and engineers in energy
- 2. Academics in environment and energy
- 3. Analysts and planners in environment policy
- 4. Lecturers
- 5. Consultants in environment and energy
- 6. Database administrators in environment and energy
- 7. Project coordinators/Consultants in environment and carbon reduction mechanisms
- 8. Specialists in environment in government and private sectors

Curriculum

Total Program Credits	40 Credits
-----------------------	------------

Curriculum Components

Plan 1.2 Dissertation

Major Course	10 Credits
Elective Course	9 Credits
Dissertation	21 Credits

COURSE STRUCTURE

First Year/ First Semester		Credits
JEE 606*	Mathematical Techniques	3
JEE 607*	Optimization Techniques	3
JEE 611	Seminar for M.Sc (Environmental Technology)	1
JEE 613	Research Methodology	3



The Joint Graduate School of Energy and Environment

Master of Science Program in Environmental Technology (International Program)

9

	Total	13
XXX	Elective	3
JEE 621	Energy Economics	3

First Year/ S	Second Semester	Credits
JEE 615	Dissertation for M.Sc (Environmental Technology)	3
XXX	Elective	3
XXX	Elective	3
	Total	9

Second Yea	ar/ First Semester	Credits
JEE 615	Dissertation for M.Sc (Environmental Technology)	9
	Total	9

Second Yea	ar/ Second Semester	Credits
JEE 615	(Dissertation for M.Sc (Environmental	9
	Technology)	

Total