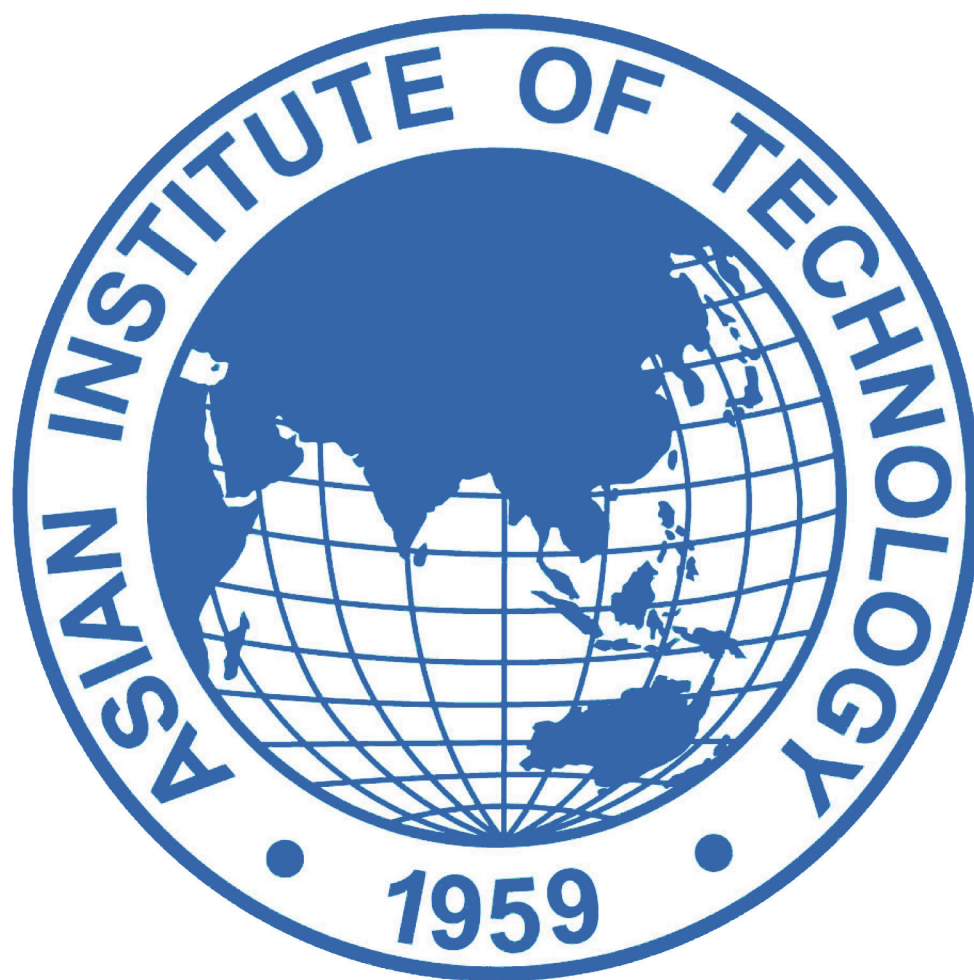




# Professional Masters in Energy Business Management





# MESSAGE



**Barbara Igel, PhD**  
Dean, School of Management



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Dean, School of Environment,  
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There has never been a better time for a career in energy. Energy is the largest industry in the world and commands a diverse spectrum of operations. The energy industry in Asia is expanding due to high economic growth in the region. However climate change, green house gas emissions, managing energy business and other challenges remain. There is a need to train a new breed of professionals who not only understand the issues but also have the capability to drive their organizations through these challenges. This new group of professionals will be able to approach the global energy business not just with technological expertise but also with financial sense and business acumen. Hence we bring to you the Professional Masters in Energy Business Management, targeted at professionals who desire an integrated understanding of the global energy business. The participants of this program will be in a unique position to combine the knowledge of energy, engineering with sound foundations of business management.

## Program Objective

### Energy Management for a Cleaner and Brighter Future

#### Program Background

There is a need for a new breed of highly trained specialized professionals who are capable of efficiently managing the energy companies in the increasingly globalized business environment. The Professional Masters program in Energy Business Management is designed to produce such human capital. The main focus of the new academic program is to give the students in-depth exposure to modern management approaches and skills needed to face the challenge of managing the changing energy business paradigms and energy markets. As energy business is increasingly linked with international financial markets, it becomes necessary to tap both domestic and foreign sources of financing for major energy production to meet the fast growing energy needs.

**Deadline for submission of application: 1 June 2013**

**Course Commences: 13 August 2013**

Application forms can be downloaded at: <http://www.ait.ac.th/admissions/application.html>



# Intended Learning Objectives

On successful completion of the program, it is envisaged that the participants will be able to:

- Demonstrate a clear and in-depth understanding of the contemporary settings within which energy business has to be managed.
- Demonstrate a clear understanding between national economic development, competition, patterns of technological and market change, and the structure and development of internal enterprise capabilities.
- Demonstrate the ability to analyze which technologies to invest in, how to structure those investments and how to anticipate and respond to behavior of the competitors, suppliers and customers.
- Demonstrate the ability to understand the issues involved in the process of energy technology acquisition and the interrelationships between technology transfer and research and development management.
- Demonstrate the ability to use various methods, tools and techniques for evaluations of various options related to energy business.
- Demonstrate the ability to understand the link between national energy and environment related policies and the competitive behavior of the enterprise.

## Program Structure

### Admission Requirement

Candidates seeking admission should have at least a Bachelor degree in engineering, science, economics, management, business, public administration or equivalent. Students attending this program should meet the AIT English requirements (TOEFL power based: 500 or equivalent; IELTS: 4.5). Applicants should also have a minimum of 2-3 years of work experience.

**Program Duration and Modality of course offering:**

- **Duration: 1 year**

### Curriculum Structure

The program comprises coursework of 27 credits and a project work of 6 credits - Total of 33 credits

#### **A : Required Courses (12 credits)**

- Development and Evaluation of Energy Projects 3(2-3)
- Energy Resources and Technologies 2(2-0)
- Human Resources Management 2(2-0)
- Managerial Accounting 2(2-0)
- Managing Technology for Competitiveness 2(2-0)
- Workshop on Energy Issues and Communication 1(0-2)

#### **B : Elective Courses (15 credits)**

Elective Courses are designed to cater the needs of the Professionals of various energy business sectors, such as:

- Electric Utilities;
- Oil and gas sector;
- Businesses involved in renewable and clean energy Technologies;
- Energy conservation, efficiency and management in Industries, buildings and commercial sectors

#### **Additionally, cross cutting courses, such as:**

- Choice & Transfer of Energy Technologies
- Innovation Management
- Energy Forecasting, Financial Management
- Corporate Finance
- Supply Chain Management

**Are also included as electives.**

#### **C : Research Project (6 credits)**



# Program Faculty

- **Dr. Youstre Badir** (Libya), PhD. Management of Technology, College of Management of Technology, The Swiss Federal Institute of Technology  
*Specialization:* Innovation and New Product Development Management, Management of Technology
- **Dr. Shobhakar Dhakal** (Nepal), PhD. Energy and Heat Island Mitigation, The University of Tokyo, Japan  
*Specialization:* Modeling of energy systems, Energy systems and GHG mitigation, Energy and Climate policy, Urbanization, Cities for climate change
- **Dr. Barbara Igel** (Germany), Dean SOM, PhD. Economics, Freie University, Berlin, Germany  
*Specialization:* High Tech Entrepreneurship, Industrial Economics, Knowledge Management, Management of Innovation
- **Prof. Nazrul Islam** (Bangladesh), Doctor of Engineering, Industrial Engineering and Management, Asian Institute of Technology, Thailand  
*Specialization:* Strategic Management of Technology, International Technology Transfer, Knowledge Management
- **Dr. Juthathip Jongwanich** (Thailand), PhD. Australia National University  
*Specialization:* International Economics, International Macro Economics, Capital mobility, Multinational Enterprise and Production Network
- **Dr. Donyaprueth Krairit** (Thailand), PhD. MIT Cambridge, USA  
*Specialization:* Technology Policy and Management
- **Prof. Sivanappan Kumar** (India), Coordinator, Professional Masters in Energy Business Management and Energy Field of Study, PhD. Institut National Polytechnique, Toulouse, France  
*Specialization:* Renewable energy resource and Technologies, Climate change and green house gas mitigation, Energy and sustainable development
- **Dr. Charles O.P. Marpaung** (Indonesia), PhD. In Energy Economics and Planning, AIT, Thailand,  
*Specialization:* Electricity economics and planning, Energy, Economy and environmental modeling, Emission mitigation, Statistical analysis on energy and environment
- **Dr. B. Mohanty** (India), PhD. In Energy, Institut National Polytechnique, Toulouse, France  
*Specialization:* Rational use of energy in buildings and Industry, Energy audit and conservation, Urban Energy systems, Demand-side Management, Energy system optimization
- **Dr. Weerakorn Ongsakul** (Thailand), Dean SERD, PhD. Texas A&M University, USA  
*Specialization:* Artificial Intelligence applications to power systems, Parallel processing applications, Power system operation & control, Power system restructuring and deregulation
- **Dr. P. Abdul Salam** (Sri Lanka), D. Eng. In Energy Technology, AIT, Thailand  
*Specialization:* Bio-energy, Renewable energy, Energy conservation and efficiency, Energy, environment and climate change issues
- **Prof. Ram M. Shrestha** (Nepal), D. Eng. In Industrial Engineering and Management, AIT, Thailand  
*Specialization:* Energy and environmental policy, Energy economics, Electricity economics and planning, Energy, economic and environmental modeling, Energy pricing
- **Dr. Sununta Siengthai** (Thailand), PhD. Labor and Industrial Relations, University of Berlin, Germany  
*Specialization:* Labor and Industrial Relations, HRM, Wages and Production
- **Dr. Jai Govind Singh** (India), PhD. In Electrical Engineering, Indian Institute of Technology, India  
*Specialization:* Power system planning, Demand-side Management, Integration of renewable energy resources
- **Dr. Vatcharapol Sukhotu** (Thailand), PhD. Texas A&M University College Station, USA  
*Specialization:* Supply Chain Management, Operations Management, Logistics Management
- **Dr. Sundar Venkatesh** (India), PhD. Indian Institute of Management, Ahmedabad, India  
*Specialization:* Financial analysis, Strategic cost Analysis and Management, Management control systems and Strategy Implementation, Corporate Finance, Corporate governance, Business Valuation, Mergers and Acquisitions

## Coordinators

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