Subject Description Form

Subject Code: EE525

Subject Title: Energy Policy and Restructuring of Electricity Supply Industry

Credit Value: 3

Level: 5

Pre-requisite/Co-requisite/Exclusion: Nil

Objectives:
1. To provide students with a comprehensive knowledge in formulating practical energy policies for sustainable energy utilization.
2. To develop a conceptual framework for understanding key and practical issues of restructuring electricity supply industry.

Intended Learning Outcomes:
Upon completion of the subject, students will be able to:

a. Identify, evaluate and formulate energy policies for sustainable energy utilization.
b. Identify the rationale and key issues for restructuring electricity supply industry.
c. Explain the market structures and regulatory framework for electricity supply industry.
d. Explain and evaluate different pricing concepts and pricing contracts in restructured electricity supply industry.
e. Present the results of study in the form of written technical reports and oral presentation.

Subject Synopsis/Indicative Syllabus:

3. Restructuring of the ESI: Electricity supply industry structures; Privatisation and competition; Market structures and architectures; Regulation of Electricity Markets. Key issues for China and Hong Kong.

Case Study:
1. Functional analysis on energy policies
2. Practical application of sustainable energy measures
3. Analysis on key issues of ESI restructuring
4. Implementation issues on ESI restructuring

Teaching/Learning Methodology

The concept of energy policy, identifications and discussions of ways of restructuring electricity supply industry will be presented through lectures and tutorials on case studies and international experiences. Students are expected to take initiative to learn through the process of engagement and participation in lectures and tutorial sessions. Mini-Projects are used to enhance students learning experiences and practical applications. They provide students with the opportunity to develop independent evaluation, formulation and technical report writing skills pertinent to the field of energy policy and restructuring electricity supply industry.

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Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks | % weighting | Intended subject learning outcomes to be assessed |
----------------------------------|------------|-----------------------------------------------|
1. Examination                   | 60%        | ☑ ☑ ☑ ☑ ☑                                      |
2. Class test/Quiz               | 25%        | ☑ ☑ ☑ ☑ ☑                                      |
3. Mini-project & report         | 15%        | ☑ ☑ ☑ ☑ ☑                                      |
Total                             | 100%       | ☑ ☑ ☑ ☑ ☑                                      |

The subject outcomes on concepts, evaluations and formulations are assessed by means of examination, quizzes and tests. The outcomes on practical formulations, implementation and evaluations of energy policies, restructuring electricity supply industry and electricity pricing, as well as technical writing, are assessed by mini-project and reports.

Student Study Effort Expected

Class contact: 30 Hrs.
- Lecture/Tutorial
- Case studies/Group discussion 9 Hrs.
- Other student study effort:
  - Mini-project discussion/report 21 Hrs.
  - Self-study 45 Hrs.
Total student study effort 105 Hrs.

Reading List and References


Dec 2018