COURSE	Name	: Special Topics in Power System Engineering
	Code	: EE185613
	Credit(s)	: 2
	Semester	: (Elective Course)

Description of Course

Nowadays, the development of knowledge on field of electrical power system engineering is very fast therefore the major of power system engineering on the graduate school of electrical engineering provides a subjects namely Special Topic for Power Systems Engineering. This subject discusses the latest developments in the field of power system engineering. This course discusses specific topic to solve current issues regarding to power system engineering such as: Defense scheme on power system, Super grid system, Renewable energy impact, Smart protection system, Bulk storage system, etc.

Learning Outcomes

Knowledge

(P01) Mastering the concepts and principles of science in a comprehensive manner, and to develop procedures and strategies needed for the analysis and design of systems related to the field of power systems, control systems, multimedia telecommunications, electronics, intelligent multimedia network, or telematics as a preparation for further education or professional career.

(P03) Mastering the factual knowledge of information and communication technology as well as the latest technology and its utilization in the field of power systems, control systems, multimedia telecommunications, electronics, intelligent multimedia network, or telematics.

Specific Skill

(KK02) Being able to compose problem solving in engineering through depth and breadth of knowledge which adapts to changes in science and technology in power systems, control systems, multimedia telecommunications, electronics, intelligent multimedia network, or telematics.

General Skill

(KU07) Being able to improve the capacity of learning independently.

Attitude

(S08) Internalizing values, norms and academic ethics.

(S09) Demonstrating attitude of responsibility on work in his/her field of expertise independently.

Course Learning Outcomes

Knowledge

Mastering on scientific concepts and principles thoroughly in the field of power system engineering related to current issues and developing strategies to analyze and solve current problems related to the electric power system.

Specific Skill

Able to develop and analyze an engineering problems and solve the problems related to scheme defense on power systems, super grid systems, renewable energy impacts, smart protection systems, bulk storage systems, and alternative storage systems

General Skill

Able to use and utilize simulation software such as MatLab, ETAP, Digsilent, and other software in power system analysis

Attitude

Internalize academic values, norms and ethics

Have an attitude of being responsible for the work in his area of expertise independently.

Main Subjects

1. Adapted to the topics offered in the semester

Reference(s)

[1] Handbook related to topics offered
[2] IEEE transactions related

Prerequisite(s)

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