

<b>COURSE</b>	Name : Special Topics in Control Systems
	Code : E185529
	Credit(s) : 2
	Semester : (Elective Course)

### Description of Course

The course of Special Topics in Control Systems is a course that provide opportunities for students to learn fundamentally and in detail about the development of science and / or technology in the field of Control System Engineering which are considered important to be known by Masters students. The material covered includes background, basic theories and concepts, the development of method or algorithm variants, performance evaluation, and application concepts.

### 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.

(KU11) Being able to implement information and communication technology in the context of execution of his/her work.

#### Attitude

(S11) Trying his/her best to achieve perfect results.

### Course Learning Outcomes

#### Knowledge

Mastering scientific concepts and principles in a comprehensive manner to develop procedures and strategies needed for the analysis and design of the system and mastery of the latest technology in the Control System Engineering and its applications that become the topic of discussion.

#### Specific Skill

Able to compile engineering problem solving by expanding knowledge that adapts changes in science and/or technology in the field of Control System Engineering which is related to the topic of discussion.

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**General Skill**

Being able to use and utilize the simulator software and MatLab / Simulink in conducting experiments related to the analysis and design of the Control System Engineering related the topic of discussion.

**Attitude**

Trying maximally in solving problems in the field of Control System Engineering related to the topic of discussion to achieve best results.

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**Main Subjects**

1. Background or supporting concepts and theories
2. Basic concepts and theories
3. Development of variants of methods or algorithms
4. Performance evaluation
5. The concept of implementation

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**Reference(s)**

- [1] Supporting textbooks.  
[2] Papers from supporting journals or conferences.

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**Prerequisite(s)**

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