

Module Description

Module name	Course Module
Module level, if applicable	Bachelor of Electronics Engineering
Code, if applicable	5215-063-2
Subtitle, if applicable	
Course, if applicable	System Engineering
Semester(s) in which the module istaught	IV
Person responsible for the module	Lecturer of Course
Lecturer	Drs. Pitoyo Yuliatmojo, MT
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a mandatory course for Control Electronics Specialization and offered in the 4 th semester.
Type of teaching, contact hours	<p>Teaching methods used in this course are:</p> <ul style="list-style-type: none"> - Lecture (i.e., group investigation, small group discussion, casestudy, and video-based learning) - Structured assignments (i.e., essays and case study) - Practice (i.e., computer simulation and case study in laboratorium) <p>The class size for lecture is 30 students. Contact hours for lecture is 23 hours, assignments are 28 hours</p>
Workload	<p>For this course, students required to meet a minimum of 79 hours in one semester, which consist of:</p> <ul style="list-style-type: none"> - 23 hours for lecture, - 28 hours for structured assignments, - 28 hours for private study
Credit points	2 credit points (equivalent with 2.88 ECTS)
Requirements according to the examination regulations	Students must have attended all classes and submitted all class assignments that are scheduled before the final tests.
Recommended prerequisites	Students must have attended all classes and submitted all class assignments that are scheduled before the final tests.

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Course Learning Objectives (CLO1): Mahasiswa mampu memahami model-model sistem secara umum yang ada dalam sistem elektronika (K1) (10)</p> <p>Course Learning Objectives (CLO2): Mahasiswa mampu memahami pemodelan sistem, analisis sistem, fungsi alih dan persamaan keadaan, metode pemodelan langsung, network dan variasional (K1) (20)</p> <p>Course Learning Objectives (CLO3): Mahasiswa mampu mengembangkan sistem elektronika di masa depan (K2, S1, S3, C1) (60)</p> <p>Course Learning Objectives (CLO4): Mahasiswa mampu memahami hubungan konstitusi komponen sistem dalam berbagai disiplin ilmu. (K1) (10)</p> <p>Program Learning Outcome (PLO2): Menerapkan ilmu-ilmu dasar untuk memecahkan masalah teknik elektronika</p> <p>Program Learning Outcome (PLO3): Menerapkan kompetensi teknik elektronika untuk memecahkan masalah keteknikan</p> <p>Knowledge (K1): Menerapkan matematika, ilmu dasar dan teknik dasar untuk merancang dan menganalisis untuk memecahkan masalah di bidang teknik elektronika.</p> <p>Knowledge (K2): Untuk menerapkan prinsip-prinsip teknik elektronik untuk memecahkan masalah dalam sistem teknik elektronik</p> <p>Engineering and Education Skill (S1): Mampu merancang prinsip dan aplikasi sistem rekayasa elektronik</p> <p>Engineering and Education Skill (S3): Mampu mencari alternatif solusi dan pemecahan masalah di bidang teknik elektronika.</p> <p>Competence (C1): Menerapkan teknologi baru di bidang rekayasa dengan mempertimbangkan standar teknis, aspek kinerja, keandalan, penerapan, dan keberlanjutan</p>
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Content	<p>Students will learn about: Mata kuliah ini membahas tentang model-model sistem secara umum yang ada dalam sistem elektronika, pemodelan sistem, analisis sistem, serta pengembangan sistem elektronika di masa depan. Fungsi alih dan persamaan keadaan. Hubungan konstitusi komponen sistem dalam berbagai disiplin ilmu. Metode pemodelan langsung, metode network, metode variasional.</p>
Forms of Assessment	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Structured tasks: 20% ; Quiz 10% ; Mid Test : 35% Final Test: 35%</p>
Study and examination requirements and forms of examination	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Students must attend 15 minutes before the class starts. - Students must switch off all electronic devices. - Students must inform the lecturer if they will not attend the class due to sickness, etc. - Students must submit all class assignments before the deadline. - Students must attend the exam to get final grade. <p>Form of examination: Written exam: Essay</p>
Media employed	<p>Direct Whiteboard, Google classroom, Tutorial Video by Youtube and Power Point Presentation.</p>
Reading list	