

Module Description

Module name	Course Module
Module level, if applicable	Bachelor of Electronics Engineering
Code, if applicable	5215-059-3
Subtitle, if applicable	
Course, if applicable	Electronics II
Semester(s) in which the module istaught	III
Person responsible for the module	Lecturer of Course
Lecturer	Dr. Wisnu Djatmiko,MT. ; Dr. Moch Sukardjo, M.Pd
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a compulsory course and offered in the 3 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) <p>The class size for lecture is 30 students. Contact hours for lecture is 27 hours, assignments are 32 hours</p>
Workload	<p>For this course, students required to meet a minimum of 91 hours in one semester, which consist of:</p> <ul style="list-style-type: none"> - 27 hours for lecture, - 32 hours for structured assignments, - 32 hours for private study
Credit points	2 credit points (equivalent with 3.00 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>PLO-CLO-ILO</p>	<p>After completing the course and given with this case:</p> <p>Course Learning Objectives (CLO1): Mahasiswa mampu menganalisis karakteristik masukan dan keluaran konfigurasi CE,CB,CC (K1, S1, S3, C1, C2) (70)</p> <p>Course Learning Objectives (CLO2): Mahasiswa mampu memahami Transistor Penguat Sinyal kecil dan besar alpha dan beta, Titik Kerja Transistor sebagai penguat, Parameter H, Penguat dengan umpan balik, Penguat daya, Rangkaian Schmitt Triogger, Pasangan Darlington, Transistor Unipolar FET, Mosfet, CMOS, Rangkaian dasar FET dan MOSFET (K1) (30)</p> <p>Program Learning Outcome (PLO2): Menerapkan ilmu-ilmu dasar untuk memecahkan masalah 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 (S2): Mampu menganalisis prinsip kerja dan penerapan 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>
<p>Content</p>	<p>Students will learn about: Karakteristik masukan dan keluaran konfigurasi CE,CB,CC, Transistor Penguat Sinyal kecil dan besar alpha dan beta, Titik Kerja Transistor sebagai penguat, Parameter H, Penguat dengan umpan balik, Penguat daya, Rangkaian Schmitt Triogger, Pasangan Darlington, Transistor Unipolar FET, Mosfet, CMOS, Rangkaian dasar FET dan MOSFET sebagai saklar dan penguat. UJT, Photo Transistor.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Sikap:10%; Keterampilan Umum: 5%; Membuat Program: 10%; UTS, UAS, Proyek dan tugas individu:75%</p>

Study and examination requirements and forms of examination	Study and examination requirements: <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. Form of examination: Written exam: Essay
Media employed	Direct Whiteboard, Google classroom, Tutorial Video by Youtube and Power Point Presentation.
Reading list	Referensi Utama: <ol style="list-style-type: none"> 1. Prinsip-Prinsip Elektronika: Albert Paul Malvino (kode: MV) 2. Rangkaian Elektronika analog: Sutarno 3. 3. Tower Transistor (data book) 4. Fakultas Teknik - UNJ, 2017, Pedoman Penyusunan Rencana Pembelajaran Semester (RPS) UNJ, Fakultas Teknik, Universitas Negeri Jakarta. Referensi Pendukung: <ol style="list-style-type: none"> 5. Moch Sukardjo dan Muhamad Yusro; Prinsip-prinsip Elektronika Das