

Module Description

Module name	Course Module
Module level, if applicable	Bachelor of Electronics Engineering
Code, if applicable	5115-033-2
Subtitle, if applicable	-
Course, if applicable	Drawing Techniques
Semester(s) in which the module is taught	II
Person responsible for the module	Lecturer of Course
Lecturer	Drs.Pitoyo Yuliatmojo,MT. ; Vina Oktaviani, S.Pd, M.T.
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a compulsory course and offered in the 2 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 laboratory) <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 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>PLO-CLO-ILO</p>	<p>After completing the course and given with this case:</p> <p>Course Learning Objectives (CLO1): Mahasiswa mampu memahami jenis peralatan dan standarisasi gambar teknik (K1) (10)</p> <p>Course Learning Objectives (CLO2): Mahasiswa mampu memahami dasar-dasar proyeksi gambar teknik (K1) (10)</p> <p>Course Learning Objectives (CLO3): Mahasiswa mampu merancang gambar instalasi listrik dan diagram elektronika (K2, S1, S3, C1, C2) (20)</p> <p>Course Learning Objectives (CLO4): Mahasiswa mampu merancang gambar simbol-simbol gambar listrik dan elektronika (K2, S1, S3, C1, C2) (20)</p> <p>Course Learning Objectives (CLO5): Mahasiswa mampu merancang gambar rangkaian elektronika menggunakan komputer (A2, K2, S1, S3, C1, C2) (40)</p> <p>Program Learning Outcomes (PLO3): PLO3: Menerapkan kompetensi teknik elektronika untuk memecahkan masalah keteknikan</p> <p>Attitude (A2): Untuk berkolaborasi sebagai sebuah tim, berkomunikasi secara efektif baik lisan maupun tulisan dalam lingkungan akademik dan profesional.</p> <p>Knowledge (K2): Untuk menerapkan prinsip-prinsip teknik elektronika untuk memecahkan masalah dalam sistem teknik elektronika</p> <p>Engineering and Education Skill (S1): Mampu merancang prinsip dan aplikasi sistem rekayasa elektronika</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>Competence (C2): Mampu mengelola dan mengembangkan proses, sistem operasi, dan peralatan dengan mempertimbangkan dampak teknis dan nonteknis dari kegiatan industri di bidang teknik elektronika.</p>
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Content	Students will learn about: Types of Equipment and standardization of technical drawings, basics of projection of technical drawings, drawing of electrical installations and electronic diagrams, symbols of electrical and electronic drawings. Drawing electronic circuits using a computer (electronic application software)
Forms of Assessment	Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Structured tasks: 30% ; Mid Test : 35% Final Test: 35%
Study and examination requirements and forms of examination	Study and examination requirements: 1. Students must attend 15 minutes before the class starts. 2. Students must switch off all electronic devices. 3. Students must inform the lecturer if they will not attend the class due to sickness, etc. 4. Students must submit all class assignments before the deadline. 5. Students must attend the exam to get final grade. Form of examination: Written exam: Essay
Media employed	Direct Whiteboard and Power Point Presentation.
Reading list	1. Narayana, K.L et.all. 2006. Machine Drawing Third Edition. New Delhi. New Age International Publisher 2. Giesecke, Frederick E. (2001). Gambar Teknik. Edisi ke sebelas, jilid 1 & 2. Jakarta, Erlangga. 3. Singh, Surjit. (1984). General Electric Drawing. PK & Co Technical Publisher, New Delhi. 4. Baer, Charles J & Ottaway John R. (1980), Electrical and Electronics Drawing Fourth Edition. Mc Graw-Hill Company.