



MODULE HANDBOOK DESCRIPTION

Module designation	Electrical Circuits II	
Code	FBS2122	
Semester(s) in which the module is taught	3 /second year	
Person responsible for the module	Ni Made Seniari, ST., MT.	
Language	Indonesian	
Relation to curriculum	Compulsory for all majors	
Teaching methods	Lectures, small group discussion, case base method.	
Workload (incl. contact hours, self-study hours)	Contact minutes every week, each week of the 16 weeks/semester: <ul style="list-style-type: none"> • Lectures: 3 x 50 minutes • Exercises and Assignments: 3 x 60 minutes • Private study: 3 x 60 minutes. total study hours = 8 hours 30 minutes/week	
Credit points	3 SKS (~ 4.8 ECTS)	
Required and recommended prerequisites for joining the module	-Electrical Circuits I (FBS1213)	
Module objectives/intended learning outcomes	1. Students understand the concept of Power in AC circuits 2. Students are able to understand the three-phase circuit system 3. Students are able to understand the concept of magnetically coupled circuit analysis 4. Students are able to understand the system with two net Working	PLO2
	5. Students are able to apply the concept of frequency response in electrical circuits	PLO3

	6. Students are able to work on cases related to frequency response in electrical circuits	PLO4
Content	<ol style="list-style-type: none"> 1. Power in AC circuit 2. Three-phase circuit system 3. Magnetically coupled circuit 4. Two Port Network 5. Complex frequency 6. Analysis of the concept of frequency response 	
Examination forms	<ul style="list-style-type: none"> - Collecting a portfolio after finishing each topic, in the form of voice recordings and working on practice assignments - Midterm and final test 	
Study and examination requirements	<p>The final grade in the module is composed of:</p> <ol style="list-style-type: none"> a. The portfolio of 6 topics is 11,67% each, for a total of 70% b. Midterm assessment: 15% c. Final assessment: 15% <p>Students must have a final grade of 70% or higher to pass</p>	
Reading list	<ol style="list-style-type: none"> 1. Hyatt, W.H., Kemmerly, J.E, Durbin, S. M., 2007, “ Engineering Circuit Analysis”, 7th edition, Mc. Graw Hill 2. Alexander, C.K., Sadiku, M.N.O., 2011, “Fundamental of Electric Circuits”, 6th edition, Mc. Graw Hill 3. Edminister, J.A., “ Rangkaian Listrik (Buku Schaum Series)” 4. Budiono, M, “Rangkaian Listrik”, ITB Bandung. 5. Naeem, W., 2009, “Concepts in Electrics Circuit”, Ventus Publishing Aps 6. Nilsson, J.W., Riedel, S.A., 2015, “Electric Circuits” 10th edition, Prentice Hall 	