



MODULE HANDBOOK DESCRIPTION

Module designation	Advanced Electronics Laboratory	
Code	FBB3207	
Semester(s) in which the module is taught	6 / third year	
Person responsible for the module	Budi Darmawan, ST., M.Eng.	
Language	Indonesian	
Relation to curriculum	Concentration Elective for Electronics Engineering.	
Teaching methods	Contextual Instruction (CI).	
Workload (incl. contact hours, self-study hours)	<p>Contact minutes every week, each week of the 16 weeks/semester :</p> <ul style="list-style-type: none"> • Practice: 1 x 50 minutes • Data analysis: 1 x 60 minutes • Writing report: 1 x 60 minutes. <p>Total study hours = 2 hours 50 minutes/week</p>	
Credit points	1 (~ 1,6 ECTS)	
Required and recommended prerequisites for joining the module	- Analog Electronics (FBB3210)	
Module objectives/intended learning outcomes	1. Students are able to analyze Differential Amplifier, Power Electronics Component, and Field Effect Transistor.	PLO3,
	1. Students are able to assemble Differential Amplifier, Power Electronics Component, and Field Effect Transistor.	PLO4
	2. Students are able to compare the analysis results of Differential Amplifier, Power Electronics Component, and Field Effect Transistor with the experimental results of these circuits and make conclusions and report the results.	PLO5

Content	<ol style="list-style-type: none"> 1. Differential Amplifier, 2. Power Electronics Component 3. Field Effect Transistor
Examination forms	<ol style="list-style-type: none"> 1. Pre-test 2. Practice skills 3. Practice report 4. Response
Study and examination requirements	<p>The final grade in the module is composed of:</p> <ol style="list-style-type: none"> 1. Pre-test and practice skills = 50% 2. Practice report and response = 50% <p>Students must have a final grade of 65% or higher to pass</p>
Reading list	<ol style="list-style-type: none"> 1. Gray, P.R., Hurst, P.J., Lewis, S.H., and Meyer, R.G. (2009). "Analysis And Design of Analog Integrated Circuits 5th ed", John Wiley & Sons, United States of America. 2. Jacob, J.M. (1982). "Applications & design with analog integrated circuits", Reston Pub. Co. 3. Boylestad, R., and Nashelsky, L., (2014). "Electronic Devices and Circuit Theory 11th ed". Pearson.