

MODULE HANDBOOK DESCRIPTION

Module designation	Electrical Measurement Laboratory	
Code	FBS2124	
Semester(s) in which the module is taught	3/second year	
Person responsible for the module	Ida Bagus Fery Citarsa, ST., MT.	
Language	Indonesian	
Relation to curriculum	Compulsory for all Majors	
Teaching methods	Contextual Instruction (CI).	
Workload (incl. contact hours, self-study hours)	Contact minutes every week, each week of the 16 weeks/semester : <ul style="list-style-type: none"> • Practice : 1 x 50 minutes • Data analysis : 1 x 50 minutes • Writing report : 1 x 50 minutes. Total study hours = 2 hours 30 minutes/week	
Credit points	1 (~ 1,6 ECTS)	
Required and recommended prerequisites for joining the module	<ul style="list-style-type: none"> • Electrical Measurement (FBS2123) 	
Module objectives/intended learning outcomes	<ul style="list-style-type: none"> • Students are able to analyze the measurement of electrical current, electrical voltage, ground resistance, single-phase and three-phase electrical power and energy. 	PLO3
	<ul style="list-style-type: none"> • Students are able to design the measurement experiment of electrical current, electrical voltage, ground resistance, single-phase and three-phase electrical power and energy. 	PLO4
	<ul style="list-style-type: none"> • Students are able to compare the analysis results of the measurement electrical current, electrical voltage, ground resistance, single-phase and three-phase electrical power and energy with the experimental results, make conclusions and report the results. 	PLO5

Content	<ul style="list-style-type: none"> • Electrical current measurement method. • Electrical voltage measurement method. • Ground resistance measurement method. • Single-phase electrical power measurement method. • Three-phase electrical power measurement method. • Single-phase electrical energy measurement method. • Three-phase electrical energy measurement method.
Examination forms	<ul style="list-style-type: none"> • Pre-test • Practice skills • Practice report • Response
Study and examination requirements	<p>The final grade in the module is composed of:</p> <ul style="list-style-type: none"> • Pre-test and practice skills = 20% • Practice report and response = 80% <p>Students must have a final grade of 65% or higher to pass</p>
Reading list	<ul style="list-style-type: none"> • Cooper, W., 1999, “Instrumentasi Elektronik dan Teknik Pengukuran”, Erlangga, Jakarta. • Sapiie, S., Nishino, O., 1980, “Pengukuran dan Alat-alat Ukur Listrik”, Pradnya Paramita, Jakarta. • Sumanto, 1996, “Alat-Alat Ukur Listrik”, Andi, Yogyakarta. • Tumanski, S., 2006. <i>Principles Of Electrical Measurement.</i> Taylor & Francis. • Wolf, S., 1986, “Guide to Electronic Measurement dan Laboratory-Practice, 2nd Edition”, Prentice Hall Inc., New York.