MODULE HANDBOOK DESCRIPTION

Module designation	Digital Electronics Laboratory	
Code	FBB3104	
Semester(s) in which the module is taught	5 / third year	
Person responsible for themodule	Budi Darmawan, ST., M.Eng.	
Language	Indonesian	
Relation to curriculum	Elective for Electronics Engineering.	
Teaching methods	Contextual Instruction (CI).	
Workload (incl. contacthours, self-study hours)	Contact minutes every week, each week of the 16weeks/semester : • 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 joiningthe module	- Digital Electronics (FBB3103)	
Module objectives/intend edlearning outcomes	1. Students are able to analyze Multiplexer Demultiplexer circuit, Analog to Digital Converter circuit, and Digital to Analog Converter circuit.	PLO3,
	2. Students are able to assemble Multiplexer Demultiplexer circuit, Analog to Digital Converter circuit, and Digital to Analog Converter circuit.	PLO4
	3. Students are able to compare the analysis results of Multiplexer Demultiplexer circuit, Analog to Digital Converter circuit, and Digital to Analog Converter circuit with the experimental results of these circuits and make conclusions and report the results.	PLO5

Content	1. Multiplexer and Demultiplexer 2. Analog to Digital Converter 3. Digital to Analog Converter
Examination forms	1. Pre-test 2. Practice skills 3. Practice report 4. Response
Study and examination requirements	The final grade in the module is composed of: a. Pre-test and practice skills = 50% b. Practice report and response = 50% Students must have a final grade of 65% or higher to pass
Reading list	1. Malvino, L., 1994, Digital Principles And Applications Third Edition, McGraw-Hill, Inc. 2. Sunarto, 1998, Dasar-dasar Teknologi Digital, Jakarta. 3. Kurniawan, F., 2005, Sistem Digital Konsep dan Aplikasi, Penerbit Gavamedia, Yogyakarta. 4. Widjanarka, W., 2006. Teknik Digital. Penerbit Erlangga, Jakarta.