MODULE HANDBOOK DESCRIPTION

Module designation	Logic Circuit Laboratory
Code	FBS1218
Semester(s) in which the module is taught	2/first year
Person responsible for the module	Budi Darmawan, ST., M.Eng.
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 : ● Practice : 1 x 50 minutes ● Data analysis : 1 x 60 minutes ● Writing report : 1 x 60 minutes. Total study hours = 2 hours 50 minutes/week
Credit points	1 (~ 1,6 ECTS)
Required and recommended prerequisites for joining the module	- Logic Circuit (FBS1107)
Module objectives/intended learning outcomes	1. Students are able to analyze logic gate, flip flop, seven segment, register, counter, and Binary Adder Circuit.	PLO3
	2. Students are able to assemble logic gate, flip flop, seven segment, register, counter, and Binary Adder Circuit based on instructions from the practicum module.	PLO4
	3. Students are able to compare the analysis results of Logic gate, flip flop, seven segment, register, counter, and Binary Adder Circuit with the experimental results and make conclusions then report the results.	PLO5

Content	1. Logic Gate 2. Flip-flop 3. Seven Segment 4. Register 5. Counter 6. Binary Adder Circuit (BAC)
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. Leach, M., 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 Gramedia,Yogyakarta. 4. Widjanarka, W., 2006, Teknik Digital, Penerbit Erlangga, Jakarta.