MODULE HANDBOOK DESCRIPTION

Module designation	*Calculus II*
Code	*FBS1212*
Semester(s) in which the module is taught	*2 / first year*
Person responsible for the module	*Suthami Ariessaputra, ST. MEng.* *Dr. I Made Ginarsa, ST.; MT.* *Lalu A. Syamsul Irfan Akbar, ST., M.Eng.* *Sabar Nababan, ST., MT.*
Language	*Indonesian*
Relation to curriculum	*Compulsory*
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: - Lectures: 3×50 minutes. - Exercises and Assignments: 3×60 minutes. - Self-learning: 3×60 minutes. total study hours = 8 hours 40 minutes/week
Credit points	*3 SKS (~ 4,8 ECTS)*
Required and recommended prerequisites for joining the module	*Calculus I (FBS1104)* A student must have attended at least 75% of the lectures to sit in the exams.
Module objectives/intended learning outcomes	*1. Students are able to calculate integral functions*	*PLO2*
	2. Students are able to calculate integrals based on integration techniques.	*PLO2*
	3. Students are able to analyze integral applications.	*PLO2*
	4. Students are able to solve questions on Cartesian and polar coordinates.	*PLO3*
	5. Students are able to complete the integration on multiple integrals.	*PLO4*

	6. *Students are able to solve vector problems in the field.*	*PLO3*
	7. *Students are able to solve partial derivatives.*	*PLO3*
Content	1. *Integral.* 2. *Integration techniques.* 3. *Integral application.* 4. *Polar coordinates* 5. *Multiple Integral* 6. *In-plane vectors.* 7. *Partial Derivatives*	
Examination forms	- *Multiple choice examination and Essay.* - *Midterm and final test*	
Study and examination requirements	*The final grade in the module is composed of:* a. *Multiple choice examination and Essay score: 30%.* b. *Midterm assessment: 30%* c. *Final assessment: 40%* *Students must have a final grade of 65% or higher to pass*	
Reading list	1. Thomas, Jr., G.B., and Finney, R.L., 1998, "Calculus and Analytic Geometri, 9TH edition", Addison-Wesley Publishing Company, Inc. USA. 2. Varberg, D., Purcell, E. and Rigdon, S., 2007. Calculus. 9th ed.,. Pearson Prentice Hall, Upper Saddle River, N.J., 3. Edwin J. Purcell and Dale E. Varberg. 1996. "Calculus with Analytic Geometry", Prentice Hall PTR.	