

Module Handbook

Module Name:	Differential Equation
Module Level:	Bachelor
Abbreviation, if applicable:	MAA205
Sub-heading, if applicable:	-
Courses included in the module, if applicable:	-
Semester/term:	3 rd / Second Year
Module coordinator(s):	Dr. Imam Utoyo, M.Si
Lecturer(s):	Zailani, S.Si., M.Si
Language:	Bahasa Indonesia
Classification within the curriculum	Compulsory Course / Elective Studies
Teaching format / class hours per week during semester:	2 hours lectures(50 min per hours)
Workload:	2 hours lectures, 2 hours structured activity , 2 hours individual activity, 13 weeks per semester, total 78 hours per semester ~ 2.6 ECTS *
Credit Points:	2
Requirements:	Calculus II
Learning goals/competencies:	<p>General Competence (Knowledge): Students are able to formulate a differential equation in the field of social life and appropriately.</p> <p>Specific Competence:</p> <ol style="list-style-type: none"> 1. Determining the degree of Differential Equations 2. Determine the high rank Differential Equations 3. Determine Differential Equation Linear high level constant coefficients 4. 4. Determine the PD with variable coefficients
Content:	Differential Equation level of degree one, Differential Equation level of a high rank, high levels of Differential Equation linear constant coefficient, Differential Equation with variable coefficients, high-level non-linear Differential Equation, Differential Equation simultaneously. Differential Equation Settlement with Laplace transform.
Attribut soft skill	Discipline and honesty
Study/exam achievements:	<p>Students are considered to be competent and pass if at least get 55 of maximum mark of the exams (UTS dan UAS), and structured activities(group discussion)</p> <p>20% assignment, 40% middle examination (UTS), 40% final examination (UAS)</p> <p>Table Value Graduation A: $100 > NA \geq 75$ AB: $74,9 \geq NA \geq 70$</p>

	B: $69,9 \geq NA \geq 65$ BC: $64,9 \geq NA \geq 60$ C: $59,9 \geq NA \geq 55$ D: $54,9 \geq NA \geq 40$ E: $39,9 \geq NA$
Forms of Media:	Slides and LCD projectors, whiteboards
Learning Methods :	Lecture, discussion, structured activities
Literature:	<ol style="list-style-type: none"> 1. Boyce, William E. and DiPrima, Richard C., 1992. <i>Elementary Differential Equations and Boundary Value Problems</i>, 5th edition. John Wiley & Sons Inc., New York 2. Kells, Lyman M., 1965. <i>Elementary Differential Equations</i>, 6th edition. McGraw-Hill Kogakusha Ltd., Tokyo.
Notes:	*Total ECTS = $\{(\text{total hours workload} \times 50 \text{ min}) / 60 \text{ min}\} / 25 \text{ hours}$ Each ECTS is equals with 25 hours