Module Description

Module Name	**Measurement Statistics**
Modul Level	Undergraduate
Code	18H02110402
Courses (if applicable)	Mandatory Courses
Semester	2nd
Person responsible for the module	Dr. Ir. Bidayatul Armynah.M.T.
Lecturer	Dr. Ir, Bidayatul Armynah, M.T, Prof. Dr. Paulus Lobo, Dr. sri dewi astuty ilyas and Heryanto. S.Si. M.Si
Language	Indonesian Language
Relation to Curriculum	Undergraduate degree program, mandatory, 2nd semester
Type of Teaching, Contact Hours	**Teaching methods**: [collaborative learning], [problem-based learning] **Teaching forms**: [lecture], [tutorial] **Schedule**: Wednesday, 09.10 – 11.50
Workload	For this course, students are required to meet a minimum of 90.40 hours in one semester, which consist of: - 26.40 hours for lecture, - 32.00 hours for structured assignments, - 32.00 hours for private study
Credit Points	2 Credit Points (equivalent with 3,4 ECTS)
Requirements According to the Examination Regulations	A student must have attended at least 80% of the lectures to sit on the final examination.
Mandatory Prerequisites	Basic Mathematics I and II
Module objectives/intended learning outcomes	**Intended Learning Outcomes (ILO):** ILO 2: Students are able to use the fundamental principles of physics in modeling and computation to solve the complex physical problem. ILO 7: Students are able to identify the physical problems based on the experimental results. **Course Learning Objective (CLO):** After taking this course, students are expected to be able to formulate physical symptoms and problems through analysis based on observations and / or experiments and be able to apply mathematical models or physical models in accordance with hypotheses or forecasts of the impact of phenomena that are the subject of discussion. **Sub CLO:**

	presentation of data. ILO-2⇒CLO-2: Students are able to explain and apply several probability theories and probability distributions. ILO-2⇒CLO-3: Students are able to explain and apply the use of estimation theory in measurement. ILO-7⇒CLO-4: Students are able to explain and apply the use of hypothesis testing. ILO-7⇒CLO-5: Students are able to explain and apply the use of regression and correlation analysis.
Content	Students will learn about: 1. Introduction to various kinds of statistics 2. Frequency distribution and data centering measures 3. Measures of data spread 4. Probability Distribution 6. Estimation theory 7, Hypothesis testing 8. Regression and Correlation
Forms of Assessment	Assessment techniques: [written test], [oral test] Assessment forms: [mid-term exam], [final term exam], [assignment], [presentation] Assignment = 30%, Presentation = 25%, Mid-term exam = 25%, Final exam = 20% CLO 1 => ILO 2: 10% (Assignment 1) CLO 1 => ILO 2: 5% (Question Number 1 in Mid Exam) CLO 2 => ILO 2: 10% (Assignment 2) CLO 2 => ILO 2: 10% (Question Number 2 in Mid Exam) CLO 3 => ILO 2: 10% (Assignment 3) CLO 3 => ILO 2: 10% (Question Number 3 in Mid Exam) CLO 4 => ILO 7: 25% (Presentation) CLO 4 => ILO 7: 10% (Question Number 1 in Final Exam) CLO 5 => ILO 7: 10% (Question Number 2 in Final Exam)
Study and examination requirements and forms of examination	**Study and examination requirements:** - Students must attend 15 minutes before the class starts. - Students must switch off all electronic devices. - Students must inform the lecturer if they will not attend the class due to sickness, etc. - Students must submit all class assignments before the deadline. - Students must attend the exam to get final grade. **Form of examination:** ● Written and Quiz exam: Essay
Media Employed	Text book, Zoom, Gmeet, Video Conference, Video and Power Point Presentation, Learning Management System (SIKOLA).

	pengantar statistika, 1992, PT. Gramedia, jakarta **Supporter:** 1. Sudjana, ”Metode statistika”, Fourth Edition, Tarsito, Bandung