

320222748 Statistics

Module Name	Statistics
Module Level, if applicable	Intermediate
Code if Applicable	320222748
Subtitle, if applicable	-
Courses, if applicable	320222748 Statistics
Semester(s) in which the module is taught	3 rd
Person responsible for the module	Dahlia Elianarni, S.TP., M.Sc.
Lecturer	Devi Dwi Siskawardani, S.TP.,M.Sc.
Language	Indonesian
Relation to curriculum	Compulsory Course for undergraduate program in the Food Technology Department, Faculty of Agriculture and Animal Science
Type of teaching	Lecture, project, practicum
Workload	<ul style="list-style-type: none"> • Lecture: 3 SKS X 50 minutes X 16 weeks • Project: 3 SKS X 60 minutes X 16 weeks • Independent learning: 3 SKS X 60 minutes X 16 week
Credit points	3 SKS X 1.5 = 4.5 ECTS
Requirements according to the examination regulations	<ol style="list-style-type: none"> 1. Registered in this course 2. Minimum 80% attendance in this course
Recommended prerequisites	-
Module Objectives (Intended learning outcomes)	<p>On successful completion of this course, student should be able to:</p> <ul style="list-style-type: none"> • Understand the basic concepts of statistics and their applications in different fields. • Apply descriptive statistics to summarize and present data. • Understand the principles of probability and probability distributions.

	<ul style="list-style-type: none"> ● Apply inferential statistical methods to make predictions and decisions based on data. ● Use statistical software to analyze data and interpret the results. ● Apply statistical methods to solve real-world problems and make informed decisions. Understand the fundamental principles of heat and mass transfer. ● Apply mathematical models to analyze heat and mass transfer processes. ● Analyze heat and mass transfer in various engineering systems such as heat exchangers, reactors, and distillation columns. ● Design and evaluate heat exchangers for different industrial applications. ● Design and evaluate mass transfer equipment for separation processes. ● Apply heat and mass transfer principles to solve engineering problems in industrial settings.
Module Content	This course presents introduction, conduction, convection, heat exchanger, radiation, mass transfer, and combine scope, types, probability, distribution, hypothesis testing, software and application.
Study and examination requirements and forms of examination	<p>Cognitive: Midterm exam, Final exam, Quizzes, Report of Practicum, Assignments</p> <p>Affective: Assessed from the element /variables achievement, namely (a) Contributions (attendance, active, role, initiative, and language), (b) Being on time, (c) Effort.</p>
Media employed	Classical teaching tools with white board and powerpoint presentation, sets of practicum tools

<p>Recommended Literature</p>	<p>For Class</p> <p>A. Compulsory</p> <ol style="list-style-type: none"> 1. Incropera, F.P., DeWitt, D.P., Bergman, T.L., Lavine, A.S. 2017. Fundamentals of Heat and Mass Transfer. Wiley. Earle. 2. McClave, J. T., Sincich, T. 2019. "Statistics." Pearson. 3. Witte, R.S., Witte, J.S. 2017. "Statistics." Wiley. 4. Cengel, Y.A., Ghajar, A.J. 2018. "Heat and Mass Transfer: Fundamentals and Applications." McGraw-Hill Education. 5. Kern, D.Q. 2012. "Heat Transfer Process." CRC Press. <p>B. Option</p> <ol style="list-style-type: none"> 1. Devore, J.L., Berk, K.N. 2018. "Modern Mathematical Statistics with Applications." 2. Springer.Holman, J.P. 2010. "Heat Transfer." McGraw-Hill Education.
<p>Date of Last Amendment</p>	<p>22nd April 2022</p>