555623761 **Cocoa Bean Final Product Processing Technology**

Module Name	**Cocoa Bean Final Product Processing Technology**
Module Level, if applicable	Advanced
Code if Applicable	555623761
Subtitle, if applicable	-
Courses, if applicable	555623761 Cocoa Bean Final Product Processing Technology
Semester(s) in which the module is taught	6th
Person responsible for the module	Dahlia Elianarni, S.TP., M.Sc
Lecturer	Agatha Virdhi Saputra, S.Pd
Language	Indonesian
Relation to curriculum	Elective Course for undergraduate program in the Food Technology Department, Faculty of Agriculture and Animal Science
Type of teaching	Lecture, Project
Workload	● Lecture: 3 SKS X 50 minutes X 16 weeks ● Project: 2 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	1. Registered in this course 2. Minimum 80% attendance in this course
Recommended prerequisites	-
Module Objectives (Intended learning outcomes)	On successful completion of this course, student should be able to: ● Understand the various stages involved in cocoa bean processing, including cleaning, roasting, grinding, and refining. ● Learn about the principles and techniques of cocoa bean processing technology, including equipment used and process parameters. ● Identify the factors influencing the quality of cocoa products at each stage of processing. ● Gain knowledge of different types of cocoa products and their characteristics, including cocoa

	liquor, cocoa powder, and cocoa butter. ● Analyze the impact of processing technology on the sensory attributes, shelf-life, and nutritional properties of cocoa products. ● Understand the importance of quality control and food safety in cocoa processing. ● Explore emerging trends and innovations in cocoa bean processing technology.
Module Content	This module explores the comprehensive processing technology involved in transforming cocoa beans into final cocoa products. Topics include the various stages of cocoa bean processing such as cleaning, roasting, grinding, and refining, along with the principles, techniques, and equipment used at each stage. Students will learn about the factors influencing the quality of cocoa products, different types of cocoa products and their characteristics, and the impact of processing technology on sensory attributes, shelf-life, and nutritional properties. Additionally, the module covers quality control, food safety considerations, and emerging trends and innovations in cocoa bean processing technology, providing students with a holistic understanding of cocoa product manufacturing.
Study and examination requirements and forms of examination	**Cognitive:** Midterm exam, Final exam, Quizzes, Assignments **Affective:** Assessed from the element /variables achievement, namely (a) Contributions (attendance, active, role, initiative, and language), (b) Being on time, (c) Effort
Media employed	Classical teaching tools with white board and power point presentation
Recommended Literature	For Class A. Compulsory 1. Beckett, S. T. (2009). Industrial chocolate manufacture and use. John Wiley & Sons.Afoakwa, E. O. (2010). Chocolate science and technology. John Wiley & Sons. 2. Fowler, M. S. (2016). Cocoa. John Wiley & Sons.

	B. Option 1. Hii, C. L., Law, C. L., & Cloke, M. (2012). Quality attributes of cocoa products—From farm to factory to shelf. Journal of the Science of Food and Agriculture, 92(14), 2795-2806.
Date of Last Amendment	22nd Agustus 2022