

Cocoa Bean Intermediate Product Processing Technology

Module Name	Inorganic Chemistry
Module Level, if applicable	Advanced
Code if Applicable	543928911
Subtitle, if applicable	-
Courses, if applicable	543928911 Cocoa Bean Intermediate Product Processing Technology
Semester(s) in which the module is taught	6 th
Person responsible for the module	Dahlia Elianarni, S.TP., M.Sc
Lecturer	Dr. Ir. I Wayan Alit Artha Wiguna
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	<ul style="list-style-type: none"> ● Lecture: 2 sks X 50 minutes X 16 weeks ● Project: 2 sks X 60 minutes X 16 weeks ● Independent learning: 2 sks X 60 minutes X 16 week
Credit points	2 SKS X 1.5 = 3 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 principles of cocoa bean processing. ● Identify different types of cocoa beans and their characteristics. ● Demonstrate knowledge of the equipment and machinery used in cocoa bean processing. ● Apply proper techniques for fermentation and drying of cocoa beans. ● Master the art of roasting cocoa beans to achieve desired flavor profiles. ● Understand the principles of cocoa nib grinding and cocoa liquor production. ● Learn about cocoa butter and cocoa powder production processes. ● Comprehend quality control measures throughout the cocoa bean processing chain. ● Demonstrate knowledge of food

	<p>safety and hygiene practices in cocoa processing.</p> <ul style="list-style-type: none"> ● Develop skills to troubleshoot common issues in cocoa bean processing. ● Utilize sustainable practices in cocoa bean processing to minimize environmental impact. ● Understand the economic and social importance of cocoa processing in the global market.
<p>Module Content</p>	<p>This module provides a comprehensive understanding of cocoa bean processing to produce intermediate cocoa products. It covers the principles of cocoa bean processing, including the identification of different cocoa bean varieties and their unique characteristics. Learners will gain knowledge of the equipment and machinery essential for cocoa bean processing and will be able to apply appropriate techniques for fermentation and drying.</p> <p>The module also covers the art of roasting cocoa beans to achieve specific flavor profiles and the processes involved in cocoa nib grinding and cocoa liquor production. Learners will explore cocoa butter and cocoa powder production methods, including quality control measures to ensure product consistency and safety.</p> <p>Furthermore, the module emphasizes the importance of food safety and hygiene practices in cocoa processing. Learners will develop skills to troubleshoot common issues that may arise during processing and will be introduced to sustainable practices aimed at minimizing environmental impact.</p> <p>Finally, learners will gain an understanding of the economic and social significance of cocoa processing in the global market, including its role in the livelihoods of farmers and its impact on local communities.</p>
<p>Study and examination requirements and forms of examination</p>	<p>Cognitive: Midterm exam, Final exam, Quizzes, Assignments Affective: Assessed from the element /variables achievement, namely (a) Contributions (attendance, active, role,</p>

	initiative, and language), (b) Being on time, (c) Effort
Media employed	Classical teaching tools with white board and power point presentation
Recommended Literature	<p>For Class</p> <p>A. Compulsory</p> <ol style="list-style-type: none"> 1. Smith, P. 2020. "Cocoa Bean Processing: Intermediate Products," Cocoa Sustainability Curriculum. <p>B. Option</p> <ol style="list-style-type: none"> 1. Beckett, S. T. 2009. "Industrial Chocolate Manufacture and Use," John Wiley & Sons. 2. Afoakwa, E. O. 2016. "Chocolate Science and Technology," John Wiley & Sons.
Date of Last Amendment	22nd August 2022