

Module Name	Engineering Economics
Module Level, if applicable	Advanced
Code if Applicable	420220471
Subtitle, if applicable	
Courses, if applicable	420220471 Engineering Economics
Semester(s) in which the module is taught	6 th
Person responsible for the module	Rista Anggriani, STP.MP.MSc
Lecturer	Desiana Nuriza Putri, S.TP., M.Sc.
Language	Indonesian
Relation to curriculum	Elective Course for Undergraduate Program in the Department of Food Technology, Faculty of Agriculture and Animal Science
Type of teaching	Lecture, Mini 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)	<ul style="list-style-type: none"> ● Understand basic economic concepts and their application in an engineering context. ● Analyze production costs and identify the break-even point. ● Apply investment evaluation methods in engineering projects. ● Calculate and understand risks in technical decision-making. ● Optimize the use of resources in technical and industrial situations.
Module Content	This course studies Introduction to Technical Economics, Cost and Income Analysis, Break-even Analysis, Investment Analysis: NPV, IRR, Payback Period, Risk and Uncertainty in Decision Making, and Resource Optimization and at the end of the meeting the students are given a case studies in the Engineering Industry
Study and examination requirements and forms of examination	<p>Cognitive: Midterm exam, Final exam, Quizzes, Assignments</p> <ul style="list-style-type: none"> ● 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 PowerPoint presentation
Recommended Literature	<p>For Class</p> <p>A. Compulsory</p> <ol style="list-style-type: none"> 1. Sprague, J.C., and Whittaker, J.D., 1986, Economic Analysis for Engineers and Managers, Prentice-Hall, Englewood Cliffs, N.J. 07632 2. Lestari, E.R., Citraresmi, A.D. and Ardianti, F.L., 2019. <i>Ekonomi Teknik: Teori dan Aplikasi</i>. Universitas Brawijaya Press. 3. Fathurohman, F., 2018. <i>Ekonomi Teknik Pertanian</i>. POLSUB PRESS 4. Giatman, M., 2011. <i>Ekonomi teknik</i>. Rajawali Press
Date of Last Amendment	8 th May 2022