

# INTERNATIONAL UNDERGRADUATE PROGRAM

The study program of Bioprocess Engineering at Faculty of Agricultural Technology, Universitas Brawijaya, has officially established in 2016, as one of three Bioprocess Engineering Study Programs in Indonesia. Furthermore, this study program has been accredited as "Good/Baik" by The Indonesian Accreditation Agency for Higher Education in Engineering (LAM Teknik) in 2022. In the same period of year, the Bioprocess Engineering has been certified internationally by The Accreditation Agency for Study Programmes in Engineering, Informatics, Natural Sciences and Mathematics (ASIIN) and The European Accreditation of Engineering Programmes (EUR-ACE). As the implication of those accreditations, the international undergraduate program is established at the Bioprocess Engineering. Besides, the international undergraduate program is an action to actualize the vision of Bioprocess Engineering, as a leading center for undergraduate education and research in the field of Bioprocess Technology and play an active role in the development and application to support the bioprocess industry in global competition.

## ADMISSION

Intake	Online Registration	Exam Date	Result Announcement
Intake 1	27 March (opens at 10.00 WIB) – 3 May 2024 (closed at 23.59 WIB)	13 May 2024*	17 May 2024*
Intake 2	6 May (opens on 10.00 WIB) – 28 June 2024 (closed at 23.59 WIB)	3 July 2024*	8 July 2024*

\* For the Medicine Study Program the test will be held in 2 days :  
Intake 1 (13 - 14 May 2024)  
Intake 2 (3 - 4 July 2024)

## REQUIREMENTS

1. High school graduates or equivalent from both domestic and foreign institutions (within the last 3 years)
2. Have academic ability as proven through:
  - a. High School (or equivalent) report/ transcript
  - b. Pass the Foreign Language test held by UB



## CONTACT US

DEPARTMENT OF  
BIOSYSTEM ENGINEERING



**INTERNATIONAL  
UNDERGRADUATE PROGRAM  
BIOPROCESS ENGINEERING  
STUDY PROGRAM**

tep.ub.ac.id



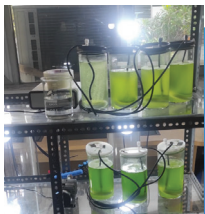


# WHAT IS BIOPROCESS ENGINEERING STUDY PROGRAM?

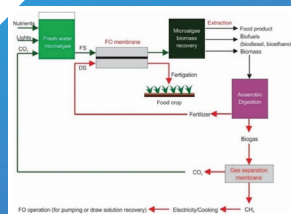
The study program of Bioprocess Engineering covers upstream and downstream processes that involving biological resources. For example, students are able to learn the basic principle of fermentation then followed by the separation technology to obtain the highest purity of bio-products. Hence, the curriculum has been designed systematically to adjust the requirements of the stakeholders in related field, such as Directorate General of Higher Education (DGHE) Ministry of Education, Universitas Brawijaya, Association of Indonesian Higher Education Programs in Chemical Engineering (APTEKIM) and Indonesian Biotechnology Consortium (KBI) in national level, American Institute of Chemical Engineers and Society of Biological Engineering in international level, and national and multinational industries.

## RESEARCH

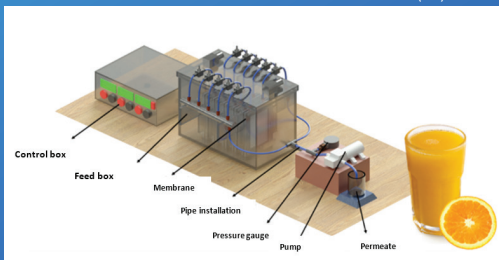
Research topics in the study program of Bioprocess Engineering are including Production of Chemicals From Biomass Using Biological Processes, Production of Biogas, Design and Simulation of Unit Operations and Unit Processes, Membrane Technology, Extraction Using Supercritical Fluids, Lipid Nanoparticle For Drug Delivery Systems. Starting from 2023, the study program of Bioprocess Engineering has initiated the use of Artificial Intelligence into research.



Microalgae cultivation



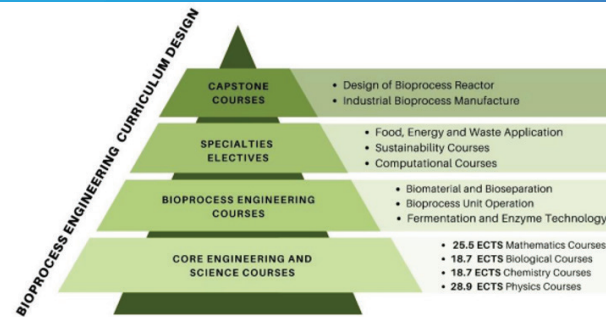
Hybrid system for harvesting microalgae with anaerobic digestion based on forward osmosis (FO)



Ultrafiltration-based orange juice clarification

## COURSE PROGRAM

The curriculum is designed to be completed by the students in 4 years (8 semesters) and attainable to be completed in 7 semesters for exceptional students. The maximum credit point that could be taken by the students is 24 credit units (equal to around 40.8 ECTS). The figure illustrates the curriculum diagram of the Bioprocess Engineering from fundamental subjects on the early semester up to advanced and capstones courses at the late semester. Each course has a set of learning outcomes (CLO) corresponding to the intended learning outcomes (ILO) of the Bioprocess Engineering.



## PARTNER UNIVERSITIES AND INDUSTRIES



## STUDENT LIFE

Students of The Bioprocess Engineering enrolled New Southbound Policy Elite Study Program 2023 in National Pingtung University of Science and Technology, Taiwan.



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