



Module Description Food Processing Tools and Machinery

Module designation	Food Processing Tools and Machinery			
Module code	23G03121603			
Semester(s) in which the module is taught	4 th semester			
Person responsible for the	❖ Dr. Abd. Azis, S.TP, M.Si			
module (lecturers)	❖ Husnul Mubarak, S.TP., M.Si			
Language	Indonesian language			
Relation to curriculum	Compulsory course			
Teaching methods	Lecture			
Workload	Total workload (estimated):			
	❖ 27 hours of lecture			
	❖ 32 hours of exercise			
	❖ 32 hours of independent study			
Credit points	2 credit points = 3.24 ECTS			
Required and recommended prerequisites for joining the module				
Module objectives/ Intended Learning Outcomes (ILO)	ILO 9. Exhibits advanced skills in food technology from post-harvest handling, food processing, packaging, to food product development (C6)			
	CLO 1. Able to factually understand operating units in the food processing industry CLO 2. Able to conceptually understand the types and working principles of machines and equipment used in each operating unit			
Content	 Introduction to courses, scope, and learning contracts Machinery and equipment for moving and storing materials in the food industry Machinery and equipment for size reduction, homogenization, and agglomeration of materials Equipment for the mechanical separation of food materials Evaporators for food products Food product drying machines Cooling and freezing 			



Bachelor Programme in Food Science & Technology



Examination form Study and examination requirements	 D Ec m fil Ec VI Writi Exam In Pi 	 ❖ Thermal process equipment ❖ Distillation, extraction, and crystallization equipment ❖ Equipment for separating product components: membrane technology, reverse osmosis and nano filtration ❖ Equipment for separating product components: ultrafiltration, microfiltration and pervaporation technology ❖ Supercritical extraction and fractionation ❖ Non-thermal preservation equipment ❖ Food product packaging equipment Writing (essay) Examination requirements: Attendance above 80% ❖ Individual tasks: 50% ❖ Project: 50% 				
	Grad N	umerical range	Letter grade	Conversion value		
		85 - 100	A	4.00		
		80 - < 85	A-	3.75		
		75 - < 80	B+	3.50		
		70 - < 75	В	3.00		
		65 - < 70	B-	2.75		
		60 - < 65	C+	2.50		
		50 - < 60	С	2.00		
		40 - < 50	D	1.00		
		< 40	E	0.00		
	If stu	If student(s) receives(s) a score below 40, student(s) must				
	_	retake the course				
Reading list		Saravacos, George, Athanasioes E. K. 2016. Handbook of Food Processing Equipment. New York: Springer.				
Date of last amendment	10 Fe	bruary 2025				