



**HASANUDDIN
UNIVERSITY**



2023 MODULE DESCRIPTION

**BACHELOR PROGRAM
AGRICULTURAL ENGINEERING
FACULTY OF AGRICULTURE
HASANUDDIN UNIVERSITY
2023**



Farm Machinery & Equipment

Semester 5

Module designation	<i>Farm Machinery & Equip</i>
Semester(s) in which the module is taught	V
Person responsible for the module	<ul style="list-style-type: none"> • <i>Dr. Iqbal, STP., M.Si</i> • <i>Dr. Abdul Azis, STP., M.Si</i> • <i>Muhammad Tahir Sapsal, STP., M.Si</i>
Language	<i>Indonesia</i>
Relation to curriculum	<i>Compulsory</i>
Teaching methods	<ul style="list-style-type: none"> - <i>Lecture and discussion</i> - <i>Independent and group assignments</i>
Workload (incl. contact hours, self-study hours)	<ul style="list-style-type: none"> • <i>2 SKS x 1.7 = 3.4 ECTS = 91.8 hours</i> • <i>Lecture = 23.3 hours</i> • <i>Excercise = 28 hours</i> • <i>Sel study = 28 hours</i> • <i>Exam = 4 hours (MID term and final)</i> • <i>Exam preparation = 8.5 hours</i>
Credit points	<i>2 SKS = 3.4 ECTS</i>
Required and recommended prerequisites for joining the module	<i>Agricultural work</i> <i>Workshop techniques Workshop techniques</i> <i>Technical Drawingv</i>
Module objectives/intended learning outcomes	<i>ILO 3 : apply knowledge of mathematics, sciences, and engineering principles in agricultural fields;</i> <i>ILO 5: use techniques, skills, and modern tools necessary for agricultural engineering practices;</i> <i>ILO 6: manage and utilize agricultural resources effectively, efficiently, and sustainably;</i> <i>ILO 8: demonstrate capacity in operating agricultural engineering related business either as producer or service provider;</i>
Content	<i>The Agricultural Tools and Machinery course studies and agricultural machinery used in crop cultivation activities from pre-harvest to harvest (on farm). This course contains explanations about the scope and definition of tools and machinery (alsin) agriculture, agricultural tractors (2 and 4 wheels) and their implements. In addition, this course also discusses the working principles, operation, and maintenance of agricultural equipment. working principles, operation, and maintenance of planting equipment, chemical application equipment, weeding equipment, and harvesting equipment. harvesting tools. This course is conducted using the following methods lectures (explaining the theory), demonstrations through videos, examples of problems, giving independent assignments to students, and practicum.</i>
Examination forms	<i>Writing and essay, etc.</i>
Study and examination requirements	<i>Attendance Above 80%</i>
Reading list	<ul style="list-style-type: none"> • <i>Ciptohadijoyo, S. 1999. Alat dan Mesin Pertanian. Fakultas Teknologi Pertanian Universitas GadjahMada. Jogjakarta.</i> • <i>Darun, S. Matondang, Sumono. 1983. Pengantar Alat dan Mesin-Mesin Perkebunan. Fakultas Pertanian Universitas Sumatera Utara.Medan.</i>

	<ul style="list-style-type: none">• <i>Harris Pearson Smith, A.E., Lambert Henry Wilkes, M. S. 1988. Farm Machinery and Equipment. McGraw-Hill Publishing</i>
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