

2023 MODULE DESCRIPTION

BACHELOR PROGRAM
AGRICULTURAL ENGINEERING
FACULTY OF AGRICULTURE
HASANUDDIN UNIVERSITY
2023



Farm Machinery & Equipment Practicum

Semester 5

Module designation	<i>Farm Machinery & Equip Practicum</i>
Semester(s) in which the module is taught	V
Person responsible for the module	<i>Dr. Iqbal, STP., M.Si</i> <i>Dr. Abdul Aziz, STP., M.Si</i> <i>Muhammad Tahir Sapsal, STP., M.Si</i>
Language	<i>Indonesia</i>
Relation to curriculum	<i>Compulsory</i>
Teaching methods	<i>Lab works</i>
Workload (incl. contact hours, self-study hours)	<i>(Estimated) Total workload:</i> <i>1 SKS = 1.7 ECTS = 45.9 hours (1 ECTS around 27 hours)</i> <i>> Laboratory session = 12 hours</i> <i>> Lab report = 30 hours</i> <i>> Virtual experiment = 1 hours</i> <i>> Final examination = 2.5 hours</i>
Credit points	<i>1 SKS = 1.7 ECTS</i>
Required and recommended prerequisites for joining the module	<i>Mechanical Workshop Practicum</i> <i>Engineering Design</i>
Module objectives/intended learning outcomes	<i>ILO 3: Apply knowledge of mathematics, sciences, and engineering principles in agricultural fields; (Knowledge 1)</i> <i>ILO 4: Use quantitative analysis, information technology and critical thinking in agricultural engineering profession; (Knowledge 2)</i> <i>ILO 5: Use techniques, skills, and modern tools necessary for agricultural engineering practices; (Skill 1)</i> <i>ILO 7: Manage and utilise agricultural resources effectively, efficiently, and sustainably; (Competence 1)</i> <i>ILO8: demonstrate capacity in operating agricultural engineering related business either as producer or service provider; (Competence 1)</i>
Content	<ul style="list-style-type: none"> <i>able to operate modern agricultural tools and machinery modern agricultural tools and machinery. In addition, they are able to develop themselves and think logically-analytically as well as their ability to work and develop creativity based on the value of maritime culture.</i> <i>Understand the concept of agricultural labor and its classification</i> <i>Explain the construction and working principles of combustion motors and tractors</i> <i>Explain the differences between various types of tractors</i>
Examination forms	<i>Writing and oral exam</i>
Study and examination requirements	<i>Completion of all laboratory reports</i>
Reading list	<ul style="list-style-type: none"> <i>Principles of Farm Machinery; Tractors and Their Power Unit</i> <i>Schwab, G.O., R.K. Frevert, T.W. Edminster, and K.K. Barnes. 1981. Soil and Water Conservation Engineering. Third Edition. John Wiley & Sons. New York.</i> <i>Arsyad, S. 2006. Konservasi Tanah dan Air. IPB Press. Edisi kedua. Darmaga, Bogor</i>