



**HASANUDDIN
UNIVERSITY**

2023

MODULE DESCRIPTION

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



Mechanical Workshop

Semester 4

Module designation	<i>Mechanical Workshop</i>
Semester(s) in which the module is taught	<i>IV</i>
Person responsible for the module	<ul style="list-style-type: none"> • <i>Dr. Iqbal, S.TP., M.Si</i> • <i>Dr. Ir. Daniel Useng, M.Eng.Sc</i> • <i>Dr. Abdul Azis, STP., M.Si</i> • <i>Samsuar, STP., M.Si</i>
Language	<i>Indonesia</i>
Relation to curriculum	<i>Compulsory</i>
Teaching methods	<i>Lecture and discussion, independent assignment, practicum</i>
Workload (incl. contact hours, self-study hours)	<p><i>(Estimated) Total workload:</i> $2\text{ SKS} \times 1.7 = 3.4\text{ ECTS} = 91.8\text{ hours}$</p> <ul style="list-style-type: none"> • <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>Engineering Properties of Materials</i>
Module objectives/intended learning outcomes	<p><i>ILO 3 : Apply knowledge of mathematics, sciences, and engineering principles in agricultural fields</i></p> <p><i>ILO 5: Use techniques, skills, and modern tools necessary for agricultural engineering practices.</i></p> <p><i>ILO 7 : Design simple equipment, components, or processes needed in agricultural engineering operations</i></p>
Content	<i>This course provides an opportunity for students to recognize and understand the agricultural workshop management system and introduction to workmanship techniques in the workshop. Coverage of the materialconsists of an introduction to equipment and work materials (wood and metal) as well as skills in (wood and metal) and skills in using basic equipment and welding both electric and both electric and carburetor welding and an introduction to piping, pneumatic and hydraulic systems piping, pneumatic and hydraulic systems</i>
Examination forms	<i>Writing</i>
Study and examination requirements	<i>Attendance above 80%</i>
Reading list	<ul style="list-style-type: none"> • <i>Herren, R.V.; E.L. Cooper. 2000. Agricultural Mechanics, Fundamentals and Application, CENGAGE Delmar Learning</i> • <i>F. Nicholson. 1955. Shop Theory. Mc GrawHills</i> • <i>Anonymous 2008. Careers in focus: Mechanics. 3rd ed. Infobase pub. USA</i>