

# 2023 MODULE DESCRIPTION

BACHELOR PROGRAM  
AGRICULTURAL ENGINEERING  
FACULTY OF AGRICULTURE  
HASANUDDIN UNIVERSITY  
2023



## Surveying Semester 3

Module designation	<i>Surveying</i>
Semester(s) in which the module is taught	<i>III</i>
Person responsible for the module	<ul style="list-style-type: none"> <li>• <i>Prof. Dr. Ir. Ahmad Munir, M.Eng.</i></li> <li>• <i>Dr. Ir. Daniel Useng, M.Eng.Sc.</i></li> <li>• <i>Dr. Ir. Mahmud, MP.</i></li> <li>• <i>Haerani, STP., M.Eng.Sc.</i></li> </ul>
Language	<i>Indonesia</i>
Relation to curriculum	<i>Compulsory</i>
Teaching methods	<i>lecture</i>
Workload (incl. contact hours, self-study hours)	<ul style="list-style-type: none"> <li>• <i>2 SKS x 1.7 = 3.4 ECTS = 91.8 hours</i></li> <li>• <i>Lecture = 23.3 hours</i></li> <li>• <i>Excercise = 28 hours</i></li> <li>• <i>Sel study = 28 hours</i></li> <li>• <i>Exam = 4 hours (MID term and final)</i></li> <li>• <i>Exam preparation = 8.5 hours</i></li> </ul>
Credit points	<i>2 SKS= 3.4 ECTS</i>
Required and recommended prerequisites for joining the module	<i>- physics</i>
Module objectives/intended learning outcomes	<p><i>ILO 5 : Use techniques, skills, and modern tools necessary for agricultural engineering practices;(skill 1).</i></p> <p><i>ILO 7 : Manage and utilize agricultural resources effectively, efficiently, and sustainably; (competence 1).</i></p>
Content	<i>This course contains (1) basic concepts of surveying, (2) Measurement, Calculation, and Corrections in Distance and Angle, (3) Mensuration in Polygon (Area, Volume, and Cut &amp; Fill) (4) Digital Mapping System (SIG and remote Sensing).</i>
Examination forms	<i>Writing exam</i>
Study and examination requirements	<i>Attendance above 80%</i>
Reading list	<i>Schofield, W. &amp; M. Breach, 2007. Engineering Surveying. Sixth Edition, Butterworth-Heinemann Elsevier. Sydney.</i>