

2023 MODULE DESCRIPTION

BACHELOR PROGRAM
AGRICULTURAL ENGINEERING
FACULTY OF AGRICULTURE
HASANUDDIN UNIVERSITY
2023



Agro-informatics

Elective

Module designation	<i>Agro-informatics</i>
Semester(s) in which the module is taught	<i>Elective</i>
Person responsible for the module	<ul style="list-style-type: none"> • <i>Prof. Dr. Ir. Ahmad Munir, M.Eng</i> • <i>Haerani, S.TP., M.Eng.Sc.</i>
Language	<i>Indonesia</i>
Relation to curriculum	<i>Elective</i>
Teaching methods	<ul style="list-style-type: none"> • <i>Lecture and in-depth discussion</i> • <i>Tutorial</i> • <i>Independent assignment</i> • <i>Mini Project</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	$2 \text{ SKS} = 3.4 \text{ ECTS}$
Required and recommended prerequisites for joining the module	<i>Basic Knowledge of Computer Programming Software for Agriculture</i>
Module objectives/intended learning outcomes	<p><i>ILO 5 : use techniques, skills, and modern tools necessary for agricultural engineering practices;</i></p> <p><i>ILO 6 : manage and utilize agricultural resources effectively, efficiently, and sustainably;</i></p>
Content	<i>Student will be able to demonstrate the understanding about agricultural data and their transformation to information system, and have skill to design simple information system related to agricultural engineering field using dbase or web-base software in presenting lump and distributed data. This course covers (1) Data, information and informatics tools, (2) Presentation techniques of database and web-base data, (3) The usage of Internet to prepare spatial and non-spatial information (4) Some cases in Agricultural Engineering area (5) Mini project in Agro-informatics.</i>
Examination forms	<i>Writing</i>
Study and examination requirements	<i>Attendance above 80%</i>
Reading list	<ul style="list-style-type: none"> • <i>Iványi, A. (Editor), 2007. Algorithms of Informatics Vol 2: Applications. Pub. MondAt Kiadó, Budapest.</i> • <i>Kumar, P., M. Folk, M. Markus, JC. Alameda, 2005. Hydroinformatics: data integrative approaches in computation, analysis, and modeling. CRC Press, Boca Raton</i>