

Module Name	Computer Application
Module Level, if applicable	Intermediate
Code if Applicable	0210204780
Subtitle, if applicable	-
Courses, if applicable	0210204780 (Computer Application)
Semester(s) in which the module is taught	2
Person responsible for the module	Ir. Ir. Wahono, MT
Lecturer	Ir. Ir. Wahono, MT
Language	Indonesian
Relation to curriculum	Compulsory Courses for undergraduate program in Department of Agrotechnology, Faculty of Agriculture and Animal Science.
Type of teaching, contact hours	Lecture, Project, Independent Learning
Workload	<ul style="list-style-type: none"> • Lecture : 2 sks × 50 minutes × 16 weeks • Project : 2 sks × 60 minutes × 16 weeks • Independent Learning 2 sks × 60 minutes × 16 weeks
Credit points	SKS 2 SCH × (1.5) = 3.0 ECTS
Requirements according to the examination regulations	<ol style="list-style-type: none"> 1. Registered in this course 2. Minimum 80% attendance in this course
Recommended prerequisites	No prerequisites
Module Objectives (Intended learning outcomes)	<p>On successful completion in this course, student should be able to:</p> <ul style="list-style-type: none"> • Students can understand the concept of Agriculture 4.0 and agricultural improvement using Internet of Things Applications for Crop Cultivation. • Explain geographic information systems and positioning technology • Understand how to use remote sensing applications for plant cultivation as well as drone applications for plant cultivation
Module Content	This course covers the concept of Agriculture 4.0 and agricultural improvement using Internet of Things Applications for Crop Cultivation and RemoteSensing Applications for plant cultivation and droneapplications for crop cultivation.
Study and examination requirements and forms of examination	<p>Cognitive: Midterm exam, Final exam, Quizzes, Assignments</p> <p>Affective: Assessed from the element /variables achievement, namely (a) Contributions (attendance, active, role, initiative, and language), (b) Being on time, (c) Effort.</p>
Media employed	Classical teaching tools with whiteboard and powerpoint presentation
Recommended Literature	For Class

	<p>E. Compulsory</p> <ul style="list-style-type: none"> - D. Kent Shannon, David E. Clay, and Newell R. Kitchen (2019), Precision Agriculture Basics (ASA, CSSA, and SSSA Books) - Francis J. Pierce, David Clay (2016) GIS Applications in Agriculture - QGIS (2020). Quantum GIS (www.qgis.org) - Piero Toscano (2020) Remote Sensing Applications for Agriculture and Crop Modelling - Prasad S. Thenkabail, John G. Lyon, Alfredo Huete (2019) Hyperspectral Indices and Image Classifications for Agriculture and Vegetation (2nd ed.) - Louise Jupp (2020) Precision Farming From Above: How Commercial Drone Systems are Helping Farmers Improve Crop Management, Increase Crop Yields and Create More Profitable Farms. -Anis Koubaa Ahmad Taher Azar (2021) Unmanned Aerial Systems: Theoretical Foundation and Applications (1st Edition) -Pattnaik, P.K., Kumar, R., Pal, S., Panda, S.N. (Eds.) (2020) IoT and Analytics for Agriculture.
Date of Last Amendment	23 rd August 2022