| | |
|---|---|
| Module designation | *Agricultural Information System* |
| Semester(s) in which the module is taught | *4th* |
| Person responsible for the module | *Ir. Setyo Widagdo, M.Si* |
| Language | *Indonesian language* |
| Relation to curriculum | *Elective* |
| Teaching methods | *Lectures (100 minutes)*<br>*Practicum sessions (170 minutes)* |
| Workload (incl. contact hours, self-study hours) | *Contact hours : 14 weeks x 100 minutes*<br>*Structured learning: 14 weeks x 120 minutes*<br>*Independent study: 14 weeks x 120 minutes*<br>*Practicum sessions: 14 weeks x 170 minutes* |
| Credit points | *3 (2-1) CP or 4.76 (ECTS)*<br>*((14 weeks x 100 minutes) + (14 weeks x 120 minutes) +*<br>*(14 weeks x 120 minutes) + (14 weeks x 170 minutes)) :*<br>*60 minutes/hour*<br>*= 119 hours : 25 study hours/ECTS*<br>*= 4.76 (ECTS)* |
| Required and recommended prerequisites for joining the module | - |
| Module objectives/intended learning outcomes | - *Students are able to analysis and interpretation data and apply logical, critical, and systematic thinking by avoiding plagiarism;*<br>- *Students are able to assess and develop knowledge of science and technology by paying attention to the humanities and scientific ethics, able to work in a collective collegial team, and be a motivator in society;*<br>- *Students are able to identify, formulate, solve problems, and apply plant science, plant protection, soil science, socio-economic agriculture, and plant production engineering principles that are oriented towards good agricultural practices (GAP);* |
| Content | *The definition of information technology, the development of information and communication technology, the use of IT in agricultural cultivation, information systems, components of information systems, various types of information systems, technology supporting information systems, development of information systems in general and applications in the world of agricultural engineering in particular.* |
| Examination forms | *oral presentation, essay* |

| | |
|---|---|
| Study and examination requirements | *Participants are evaluated based on their performance in class (lectures) (70%) and lab (practicum) (30%).*<br><br>*Performance in theory (100%):*<br>*Mid Exam (20%)*<br>*Final Exam (20%)*<br>*Assignments (40%)*<br>*Class participation (10%)*<br>*Individual quiz (10%)*<br><br>*Performance in practicum (100%):*<br>*Practicum exam (30%)*<br>*Pre-test or post-test (10%)*<br>*Experiment reports (60%)* |
| Reading list | 1. *Batubara, H.H. 2017. Teknologi Informasi dan Komunikasi (TIK). Deepublish. 542p*<br>2. *Blackie, M.J. 2012. Information Systems for Agriculture. Springer Dordrecht. 176p.*<br>3. *Saravanan, R. 2011. Information and Communication Technology for Agriculture and Rural Development. New India Publishing Agenc. 386p.*<br>4. *Shinde, GU. , P. K. Ghosh, and P. Kumar. 2021. Digital Technology for Precision Agriculture: Robot,drone, AGV, mechatronics ,CAD/ CAM/CAE and Sensors Applicant Technologies. Lap Lambert Academic Publishing. 56p.*<br>5. *World Bank. 2017. ICT in Agriculture (Updated Edition): Connecting Smallholders to Knowledge, Networks, and Institutions. World Bank Publications. 460p.* |