Module designation	*Land Preparation Technology*
Semester(s) in which the module is taught	*5th*
Person responsible for the module	*Dr Ir. Afandi, M.P.*
Language	*Indonesian language*
Relation to curriculum	*Compulsory*
Teaching methods	*Lectures (100 minutes)* *Practicum sessions (170 minutes)*
Workload (incl. contact hours, self-study hours)	*Contact hours : 14 weeks x 100 minutes* *Structured learning: 14 weeks x 120 minutes* *Independent study: 14 weeks x 120 minutes* *Practicum sessions: 14 weeks x 170 minutes*
Credit points	*3 (2-1) CP or 4.76 (ECTS)* *((14 weeks x 100 minutes) + (14 weeks x 120 minutes) +* *(14 weeks x 120 minutes) + (14 weeks x 170 minutes)) :* *60 minutes/hour* *= 119 hours : 25 study hours/ECTS* *= 4.76 (ECTS)*
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	- *Students are able to apply the basic concepts and principles of cultivation technology and the development of sustainable agriculture technology.* - *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)* - *Students are able to plan, design, implement and develop plant production with the latest and environmentally friendly technology creatively and innovatively*
Content	*The Land Preparation Technology course is a 3 (2-1) credit course. This course contains studies on principles of land preparation, from clearing land activities until land ready for planting.* *The course materials included types of land preparation at various scales cultivation, land design, contour analysis and planting directions; variety equipment and mechanization; tillage type, making beds/plots, arranging planting patterns, and basic fertilizer applications.*
Examination forms	*oral presentation, essay*

Study and examination requirements	*Participants are evaluated based on their performance in class (lectures) (70%) and lab (practicum) (30%).* *Performance in theory (100%):* *Mid Exam (20%)* *Final Exam (20%)* *Assignments (40%)* *Class participation (10%)* *Individual quiz (10%)* *Performance in practicum (100%):* *Practicum exam (30%)* *Pre-test or post-test (10%)* *Experiment reports (60%)*
Reading list	1. *Afandi. 2019. Fisika Tanah. Penerbit Aura.* 2. *Rudi Hartono dan Soesilo Wibowo.2018. Teknik Pengolahan Tanah. Pusat Pendidikan Pertanian Kementrian Pertanian.* 3. *Jury WA, R Horton. 2004. Soil Physics. Hoboken. John Wiley & Sons, Inc.* 4. *Shukla,MK. 2013. Soil physics: An introduction books.google.com.* 5. *Warrick AW. 2001. Soil physics companion taylorfrancis.com.*