

Module designation	<i>Soil and Water Conservation Technology</i>
Semester(s) in which the module is taught	<i>4th</i>
Person responsible for the module	<i>Prof. Dr. Ir. Irwan Sukri Banuwa, M.S</i>
Language	<i>Indonesian language</i>
Relation to curriculum	Compulsory
Teaching methods	<i>Lectures (100 minutes) Practicum sessions (170 minutes)</i>
Workload (incl. contact hours, self-study hours)	<i>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</i>
Credit points	<i>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)</i>
Required and recommended prerequisites for joining the module	<i>- Completion of course: Introduction to soil science</i>
Module objectives/intended learning outcomes	<ul style="list-style-type: none"> <i>- Students are able to apply the basic concepts and principles of cultivation technology and the development of sustainable agriculture technology</i> <i>- 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)</i> <i>- Students are able to plan, design, implement and develop plant production with the latest and environmentally friendly technology creatively and innovatively.</i>
Content	<i>Soil and Water Conservation Technology course is a 3 (2-1) credit course. This course contains studies on: erosion problems and their consequences, basic understanding of erosion and hydrology, factors affecting erosion, soil and water conservation methods, prediction and evaluation of damage by erosion, understanding and objectives of watershed management, division and boundaries of watersheds, problems in watershed management, targets and principles in watershed management, watershed as a hydrological unit.</i>
Examination forms	<i>oral presentation, essay</i>

Study and examination requirements	<p><i>Participants are evaluated based on their performance in class (lectures) (70%) and lab (practicum) (30%).</i></p> <p><i>Performance in theory (100%):</i> <i>Mid Exam (20%)</i> <i>Final Exam (20%)</i> <i>Assignments (40%)</i> <i>Class participation (10%)</i> <i>Individual quiz (10%)</i></p> <p><i>Performance in practicum (100%):</i> <i>Practicum exam (30%)</i> <i>Pre-test or post-test (10%)</i> <i>Experiment reports (60%)</i></p>
Reading list	<ol style="list-style-type: none"> 1. <i>Arsyad, S. 2010. Konservasi Tanah dan Air. Edisi kedua. Penerbit IPB, Bogor.</i> 2. <i>Banuwa, I.S. 2013. Erosi. Edisi pertama. Prenadamedia Group, Jakarta. 206 hlm.</i> 3. <i>Hudson, W.W. 1976. Soil Conservation. BT. Batsford Limited. London.</i> 4. <i>Kirkby, M.J. 1980. Soil Erosion. British Geomorphological Research Group. John Willey & Sons.</i> 5. <i>Blanco, H., & Lal, R. 2008. Principles of soil conservation and management (Vol. 167169). New York: Springer.</i>