



## **CURRICULAR OVERVIEW**

### **STUDY PROGRAM : Bachelor Degree of Soil Science**

Education Objective of undergraduate program in Soil Science.

PEO-1: Having ability to improve the quality of soil and land resource

PEO-2: Having ability to develop professional career and education

PEO-3: Having leadership capability to address an organization or institutions

Intended Learning outcomes of undergraduate program in Soil Science.

ILO-1 : Able to apply basic agricultural sciences widely in overcoming agricultural problems for sustainable agricultural development

ILO-2 : Able to identify, analyze and solve the land problems in increasing productivity and quality for sustainable agricultural development

ILO-3: Able to use methods for soil and plant analysis in land resources management

ILO-4: Able to recognize professional responsibilities to make decision in soil and land management

ILO-5: Able to acquire and apply in new knowledge as needed with appropriate learning strategies

ILO-6: Able to built teamwork among different scientific backgrounds.

ILO-7: Able to communicate with in different community backgrounds and/or levels.

## Curriculum Structure

### 1<sup>st</sup> Semester

Code	Course Module	Credit	ECTS*	Workload**	
				Hours in class	Hours Self-Study
MWU601 04	Indonesian	2 ( 2-0 )	3.7	36.3	54.6
MWU601 03	Civic Education	3 ( 3-0 )	3.7	36.3	54.6
PTN611 01	Biology	3 ( 2-1 )	3.6	39.3	45.8
PTN611 02	Fundamental of Agronomy	3 ( 2-1 )	3.6	39.3	45.8
KIM611 05	Chemistry	3 ( 2-1 )	3.6	39.3	45.8
PTN611 04	Introduction to Agricultural Science	2 ( 2-0 )	3.7	36.3	54.6
AGT611 02	Mathematics	3 ( 2-1 )	3.6	39.3	45.8
PTN611 03	Introduction to Ecology	2 ( 2-0 )	3.5	42	54.6
PAB611 01	Fundamental of Management	2 (2-0 )	3,7	36.3	54.6
<b>Sub-Total</b>			32.9	344.4	456.2

### 2<sup>nd</sup> Semester

Code	Course Module	Credit	ECTS*	Workload**	
				Hours in class	Hours Self-Study
MWU601 02	Pancasila Education	3 ( 3-0 )	3.5	42	44
MWU601 01	Religious Study	2 ( 2-0 )	3,7	36.3	54.6
PIT621 01	Agroclimatology	3 ( 2-1 )	3.6	39.3	45.8
PTN621 01	Fundamental of Soil Science	3 ( 2-1 )	3.6	39.3	45.8
PTN621 02	Fundamental of Plant Protection	3 ( 2-1 )	3.6	39.3	45.8
PTN621 03	English For Academic Purpose (agriculture)	3 ( 3-0 )	3.7	36.3	54.6
PTN621 04	Physics	3 ( 2-1 )	c	36.3	45.8
AGT621 01	Fundamental of Plant Physiology	3 (2-1 )	3.6	36.3	45.8
<b>Sub-Total</b>			28.9	305.1	382.2

### 3<sup>rd</sup> Semester

Code	Course Module	Credit	ECTS*	Workload**	
				Hours in class	Hours Self-Study
PTN 611 05	Statistics	3 ( 3-0 )	3.9	55	44
PIT 611 01	Agrogeology	3 ( 2-1 )	3.6	39.3	45.8
PIT 611 02	Soil Physics	3 ( 2-1 )	3.6	39.3	45.8
PIT 611 03	Soil Fertility	3 ( 2-1 )	3.6	39.3	45.8
PIT 611 06	Communication technique and presentation	1 ( 1-0 )	2.9	24.6	44
PIT 611 04	Soil and Water Conservation	3 ( 2-1 )	3.6	39.3	45.8

PIT 611 05	Soil Morphology and Classification	3 ( 2-1 )	3.6	39.3	45.8
PIT612 01	Applied Agroclimatology	3 ( 2- 1 )	3.6	39.3	45.8
PIT612 02	English for scientific Purposes	2 ( 2-0 )	3.7	49.3	54.6
PPT611 01	Agriculture Microbiology	3 ( 2-1 )	3.6	39.3	45.8
PAB611 05	Introduction to Economics	2 ( 2-0 )	3.7	36.3	54.6
PAB611 06	Sociology and Agriculture	2 ( 2- 0 )	3.7	36.3	54.6
<b>Sub-Total</b>			43.1	476.6	618.2

#### 4<sup>th</sup> Semester

Code	Course Module	Credit	ECTS*	Workload**	
				Hours in class	Hours Self-Study
PTN621 05	Experimental Design	3 ( 3-0 )	3.9	55	44
PIT621 02	Soil Biology	3 ( 2-1 )	3.6	39.3	45.8
PIT621 03	Agricultural Hydrology	3 ( 2-1 )	3.6	39.3	45.8
PIT621 05	Soil Chemistry	3 ( 2-1 )	3.6	39.3	45.8
PIT621 04	Cadastral and Cartography	3 ( 2-1 )	3.6	39.3	45.8
PIT621 06	Geomorphology and Landscape Analysis	2 ( 2-0 )	3.7	36.3	44
PIT621 08	Fertilizer and Fertility Management	3 ( 2-1 )	3.6	39.3	45.8
PIT621 09	Survey and Land Evaluation	3 ( 2-1 )	3.6	39.3	45.8
PTN622 01	Organic Farming System	3 ( 2-1 )	3.6	39.3	45.8
PIT622 01	Remote Sensing	3 ( 2-1 )	3.6	39.3	45.8
AGT621 05	Horticulture Crop Production	3 ( 2-1 )	3.6	39.3	45.8
AGT621 06	Food Crop Production	3 ( 2-1 )	3.6	39.3	45.8
AGT621 07	Estate Crop Production	3 ( 2-1 )	3.6	39.3	45.8
<b>Sub-Total</b>			47.2	523.6	546

#### 5<sup>th</sup> Semester

Code	Course Module	Credit	ECTS*	Workload**	
				Hours in class	Hours Self-Study
PTN611 06	Scientific methods	3 ( 2-1 )	3.9	55	44
PIT612 03	Agroforestry	2 ( 2-0 )	3.7	36.3	54.6
PIT612 04	Soil and Plant Analysis	3 ( 2-1 )	3.6	39.3	45.8
PIT612 05	Irrigation and Drainage	3 ( 2-1 )	3.6	39.3	45.8
PIT612 06	Wetland Management	2 ( 2-0 )	3.7	36.3	54.6
PIT612 07	Dryland Management	2 ( 2-0 )	3.7	36.3	54.6
PIT612 09	Radioisotopes in Soil and Plant Studies	3 ( 2-1 )	3.6	39.3	45.8
PIT612 08	Land Resources Information System	3 ( 2-1 )	3.6	39.3	45.8
PAB611 02	Fundamental of extension and communication	3 ( 2-1 )	3.6	39.3	45.8
<b>Sub Total</b>			<b>33</b>	<b>360.1</b>	<b>436.8</b>

### 6<sup>th</sup> Semester

Code	Course Module	Credit	ECTS*	Workload**	
				Hours in class	Hours Self-Study
AND601 02	Agribusiness and Entrepreneurship	3 ( 2-1 )	3.6	39.3	45.8
PIT621 07	Field Study	1 ( 1-0 )	0.2	6.7	0
PTN622 02	Integrated farming system	3 ( 2-1 )	3.7	36.3	54.6
PIT622 02	Soil Biotechnology	3 ( 2-1 )	3.6	39.3	45.8
PIT622 03	Soil Mineralogy	3 ( 2-1 )	3.6	39.3	45.8
PIT622 04	Regional development and planning	3 ( 2-1 )	3.6	39.3	45.8
PIT622 05	Reclamation and soil bioremediation	3 ( 2-1 )	3.6	39.3	45.8
<b>Sub-Total</b>			21.9	239.5	283.6

### 7<sup>th</sup> Semester

Code	Course Module	Credit	ECTS*	Workload**	
				Hours in class	Hours Self-Study
AND601 01	Student field service	4 ( 0 + 4 )	1.5	-	-
PTN601 01	Internship	2 ( 2 - 0 )	1	-	-
PIT612 09	Fundamental of Environmental Impact Assessment	2 ( 2-0 )	3.7	36.3	54.6
PIT612 10	Watershed Management	2 ( 2- 0 )	3.7	36.3	54.6
PIT612 11	Landuse and Agrarian	3 ( 2-1 )	3.6	39.3	45.8
PIT612 12	Writing Technique /TOEFL	1 ( 1-0 )	2.9	24.6	44
<b>Sub-Total</b>			11.3	136.5	199

### 8<sup>th</sup> Semester

Code	Course Module	Credit	ECTS*	Workload**	
				Hours in class	Hours Self-Study
PAF421	Research Proposal Seminar	1(0-1)	0.3	1.1	-
PAF422	Research Result Seminar	1(0-1)	0.3	1.1	-
PAF423	Skripsi	4(0-4)	3.3	-	100
<b>Sub-Total</b>			3.9	2.2	100

**Note:** Students should take course at minimum 144 SKS from available course 180 SKS

**Total : 144 SKS = 227,96 ECTS**

**Notes:**

\* 1 ects = 30 hours

\*\* 1 sks = 170 minutes = 2,833 hour (50 minutes hours in class and 120 minutes hours self-study