Matrix of Correlation between Courses and Intended Learning Outcome (ILO)

No.	Kode	Nama Mata Kuliah	Courses	SKS	ECTS	Intended Learning Outcome (ILO)										
						1	2	3	4	5	6	7	8	9	10	11
Semester I																
1	MKWU1002	Kewarganegaraan	*Civic Education*	2	3,2	√	√									
2	MKWU1004	Bahasa Inggris	*English*	2	3,2			√	√	√						
3	MKWU1006	Pembinaan Karakter I	*Character Building I*	0	0	√										
4	FPEN1001	Pengantar Ilmu Pertanian Berkelanjutan	*Introduction to Sustainable Agricultural Science*	2	3,2			√	√							
5	SSOL1001	Matematika	*Mathematics*	2	3,2					√						
6	SSOL1003	Fisika	*Physics*	2	3,2			√	√							
7	SSOL1005	Praktikum Fisika	*Practicum of Physics*	1	1,6				√		√					
8	SSOL1007	Kimia	*Chemistry*	2	3,2			√	√							
9	SSOL1009	Praktikum Kimia	*Practicum of Chemistry*	1	1,6						√					
10	SSOL1011	Biologi	*Biology*	2	3,2			√	√							
11	SSOL1013	Praktikum Biologi	*Practicum of Biology*	1	1,6				√			√				
12	SSOL1015	Fisiologi Tumbuhan	*Plant Physiology*	2	3,2					√	√					
13	SSOL1061	Praktikum Fisiologi Tumbuhan	*Practicum of Plant Physiology*	1	1,6					√						
Semester II																
1	MKWU1001	Pancasila	*Pancasila*	2	3,2	√	√									
2	MKWU1003	Bahasa Indonesia	*Indonesian Language*	2	3,2			√	√	√						
3	MKWU1005	Kebencanaan dan Lingkungan	*Disaster Management and Environment*	2	3,2		√		√		√					
4	MKWU1007	Pembinaan Karakter II	*Character Building II*	0	0	√	√									
5	SSOL1002	Dasar-dasar Ilmu Tanah	*Fundamental of Soil Science*	2	3,2			√	√	√	√					
6	SSOL1004	Praktikum Dasar-dasar Ilmu Tanah	*Practicum of Fundamental of Soil Science*	1	1,6								√	√		
7	SSOL1006	Agroklimatologi	*Agroclimatology*	2	3,2				√		√					
8	SSOL1008	Praktikum Agroklimatologi	*Practicum of Agroclimatology*	1	1,6					√					√	
9	SSOL1010	Dasar-dasar Agronomi	*Introduction to Agronomy*	2	3,2			√								
10	SSOL1012	Praktikum Dasar-dasar Agronomi	*Practicum of Introduction to Agronomy*	1	1,6					√	√					
11	SSOL1014	Statistika	*Statistics*	2	3,2				√	√						
12	SSOL1016	Penginderaan Jauh	*Remote Sensing*	2	3,2				√	√	√					
13	SSOL1018	Praktikum Penginderaan Jauh	*Practicum of Remote Sensing*	1	1,6				√							√
Semester III																
1	SSOL2017	Fisika Tanah	*Soil Physics*	2	3,2			√	√		√					
2	SSOL2019	Praktikum Fisika Tanah	*Practicum of Soil Physics*	1	1,6								√		√	
3	SSOL2021	Kimia Tanah	*Soil Chemistry*	2	3,2		√	√								
4	SSOL2023	Praktikum Kimia Tanah	*Practicum of Soil Chemistry*	1	1,6						√		√			
5	SSOL2025	Biologi Tanah	*Soil Biology*	2	3,2			√		√	√					
6	SSOL2027	Praktikum Biologi Tanah	*Practicum of Soil Biology*	1	1,6			√		√	√					
7	SSOL2029	Dasar-dasar Proteksi Tanaman	*Introduction to Plant Protection*	2	3,2	√			√	√						

No.	Kode	Nama Mata Kuliah	Courses	SKS	ECTS	Intended Learning Outcome (ILO)										
						1	2	3	4	5	6	7	8	9	10	11
8	SSOL2031	Praktikum Dasar-dasar Proteksi Tanaman	*Practicum of Introduction to Plant Protection*	1	1,6							√			√	
9	SSOL2033	Sistem Informasi Geografis (SIG)	*Geographic Information System (GIS)*	2	3,2				√		√					
10	SSOL2035	Praktikum Sistem Informasi Geografis (SIG)	*Practicum of Geographic Information System (GIS)*	1	1,6					√						√
11	SSOL2037	Morfologi dan Klasifikasi Tanah	*Soil Morphology and Classification*	2	3,2			√		√						
12	SSOL2039	Praktikum Morfologi dan Klasifikasi Tanah	*Practicum of Soil Morphology and Classification*	1	1,6						√		√			
13	SSOL2041	Geologi dan Mineralogi	*Geology and Mineralogy*	2	3,2			√		√						
14	SSOL2043	Praktikum Geologi dan Mineralogi	*Practicum of Geology and Mineralogy*	1	1,6						√		√			
15	SSOL2045	Manajemen Agribisnis	*Agribusiness Management*	2	3,2		√		√		√					
Semester IV																
1	MKWU2001	Pendidikan Agama	*Religion Education*	2	3,2	√	√				√					
2	SSOL2020	Perancangan Percobaan	*Experimental Design*	2	3,2		√		√							
3	SSOL2022	Konservasi Tanah dan Air	*Soil and Water Conservation*	2	3,2				√		√					
4	SSOL2024	Praktikum Konservasi Tanah dan Air	*Practicum of Soil and Water Conservation*	1	1,6					√					√	
5	SSOL2026	Kesuburan Tanah dan Pemupukan	*Soil Fertility and Fertilization*	2	3,2			√	√							
6	SSOL2028	Praktikum Kesuburan Tanah dan Pemupukan	*Practicum of Soil Fertility and Fertilization*	1	1,6						√			√		
7	SSOL2030	Ilmu Ukur Tanah dan Kartografi	*Geodesy and Cartography*	2	3,2				√		√					√
8	SSOL2032	Praktikum Ilmu Ukur Tanah dan Kartografi	*Practicum of Geodesy and Cartography*	1	1,6					√						√
9	SSOL2034	Geografi dan Perkembangan Tanah Indonesia	*Geography and Indonesian Soil Development*	2	3,2			√		√						
10	SSOL2036	Irigasi dan Drainase	*Irrigation and Drainage*	2	3,2				√	√	√					
11	SSOL2038	Praktikum Irigasi dan Drainase	*Practicum of Irrigation and Drainage*	1	1,6							√			√	
12	SSOL2040	Pengelolaan Tanah	*Soil Management*	2	3,2						√					
13	SSOL2042	Analisis Mengenai Dampak Lingkungan	*Environmental Impact Assessment*	2	3,2		√		√							
14	SSOL2044	Praktikum Analisis Mengenai Dampak Lingkungan	*Practicum of Environmental Impact Assessment*	1	1,6					√	√					
15	SSOL2062	Praktikum Perancangan Percobaan	*Practicum of Experimental Design*	1	1,6					√	√					
Semester V																
1	FPEN3001	Agroteknoprenership	*Agrotechnopreneurship*	2	3,2			√		√						
2	SSOL3047	Pengelolaan Daerah Aliran Sungai	*Watershed Management*	2	3,2				√		√				√	
3	SSOL3049	Pencemaran Tanah dan Air	*Soil and Water Pollution*	2	3,2		√		√			√				
4	SSOL3051	Praktikum Pencemaran Tanah dan Air	*Practicum of Soil and Water Pollution*	1	1,6						√				√	
5	SSOL3053	Survai Tanah dan Evaluasi Lahan	*Soil Survey and Land Evaluation*	2	3,2				√		√					√
6	SSOL3055	Praktikum Survai Tanah dan Evaluasi Lahan	*Practicum of Soil Survey and Land Evaluation*	1	1,6				√		√					√
7	SSOL3057	Pengelolaan Tanaman Pangan dan Perkebunan	*Management of Food Crops and Plantations*	2	3,2				√		√					
8	SSOL3059	Prak. Pengelolaan Tanaman Pangan & Perkebunan	*Practicum of Management of Food Crops and Plantations*	1	1,6						√				√	
Semester VI																
1	FPEN3002	Praktikum Agroteknoprenership	*Practicum of Agrotechnopreneurship*	2	3,2									√	√	
2	SSOL3046	Nutrisi Tanaman	*Plant Nutrition*	2	3,2				√		√			√		
3	SSOL3048	Geomorfologi dan Analisis Lansekap	*Geomorphology and Landscape Analysis*	2	3,2			√		√						√
4	SSOL3050	Praktikum Geomorfologi dan Analisis Lansekap	*Practicum of Geomorphology and Landscape Analysis*	1	1,6						√		√			√

No.	Kode	Nama Mata Kuliah	Courses	SKS	ECTS	Intended Learning Outcome (ILO)										
						1	2	3	4	5	6	7	8	9	10	11
5	SSOL3052	Bioteknologi Tanah	*Soil Biotechnology*	2	3,2				√	√	√					
6	SSOL3054	Praktikum Bioteknologi Tanah	*Practicum of Soil Biotechnology*	1	1,6							√			√	
7	SSOL3056	Agrohidrologi	*Agrohydrology*	2	3,2				√	√			√		√	
8	SSOL3058	Metode Penelitian	*Research Methods*	2	3,2	√					√	√				
Semester VII/VIII																
1	MKWUP001	Kuliah Kerja Nyata	*Community Service Program*	2	3,2		√			√						
2	SSOLP001	Praktik Keterampilan	*Skill Practicum*	3	4,8								√	√	√	√
3	SSOLP002	Seminar	*Proposal Seminar*	1	1,6				√	√	√					
4	SSOLPA01	Skripsi	*Undergraduate Thesis*	6	9,6					√				√	√	√
Odd Semester Elective Courses																
1	SSOL6001	Biopestisida Sumberdaya Lokal	*Local Resources Biopesticides*	2	3,2				√	√	√					
2	SSOL6003	Praktikum Biopestisida Sumberdaya Lokal	*Practicum of Local Resources Biopesticides*	1	1,6							√			√	
3	SSOL6005	Mekanisasi Pertanian	*Agricultural Mechanization*	2	3,2				√	√	√					
4	SSOL6007	Praktikum Mekanisasi Pertanian	*Practicum of Agricultural Mechanization*	1	1,6							√			√	
5	SSOL6009	Ekonomi Sumberdaya Alam dan Lingkungan	*Natural Resources and Environmental Economics*	2	3,2				√		√					
6	SSOL6011	Taksonomi Tanah	*Soil Taxonomy*	2	3,2			√		√						
7	SSOL6013	Praktikum Taksonomi Tanah	*Practicum of Soil Taxonomy*	1	1,6						√		√			
8	SSOL6015	Sistem Informasi Geografis Terapan	*Applied Geographic Information System*	2	3,2				√	√	√					
9	SSOL6017	Praktikum Sistem Informasi Geografis Terapan	*Practicum of Applied Geographic Information System*	1	1,6										√	√
10	SSOL6019	Aplikasi Rencana Tata Ruang Wilayah	*Spatial Planning Application*	2	3,2				√	√	√					√
11	SSOL6021	Praktikum Aplikasi Rencana Tata Ruang Wilayah	*Practicum of Spatial Planning Application*	1	1,6				√	√	√					√
12	SSOL6023	Komunikasi Penyuluhan dan Pembangunan	*Extension Communication and Development*	2	3,2		√				√				√	
Even Semester Elective Courses																
1	SSOL6002	Karakteristik dan Pengelolaan Lahan Rawa	*Characteristics and Management of Swamp Land*	2	3,2				√		√					
2	SSOL6004	Praktikum Karakteristik & Pengelolaan Lahan Rawa	*Practicum of Characteristics & Management of Swamp Land*	1	1,6			√			√					
3	SSOL6006	Reklamasi dan Rehabilitasi Lahan	*Land Reclamation and Rehabilitation*	2	3,2				√		√				√	
4	SSOL6008	Praktikum Reklamasi dan Rehabilitasi Lahan	*Practicum of Land Reclamation and Rehabilitation*	1	1,6				√		√				√	
5	SSOL6010	Analisis Tanah dan Tanaman	*Soil and Plant Analysis*	2	3,2						√			√		
6	SSOL6012	Sosiologi Pedesaan	*Rural Sociology*	2	3,2		√		√							
7	SSOL6014	Agroekologi	*Agroecology*	2	3,2				√			√			√	
8	SSOL6016	Bioremediasi Tanah	*Soil Bioremediation*	2	3,2				√	√		√				
9	SSOL6018	Praktikum Bioremediasi Tanah	*Practicum of Soil Bioremediation*	1	1,6				√	√	√					
MBKM Courses																
1	SSOL6020	Penelitian/Riset di Luar USK	*Research in Other Institution*	20	32	√	√	√	√	√	√	√	√	√	√	√
2	SSOL6022	Program Wirausaha	*Entrepreneurial Programme*	20	32	√	√	√	√	√	√	√	√	√	√	√
3	SSOL6024	Studi/Proyek Independen	*Independent Studies/Projects*	20	32	√	√	√	√	√	√	√	√	√	√	√
4	SSOL6025	Pertukaran Mahasiswa	*Student Exchange*	20	32	√	√	√	√	√	√	√	√	√	√	√
5	SSOL6026	Membangun Desa/KKN Tematik	*Villages Development/Thematic Community Service*	20	32	√	√	√	√	√	√	√	√	√	√	√

No.	Kode	Nama Mata Kuliah	Courses	SKS	ECTS	Intended Learning Outcome (ILO)										
						1	2	3	4	5	6	7	8	9	10	11
6	SSOL6027	Magang/Praktik Kerja di Industri/ Instansi	*Internship/Job Training in Industry/Agencies*	20	32	√	√	√	√	√	√	√	√	√	√	√
7	SSOL6029	Asistensi Mengajar di Satuan Pendidikan	*Teaching Assistance in Education Institution*	20	32	√	√	√	√	√	√	√	√	√	√	√
8	SSOL6031	Proyek Kemanusiaan	*Humanitarian Project*	20	32	√	√	√	√	√	√	√	√	√	√	√

Intended learning Outcomes (ILO) of ITN

Code	Intended Learning Outcomes (ILO)
	Attitude and Behaviour
1	Demonstrate a religious attitude and uphold human values in carrying out duties based on religion, morals, and ethics.
2	Participate actively in enhancing the quality of life in society and the nation.
	Knowledge
3	Understand the function of various soils as natural resources, planting media, ecological subsystems, and resources.
4	Master the knowledge of land and environmental resource management based on the latest and most innovative technologies to support sustainable agriculture and the environment.
	General Skills
5	Able to apply logical, critical, and innovative thinking in the context of implementation and development of science and technology in accordance with the field of expertise in soil science and land resource management.
6	Able to identify, plan, design, evaluate, and solve problems appropriately regarding soil management, land resources, and the environment.
7	Able to demonstrate independent and entrepreneurial performance in the field of soil science to support sustainable agriculture.
	Specific Skills
8	Able to apply knowledge about soil formation and development, as well as soil investigation techniques.
9	Able to diagnose nutrients visually and in a laboratory and able to make fertilizer recommendations.
10	Able to apply soil and water conservation technology based on the principles of sustainable agriculture.
11	Able to apply geospatial technology and land mapping surveys and regional development.