Tabel 1. Matrix between ILO Soil Science and The Subject-Specific Criteria (SSC) of the Technical Committee 08 - Agriculture, Forestry, Food Sciences, and Landscape Architecture

		Knowledge				Special Skills						
SSC 08	Graduate Competences	Mastering knowledge about the process of soil formation and soil morphology	Mastering knowledge about land use and land- based geospatial.	Mastering knowledge about the quality and use of land and land in a sustainable manner.	Mastering knowledge about land conservation, degraded land and its reclamation	Able to describe the properties, characteristic s of various types of soil as well as the potential and constraints in their use in agriculture	Able to identify various soil and land problems in agricultural cultivation and apply the principles of Soil Science in various conditions.	Able to classify soils, evaluate land suitability classes and choose alternative uses in a sustainable manner, so as to maintain the ecological functions of the soil based on field observations, laboratory and landscape analysis and cartographic	Special Skills Able to carry out land surveys and mapping to evaluate capability and suitability of land as the basis for sustainable land use planning.	Able to diagnose visually and/or laboratory symptoms of weakness (deficiency) of nutrients and toxicity and alternative solutions of various types of main cultivated plants in agriculture, plantations and forestry.	Able to compile fertilizer recommendati ons including types and doses of fertilizers based on specific locations on various types of soil and cultivated plants.	Able to analyze, determine and carry out soil and water management actions based on the principles of sustainable agriculture supported by field observations, laboratory and landscape analysis.
Knowledge and Understanding	know and understand the principles of natural sciences, social science, mathematics, medical science, economics and engineering their discipline is based on; have a coherent knowledge in their discipline including knowledge of the latest findings in their discipline; know concepts of identification and safeguarding of quality in their respective fields of work; know the essential legal regulations relating to their discipline; are aware of the further multidisciplinary context of agriculture, forestry, food science, or landscape architecture and neighbouring fields.	X	X	X X	X X X			cartographic mapping.				

Engineering Analysis	□ have the required knowledge and understanding to identify and formulate problems arising in agriculture, forestry, food science, or landscape architecture (which may contain aspects stemming from areas other than their field of specialisation); □ are able to apply different methods orientated on fundamentals – such as mathematical, statistical, and experimental (laboratory) analysis;						
	are qualified to plan and conduct respectively suitable experiments, interpret the data, and draw conclusions.						
Investigations	are able to pursue literature searches in a targeted way and to use data bases and other sources of information;						
	are qualified to carry out assessments on the basis of comparisons with literature references and plausibility considerations.						
	have the skills to solve practical problems;						
Engineering Practice	can combine theory and practice to solve subject-specific practical problems;						
	I are able to select and apply suitable devices, processes, and methods;						
	I have developed an understanding of applicable techniques and methods and their limitations;						
	I recognise the technical, health and safety, social, ecological, and legal implications of engineering practice in their field of scientific expertise;						
	© can apply methods relevant for their profession;						

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	I are aware of the usability and			1			
	the restrictions of concepts						
	and solution strategies;						
	I can resort to experience with						
	problems, topics, and						
	processes relating to their						
	scientific discipline;						
	are able to consult adequate						
	literature and information						
	sources and coordinate the						
	work of experts.						
	are able to work efficiently on						
	their own and as team						
	members;						
	are qualified to apply different						
	methods to communicate						
	effectively with the scientific						
	community and the society as						
	a whole;						
	feel obliged to act in						
	accordance with professional						
	ethics and the responsibilities						
	and standards of practical						
es	engineering;						
l ou	I are aware of the methods of						
ete	project management and						
d	business practices such as risk						
ខ្ល	and change management and						
Social Competences	understand their limitations;						
oci	I recognise the necessity of						
S	independent life-long learning						
	and are qualified to do so;						
	I depending on the						
	professional field they have						
	competences in the fields of						
	management and marketing, in						
	particular project management,						
				1			
	acquisition, personnel						
	management, controlling etc,						
	I are adequately competent in						
	the area of communication,			1			
	e.g. presentations or						
	moderation.						