

ISRIC Spring School
May 28 – June 1, 2018
Wageningen, the Netherlands

PROGRAMME
Course Hands-on Digital Soil Mapping
(1.6 ECTS)

DAY 0 - OPTIONAL, Friday, 25 May 2018

Block	Topic	Lecturer	Room/ type
9.00 – 17.30	Introduction to the statistical software R*	Bas Kempen	Lumen 1&2 / Guided self-study
12:30-13:30	<i>Lunch</i>		Forum Grand Cafe

DAY 1 - Monday, 28 May 2018

Block	Topic	Lecturer	Room/type
8.30 – 9.00	Registration and Coffee		Hall Gaia
9.00 – 9.45	Official opening of the ISRIC Spring School Group photo	Rik van den Bosch (Director), Bas Kempen	Gaia 1
9.45 – 10.15	Course introduction and overview	Gerard Heuvelink	Lumen 1&2
10.15 – 10.45	Geostatistics for soil mapping	Gerard Heuvelink	Lumen 1&2/ lecture
10.45 – 11.15	<i>Coffee break</i>		Lumen terras
11.15 – 12.30	Geostatistics for soil mapping	Gerard Heuvelink	Lumen 1&2/ lecture
12.30 – 13.30	<i>Lunch</i>		Gaia 1st floor
13.30 – 15.00	Geostatistics for soil mapping	Gerard Heuvelink, Titia Mulder	Lumen 1&2/ computer practical
15.00 – 15.30	<i>Coffee break</i>		Lumen terras
15.30 – 17.30	Geostatistics for soil mapping	Gerard Heuvelink, Titia Mulder	Lumen 1&2/ computer practical

DAY 2 - Tuesday, 29 May 2018

Block	Topic	Lecturer	Room/type
9.00 – 10.00	Data preparation for DSM	Bas Kempen	Lumen 1&2/ lecture
10.00 – 10.30	Data preparation for DSM	Bas Kempen, Titia Mulder	Lumen 1&2/ computer practical
10.30 – 11.00	<i>Coffee break</i>		Lumen terras
11.00 – 12.30	Data preparation for DSM	Bas Kempen, Titia Mulder	Lumen 1&2/ computer practical
12.30 – 13.30	<i>Lunch</i>		Gaia 1st floor
13.30 – 15.00	Accessing the WOSIS database for soil profile data	Eloi Ribeiro (Bas Kempen)	Lumen 1&2/ Lecture and exercise
15.00 – 15.30	<i>Coffee break</i>		Lumen terras
15.30 – 17.30	Remote and proximal sensing for natural resource inventories	Titia Mulder (Bas Kempen)	Lumen 1&2/ lecture and exercise
19.00 – 22.00	<i>Dinner in town (Colors World Food restaurant)</i>		

DAY 3 - Wednesday, 30 May 2018

Block	Topic	Lecturer	Room/ type
9.00 – 10.30	Machine learning 1: Introduction to Random Forest Modelling	Bas Kempen	Lumen 1&2/ lecture
10.30 – 11.00	<i>Coffee break</i>		Lumen terras
11.00 – 12.30	Machine learning 1: Introduction to Random Forest Modelling	Bas Kempen Gerard Heuvelink	Lumen 1&2/ computer practical
12.30 – 13.30	<i>Lunch</i>		Gaia 1st floor
13.30 – 15.00	Uncertainty quantification and propagation	Gerard Heuvelink	Lumen 1&2/ Lecture
15.00 – 15.30	<i>Coffee Break</i>		Lumen terras
15.30 – 17.30	Uncertainty quantification and propagation	Gerard Heuvelink, Bas Kempen	Lumen 1&2/ computer practical

DAY 4 - Thursday, 31 May 2018

Block	Topic	Lecturer	Room/ type
9.00 – 10.30	Machine learning 2: Understanding methods, model selection and interpretation	Madlene Nussbaum	Lumen 1&2/ lecture
10.30 – 11.00	<i>Coffee break</i>		Lumen terras
11.00 – 12.30	Machine learning 2: Understanding methods, model selection and interpretation	Madlene Nussbaum Bas Kempen	Lumen 1&2/ computer practical
12.30 – 13.30	<i>Lunch</i>		Gaia 1st Floor
13.30 – 15.00	Validation of digital soil maps	Bas Kempen	Lumen 1&2/ lecture
15.00 – 15.30	<i>Coffee break</i>		Lumen terras
15.30 – 17.30	Validation of digital soil maps	Bas Kempen, Gerard Heuvelink	Lumen 1&2/ computer practical

DAY 5 - Friday, 1 June 2018

Block	Topic	Lecturer	Room/ type
9.00 – 10.00	Visit to World Soil Museum	Stephan Mantel	Soil Museum
10.00 – 10.30	Interactive Workshop Opportunity for course participants to present their work and receive feedback	Gerard Heuvelink	Lumen 1&2
10.30 – 11.00	<i>Coffee break</i>		Lumen terras
11.00 – 12.30	Interactive Workshop Opportunity for course participants to present their work and receive feedback	Gerard Heuvelink	Lumen 1&2
12.30 – 13.30	<i>Lunch</i>		Gaia 1st Floor
13.30 – 14.30	Course evaluation, certificates	Gerard Heuvelink	Lumen 1&2
14.30 – 15.30	Measuring the value of the soil resource	David Rossiter	Lumen 1&2/ guest lecture
15.30 – 17.00	Closing words and ISRIC borrel (drinks and snacks)	Rik van den Bosch	Lumen 1&2 and terras