

Surveying II. (BSc)

Spring semester, 2017/18

Detailed course plan

L1 08.02	<i>Distance measurements, electrooptical distance measurements. Processing distance measurements</i>
P1 09.02	Fundamental tasks of surveying, orientation of mean directions
L2 15.02	<i>Traversing, traverse types. Calculation of traverse lines. Locating blunders.</i>
P2 16.02	Control test (30') . Intersections
L3 22.02	<i>Detail surveys. Offset surveying. Tacheometry. Electronic tacheometers</i>
P3 23.02	Calculation of free traverse
L4 01.03	<i>Setting out straight lines, angles and points with a given reduced level. Setting out software of total stations</i>
P4 02.03	Calculation of the linked (closed line) traverse
L5 08.03	<i>Random error. The mean error and the weight. Propagation of mean error.</i>
P5 09.03	Test 1: Computation of the linked traverse
P6 10.03 (SAT)	Fundamentals of mapping. Reading maps.
15.03	Lecture cancelled due to National Holiday
16.03	Working day transferred to 10.03 (Saturday)
L6 22.03	<i>Adjustment of repeated observations of a single quantity</i>
P7 23.03	Data acquisition from maps. Distortions of map sheets. Methods of area measurements.
L7 29.03	<i>Construction tolerances. Fundamentals of geometrical quality control of construction.</i>
P8	Large scale digital mapping with digitizing analogue maps.

30.03	
05.04	Spring Holiday
06.04	Spring Holiday
12.04	Faculty Days
13.04	Faculty Days
L8 19.04	<i>'A priori' mean error of levelling. Computation of heighting lines and heighting joints.</i>
P9 20.04	Computational adjustment of repeated observation of a single quantity.
L9 26.04	<i>3D coordinate determination with Global Navigation Satellite Systems</i>
P10 27.04	Computational exercises for the propagation of mean error.
L10 03.05	<i>Building surveys. Localization of underground public utilities. Public utility registers.</i>
P11 04.05	Test 2: Mapping, computational adjustments and error theory (P6-P10)
L11 10.05	<i>Displacement and deformation measurements.</i>
P12 11.05	Measurement of the height of buildings using trigonometric heighting.
L12 17.05	<i>Setting out roadworks (straight lines, radial curves and transition curves)</i>
P13 18.05	Levelling in multi-storey buildings. Transferring height systems between various floors.