## Practical classes FS01 – WS 2025/2026

	Date	Schedule
1	22.9.	Levelling - part 1: principles, instruments, reading of levelling rods,
		registration of measured data, calculation of a levelling field book.
		1 <sup>st</sup> homework - Calculation of the levelling field book.
2	29.9.	Levelling - part 2: practical measuring in the field. Calculation and adjustment
		of a levelling line.
3	6.10.	Total stations - part 1: total station Trimble M3 - description, optical
		centering, levelling, reading, pointing, horizontal and zenith angles booking
		and calculating, measurement of a horizontal angle in one set (face left and
		face right positions of the telescope), measurement of a zenith angle.
		1 <sup>st</sup> test - Calculation of a levelling field book.
		2 <sup>nd</sup> homework - Calculation of horizontal directions and zenith angles.
4	13.10.	Total stations - part 2: total station Trimble M3 -, angular and distance
		measurement without registration.
		2 <sup>nd</sup> test - Calculation of horizontal and vertical angles.
5	20.10.	Total stations - part 3: total station Trimble M3 - software, registration of a
		measurement, communication with a computer, tacheometry, data collecting,
		setting-out.
	2.11	3 <sup>rd</sup> homework - Spatial polar method, setting-out elements.
6	3.11.	GNSS - part 1: interpolation of contour lines, Global navigation satellite
		system - introduction, basic principles, GPS Trimble GeoXR - description,
		software, demonstration of measurement and calculations.
		3 <sup>rd</sup> test - Spatial polar method, setting-out elements.
7	10.11.	4 <sup>th</sup> homework - Interpolation of contour lines.
/	10.11.	GNSS - part 2: Practical measuring in the field, comparison of results with other surveying methods.
8	19.11.	Situation: measurement of the planimetry for the creating special-purpose
0	17.11.	plan.
9	24.11.	Tacheometry: tacheometric measurement for creating contour line plan.
10	1.12.	Interior: measurement of building interior, creation of drawing documentation.
11	8.12.	Setting-out: setting-out of the object using total station.
12	15.12.	Working with map: basic cartographic measurements and calculations,
12	13.14.	altitude measurement, measurement of volume and area. <b>ASSESSMENT</b>
		annual measurement, measurement of volume and area. ASSESSIVELVI

CTU, FCE, Department of Special Geodesy Prague, 12<sup>th</sup> September 2025

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