SYLLABUS

Name: ***Surveying (BudAB>SI3SURVEY19)***
Name in Polish:
Name in English: ***Surveying***

Information on course:

Course offered by department: Faculty of Civil Engineering
Course for department: Silesian University of Technology

Default type of course examination report:

ZAL

Language:

English

Course homepage:

https://platforma.polsl.pl/rb/

Short description:

Course will introduce student to the theories and techniques for level measurements with leveler and exercises of basic works with maps together with their supplementing.

Description:

LECTURES: 15 hours
Reference surfaces. Coordinate systems (height). Geodetic methods of measuring and calculating height differences. Calibration, adjustment and maintenance of the level. Topographic maps. Area and volume measurements. Principles of angular measurements and distances.

CLASSES: 5 hours
Reading of maps, measuring distances and angles on maps. Making cross sections from data read from paper map.

LABORATORY: 10 hours
Surveying instruments in practice - level, adjustments and maintenance. Determining highest of bench mark, measuring distances, making inventory of stair case/road, measuring profile and cross section of terrain. Determining of slope.

Bibliography:

[1] Anderson J., Mikhail E Surveying: Theory and Practise. WCB/McGRAW-HILL, New York, 1998.
[2] Assur V.L., Filatov A.M.: Practical Guide to Surveying. Mir Publishers Moscow 1998.
[3] Hycner R., Dobrowolska-Wesołowska M.: Geodesy, surveying and professionals ethics. Wydawnictwo Gall, 2008.

Learning outcomes:

KNOWLEDGE:
(1) Student knows basic geodesic-cartographical elaborations and ways of gaining of spatial datas - [directional effect K1A_W03]
(2) Students understands the nature and aim of geodesic works performed for needs for the building process - [directional effect K1A_W03]

SKILLS:
(3) Student can handle with geodesic-cartographical documentation - [directional effect K1A_U07]
(4) Students gets the knowledge required for realization of basic calculations and geodesic measurement which are necessary on the building site - [directional effect K1A_U07]
(5) Student are familiar with geodesic-cartographical law - [directional effect K1A_U07].

Assessment methods and assessment criteria:

Prerequisites: No requirements.

CONDITIONS FOR PASSING THE COURSE:
1) Attendance at exercises and laboratories;
2) Making reports from the practical and laboratory part and passing them;
3) Passing the final test covering the lecture, practical and laboratory part.

FINAL ASSESSMENT:
100% (test)
The final grade for the course is the grade for the final test. The condition for issuing the final grade is passing all reports.

To have partial grades transferred, students should contact their instructor within the first two weeks of the semester.
The syllabus is effective from the winter semester of the 2025/2026 academic year, and its content is not subject to change during the semester.

Element of course groups in various terms:

Course group description	First term	Last term
missing group description in English (BudAB-S1-2019-sem3)	2020/2021-Z	

Course credits in various terms:

<without a specific program>

Type of credits	Number	First term	Last term
European Credit Transfer System (ECTS)	2	2020/2021-Z	