

COURSE SYLLABUS AND COURSE REQUIREMENTS

ACADEMIC YEAR 2025/26 2ND SEMESTER

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|------------------------------|-------------------------------|
| <i>Course title</i> | <i>Geodesy Field Practice</i> |
| <i>Course Code</i> | MSB033ANEP |
| <i>Hours/Week: le/pr/lab</i> | 0/0/3 |
| <i>Credits</i> | 5 |
| <i>Degree Programme</i> | Civil Engineering BSc |
| <i>Study Mode</i> | Full time |
| <i>Requirements</i> | Geodesy |
| <i>Teaching Period</i> | autumn |
| <i>Prerequisites</i> | Geodesy |
| <i>Department(s)</i> | Civil Engineering |
| <i>Course Director</i> | Béla GADÓ |
| <i>Teaching Staff</i> | László ARADI, Zsolt BONNYAI |

COURSE DESCRIPTION

In this course students will have an opportunity to put together all their knowledge from Geodesy in a complex surveying task. On this five-day long camp on Orfű students will have to work together in groups to accomplish their project assignment. Students will use measurement, calculation and drawing techniques, learned in Geodesy class in order to create a final detail measurement map of the surrounding streets of the camp site. Students may freely schedule their tasks during the five days.

SYLLABUS

1. GOALS AND OBJECTIVES

The main goal of this field practice is to let the students have a real-world experience working in a group. All the theoretical knowledge from Geodesy should come together as subparts in this complex measurement project.

2. COURSE CONTENT

TOPICS

PRACTICE

1. *Traversing*
2. *Line Levelling*
3. *Profile Section and Cross Section Levelling*
4. *Orthogonal Detail Point Measurement*
5. *Tacheometry*

DETAILED SYLLABUS AND COURSE SCHEDULE

PRACTICE, LABORATORY PRACTICE

| day | Topic | Compulsory reading | Required tasks | Completion date, due date |
|-----|---|--------------------|---------------------|---------------------------|
| 1. | Opening meeting, traversing, line levelling | [1.] | | |
| 2. | Orthogonal detail point measurement, tacheometry | [1.] | | |
| 3. | Profile and cross section levelling | [1.] | | |
| 4. | Calculations and drawings, supplementary measurements | [1.] | | |
| 5. | Creating the final documentation | [1.] | Final documentation | Last day of camp |

3. ASSESSMENT AND EVALUATION

ATTENDANCE

No absence is allowed due to the complexity of the group project. All members shall stay for all five days unless the team finishes early and turns in an acceptable documentation. The camp sight may be left for shorter purposes (e.g. shopping) but halting camp permanently before turning in the final documentation will result in the refusal of the final mark regardless of the remaining team members' final grade.

Method for monitoring attendance

On every morning at 8am an opening meeting will be held to discuss the teams' plans for the day. Sober readiness for the day's work is also going to be checked. During daytime the instructors will visit each group to see team progress and active presence.

ASSESSMENT

The final documentation shall consist of the following parts: cover page, coordinate list, traversing, line levelling, orthogonal detail point measurement, tacheometry, base map, profile section levelling and cross section levelling. All parts must be of at least sufficient quality for a successful turning in. The student's individual activity in the group will be also considered as a modifying factor for the final mark.

Course resulting in mid-term grade (PTE TVSz 40§(3))

Mid-term assessments, performance evaluation and their ratio in the final grade

| Type | Assessment | Ratio in the final grade |
|---------------------------------------|------------|--------------------------|
| Final documentation (per group) | 80 points | 80 % |
| Active participation (per individual) | 20 points | 20 % |

Opportunity and procedure for re-takes (PTE TVSz 47§(4))

The final documentations shall be reviewed by the instructors before turning it in to see if the quality is sufficient. If not, the documentation (measurements, calculations, drawings) may be improved. Due to the camp nature of the subject, no re-takes are possible after several failed attempts to turn in the insufficient documentation.

Grade calculation as a percentage

| Course grade | Performance in % |
|------------------|------------------|
| excellent (5) | 85 % ... |
| good (4) | 70 % ... 85 % |
| satisfactory (3) | 55 % ... 70 % |
| pass (2) | 40 % ... 55 % |
| fail (1) | below 40 % |

The lower limit given at each grade belongs to that grade.

4. SPECIFIED LITERATURE

COMPULSORY READING AND AVAILABILITY

[1.] Lecture notes: Geodesy – Aradi full: available in the Teams group and on Witch-server