

## SYLLABUS

**Course title:** Transportation Infrastructure

**Course title (in Polish):** Budownictwo Komunikacyjne

The syllabus is valid since the summer semester of the academic year 2025/26 and its content is not subject to changes during the semester.

### Course details:

**Unit offering the course:** Faculty of Civil Engineering

**Course designated for the unit:** The Silesian University of Technology

**Specialization:** Structural Engineering

**Didactic cycle:** -

**Coordinator of the course:** -

**Delivery mode:** in-person

**Number of ECTS credits:** 1

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| <b>Language:</b>   |
| English  |
| <b>Course homepage:</b>  |
| <a href="https://platforma.polsl.pl/rb/enrol/index.php?id=689">https://platforma.polsl.pl/rb/enrol/index.php?id=689</a>  |
| <b>Prerequisites:</b>  |
| Surveying, Engineering Geology and Soil Mechanics, Building Materials  |
| <b>Short description:</b>  |
| Railway and roads designing, basic information introducing students to issues of transportation infrastructure.  |
| <b>Description:</b>  |
| <b>PROJECT:</b> 15 hours   |
| <b>Bibliography:</b>   |
| 1. Cope G.H. "British railway track, Design, construction and maintenance."<br>2. Dziennik Ustaw nr 151 z 1988 roku. Rozporządzenie Ministra Transportu i Gospodarki Morskiej w sprawie warunków technicznych jakim powinny odpowiadać budowle kolejowe i ich usytuowanie. |
| <b>Learning outcomes:</b>  |
| KNOWLEDGE<br>1. Knows the standards and guidelines for the design of buildings and their components. [K1A_W06]<br>SKILLS<br>1. Knows how to create simple estimate and timetable of construction works. [K1A_U12]  |
| <b>Assessment methods and assessment criteria:</b>   |

**PROJECT**

Design conception of road - horizontal profile and vertical alignment. Road cross section (straight sections and curves). Estimating Earthwork. Calculating railway elements: transition curve, superelevation, ramp curve. Design conception of small railway station.

**FINAL GRADE:**

100% project evaluation

To rewrite partial grades student should approach the coordinator within first two weeks of semester.

The subject information sheet is applicable since winter semester 2025/2026 and its content is not changing during the semester.

**Description of the ECTS calculation method:**

| Type of activity  | Number of hours |
|---|-----------------|
| Number of class hours, regardless of the delivery mode                  | 15              |
| Student's individual work 1* - <i>consultations and project defence</i> | 15              |
| <b>Total hours</b>  | <b>15</b>       |
| <b>Number of ECTS credits assigned to the course</b>                    | <b>1</b>        |
|   |                 |

Legend:

\* - Student's individual work – specify the forms of activity, e.g. *preparation for classes, data interpretation, class report writing, preparation for an exam, literature review, preparation of a project, presentation development, written work, report, etc.*

\*\* – other, e.g., *additional contact hours*