



Subject card

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|---|--|--|---|-------------------------------------|--|------------|-----|
| Subject name and code | Roads and Streets, PG_00044660 | | | | | | |
| Field of study | Transport | | | | | | |
| Date of commencement of studies | October 2022 | Academic year of realisation of subject | | | 2024/2025 | | |
| Education level | first-cycle studies | Subject group | | | Optional subject group Subject group related to scientific research in the field of study | | |
| Mode of study | Full-time studies | Mode of delivery | | | at the university | | |
| Year of study | 3 | Language of instruction | | | Polish | | |
| Semester of study | 6 | ECTS credits | | | 4.0 | | |
| Learning profile | general academic profile | Assessment form | | | exam | | |
| Conducting unit | Department of Transportation Engineering -> Faculty of Civil and Environmental Engineering | | | | | | |
| Name and surname of lecturer (lecturers) | Subject supervisor | | | | | | |
| | Teachers | | | | | | |
| Lesson types and methods of instruction | Lesson type | Lecture | Tutorial | Laboratory | Project | Seminar | SUM |
| | Number of study hours | 30.0 | 0.0 | 15.0 | 0.0 | 0.0 | 45 |
| | E-learning hours included: 0.0 | | | | | | |
| Learning activity and number of study hours | Learning activity | Participation in didactic classes included in study plan | | Participation in consultation hours | | Self-study | SUM |
| | Number of study hours | 45 | | 5.0 | | 50.0 | 100 |
| Subject objectives | Obtaining basic knowledge of road materials (soil, aggregates, bitumens, asphalt mixtures), pavementstructures, earthworks, drainage of roads. | | | | | | |
| Learning outcomes | Course outcome | | Subject outcome | | Method of verification | | |
| | [K6_U13] able to select tools and methods, carry out assessments and simple tests of transport infrastructure and means of transport to an extent required of the specialty / learning profile | | The student can choose the quality of the materials needed to build of the road. The student is able to develop a simple technical specification for the designed road section | | | | |
| | [K6_W18] has proficiency in transport infrastructure as appropriate for their specialty | | The student has knowledge to design a pavement structure for traffic and soil conditions and level of water in the soil and define requirements concerning materials and technology. | | | | |
| Subject contents | The cross-section of the road. Basic rules for the implementation of earthworks and road drainage. Types ofroad pavements. Concrete pavements. Geosynthetics in road construction. Road materials: rock andaggregates, bitumen, asphalt mixtures. Improved subgrade, Base courses. Asphalt pavements.Soil survey, bitumen and asphalt mixtures.Design of flexible and rigid pavements. | | | | | | |
| Prerequisites and co-requisites | | | | | | | |
| Assessment methods and criteria | Subject passing criteria | | Passing threshold | | Percentage of the final grade | | |
| | laboratory | | 100.0% | | 40.0% | | |
| | lectures | | 60.0% | | 60.0% | | |
| Recommended reading | Basic literature | | 1. Piłat J., Radziszewski P.: Nawierzchnie asfaltowe. WKŁ 20042. Błażejowski K., Styk S.: Technologia warstw asfaltowych. WKŁ 20093. Judycki J i wsp.: Analizy i projektowanie konstrukcji nawierzchni podatnych i półsztywnych. WKŁ 2014 | | | | |
| | Supplementary literature | | 1. Szydło A.: Nawierzchnie drogowe z betonu cementowego. Polski Cement. 2004.2. Edel R. Odwodnienie dróg, WKiŁ, 20103. Głazewski M. i wsp. Roboty ziemne i rekultywacyjne w budownictwie komunikacyjnym, WKiŁ, 2010 | | | | |

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| | eResources addresses | Adresy na platformie eNauczenie: |
| Example issues/ example questions/ tasks being completed | Properties of road bitumens.The research of subgrade capacity..Designing a flexible pavement structures. | |
| Work placement | Not applicable | |