



Subject card

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| Subject name and code | Technology of Highway Works , PG_00044227 | | | | | | |
| Field of study | Civil Engineering | | | | | | |
| Date of commencement of studies | October 2020 | Academic year of realisation of subject | | | 2023/2024 | | |
| Education level | first-cycle studies | Subject group | | | Optional subject group | | |
| Mode of study | Full-time studies | Mode of delivery | | | at the university | | |
| Year of study | 4 | Language of instruction | | | Polish | | |
| Semester of study | 7 | ECTS credits | | | 3.0 | | |
| Learning profile | general academic profile | Assessment form | | | assessment | | |
| Conducting unit | Department of Transportation Engineering -> Faculty of Civil and Environmental Engineering | | | | | | |
| Name and surname of lecturer (lecturers) | Subject supervisor | dr inż. Jacek Alenowicz | | | | | |
| | Teachers | dr inż. Jacek Alenowicz dr inż. Bohdan Dołżycki | | | | | |
| Lesson types and methods of instruction | Lesson type | Lecture | Tutorial | Laboratory | Project | Seminar | SUM |
| | Number of study hours | 15.0 | 0.0 | 0.0 | 15.0 | 0.0 | 30 |
| 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 | 30 | 5.0 | | 40.0 | | 75 |
| Subject objectives | Widening of knowledge in the field of road works technology. | | | | | | |
| Learning outcomes | Course outcome | Subject outcome | | | Method of verification | | |
| | [K6_W10] Has basic knowledge on design, construction and maintenance of roads and railroads | Student recognizes and classifies operational sequence of road construction. Student defines and describes choice of suitable road construction plant and materials. | | | | | |
| | [K6_U17] has specialized skills in civil engineering within offered specialization | Student has ability to recognize adequate technological processes in road construction. Student has ability to chose suitable road construction plant and materials. | | | | | |
| | [K6_W16] Has deeper and adequate knowlege of civil engineering, within offered specialization | Student has organized and extended knowledge on road and motorway construction. | | | | | |
| Subject contents | Lectures: Execution of earthworks. Technology of soil stabilization. Construction of bituminous layers. Technology of concrete pavements. Cold and hot recycling of asphalt pavements. Designing: Design of strenghtening of poor subgrade soil and pavement layers with use of geosynthetics. Planning of execution of selected road technology activities. Design of hot mix asphalt mixture with reclaimed asphalt pavement. | | | | | | |
| Prerequisites and co-requisites | Knowledge from the subject ROAD AND MOTORWAY CONSTRUCTION (BPS017) | | | | | | |
| Assessment methods and criteria | Subject passing criteria | Passing threshold | | | Percentage of the final grade | | |
| | Project | 100.0% | | | 50.0% | | |
| | Test | 60.0% | | | 50.0% | | |

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| Recommended reading | Basic literature | <ol style="list-style-type: none"> 1. Piłat J., Radziszewski P., Nawierzchnie asfaltowe, WKŁ, 20010 2. Szydło A.: Nawierzchnie drogowe z betonu cementowego, Polski Cement, 2004 3. Błażejowski K., Styk S., Technologia warstw asfaltowych, WKŁ, Warszawa, 2009 4. Głazewski M., Nowocień E., Piechowicz K., Roboty ziemne i rekultywacyjne w budownictwie komunikacyjnym, WKŁ, Warszawa, 2011 |
| | Supplementary literature | Judycki J., Alenowicz J., Nowoczesne metody renowacji nawierzchni asfaltowych., WKŁ Warszawa 1988 |
| | eResources addresses | Adresy na platformie eNauczanie: |
| Example issues/ example questions/ tasks being completed | | |
| Work placement | Not applicable | |