



Subject card

| | | | | | | | |
|---|---|--|---|-------------------------------------|--|------------|-----|
| Subject name and code | , PG_00065284 | | | | | | |
| Field of study | Transport | | | | | | |
| Date of commencement of studies | February 2024 | | Academic year of realisation of subject | | 2024/2025 | | |
| Education level | second-cycle studies | | Subject group | | | | |
| Mode of study | Full-time studies | | Mode of delivery | | at the university | | |
| Year of study | 1 | | Language of instruction | | Polish | | |
| Semester of study | 2 | | ECTS credits | | 2.0 | | |
| Learning profile | general academic profile | | Assessment form | | assessment | | |
| Conducting unit | Faculty of Civil and Environmental Engineering | | | | | | |
| Name and surname of lecturer (lecturers) | Subject supervisor | | dr inż. Sławomir Grulkowski | | | | |
| | Teachers | | | | | | |
| Lesson types and methods of instruction | Lesson type | Lecture | Tutorial | Laboratory | Project | Seminar | SUM |
| | Number of study hours | 15.0 | 15.0 | 0.0 | 0.0 | 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 | | 0.0 | | 0.0 | 30 |
| Subject objectives | Obtaining basic information on the technique and organization of railway transport. | | | | | | |
| | Transmission of the message on vertical management in rail traffic | | | | | | |
| Learning outcomes | Course outcome | | Subject outcome | | Method of verification | | |
| | [K7_U05] cooperates with other people in the implementation of team work, both as a leader and a team member, effectively achieving set goals | | Is able to identify and define the role of transport in a given location and economic situation. Is able to establish a hierarchy of means of transport with the team | | [SU3] Assessment of ability to use knowledge gained from the subject [SU4] Assessment of ability to use methods and tools | | |
| | [K7_U02] presents logical and solid arguments regarding the obtained results, through analysis, synthesis of information in various technical contexts, critically approaching their interpretation | | It can analyze data from transport systems in order to integrate them | | [SU3] Assessment of ability to use knowledge gained from the subject [SU4] Assessment of ability to use methods and tools | | |
| | [K7_K01] recognizes the importance of knowledge related to the field of study in solving cognitive and practical problems | | Identifies rolling stock and personnel needs. Determines the use of transport potential using scientific methods | | [SK5] Assessment of ability to solve problems that arise in practice [SK1] Assessment of group work skills | | |
| | [K7_W01] identifies in an in-depth way phenomena related to the field of study as well as theories describing them and possible methods of analyzing processes occurring in the life cycle of technical systems | | The student is able to determine the capacity of a station and a railway line. He is able to create a timetable. | | [SW1] Assessment of factual knowledge | | |
| | [K7_K02] makes competent and ethical decisions, caring for the public interest and maintaining economic, social and environmental values | | Is able to choose the preferred transport system in a given situation. Is able to calculate the capacity of the means of transport | | [SK2] Assessment of progress of work [SK3] Assessment of ability to organize work | | |

| | | | |
|--|---|---|-------------------------------|
| Subject contents | LECTURE | | |
| | Rules and procedures for running train traffic on the railway network. | | |
| | Timetable preparation procedure | | |
| | Technology of passenger transport | | |
| | Technology of rail freight Interoperability | | |
| | Capacity of lines and railway stations. | | |
| | TUTORIALS | | |
| | Cyclical timetable | | |
| | Circulation and rotation of the composition | | |
| | Calculation of bandwidth | | |
| Prerequisites and co-requisites | Basic information on the subjects Railway Traffic Engineering and Rail Transport Infrastructure | | |
| Assessment methods and criteria | Subject passing criteria | Passing threshold | Percentage of the final grade |
| | Tutorials | 60.0% | 50.0% |
| | Test | 60.0% | 50.0% |
| | | | |
| Recommended reading | Basic literature | Jacyna M., Gołębiowski P., Krześniak M., Szkopiński J., Organizacja ruchu kolejowego, Warszawa, 2019. | |
| | | Żurkowski A., Pawlik M., Ruch i przewozy kolejowe. Sterowanie ruchem, Warszawa, 2010. | |
| | | Żurkowski A., Ewolucja i nowoczesne zasady budowy wykresu ruchu pociągów pasażerskich, Logistyka, 3, 2014. | |
| | | Nowosielski L., Organizacja przewozów kolejowych, KOW, Warszawa, 1999 | |
| | Supplementary literature | Urbanyi-Popiołek I., Ekonomiczne i organizacyjne aspekty transportu, Wyższa Szkoła Gospodarki w Bydgoszczy, Bydgoszcz, 2013 | |
| | | Zalewski P., Siedlecki P., Drewnowski A., Technologia transportu kolejowego, WKŁ, Warszawa, 2004. | |
| | eResources addresses | Adresy na platformie eNauczanie: | |
| Example issues/ example questions/ tasks being completed | What is train and shunting? | | |
| | Cyclical, integrated timetable | | |
| | Calculation of transport needs | | |
| Work placement | Not applicable | | |