



## Subject card

|   |   |  |   |                                     |  |            |     |
|---|---|--|---|-------------------------------------|--|------------|-----|
| Subject name and code                       | Infrastructure and Exploitation of Ports and Logistics Terminals, PG_00060656   |  |   |                                     |  |            |     |
| Field of study                              | Transport and Logistics   |  |   |                                     |  |            |     |
| Date of commencement of studies             | October 2023  |  | Academic year of realisation of subject   |                                     | 2025/2026  |            |     |
| Education level                             | first-cycle studies   |  | Subject group   |                                     | Obligatory subject group 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                           | 5   |  | ECTS credits  |                                     | 5.0  |            |     |
| Learning profile                            | general academic profile  |  | Assessment form   |                                     | exam   |            |     |
| Conducting unit                             | Department of Theory and Ship Design -> Faculty of Mechanical Engineering and Ship Technology   |  |   |                                     |  |            |     |
| Name and surname of lecturer (lecturers)    | Subject supervisor  |  | prof. dr hab. inż. Jakub Montewka   |                                     |  |            |     |
|   | Teachers  |  |   |                                     |  |            |     |
| Lesson types and methods of instruction     | Lesson type   | Lecture  | Tutorial  | Laboratory                          | Project  | Seminar    | SUM |
|   | Number of study hours   | 30.0   | 30.0  | 0.0                                 | 0.0  | 0.0        | 60  |
|   | 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   | 60   |   | 5.0                                 |  | 60.0       | 125 |
| Subject objectives                          | The aim of the course is to familiarize the student with the sea and inland ports subject, i.e. the most important aspects related to the infrastructure, suprastructure and operation of sea and inland ports in Poland and in the world. The student learns about functioning of modern, large sea and inland ports, their construction and the most important port services they provide. This course also aims at showing the economic and organizational conditions of operating ports and to presenting the requirements that modern, large ports in Poland and in the world face.  |  |   |                                     |  |            |     |
| Learning outcomes                           | Course outcome  |  | Subject outcome   |                                     | Method of verification   |            |     |
|   | [K6_U71] is able to apply knowledge from humanistic, social, economic or legal sciences in order to solve problems  |  | The student is aware of the multi-aspect nature of transport systems.   |                                     | [SU3] Assessment of ability to use knowledge gained from the subject |            |     |
|   | [K6_W05] has established knowledge in the field of design, construction and operation of transport means and systems  |  | The student is able to indicate the main elements related to the process of design, construction and operation of maritime transport systems and the means of transport used. |                                     | [SW3] Assessment of knowledge contained in written work and projects |            |     |
|   | [K6_K03] understands non-technical aspects and effects of activity in the profession of an engineer and its impact on the environment; is aware of the responsibility for decisions made  |  | The student understands a wide range of aspects related to the profession and its impact on the environment.  |                                     | [SK5] Assessment of ability to solve problems that arise in practice |            |     |
| Subject contents                            | Construction and equipment of sea and inland ports. Division of sea and inland ports by destination and function. Characteristics of the functioning of modern seaports, seaports in Poland, Europe and the world, competitiveness of seaports. Conditions that must be met by a seaport to be able to function freely, basic requirements for modern seaports. The concept and classification of seaports, the importance of port infrastructure, port infrastructure management. Port infrastructure, the process of loading cargo onto the ship. Port suprastructure. Port networks. Functions of seaports, quality of port services, production features of port services. Transshipment technologies in Polish seaports, terminal equipment in seaports. Size of the seaport measures, port generations. |  |   |                                     |  |            |     |
| Prerequisites and co-requisites             | Transportation means, transport infrastructure  |  |   |                                     |  |            |     |
| Assessment methods and criteria             | Subject passing criteria  |  | Passing threshold   |                                     | Percentage of the final grade  |            |     |
|   | Test  |  | 50.0%   |                                     | 50.0%  |            |     |
|   | Seminar   |  | 50.0%   |                                     | 50.0%  |            |     |

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| Recommended reading  | Basic literature  | Robert J. McCalla, Brian Slack, Peter Hall, <i>Integrating Seaports and Trade Corridors</i> , 2016 Routledge  |
|  | Supplementary literature  | Kap Hwan Kim (Editor), Hans-Otto Günther, <i>Container Terminals and Cargo Systems: Design, Operations Management, and Logistics Control Issues</i> , Springer 2007 |
|  | eResources addresses  | Adresy na platformie eNauczenie:  |
| Example issues/<br>example questions/<br>tasks being completed | Transshipment technologies in sea ports<br>Characteristics of Ro-Ro handling technology |   |
| Work placement   | Not applicable  |   |

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