



## Subject card

|   |  |  |   |                                     |  |            |     |
|---|--|--|---|-------------------------------------|--|------------|-----|
| Subject name and code                       | Ocean Engineering Objects` Production Technology, PG_00045119  |  |   |                                     |  |            |     |
| Field of study                              | Ocean Engineering  |  |   |                                     |  |            |     |
| Date of commencement of studies             | October 2022   | Academic year of realisation of subject                  |   |                                     | 2024/2025  |            |     |
| Education level                             | first-cycle studies  | Subject group  |   |                                     |  |            |     |
| 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   |   |                                     | 2.0  |            |     |
| Learning profile                            | general academic profile   | Assessment form  |   |                                     | assessment   |            |     |
| Conducting unit                             | Department of Ship Manufacturing Technology, Quality Systems and Materials Science -> Faculty of Mechanical Engineering and Ship Technology  |  |   |                                     |  |            |     |
| Name and surname of lecturer (lecturers)    | Subject supervisor   |  | dr inż. Ryszard Pyszko  |                                     |  |            |     |
|   | Teachers   |  |   |                                     |  |            |     |
| Lesson types and methods of instruction     | Lesson type  | Lecture  | Tutorial  | Laboratory                          | Project  | Seminar    | SUM |
|   | Number of study hours  | 30.0   | 0.0   | 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   |   | 3.0                                 |  | 17.0       | 50  |
| Subject objectives                          | The aim of the course is to familiarize with the scope of the concept of ocean engineering as an interdisciplinary field of technology dealing with the research, exploitation and exploration of seas and oceans. This concept will be included in the technological aspect.  |  |   |                                     |  |            |     |
| Learning outcomes                           | Course outcome   |  | Subject outcome   |                                     | Method of verification   |            |     |
|   | [K6_W08] has knowledge of the principles of sustainable development  |  | The student knows the legal regulations related to the safety aspect of operational installations in the marine environment   |                                     | [SW1] Assessment of factual knowledge<br>[SW2] Assessment of knowledge contained in presentation |            |     |
|   | [K6_W06] has an organized knowledge on engineering methods and design tools allowing the conducting of projects within the construction and operation of ocean technology objects and systems  |  | The student is able to analyze, prepare and prepare a project in terms of formal and legal terms in the field of construction and operation of ocean engineering facilities and systems |                                     | [SW1] Assessment of factual knowledge  |            |     |
| Subject contents                            | 1. Technology of exploitation of mineral resources lying on or under the seabed - extraction of oil and gas, polymetallic nodules and other deposits<br>2. Technology of construction of offshore vessels and their systems; including offshore installation vessels<br>3. Materials and technologies for the construction of offshore facilities<br>4. Technology of construction and installation of selected mining and transportation facilities<br>5. Settlement and construction of offshore housing (above-water and underwater)<br>6. protection of the marine environment from the effects of human activities<br>7. exploitation of ocean resources. |  |   |                                     |  |            |     |
| Prerequisites and co-requisites             |  |  |   |                                     |  |            |     |

| Assessment methods and criteria                                | Subject passing criteria  | Passing threshold  | Percentage of the final grade |
|--|---|--|-------------------------------|
|  | Preparation of the presentation by the student  | 100.0%   | 50.0%                         |
|  | Lecture   | 60.0%  | 50.0%                         |
| Recommended reading  | Basic literature  | K. Mazurkiewicz: "Encyclopedia of Marine Engineering", 2009; Foundation for the Promotion of the Shipbuilding Industry and Maritime Economy; ISBN-978-83-60584-15-6<br><br>A.Wewiórski, Z.Wesołek, J.Puchalski: "Crude oil in sea transport", 2007; Trader Publishing House, Gdynia; ISBN -978-83924549-2-1.J. Cydejko, J. Puchalski, G. Rutkowski: "Offshore Ships and Technologies", 2011- Gdynia, Trader Publishing House, ISBN 978-83-62227-24-2 |                               |
|  | Supplementary literature  | Magazines: ShipingWorld & Shipbuilder, The journal of ocean technology; <a href="https://www.thejot.net/">https://www.thejot.net/</a>  |                               |
|  | eResources addresses  | Adresy na platformie eNauczanie:   |                               |
| Example issues/<br>example questions/<br>tasks being completed | Give the main findings of the Jamaican Convention of 1982.<br>What are manganese concretions and under what conditions Poland has access to them? |  |                               |
| Work placement   | Not applicable  |  |                               |