



## Subject card

|   |   |  |   |            |   |         |     |
|---|---|--|---|------------|---|---------|-----|
| Subject name and code                       | Selected issues of technology, PG_00060551  |  |   |            |   |         |     |
| Field of study                              | Design and Construction of Yachts, Naval Architecture and Offshore Structures   |  |   |            |   |         |     |
| Date of commencement of studies             | October 2023  | Academic year of realisation of subject                  |   |            | 2025/2026   |         |     |
| Education level                             | first-cycle studies   | Subject group  |   |            | Optional subject group<br>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   |   |            | 8.0   |         |     |
| Learning profile                            | general academic profile  | Assessment form  |   |            | exam  |         |     |
| Conducting unit                             | Faculty of Mechanical Engineering and Ship Technology   |  |   |            |   |         |     |
| Name and surname of lecturer (lecturers)    | Subject supervisor  | dr inż. Jakub Kowalski                                   |   |            |   |         |     |
|   | Teachers  |  |   |            |   |         |     |
| Lesson types and methods of instruction     | Lesson type   | Lecture  | Tutorial  | Laboratory | Project   | Seminar | SUM |
|   | Number of study hours   | 45.0   | 0.0   | 15.0       | 30.0  | 0.0     | 90  |
|   | 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   | 90   | 9.0   |            | 101.0   | 200     |     |
| Subject objectives                          | The purpose of the course is to teach students about the current problems in the construction of metal hulls  |  |   |            |   |         |     |
| Learning outcomes                           | Course outcome  |  | Subject outcome   |            | Method of verification  |         |     |
|   | [K6_U04] has skills that allow for self-education and preparation for work in an industrial environment, including the application of occupational health and safety rules  |  | The student is able to independently search and verify knowledge and apply it to the task at hand               |            | [SU3] Assessment of ability to use knowledge gained from the subject<br>[SU1] Assessment of task fulfilment |         |     |
|   | [K6_U02] can work individually and in a team, communicate through various techniques in professional environment and also record, analyse, and present the results of work, can estimate the time needed to complete a given task   |  | The student is able to consciously plan (individually or in a group) and document the work of the realized task |            | [SU1] Assessment of task fulfilment   |         |     |
|   | [K6_W02] has knowledge in the field of technical mechanics, fluid mechanics, strength of materials, necessary to understand the basic physical phenomena occurring in ocean engineering   |  | The student is able to apply knowledge of basic science to solve a complex problem                              |            | [SW2] Assessment of knowledge contained in presentation   |         |     |
| Subject contents                            | Lecture:<br>The content of the lecture focuses on current industrial problems related to the construction and outfitting of steel hulls. Among other issues, the following will be discussed: joining of dissimilar materials, hull assembly at the launching site, measurements and industrial testing<br>Laboratory<br>Participation of students in current research at the Institute in the fields of mechanics, strength, fracture and fatigue of materials or ship technology. |  |   |            |   |         |     |

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|--|---|---|-------------------------------|
| Prerequisites and co-requisites                                | Basic knowledge of the following subjects:<br>- mechanics<br>- strength of materials<br>- hull technology         |   |                               |
| Assessment methods and criteria                                | Subject passing criteria  | Passing threshold   | Percentage of the final grade |
|  |   | 100.0%  | 33.0%                         |
|  |   | 100.0%  | 33.0%                         |
|  |   | 60.0%   | 34.0%                         |
| Recommended reading  | Basic literature  | <p>Classification societies' regulations and the standards indicated in the classes</p> <p>Lamb, Thomas. (2003 - 2004). Ship Design and Construction, Volumes 1-2; Society of Naval Architects and Marine Engineers (SNAME). Book available from the Knovel database (accessed through the PG library website)</p> <p>Bruce, George J. Eyres, David J.. (2012). Ship Construction (7th Edition).Elsevier. Book available from Knovel database (accessed through PG library website)</p> <p>I. Lotsberg, Fatigue Design of Marine Structures. Cambridge University Press, 2016. book available from Knovel database (accessed through PG library website).</p> |                               |
|  | Supplementary literature  | scientific articles indicated by the lecturer<br>internet sources   |                               |
|  | eResources addresses  | Adresy na platformie eNauczanie:  |                               |
| Example issues/<br>example questions/<br>tasks being completed | Purpose and procedure for determining CTOD for welded joints<br>Procedure for launching from a longitudinal slope |   |                               |
| Work placement   | Not applicable  |   |                               |