GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

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|---|---|---|---|
| Subject name and code | Corrosion monitoring, PG_00048988 | | |
| Field of study | Corrosion | | |
| Date of commencement of studies | February 2024 | Academic year of realisation of subject | 2024/2025 |
| Education level | second-cycle studies | Subject group | Obligatory subject group in the field of study<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 | 1 | Language of instruction | Polish |
| Semester of study | 2 | ECTS credits | 4.0 |
| Learning profile | general academic profile | Assessment form | exam |
| Conducting unit | Department of Electrochemistry, Corrosion and Materials Engineering -> Faculty of Chemistry | | |
| Name and surname of lecturer (lecturers) | Subject supervisor | prof. dr hab. inż. Juliusz Orlikowski | |
| | Teachers | | |

**Lesson types and methods of instruction**

| Lesson type | Lecture | Tutorial | Laboratory | Project | Seminar | SUM |
|---|---|---|---|---|---|---|
| Number of study hours | 15.0 | 0.0 | 30.0 | 0.0 | 0.0 | 45 |

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 | 45 | 5.0 | 50.0 | 100 |

**Subject objectives**

The aim of the course is to present issues from corrosion monitoring and risk analysis

**Learning outcomes**

| Course outcome | Subject outcome | Method of verification |
|---|---|---|
| K7_U05 | The aim of monitoring and risk analysis | [SU1] Assessment of task fulfilment |
| K7_U04 | Analysis of corrosion mechanisms under RBI | [SU1] Assessment of task fulfilment |
| K7_W04 | Analysis of the installation data and the composition of process streams in terms of corrosion risk | [SW1] Assessment of factual knowledge |

**Subject contents**

Przedstawienie budowy i funkcjonowania podstawowych instalacji rafineryjnych. Opis procesów technologicznych oraz ich wpływ na korozję. Przedstawienie technik monitorowania metodą FSM, ultradźwiękową. Analiza grupowa RBI.

**Prerequisites and co-requisites**

Basic knowledge of Chemical Engineering and the basis of corrosion

**Assessment methods and criteria**

| Subject passing criteria | Passing threshold | Percentage of the final grade |
|---|---|---|
| Final Exam | 60.0% | 100.0% |

**Recommended reading**

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|---|---|
| Basic literature | RBI Risk Base Inspection API RBI 571, 580, 581 |
| Supplementary literature | There is no requirement. |
| eResources addresses | Adresy na platformie eNauczanie: |

| | |
|---|---|
| Example issues/ example questions/ tasks being completed | Corrosion monitoring techniques<br>Methods of risk analysis<br>Technological processes in refineries |
| Work placement | Not applicable |