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| FACULTY: | **Faculty of Mechanical and Energy Engineering**  Department of Biomedical Engineering |
| FIELD OF STUDY: | **Biomedical Engineering** |
| ERASMUS COORDINATOR OF THE FACULTY: | Igor Maciejewski, DSc, PhD |
| E-MAIL ADDRESS OF THE COORDINATOR: | igor.maciejewski@tu.koszalin.pl |
| COURSE TITLE: | **Basics of electronics** |
| LECTURER’S NAME: | Robert Świta, Eng. PhD |
| E-MAIL ADDRESS OF THE LECTURER: | robert.swita@tu.koszalin.pl |
| ECTS POINTS FOR THE COURSE: | 2 |
| COURSE CODE (USOS): | 0911>1000- PEle |
| ACADEMIC YEAR: | 2025/2026 |
| SEMESTER: (W – winter, S – summer) | S |
| HOURS IN SEMESTER: | 30 |
| LEVEL OF THE COURSE:  (1st cycle, 2nd cycle, 3rd cycle) | 1st cycle |
| TEACHING METHOD:  (lecture, laboratory, group tutorials, seminar, other-what type?) | Lectures (15h) exercises (15h) |
| LANGUAGE OF INSTRUCTION: | * **English full time scheme for classes with 5 and more International Erasmus+ students enrolled/accepted;** * **English 50% individually with the teacher + Polish 50% with Polish students or individual project work- scheme for classes with less than 5 International Erasmus+ students enrolled/ accepted;** |
| ASSESSMENT METOD:  (written exam, oral exam, class test, written reports, project work, presentation, continuous assessment, other – what type?) | Class test |
| COURSE CONTENT: | Physical foundations of electric current flow. Electrical properties of materials (conductors, semiconductors, superconductors, insulators). Basic methods of electrical circuit analysis. RLC circuits and vector analysis, approach using complex numbers. Basic electronic elements and circuits. Filters and basic types of signals. |
| ADDITIONAL INFORMATION: |  |