DOCTORAL SCHOOL OF WROCŁAW UNIVERSITY OF SCIENCE AND TECHNOLOGY

SUPERVISOR DECLARING/CONDUCTING COURSE: prof. Artur Wymysłowski DEPARTMENT:

SCIENTIFIC DISCIPLINE:

COURSE CARD

Course name in Polish: Najnowsze kierunki badań w dyscyplinie AEE

Course name in English: The latest research directions in AEE discipline

Course language: English

The course is intended for all PhD students: YES

- 1) BASIC COURSE
- 2) SPECIALIST COURSE
- 3) SEMINAR
- 4) HUMANISTIC COURSE
- 5) LANGUAGE
- 6) RESEARCH SKILLS

Subject code: AEQ100233W

* delete as applicable

| | Lecture | Foreign language course | Seminar | Mixed forms |
|--|---------|-------------------------------|-------------------|--------------------------------------|
| Number of hours of organized classes in university (ZZU) | 30 | | | |
| Grading | Pass | Exam | Oral presentation | Exam, inspection, evaluation classes |

PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES

- 1. Basic knowldwge on mathematics and physics
- 2. Basic knowledge on automation, electronics and electrical enegineering
- 3. English language

COURSE OBJECTIVES

- C1 Acquainting PhDstudents with the latest research directions in the discipline of automation, electronics and electrical engineering
- C2 Acquainting PhD students with the scientific and research laboratories available at the University as well as Its technological and measurement possibilities
- C3 Conducting an interdisciplinary discussion

Page 1 of 2

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PROGRAM CONTENTS

| | Form of classes | Number of hours |
|-------|---|-----------------|
| Le.1 | Introduction to the lecture activities | 2 |
| Le.2 | Department of Acoustics, Multimedia and Signal Processing | 2 |
| Le.3 | Department of Cybernetics and Robotics | 2 |
| Le.4 | Department of Electronic and Photonic Metrology | 2 |
| Le.5 | Department of Field Theory, Electronic Circuits and Optoelectronics | 2 |
| Le.6 | Summary and interdisciplinary discussion | 2 |
| Le.7 | Department of Electrical Engineering Fundamentals | 2 |
| Le.8 | Department of Electrical Power Engineering | 2 |
| Le.9 | Department of Electrical Machines, Drives and Measurements | 2 |
| Le.10 | Summary and interdisciplinary discussion | 2 |
| Le.11 | Department of Microelectronics and Nanotechnology | 2 |
| Le.12 | Department of Microsystems | 2 |
| Le.13 | Department of Nanometrology | 2 |
| Le.14 | Summary and interdisciplinary discussion | 2 |
| Le.15 | Final pass lecture | 2 |
| • | Total hours | 30 |

TEACHING TOOLS USED

- N1. Multimedia presentations
- N2. Materials uploded to the ePortal PWr portal

| ACHIEVED SUBJECT LEARNING OUTCOMES | | | | | |
|------------------------------------|--------------------------|--------------------------------|--|--|--|
| Type of learning outcome | Code of learning outcome | Assessment of learning outcome | | | |
| Knowledge | P8S_WG | | | | |
| Knowledge | P8S_WK | | | | |

PRIMARY AND SECONDARY LITERATURE

PRIMARY LITERATURE:

[1] Literature provided and made available by the teacher.

SECONDARY LITERATURE:

[1] Multimedia presentations placed at ePortal PWR platform

SUBJECT SUPERVISOR (NAME AND SURNAME, E-MAIL ADDRESS)

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