

DESCRIPTION OF THE COURSES

- **Course code:** ARR3103
- **Course title:** ELECTRIC MACHINES II
- **Language of the lecturer:** Polish

<i>Course form</i>	<i>Lecture</i>	<i>Classes</i>	<i>Laboratory</i>	<i>Project</i>	<i>Seminar</i>
<i>Number of hours/week*</i>			2		
<i>Number of hours/semester*</i>			30		
<i>Form of the course completion</i>			Pass		
ECTS credits			2		
Total Student's Workload			60		

- **Level of the course:** basic
- **Prerequisites:** Passed subjects: Electric machines 1
- **Name, first name and degree of the lecturer/supervisor:** Ignacy Dudzikowski
Ph.D., D.Sc., prof.
- **Names, first names and degrees of the team's members:** Jan Zawilak Ph.D., D.Sc., Prof., Ludwik Antal Ph.D., D.Sc., Prof., Tomasz Janta Ph.D., Olgierd Kasaty Ph.D., Piotr Zieliński Ph.D., Maciej Antal M.Sc., Marek Ciurys M.Sc., Dariusz Gierak M.Sc., Piotr Kisielewski M.Sc., Tomasz Zawilak M.Sc.
- **Year:** 3 **Semester:** 5
- **Type of the course:** obligatory
- **Aims of the course (effects of the course):**
The aim of the course is to learn the systems for parameters and operating characteristics determination of the basic electric machines and transformers. Learning of the practical skills about parameters and operating characteristics determination of the typical electric machines.
- **Form of the teaching:** traditional
- **Course description:**
Transformer testing, asynchronous, synchronous and direct current motors testing. Direct and alternating current generators testing.

- **Lecture:**

<i>Particular lectures contents</i>	<i>Number of hours</i>
1. Introduction	3
2. Three-phase transformer testing	3
3. Three-phase asynchronous motor's parameters and characteristics' determination	3
4. Single-phase asynchronous motor testing	3
5. Phase shifter and induction regulator testing	3

6. Three-phase synchronous generator testing	3
7. Synchronous motor testing	3
8. Shunt motor testing	3
9. Series motor testing	3
10. Pass	3

- **Basic literature:**

1. Antal L., Janta T., Zieliński P., Maszyny elektryczne ćwiczenia laboratoryjne. Oficyna Wydawnicza Politechniki Wrocławskiej 2001

- **Additional literature:**

1. Plamitzer A., Maszyny elektryczne. WNT 1989

- **Conditions of the course acceptance/creditation:** realization of the exercises

* - depending on a system of studies