

Course code																																							
Type and description	Elective Course																																						
ECTS credit	1																																						
Course name	Scientific Research Methodology																																						
Course name in Polish	Metodyka badań naukowych																																						
Language of instruction	English																																						
Course level	8 PRK																																						
Course coordinator	prof. dr hab. inż. Andrzej Bartoszewicz																																						
Course instructors	prof. dr hab. inż. Andrzej Bartoszewicz																																						
Delivery methods and course duration	<table><tr><td></td><td>Lecture</td><td>Tutorials</td><td>Laboratory</td><td>Project</td><td>Seminar</td><td>Other</td><td>Total of teaching hours during semester</td></tr><tr><td>Contact hours</td><td>5</td><td>10</td><td>0</td><td>0</td><td>0</td><td>0</td><td>15</td></tr><tr><td>E-learning</td><td>No</td><td>No</td><td>No</td><td>No</td><td>No</td><td>No</td><td></td></tr><tr><td>Assessment criteria (weightage)</td><td>0,33</td><td>0,67</td><td></td><td></td><td></td><td></td><td></td></tr></table>								Lecture	Tutorials	Laboratory	Project	Seminar	Other	Total of teaching hours during semester	Contact hours	5	10	0	0	0	0	15	E-learning	No	No	No	No	No	No		Assessment criteria (weightage)	0,33	0,67					
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Course objective	<div>1. The aim of the course is to acquaint students with basic concepts related to scientific research in electrical, electronic and control engineering.</div> <div>2. The secondary objective is to familiarize students with their PhD program organization.</div> <div>3. The course also aims at developing skills necessary for performing effective research and publishing research results among professionals and general public.</div>																																						
Learning outcomes	<div>Having completed the course student:</div> <div>1. knows and understands research methodology appropriate for electrical, electronic and control engineering – effects W4, U1</div> <div>2. knows and understands the principles of research results dissemination in conventional and open access environment - effects W4, U1, U2</div> <div>3. can disseminate research results among professionals and general public – effects W4, U2, K1</div> <div>4. is prepared to critically asses his/her own contribution to the field of electrical, electronic and control engineering - effects W4, U1, K1</div>																																						
Assessment methods	<div>Outcomes 1-3 – oral presentation</div> <div>Outcome 4 - homework</div>																																						
Prerequisites	none																																						
Course content with delivery methods	<div>Course contents</div> <div>LECTURE</div> <div>1. Requirements imposed on the PhD candidates by the Law on Higher Education and Science</div>																																						

	<p>(Ustawa 2.0) and current regulations of the Polish Ministry of Science and Higher Education.</p> <p>2. Fundamentals of academic writing and good practices in preparing research publications, public presentations and PhD theses.</p> <p>3. Dissemination of research results.</p> <p>4. Brief introduction to bibliometric factors.</p> <p>TUTORIALS</p> <p>1. Introduction to practical aspects of determining and interpreting various bibliometric factors.</p> <p>2. Introduction to the use of databases fundamental for electrical, electronic and control engineering.</p> <p>3. Paradigms of academic writing in electrical, electronic and control engineering.</p> <p>4. Selection of appropriate means for dissemination of results.</p>
<b>Basic reference materials</b>	<p>1. The Law on Higher Education and Science (Ustawa 2.0) and current regulations of the Polish Ministry of Science and Higher Education.</p> <p>2. Van Emden J., Eastal J., Technical writing and speaking. An introduction, McGraw Hill, 1996.</p>
<b>Other reference materials</b>	<p>1. Selected internet sources.</p> <p>2. Writing an Engineering Technical Report available at : <a href="https://www.monash.edu/rlo/assignment-samples/engineering/eng-writing-technical-reports">https://www.monash.edu/rlo/ assignment-samples/engineering/eng-writing-technical-reports</a></p>
<b>Average student workload outside classroom</b>	10h
<b>Comments</b>	
<b>Last update</b>	