DOCTORAL SCHOOL OF WROCŁAW UNIVERSITY OF SCIENCE AND TECHNOLOGY

SUPERVISOR/TEAM/ DECLARING/CONDUCTING COURSE: Wojciech Bożejko
DEPARTMENT: Faculty of Electronics W4
SCIENTIFIC DISCIPLINE: Automation, Electronics and Electrical Engineering

COURSE CARD

Nazwa w języku polskim: Seminarium optymalizacji i obliczeń współbieżnych
Nazwa w języku angielskim: Seminar of optimization and parallel computing
Course language Polish
The course is intended for all PhD students: YES / NO
~~**1) BASIC COURSE**~~
~~**2) SPECIALIST COURSE**~~
3) SEMINAR
~~**4) HUMANISTIC COURSE**~~
~~**5) LANGUAGE**~~

Subject code: AEQ004106S

* delete as applicable

	Lecture	Foreign language course	Seminar	Mixed forms
Number of hours of organized classes in university (ZZU)			15	
Grading	Exam	Exam	Oral presentation	Exam, inspection, evaluation classes
Number of ECTS points			0	

PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES

1. Basic knowledge of programming in a high-level language

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SUBJECT OBJECTIVES	
C1	To gain knowledge in the field of the discipline of the doctorate, in particular in the field of discrete and continuous optimization with an emphasis on discrete or oratory optimization of the use of parallel programming tools.
C2	To acquire the ability to disseminate research results, initiate debate, and participate in scientific discourse.

SUBJECT EDUCATIONAL EFFECTS

Relating to knowledge:

P8S_WG– has knowledge at the most advanced frontier of a field of study including:
Theoretical foundations and general issues and selected specific issues relevant to the scientific discipline to a degree that revise existing paradigms; main

development trends in the scientific discipline relevant for the education program; research methodology

Relating to skills:

P8S_UK – has the ability to: disseminate research results, also in popular forms; initiate a debate; participate in scientific discourse; use a foreign language to participate in an international scientific and professional environment

PROGRAM CONTENTS		
Form of classes – Seminar		Number of hours
Se1	Presentation of basic principles of conducting research, and preparation and writing of doctoral thesis	**2**
Se2	Presentation of concurrent programming tools in application to calculations and simulations	**2**
Se2	Individual presentations of PhD students participating in the seminar to discuss the current state of knowledge related to the topic of doctoral dissertation and to present their own research results with the emphasis on the original author's achievements together with the discussion in the seminar group	**6**
Se3	Discussion in the seminar group on the state of the art literature and the assumed concept of solving problems, consisting of the dissertation	**5**
	Total hours	**15**

TEACHING TOOLS USED	
N1	Presentation
N2	Discussion
N3	Self work

EVALUATION OF ACHIEVED SUBJECT EDUCATIONAL EFFECTS		
Evaluation: F – forming (partial) C – concluding	Educational effect number	Way of evaluating achievement of educational effects
F1	P8S_WG	Presentation
F2	P8S_UK	Results discussion
C = 0.5 F1+0.5 F2		

PRIMARY AND SECONDARY LITERATURE

PRIMARY LITERATURE:

[1] Current scientific literature on the academic discipline in which the doctoral thesis is conducted, with particular emphasis on topics covered in the doctoral dissertations conducted by the participants of the seminar including journals, conference materials, scientific reports, etc.

SECONDARY LITERATURE:

[1] Dan Remenyi and Arthur Money *"Research Supervision for Supervisors and their Students"*
[2] Robert E. Berger, "A Scientific Approach to Writing for Engineers and Scientists", Wiley-IEEE Press 2014
[3] N. Patel, "Technical Presentations", IEEE Books
[4] Ananth Grama, Anshul Gupta, George Karypis, Vipin Kumar, Introduction to Parallel Computingm Second Edition, Pearson Addison Wesley 2003

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

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