DOCTORAL SCHOOL OF WROCŁAW UNIVERSITY OF SCIENCE AND TECHNOLOGY

SUPERVISOR DECLARING/CONDUCTING COURSE: Prof. Wojciech Bożejko DEPARTMENT: W04N (Faculty of Information and Communication Technology) SCIENTIFIC DISCIPLINE: Information and Communication Technology

COURSE CARD

Course name in Polish: Seminarium optymalizacji i obliczeń współbieżnych Course name in English: 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
- 6) RESEARCH SKILLS

Subject code: ITQ100274S

* delete as applicable

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

PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES

1. Basic knowledge of mathematics, programming and optimization

COURSE 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.

PROGRAM CONTENTS

Form of classes – Seminar	Number of hours
Presentation of basic principles of conducting research, and preparation and writing of doctoral thesis	2
Presentation of concurrent programming tools in application to calculations and simulations	2

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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
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			

ACHIEVED SUBJECT LEARNING OUTCOMES				
Type of learning outcome	Code of learning outcome	Assessment of learning outcome		
F1				
F2				
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 Computing", Second Edition, Pearson Addison Wesley 2003

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

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