

DESCRIPTION OF THE COURSES

- Course code: ARR3220
- Course title: **Object-oriented programming**
- 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>	1		2		
<i>Number of hours/semester*</i>	15		30		
<i>Form of the course completion</i>	<i>credit</i>		<i>credit</i>		
<i>ECTS credits</i>					
<i>Total Student's Workload</i>					

- Level of the course (basic/advanced): advanced)
- Prerequisites:
- Name, first name and degree of the lecturer/supervisor: Czesław T. Kowalski, Dr hab. inż.
- Names, first names and degrees of the team's members: Krzysztof Dyrz dr inż., Joanna Lis mgr inż., Jacek Lis mgr inż.
- Year:.....1.... Semester:.....2.....
- Type of the course (obligatory/optional): optional
- Aims of the course (effects of the course): basics of the object-oriented programming in C++ programming language
- Form of the teaching (traditional/e-learning): traditional
- Course description:
- Lecture:

<i>Particular lectures contents</i>	<i>Number of hours</i>
1. Introduction to C programming. C and C++ similarities and differences	2
2. Functions, variable's visibility and dynamical variables.	2
3. Object and data types	2
4. Packets and moduls	2
5. Abstraction and encapsulation,	2
6. Classes and inheritance	2
7.Classes and the object programming	3

- Classes – the contents:
- Seminars – the contents:
- Laboratory – the contents:

The objective of the laboratory is to provide the students with the practical proficiency in object-oriented c programming. The difficulty of the laboratory exercises is in the increase during the course. Initially the programs only involve the knowledge of the basic issues like the dynamic memory, eventually the advanced objective programs with the mechanisms of the inheritance, affinity and the complicated object's inheriting from the basic groups are to be developed.

The laboratory exercises aim to introduce the students to the object-oriented programming and constitute the starting point for the further unaided studies.

- Project – the contents:
- Basic literature:
 - *Jerzy Grębosz, Symfonia C++ standard. Programowanie w języku C++ orientowane obiektowo. Tomy 1,2,3, Edition 2000, Kraków, 2005*
 - *Jerzy Grębosz, Pasja C ++, Szablony, pojemniki i obsługa sytuacji wyjątkowych w C++, Łatwy podręcznik, Oficyna Kallimach, Krakow, 2002*
- Additional literature:
- Conditions of the course acceptance/creditation: credit

* - depending on a system of studies