Poznan University of Technology
Faculty of Electrical Engineering

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Title **Languages and pardigms of programming**	Code **1010334441010330563**
Field **Computer Science**	Year / Semester **2 / 4**
Specialty **-**	Course **core**
Hours Lectures: **2** Classes: **-** Laboratory: **2** Projects / seminars: **-**	Number of credits **4**
	Language **polish**

Lecturer:

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Status of the course in the study program:

Obligatory course, Faculty of Electrical Engineering, field Computer Science

Assumptions and objectives of the course:

Understanding different styles (and languages) of programming.
Clever using of constructs that are typical of object-oriented languages (C++, C#).
Competence for designing and implementing various algorithms in object-oriented style and language.

Contents of the course (course description):

Different styles of programming, choosing the correct style.
Basic paradigms of object-oriented programming (encapsulation, inheritance, polymorphism) and their implementation in C++ and C# languages.
Implementation of input-output instructions in C++ and C#.
Handling errors and exceptions in object-oriented languages.
Overloading functions and operators.
Dynamic storage management. Multi-thread programming.

Introductory courses and the required pre-knowledge:

Knowledge of mathematical programming foundations,
knowledge of fundamental algorithms and data structures,
skill of procedural programming (C).

Courses form and teaching methods:

Lectures illustrated with slides, laboratory exercises

Form and terms of complete the course - requirements and assessment methods:

Written tests, exercises

Basic Bibliography:

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Additional Bibliography:

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