Title Object-oriented programming	Code 1010341541010320721
Field	Year / Semester
Mathematics	2/4
Specialty	Course
•	core
Hours	Number of credits
Lectures: 1 Classes: - Laboratory: 1 Projects / seminars: -	4
	Language
	polish

Lecturer:

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Faculty:

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Status of the course in the study program:

Obligatory subject, Electrical Engineering Faculty, Field: Mathematics, Full Time Undergraduate Studies

Assumptions and objectives of the course:

Learning theoretical and practical problems of object-oriented programming, acquiring skills of create object-oriented applications by means of .NET Visual C# environment.

Contents of the course (course description):

Representation of physical reality in data structures, object-oriented modeling and UML, design patterns, general characteristics of object-oriented programming, structure, object types declarations, static and dynamic object-oriented variables, fields and methods, constructors and destructors, encapsulation, inheritance, polymorphism, static methods and virtual, properties and events, delegates, interfaces, exception handling, operator overloading, templates and their application. NET (shared runtime library. NET Framework, the code does not run and managed, intermediate language, scalar and reference types) C + + / CLI and Visual Studio. NET, C# language and its application.

Introductory courses and the required pre-knowledge:

Base knowledge of computer science, C++ programming

Courses form and teaching methods:

Auditorical lecture, laboratory exercises

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

Passing laboratory exercises, written examination

Basic Bibliography:

Additional Bibliography:

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