

Title Informatics and Programming	Code 1010101221010510337
Field Environmental Engineering First-cycle Studies	Year / Semester 1 / 2
Specialty -	Course core
Hours Lectures: 2 Classes: - Laboratory: 1 Projects / seminars: -	Number of credits 3
	Language polish

Lecturer:

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Status of the course in the study program:

Basic course.

Assumptions and objectives of the course:

Students should obtain knowledge of theoretical and practical problems of IT systems in the context of applications in environmental engineering.

Contents of the course (course description):

The course lecture contains the following topics: Programming language for microcomputers. Programming in Pascal, Visual-Basic, C. Logical operators. Functions and variables. Character strings and arrays. Indexes. Numerical calculations. Computational complexity. Bases of databases. Relational and object databases. Applications of databases. Tools for the design and services of databases. Environmental databases. Tools for creating websites. Internet systems of the service. Computer networks. Wireless computer networks. Safety of computer systems and computer networks. Electronic economy. Scientific computation. The Matlab programming scripting language. Programming in the computational Scilab environment.

Introductory courses and the required pre-knowledge:

The knowledge of lectures and laboratory from the scope of the first semester.

Courses form and teaching methods:

Lectures and laboratories.

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

Written test, tests in computer laboratory.

Basic Bibliography:

1. Beynon-Davies P. Inżynieria systemów informacyjnych WNT Warszawa 2004
2. Malina W., Szwoch M. Metodologia i techniki programowania WNT Warszawa 2008
3. Wróblewski P. Algorytmy, struktury danych i techniki programowania. Wydanie III Helion Gliwice 2007
4. Wirth N. Algorytmy + struktury danych = programy WNT Warszawa 2004

Additional Bibliography:

