

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject An Itroudction to Computing II		Code 1010804151010820867
Field of study Electronics and Telecommunications	Profile of study (general academic, practical) general academic	Year /Semester 3 / 5
Elective path/specialty -	Subject offered in: Polish	Course (compulsory, elective) obligatory
Cycle of study: First-cycle studies	Form of study (full-time,part-time) part-time	
No. of hours Lecture: 30 Classes: 35 Laboratory: - Project/seminars: -		No. of credits 8
Status of the course in the study program (Basic, major, other) major		(university-wide, from another field) from field
Education areas and fields of science and art technical sciences Technical sciences		ECTS distribution (number and %) 8 100% 8 100%
Responsible for subject / lecturer: dr. inż. Mariusz email: mariusz.zal@put.poznan.pl tel. +48 61 665 3926 Faculty of Electronics and Telecommunications ul. Piotrowo 3A 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Basic knowledge of mathematics
2	Skills	Is able to retrieve and interpret information from books and Internet
3	Social competencies	Student understands a necessity to acquire a new knowledge and skills stemming from a chosen field of studies.
Assumptions and objectives of the course: The aim of the subject is to deliver to a student a basic knowledge of algorithms, data structure, computational complexity, and principles of object programming in C#.		
Study outcomes and reference to the educational results for a field of study		
Knowledge: 1. Knows the principles of construction of computer programs; has knowledge from the area of computing science; knows the syntax of C#, - [K1_W09] 2. Knows about development trends in high level .NET programming languages - [K1_W24]		
Skills: 1. Is able to write software for basic computational algorithms, using C# programming languages - [K1_U13] 2. Uses high level programming languages: C# - [K1_U13] 3. Is able to write and run programs (C#) to solve selected problems in telecommunication - [K1_U13]		
Social competencies: 1. Is aware of the limitations of his/her current knowledge and skills; is committed to further self-study. - [K1_K01] 2. Demonstrates responsibility and professionalism in solving technical problems. Is able to participate in collaborative projects. - [K1_K02] 3. Demonstrates responsibility for designed software. Is aware of the hazards they pose for individuals and communities if they are improperly designed. - [K1_K03]		
Assessment methods of study outcomes		

<p>Forming assessment: Lectures: Written exam; exam is passed when student receives at least 50% points. Exam can be taken after the completion of laboratories.</p> <p>Laboratories: - evaluation and assessment of knowledge increment that need to be effective in solving problems covering all tasks within a given subject area; - continuous assessment during daily classroom practice - rewarding knowledge increment in skills in management of using rules and methods learnt in class.</p>		
Course description		
<p>Introduction to programming in C #, overview development environment. .NET platform. Types, arrays, and flow control. Classes and pillars of object-oriented programming. Operator overloading. Inheritance and interfaces. Delegates and event handling. Exception handling. Data Structures and generics. Multithreaded Programming.</p>		
<p>Basic bibliography: 1. Jesse Liberty &#34;Programowanie C&#34;; Helion 2005 2. http://msdn.microsoft.com/en-us/library/vstudio/67ef8sbd.aspx</p>		
<p>Additional bibliography:</p>		
Result of average student's workload		
Activity	Time (working hours)	
1. Lectures	20	
2. Laboratories	20	
3. Preparation for lectures	40	
4. Preparation for laboratories	40	
5. Preparation for exam	20	
6. Preparation for test	20	
7. Consultation	5	
Student's workload		
Source of workload	hours	ECTS
Total workload	200	8
Contact hours	70	3
Practical activities	100	4