Module card

I. GENERAL INFORMATION	
THE WITELON STATE UNIVERSITY OF APPLIED SCIENCES IN LEGNICA **DEPARTMENT FACULTY OF TECHNICAL AND ECONOMIC SCIENCE**	
Field	Computer sciences
Module title	Visual programming (MI.2)
Language of lecture	English
ECTS points	5
Preliminary conditions:	Object-oriented approach in programming techniques

II. Education aims
1. Show students some methods of application design and implementation in Windows environment 2. Show how to use RAD – Rapid Application Development tools and approach.

III. Education outcomes
EF1: Student will be able to use visual programing language to build a simple Windows application EF2: Studing will be able to use RAD environment to design and implement a Windows application.

IV. EDUCATIONAL METHODS
Educational method: Multimedia presentations, computer tools activities.
Assessment methods: Project, documentation

V. MODULE TYPE AND CONTENTS
Lecture – Conception of Windows application design using RAD tools; architecture of Windows application, Windows API approach. Component libraries; basics of visual GUI design, forms creation using predefined component; computer graphics implementation; Laboratories – recognize a RAD environment; form creation of GUI design; programming dynamic libraries, scripts; using predefined component in application design. Attesting project.

VII. ECTS POINT BALANCE SHEET - STUDENT'S WORKLOAD	
Category	**Student's workload**
Contact hours	30
Participation in lectures	15
Participation in classes, workshops	15
Exam	-
Independent student's work	95
Preparation for the lecture	25
Preparation for the classes, workshops	60
Preparation for the test	2
Preparation for the exam	

Preparing the project	8
Preparing multimedia presentation	-
Total numer of hours	125
ECTS points	5

VIII. Recommended literature

1. C# Notes for Professionals book. E-book on https://books.goalkicker.com/CSharpBook/
2. Visual Basic. NET Notes for Professionals book. E-book on https://books.goalkicker.com/VisualBasic_NETBook/
3. C++ Notes for Professionals book. E-book on https://books.goalkicker.com/CPlusPlusBook/

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