Załącznik nr 3

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	Databases (MI.1)
Language of lecture	English
ECTS points	5
Preliminary conditions:	none

II. Education aims

1. Present basic features and definitions of database systems.
2. Discuss and use a structure query language (SQL).
3. Show some methods of a relational database schema design.

III. Education outcomes

EF1: Student has a knowledge concerning structure design and maintenance of a relational database.
EF2: Student is able to design a relational database schema in 3 normal form or farther.
EF3: Student can use SQL language to read and modify a database content.

IV. EDUCATIONAL METHODS

Educational method: Multimedia presentations, computer tools activities.

Assessment methods: Project, paper work, test

V. MODULE TYPE AND CONTENTS

Introduction to database system theory. Database features. Data models and DBMS. SQL language -the DML and DDL functionality. Creation a database system, a normalization process of relations. Entity-relational diagrams. Managing a database system. Transaction management and data security . A survey of a DBMS tools.

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. SQL: Notes for Professionals, https://books.goalkicker.com/SQLBook/, e-book
2. C.J.Date, Database Design and Relational Theory. Normal Forms and All That Jazz (ebook), www.helion.pl, 2012
3. SQL tutorial on: https://www.w3schools.com/sql/

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