

**Module for Business informatics**

ECTS range: 16

Courses: 1) Database management; 2) E-commerce and retail; 3) Computer based problem solving with excel

<b>(1) Course: Database management</b>	<b>ECTS: 5</b>
Elective	
<b>Ratio of theory – practice, %:</b> 66 % practice	
<b>Type of lesson:</b> lecture / seminar and number of lessons in semester of teaching: 15 + 30 <b>Language of instruction:</b> <i>English</i> <b>Specific techniques or methods in teaching</b> (if any e.g. specific software): continuous study control	
<b>Type of examination and course mark:</b> practical mark Further methods of examination or mid/end term testing (e.g. project works): practical assignments	
<b>Semester:</b> 4	
<b>Preconditions of the course:</b> Business informatics	

**Description of course content:**

Objectives: By the end of the course students will gain knowledge and routine in use of databases. The main aim is to introduce students into the design and creation of relational databases. Topics include storing, retrieving, updating and displaying data using Structured Query Language (SQL).

Brief content: The semester can be divided into four parts. These are about:

**THEORIES:**

This part of the course involve the fundamentals of database theories, basic concepts

**DESIGN:**

Second part is about planning, modelling data, mapping data structures

**CREATING DATABASES:**

This part has all needed knowledge to create databases and SQL.

**COMPLEX PROBLEM SOLVING:**

This part starts at the 13th week and will be finished at 14th week.

During these last two times student will solve problems.

Finally they will have an individually designed, created and documented database system in own chosen topic.

**Compulsory and recommended literatures (2-5 pieces) with full bibliography***Compulsory literature:*

Hans-Petter Halvorsen: Structured Query Language, University College of Southeast Norway, 2016, ISBN-10: 1291199519

Michael Alexander: Access 2016 Bible 1st Edition, 2016, ISBN-13: 978-1119086543

*Recommended literature:*

Ben Forta: SQL in 10 Minutes, Sams Teach Yourself (4th Edition) 4th Edition, ISBN-13:978-0672336072, 2018.

**Elements of Student Requirement System (KKK) that the course contributes to:****a) knowledge**

- The student is aware of the operation of the organizations using the IT and office technology tools supporting the management processes.

**b) skills**

- They can apply techniques of solving economic problems, problem-solving methods, their conditions of use and limitations.
- Participates in a project, a group assignment solution, after acquiring practical knowledge and experience, leads, organizes, evaluates and controls the activity as a leader.

**c) attitude**

- He is receptive to receiving new information, new professional knowledge and methodologies, open to new, independent and cooperative assignments and responsibilities.

**d) autonomy**

- As a member of projects, group work and organizational units, the assignments assigned to him / her are carried out independently and responsibly.

**Course leader: Dr. Róbert Barna PhD, assistant professor**