Course title: SQL Server Databases
Course code: 62038
ECTS credits: 6
Requirements: None
Basic information
Level of studies: Undergraduate applied studies
Year of study: 2
Trimester: 4
Goal: Introducing relational database management, aggregate functions, correlated subqueries, indexes, stored procedures, functions, views, triggers, transactions, normal forms, redundancies and decomposition.
Outcome: Upon completion of the course, students should be able to design databases using a relational model, write SQL queries using standard SQL structures, decompose a database using the 3rd normal form, use T-SQL programming in MS SQL Server, design simple databases in MS SQL Server, program access to database systems using ODBC.
Contents of the course:
Theoretical instruction
1. Introduction to databases
2. MS SQL Server. SQL Server Management Studio
3. Table manipulation
4. Views
5. Stored procedures
6. Triggers
7. Indexes
8. T-SQL programming
9. User-defined functions
Practical instruction (Problem solving sessions/Lab work/Practical training)
1. In practical classes students use programming techniques in MS SQL Server Management Studio, introduced in theory classes.
Textbooks and References
1. M. Lee, G. Bieker: SQL Server 2008, Kompjuter biblioteka, 2009.
2. L. Lobel, A. J. Burst, S. Forte: Programming Microsoft SQL Server 2008, Microsoft Press, 2009.

3. K. Delaney: Microsoft SQL Server 2008 Internals, Microsoft Press, 2009.
4. I. Ben-Gan et al.: T-SQL Querying, Microsoft Press, 2015.
5. S. Varga, D. Cherry: Introducing Microsoft SQL Server 2016, Microsoft Press, 2016.
Number of active classes (weekly)
Lectures: 3
Practical classes: 3
Other types of classes: 0
Grading (maximum number of points: 100)
Pre-exam obligations: Points
Activities during lectures: 10
Activities on practical exercises: 20
Seminary work: 0
Colloquium: 20
Final exam: Points
Written exam: 50
Oral exam:
Lecturer: Milorad Paskaš, PhD
Associate: