Course name: TECHNICAL INFORMATICS I.

Course code: YCRMIN1BNF

Hours per week: 3 practice / F: final mark/ credits: 6
Department of Construction Technology and Management

In charge: Dr. Gergely Mészáros

For students of BSc in Civil Engineering

Pre-requirements for Erasmus students: none

## **OBJECTIVE OF THE COURSE:**

During the course students gain application-level knowledge of data management and calculation. Learn basic data management theory and solve practical engineering problems using generic spreadsheet and database management systems. Practical training takes place in computer labs.

## **14 WEEKS SCHEDULE:**

1. week: Spreadsheet basics 1.

2. week: Spreadsheet basics 2.

3. week: Data management in spreadsheets

4. week: Solving engineering problems 1.

5. week: Solving engineering problems 2.

6. week: Test #1: Spreadsheet calculations

7. week: Database basics

8. week: Data gueries in SQL

9. week: Database design basics

10. week: Database planning and optimalization basics

11. week: Data extraction, manipulation

12. week: Advanced queries

13. week: Test #2/#3: Databases and IT concepts

14. week: Supplementary exams

## Assesment:

lab tests (computational tasks and multiple choice test)

