

## Tárgytematika / Course Description

### Methods of Engineering Calculation I

GKNB\_MSTA006

**Tárgyfelelős neve /**

**Teacher's name:** dr. Kallós Gábor

**Félév / Semester:** 2019/20/1

**Beszámolási forma /**

**Assesment:** Vizsga

**Tárgy heti óraszám /**

**Teaching hours(week):** 0/2/0

**Tárgy féléves óraszám /**

**Teaching hours(sem.):** 0/0/0

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### OKTATÁS CÉLJA / AIM OF THE COURSE

The aim of the course is to provide an introduction to the most basic tools of calculations to engineers (without the need of special software tools). Students learn how to use office spreadsheet applications for basic data processing tasks.

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### TANTÁRGY TARTALMA / DESCRIPTION

Basic Office applications. Word processor, Presentation maker, Spreadsheet editor, etc.

Data processing. Importing and exporting data. Typical file formats. Fundamentals of using spreadsheets. Data types and basic functions. Numerical, Text and Date functions. Logical and other functions. Aggregating functions. Search possibilities.

Visual presentation of data. Diagrams. Presenting interpolations and approximation.

Ordering and filtering spreadsheet data. Regular expressions.

Using Matrices and vectors. Solving linear equations. Role of determinant. Inverse matrices.

Using solver. Solve linear equations with solver.

Pivot tables. Creating reports on available data.

Analyzing data. Statistics, correlation, histograms

Analyzing data. Analysis Toolpak

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### SZÁMONKÉRÉSI ÉS ÉRTÉKELÉSI RENDSZERE / ASSESSMENT'S METHOD

2 midterm exams (tests), final written exam.

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### KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL

Webpage, Internet links given.