

Tárgytematika / Course Description Methods of Engineering Calculation I

GKNB_MSTA006

Tárgyfelelős neve /

Teacher's name: dr. Fülep Dávid

Félév / Semester: 2023/24/1

Beszámolási forma /

Assesment: Vizsga

Tárgy heti óraszám /

Teaching hours(week): 0/2/0

Tárgy féléves óraszám /

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

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.

In this course we will get acquainted with typical problems and expectations on collecting, manipulating, storing or analysing data.

Visiting the lessons is not compulsory.

The final grade is calculated from the result of a written exam.

-50%: insufficient

50-63%: sufficient

64-77%: satisfactory

78-90%: good

91%-: excellent

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

SZÁMONKÉRÉSI ÉS ÉRTÉKELÉSI RENDSZERE / ASSESMENT'S METHOD

2 midterm exams (tests), final written exam.

KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL

Webpage, Internet links given.

AJÁNLOTT IRODALOM / RECOMMENDED MATERIAL