

## Tárgytematika / Course Description

### Calculus 1.

**GKNB\_MSTA053****Tárgyfelelős neve /****Teacher's name:** dr. Kallós Gábor**Félév / Semester:** 2025/26/2**Beszámolási forma /****Assesment:** Folyamatos számonkérés**Tárgy heti óraszám /****Teaching hours(week):** 1/1/1**Tárgy féléves óraszám /****Teaching hours(sem.):**

### OKTATÁS CÉLJA / AIM OF THE COURSE

The primary objective of the course is to introduce the basic concepts and methods, their computational tools, and applications in the engineering environment of one- and multi-variable functions, including the differential and integral calculus of one-variable functions.

### TANTÁRGY TARTALMA / DESCRIPTION

During the programme, the students perform projects, some of which require mathematical competencies to be taught in atoms. In this course, the topics of the related atoms and the related projects are listed below:

Atoms:

- Vectors, coordinate systems
- Complex numbers
- Functions of one variable: basic functions, properties, graphs, limits, continuity, differentiation

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

The total grade is given based on 2 tests. The results of the tests are added.

Final evaluation according to the total grade is as follows:

- 0-51% fail,
- 52-61% passable,
- 62-71% satisfactory,
- 72-81% good,
- 82-100% excellent.

### KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL

<https://openstax.org/subjects/math>

**AJÁNLOTT IRODALOM / RECOMMENDED MATERIAL**