

Admission Requirements -- Mathematics

International students can be admitted into Engineering, IT, Business, or Agricultural Programs if they meet the entrance examination requirements in Mathematics.

The language of the entrance examination and interview is English.

Applicants having earned an arbitrary B.Sc. degree or a B.A. degree in the related field at an internationally accredited and registered college or university, as well as I. B. diploma holders may be exempted from the entrance examination.

Topics of the entrance examination:

- ♣ Fundamentals of set theory
- ♣ Use of equivalent transformations
- ♣ The concept and basic properties of logarithms
- ♣ Solving first and second degree equations and systems of equations
- ♣ Solving equations with absolute value expressions
- ♣ Solving equations containing radicals
- ♣ Solving exponential and logarithmic equations
- ♣ Solving simple inequalities
- ♣ Graphing functions
- ♣ Solving basic problems in geometry
- ♣ Calculating volume and surface area
- ♣ Fundamentals of trigonometry
- ♣ Calculations with vectors, solving problems in coordinate geometry
- ♣ Arithmetical and geometrical progressions
- ♣ The method of induction
- ♣ Fundamentals of combinatorics
- ♣ Fundamentals of graph theory
- ♣ Fundamentals of number theory

Recommended textbooks:

1. A. Bérczes, Á. Pintér: College Algebra, <http://math.unideb.hu/media/berczes-attila/College-Algebra.pdf>
2. A. Bérczes, Á. Pintér: College Analysis, <http://math.unideb.hu/media/berczes-attila/CollAnal1.pdf>
3. Cs. Vincze, L. Kozma: College Geometry, <http://math.unideb.hu/media/vincze-csaba/collegegeom-main-1.pdf>
4. G. Horváth, Sz. Tengely, College Discrete Mathematics, <http://math.unideb.hu/media/horvath-gabor/publications/CollDiscrMath.pdf>