



# Exam 1: Mathematics

## Syllabus for the Admission Examination to “Politehnica” University of Timisoara

**Subject:** Mathematics

### **Faculty of Architecture**

- **Bachelor’s Programmes : Architecture**

- Bachelor Level I, years of study: 6 – Romanian - medium programmes

### **Syllabus**

#### **Elements of linear algebra**

Matrices. Determinants. Systems of linear equations

#### **Elements of Mathematical Analysis**

Limits of sequences .Limits of functions .Continuous functions .Differentiable functions .Applications of derivatives for the study of the variation of functions .

### **Bibliography:**

1. Alternative handbooks approved by the Romanian Ministry of Education for IX-th, X-th, XI-th, XII-th grade;
2. T. Banzaru, N. Boja, O. Lipovan, A. Kovacs, Gh. Babescu, P. Gavruta, D. Rendi, I. Mihut, D. Daianu, D. Paunescu, C. Milici, R. Angheliescu - *Mathematical tests (with choose option response) for the high school graduated and the university admission examinations*, Ed. Politehnica, Timisoara, 2007 or 2010.

*Note* : The selected exam subjects will contain problems as those contained in bibliography sources.