| ***COURSE*** | | **ENGINEERING MATHEMATICS I** | | |
|---|---|---|---|---|
| ***LECTURER*** | | Assoc. Prof. Emil Ilić-Georgijević Ph.D. | | |
| ***STUDY*** | ***STATUS*** | ***SEMESTER*** | ***NUMBER OF LESSONS L+E*** | ***ECTS*** |
| B - CE | Compulsory | 1 | 4+3 | 8 |

## *OBJECTIVES*

- To obtain basic knowledge in linear algebra, analytic geometry.
- To obtain knowledge in differential calculus of single-variable and multi-varible functions.
- To obtain knowledge in indefinite integrals.

## *LEARNING OUTCOMES*

Student should learn notions related to systems of linear equations, vector algebra, analytic geometry, mathematical analysis: limit, continuity, derivatives, indefinite integral, as well as to be able to apply them.

## *COURSE CONTENT*

Sentence, set, relation, mapping, operation, algebraic structures (R and C), vector space

Linear algebra: matrices and systems of linear equations, vector algebra and analytic geometry. Sequences and series. Limits and continuity of functions. Differentiation of functions of one and several variables, vector functions. Indefinite integral

## *RECOMMENDED LITERATURE*


1. Adnađević, Kadelburg: Matematička analiza I, Beograd, 1998.
2. Đ. Takači, S.Radenović:"MATEMATIKA 1- za inžinjere", Bgd. 2002.
3. P. Demidovič, Zadaci iz više matematike za tehničke nauke, Zagreb 1986.
4. B.Mesihović i Š.Arslanagić: Zbirka zadataka, svijetlost s-vo 1987,
5. D. Mihailović, R. Janjić, Elementi matematičke analize I, Bgd-1991.
6. M.Bračković: Matematika I,II i III dio, Svijetlost Sarajevo,


Examination:
Two in-class written exams, each of which worths 50 points.
If in total student obtains at least 55 points, the final mark is formed in accordance with the Law of higher education.
Otherwise, student takes an integral written exam (50 points) and the mark is formed in the following way:
50% of points obtained on in-class exams + points obtaned on an integral exam.