
Problems and prospects of the development of the numerical methods course in the Bauman MSTU

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The work argues the importance of mathematics in the modern world. Numerical analysis of the mathematical models is currently the most effective instrument of research of applied problems. The article stresses the importance of implementing serious two semester course «Numerical methods» in the program of all faculties of the technical University. We offer a program reading the first part of the «General numerical methods» under the scheme 2 + 1 + 1 for students of the third or fourth semester. The detailed structure of the course is provided. A scheme for carrying out laboratory works on the example of the laboratory work «Numerical methods for solving systems of linear algebraic equations in MATLAB» is considered. There is a variant of the second part of the course "Numerical methods for solving equations of mathematical physics", discussed in detail its structure. The topics of all laboratory works are listed.

Keywords: *numerical methods, laboratory work, the accuracy of the calculations.*

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