## Teaching Visual Basic for Applications as a Basic Language for Technical University Students

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## key words

office programming, Python, Pascal, VBA, Excel, algorithmization, teaching methods, standard algorithms, office applications Information technology and programming are among the most dynamically developing disciplines. There are often discussions in the university environment about which programming languages to give preference to when teaching students the basics of computer science and algorithmization, because sometimes the list of languages taught has a direct impact on the choice of the applicant's place of study.

This question depends, first of all, on the direction of the student's training, according to which he is studying. A student of the IT direction will expect that after graduation he will have a fairly good command of several of the popular languages: Java, C++, C#, Python. Obviously, for graduates of IT specialties, these languages are necessary, also because they are in demand by employers, including leading IT companies.

But are these popular languages suitable for all future specialists? After all, it is desirable to teach programming to future engineers (not IT-directions), chemists, economists, sociologists — students who did not prepare to become programmers, but for whom programming skills can become a powerful help in their future profession. The task of the initial stage of training for such students is to organize an easy, but high-quality entry into the world of programming. Here the question of choosing a language is even more important. At the Department of Computer Science and Information Management Systems (IIUS) Kazan State Power Engineering University has many years of experience in successfully teaching computer science and the basics of office programming to first-year students of technical and humanitarian specialties based on the Visual Basic for Applications (VBA) language, which is part of the Microsoft Excel spreadsheet processor.

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