

## SOFTWARE ENGINEERING: NEW DISCIPLINES AND E-LEARNING THEME FOR DEVELOPMENT OF APPLIED SYSTEMS

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### ABSTRACT

This article presents the new scientific disciplines of software engineering (SE), which oriented on constructing different applications, applied systems (AS) and product families system (SPF) from ready reusable components (RC) in conditions of factories. These disciplines: are such as: theories of reuses, them engineering (technology), economy, management and productions of programs products from RC. The new formal basis of programming by components, models of variability and interoperability systems of components for executions in the modern environment and practices building AS and SPF of RC for these disciplines are realized into the instrumental and technological complex (ITC) as the programs factory based on systems tools and instruments of MS.Net. This factory ITS may be used for electronic learning of different aspects of proposed disciplines for the building AS and SPF, which describes in our textbooks, which may be use for building simple applications and AS.

**Keywords:** disciplines, technologies, variability, industry, applied systems, educations, e-learning.