



## METADATA

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### Abstract

Software Engineering is a cross-disciplinary field of computer science. It potentially encompasses all areas of computer science, such as algorithms, programming, data structures, databases, computer networks, operating systems, security, user interface design, etc. It also includes elements from other engineering disciplines, such as quality assurance and project management. Finally, it is not only a theoretical subject, but is strongly related to the final result and cost of construction, which has a significant impact on the environment in which it is used. In this sense, Software Technology is similar to the management of large technical projects, which can only be carried out by engineers who understand all the individual areas of a project, as well as its creation and operating costs. The rapid development

of computer science has created a huge need for software, which is now found in literally every modern device that incorporates some form of computer. However, software development continues to be a challenge, and failure to address this challenge often leads to large-scale project failures, with cost being only one of the consequences. At the same time, software is a powerful lever for growth that requires only investment in brains. In this context, a disciplined approach to software development is a major challenge that must be addressed by the thematic umbrella covering the multitude of cognitive subjects in information technology, known as "Software Technology." The proposed book, which is the evolution of a two-volume work originally written 12 years ago, aims to contribute to this disciplined approach.

