
Abstract

This guide presents a comprehensive framework for the teaching of the Methods of Teaching Computer Science (MTCS) course as well as the teaching of additional other computer science and computer science education courses. We hope that it inspires the message that computer science learning and teaching processes can be fun, interactive, thought-provoking, and stimulating, and by delivering this message, learners' interest in computer science learning on all levels will be increased.

This guide presents a comprehensive framework for the teaching of the Methods of Teaching Computer Science (MTCS) course as well as the teaching of additional other computer science and computer science education courses. As has been mentioned in this guide, not all issues related to the teaching of these topics can be addressed in one guide. Indeed, we view this book as a guide that enables each computer science educator to further develop and adopt the material the guide presents for his or her individual needs. For example, the teaching of advanced computer science topics can be based on applying the principles presented in this guide, such as active learning, lab-based teaching, and the variations in teaching methods, types of questions, and tasks presented to the learners.

We do hope, however, that this guide does inspire the message that computer science learning and teaching processes can be fun, interactive, thought-provoking, and stimulating, and by delivering this message, learners' interest in computer science learning on all levels will be increased.