

Industry Trends in Software Engineering Education

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Software has become ubiquitous in every corner of modern societies. During the last five decades, software engineering has also changed significantly to advance the development of various types and scales of software products. In this context, Software Engineering Education plays an important role in keeping students updated with software technologies, processes, and practices that are popular in industries. We investigate from literature the extent Software Engineering Education addresses major Software Engineering Trends in the academic setting. We conducted a systematic mapping study about teaching major Software Engineering Trends in project courses. We classified 126 papers based on their investigated Software Engineering Trends, specifically Software Engineering processes and practices, teaching approaches, and the evolution of Software Engineering Trends over time. We reveal that Agile Software Development is the major trend. The other Trends, i.e., Software Implementation, Usability and Value, Global Software Engineering, and Lean Software Startup, are relatively small in the academic setting, but continuously growing in the last five years. System of Systems is the least investigated among all Trends. The study points out the possible gaps between Software Industry and Education, which implies actionable insights for researchers, educators, and practitioners.