Project course in engineering studies Course implementation and pedagogical approach

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ABSTRACT

Nowadays working life consists largely of projects. Skills and competences in project management and team work are essential and thus it is important that graduates in engineering programmes achieve these already during their studies. According to previous studies working in teams on interdisciplinary projects, students learn more efficiently about working in teams, project management and communication and time management. Tampere University of Applied Sciences, School of Industrial Engineering launched a new project work course, which was implemented in all degree programmes of the School. These included Automobile and Transport Engineering, Bio-product and Process Engineering, Environmental Engineering, Laboratory Engineering, Mechanical and Product Engineering and Forestry degree programmes. Altogether 210 third-year students were participating the course.

The first full-scale implementation of the Project Work –course indicates that revolutionary changes in organising teaching and learning are possible, and that bringing working life into engineering students' studies through working life projects can work on large multi-professional implementations. Organising a multi-professional course based on coaching also clearly increased cooperation of teachers who work in different programs. The course implementation was new both to the coaches and students and thus the experiences and future development needs were carefully

recorded. Coaching as a pedagogical approach in engineering education is still new and the adoption of it needs time and effort.