Improving innovation and multidisciplinary competences among bachelor of engineering students - DTU Orbit (24/12/2018)

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From society and industry, there are increasing requirements for skilled and well-educated engineers who can develop new solutions through innovation and this have pushed universities to meet these requirements by having an increasing focus on developing innovation and entrepreneurship programmes within Engineering Education. Furthermore, there is also a demand for the graduates to be able to work multidisciplinary and to be able to use generic skills in their work. In this paper, the research question is how to enhance innovation and multidisciplinary competences of engineering students? This is a central question in order to educate engineers that can create sustainable solutions for the environment, for products and to secure future workplaces. In this paper, a new mandatory course for Bachelor of Engineering students at the Technical University of Denmark (DTU) "Innovation Pilot", will be described and how the challenge to improve innovative competences and the ability to work in multidisciplinary teams with engineers from other disciplines are solved. Results from a survey regarding the students' innovation competences and interdisciplinarity show that we have succeed in creation of understanding of what innovation is. However interdisciplinary is still difficult for the students to handle.

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