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The increasing societal and industrial emphasis on sustainability requests that the next generation engineers needs to be trained in the context of sustainability. One of the means to address students at DTU is the establishment of a course aimed at bachelor students from all of the university's study lines. The objectives of the course 'Sustainability in engineering solutions', is for the participants to understand the basic concept of sustainability and its three dimensions (people, profit, planet), as well as to analyse problems and synthesize solutions that are sustainable throughout their life cycle. The course runs over a full time 3-week period and employs project-based learning with several sub-projects/-problems. This paper takes an in-depth discussion of the considerations concerning how to teach such a complicated subject to students of widely differing backgrounds, and reflects both the teachers’ and the students’ experiences with the course.

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