

### **328b Integrating Sustainability into Engineering Curriculum: Case Study-Based Learning**

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It is widely recognised that education is crucial for promoting the philosophy and practice of sustainable development. This paper attempts to answer the question of how to teach sustainability to engineering students. Arguing that sustainability must be an integral part of the curriculum and not a mere 'add-on', the paper outlines a way in which a multidisciplinary approach to teaching and learning sustainable development can be embodied in chemical engineering programmes. The proposed approach combines dedicated lectures with specific case studies and design projects throughout the curriculum. It is argued that this method provides a good education framework for engineering students as it enables structured learning, progressing from lower levels of complexity towards more sophisticated considerations and methods. This framework also helps students to understand the relevance of sustainable development for chemical engineering and how they can work towards it. The approach is illustrated by several case studies developed and used at the University of Surrey in England.