

Developing employability in engineering education: a systematic review of the literature

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ABSTRACT

In this systematic review of the research literature on engineering employability, curricular and pedagogical arrangements that prepare graduates for work in the twenty-first century were identified. The research question guiding the review was: Which curricular and pedagogical arrangements promote engineering students' employability? The particular focus of the study was on how authors prioritised engineering knowledge and professional skills. The review drew on a theoretical framework that differentiated between engineering knowledge and professional skills to explain how employability could be included in engineering programmes. Data was obtained from research studies over the period 2007–2017. We found an interdependent relationship between engineering knowledge and professional skills that enabled engineering graduates to attain employability. The complexity of engineering problems require students to master engineering knowledge, while the ability to work with others across contexts requires professional skills. Both are necessary for deep understanding of engineering principles and a focus on real world problems.

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Disclosure statement

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Additional information

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