

Developing Technology Entrepreneurship Capabilities – Lessons Learned from Educating Engineers

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Scientific abstract

In recent years, technology entrepreneurship has received major attention in research and practice. This is primarily due to the field's potential contribution to socio-economic progress, for instance through technology-based new ventures. In addition, technology entrepreneurship represents a promising option for universities to commercialize technology research and contribute directly to surrounding environments. Despite the high relevance of technology entrepreneurship, educational efforts face the challenge of crossing the boundaries between science and engineering on the one hand and entrepreneurship and management on the other. Merging these inherently separated disciplines in interdisciplinary education approaches calls for specifically designed pedagogy and curricula that pursue the development of technology entrepreneurship capabilities.

This dissertation adopts a qualitative approach in studying the integration of entrepreneurship education in engineering programs with the objective to contribute to the development of a solid foundation for technology entrepreneurship education. More specifically, the aim is to identify how entrepreneurship education can be integrated in an engineering curriculum and what the impact on educational content, pedagogy, and learning outcomes is. In addition, this research seeks to uncover potential contributions of technology entrepreneurship education to technology transfer and commercialization. The dissertation comprises four research papers that jointly develop frameworks and methods for technology entrepreneurship education. The findings do not only solidify the core topic itself but contribute also to research and practice of generic entrepreneurship education and technology transfer and commercialization.