



**Call for:
MASTER THESIS**

**Navigating the Valley of Death: Institutional Barriers and Enablers of
Deep-Tech Startups**

Topic Description:

Deep-Tech ventures (defined as a complex capital- and research-intensive development of new technologies that serve as the basis for future industries and value generation processes) are at the forefront of current societal, economic and political debates. While certain Deep-Tech innovation spaces like blockchain technologies have as of yet shown no real societal impact, quantum computing and AI serve as two examples of Deep-Tech approaches that demonstrate their power in reshaping how we think about and interact with technology, and opened the way for new industries to emerge. This has not gone unnoticed, with political actions going into promoting and funding potential Deep-Tech ventures to ensure a position at the top of future economic developments. Baden-Württemberg has joined in on these actions with the establishment of programs like the [DeepTechHub](#) to strengthen regional Deep-Tech developments.

From a research perspective, however, things are not as clear-cut as these initiatives make them seem. Deep-Tech innovations require massive expenditures on research and product developments with no clear path to profitability – or often, viability – established beforehand. As such, there is a large “valley of death” between possible research projects and startup ideas efforts on one side, and profitable economic activities on the other side. The purpose of this thesis is to serve as an in-progress study of Deep-Tech startups in Baden-Württemberg that are currently developing new products and services, as the surrounding ecosystem is pivoting to put the focus on Deep-Tech ventures.

To provide information, one of two potential research questions can be pursued via interviews with founders of Deep-Tech startups and actors in the supporting ecosystem:

1. What resources do these startups need to potentially establish themselves as an economic player, and does the current (or promised future) regional entrepreneurial ecosystem provide these resources to them? How aware are they and the ecosystem actors of the risks posed by the “valley of death” in Deep-Tech fields?
2. How do the founders deal with the risks posed by the “valley of death” in Deep-Tech startups? Are the founders aware of previously unsuccessful ventures or competitors in the same business context, and how do they build on the knowledge obtained by previously unsuccessful venture designs, ideas and findings for their own commercialization efforts? Do they cooperate or compete with other Deep-Tech startups?

Goals & Expected Contributions:

1. Gain insights into how (and how effectively) the Entrepreneurial Ecosystem is responding to Deep-Tech ventures and technologies
2. Analyze different founder perspectives on Deep-Tech and the “valley of death”
3. Synthesize broader concepts on how founders and ecosystems adapt to new technologies and emerging business opportunities in the Deep-Tech space



Initial Readings:

- Davidsson, P (2016). Researching Entrepreneurship: Conceptualizations and Design. Springer Cham. <https://doi.org/10.1007/978-3-319-26692-3>
- Dionisio EA, Inacio Junior E, Morini C, Carvalho RDQ (2023). Identifying necessary conditions to deep-tech entrepreneurship. RAUSP Management Journal, Vol. 58(2), 162-185. <https://doi.org/10.1108/RAUSP-09-2022-0203>
- Kask, J, Linton, G (2025). Navigating the Innovation Process: Challenges Faced by Deep-Tech Startups. In: Aaltonen, P, Kurvinen, E (eds): Contemporary Issues in Industry 5.0. Technology, Work and Globalization. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-031-74779-3_8
- Romme, AGL, Bell, J & Frericks, G (2023). Designing a deep-tech venture builder to address grand challenges and overcome the valley of death. J Org Design 12, 217-237. <https://doi.org/10.1007/s41469-023-00144-y>
- Stam, E., & van de Ven, A. (2021). Entrepreneurial ecosystem elements. Small Business Economics 65. <https://doi.org/10.1007/s11187-019-00270-6>

Your Profile:

You can apply for this thesis call if you (are)...

- highly motivated to work in a structured way.
- interested in the topic.
- creative and interested in learning new things, topics, and methods.
- enrolled in either MSc BWL / MSc BWL t.o. / MSc TechMan / MA EPSF program.
- have previously completed at least one course offered at ENI (or plan to do so during your thesis semester).

How to Apply:

Application deadline: **30.04.2025**.

To apply, please prepare a max. 2-page exposé summarizing your proposed approach to the topic and a proposed preliminary overview of contents. Please also indicate if you have already completed a course at ENI and don't forget to add your contact details. You may submit your exposé via our website:

<https://www.eni.uni-stuttgart.de/en/teaching/Courses/Bachelor-and-Masterthesis/>

If you have questions about this call, please reach johannes.engels@eni.uni-stuttgart.de

We are looking forward to working with you!