# CASE STUDY WORKSHOP

## Integrating AI in your Curriculum

**Lessons learned at Hochschule Luzern regarding the importance of close industrial collaboration**

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## ABSTRACT

This workshop explores the benefits, challenges of, and success factors for integrating artificial intelligence (AI) in an undergraduate degree program. The content is based on the experiences at the Lucerne School of Computer Science & IT, in launching Switzerland's first and largest AI Bachelor, in Spring 2020. In addition to an interdisciplinary, and inter-departmental approach, we have found that a local expertise ecosystem is the key contributory factor to the success of the program. This latter approach, related to industrial collaboration, and associated learnings, will be shared and discussed in the workshop.

## CASE CONTENT

Organizations who are succeeding in AI all do something in common: they work in open, dynamic, collaborative ecosystems. Educational organizations who want to benefit from and succeed with AI are no different. Rapid, tangible benefits can be achieved in Universities of Applied Sciences, when a flexible, inter-disciplinary and collaborative approach is taken to AI projects.

Much of the Bürgenstock conference is concerned with **AI for Education**. At HSLU Informatik we are using AI in several areas for the management of educational activities. Our student-timetables are generated automatically using constraint optimization. Some lectures are translated and auto-captioned using language models. Plagiarism is detected in essays using AI-based text-readers. Marketing campaigns are enhanced with search engine optimization. (We don't yet do AI-based personalized learning, which is sometimes offered by the MOOC's). However, these topics are left for other workshops.

Rather, this Case will focus on where HSLU has a unique and leading perspective: **Teaching AI in the Curriculum.** Our pioneering AI & Machine Learning Bachelor has pulled in a mix of interdisciplinary subjects from business topics, such as project-management & entrepreneurship, life-science topics such as neuroscience & cognitive function, social sciences such as ethics & policy, and of course the technical sciences, such as engineering, computer science and mathematics. Additionally, because we target applied science, we have worked closely with industry, launching the Lucerne AI & Cognitive Community. This is an Ecosystem of AI-relevant companies, who work with us in providing Bachelor projects, guest lectures, expert coaching and so on. Our approach has proved to be both successful and popular. Student feedback is positive, and the numbers enrolling are high.

In this workshop, the goal is to quickly share the experiences and learnings around the topic of industrial collaboration for AI teaching and take the opportunity to have the participants share their own experiences as well as answer questions which may arise. The workshop will be 50 minutes and will take place in English.