

Health Data Analytics Course

Country	Germany
Institution/Organisation	OPEN-VHB / Virtuelle Hochschule Bayern (Virtual University of Bavaria).
Type of setting	Higher education consortium focusing on AI-driven learning innovation
National Context	The use of AI in education is becoming increasingly critical in Germany's higher education landscape. The 'KI meets vhb' project addresses the need for innovative, accessible, and flexible online learning solutions by embedding AI systems into existing university courses.

A locally hosted, low-resource AI-based system that serves as an interactive tutor for students in the 'Health Data Analytics' course. It includes a prompt-based chat interface, flashcard and quiz generation, and adaptive learning support.

Implementation Process

- **Steps Taken:** A locally hosted AI learning partner was developed and integrated into the course. Personalized learning tools such as question generators, flashcards, and interactive case studies were created, and introduced to participants.
- **Stakeholders Involved:** Data scientists, academic researchers, health informaticians.
- **Timeframe:** 6-12 months

Impact and Results

- **Quantitative Results:** Expected results of Pre/Post evaluation and participation of more than 40 students in pilot testing.
- **Qualitative Outcomes:** Enhanced student engagement and feedback, greater personalization and adaptive learning paths and Increased understanding of ethical AI use in healthcare analytics

Success Factors

- Strong interdisciplinary collaboration.
- Modular and flexible integration into an existing course.
- Real-time feedback and interactivity.
- Use of personas to increase relatability and engagement.

Challenges and Barriers

- Technical limitations on resource-constrained systems.
- Ensuring fast response times and meaningful AI-generated feedback.
- Local hosting to ensure data security.
- Iterative testing and student feedback cycles.
- Transparent communication on tutor limitations.

Key Lessons Learned

- Personalization in learning increases student motivation.
- AI tutors must be transparently introduced and supported.
- Local hosting is effective for data-sensitive education environments.