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UNIVERSITÄT
BERN

CAS

Artificial Intelligence in Medical Imaging

WEITER
BILDUNG
UNIBE

Swiss Institute for Translational
and Entrepreneurial Medicine

siteminsel

Academic degree program for
Artificial Intelligence in Medical Imaging

The Certificate of Advanced Studies in Artificial Intelligence in Medical Imaging (CAS AIMI) offers a hands-on, application-focused introduction to Artificial Intelligence (AI) in the field of medical imaging. It provides participants with the foundational understanding and practical skills needed to critically assess, use, and contribute to AI solutions in clinical and research environments.

Education tailored to your own needs

The CAS AIMI is a one-year continuing education program that provides participants with hands-on experience in the development, use, and evaluation of AI algorithms across various medical imaging domains. Throughout the program, participants will work on an individual AI project, allowing them to apply their learning to real-world scenarios and assess the feasibility and relevance of proposed AI solutions within their professional context.

Designed as an extra-occupational program, the CAS AIMI is structured to fit alongside professional commitments, with regular in-person course sessions that also offer valuable networking opportunities to build and strengthen connections within the field.

Study Format

Each CAS corresponds to at least 15 ECTS credits, whereby each credit corresponds to a study work performance of about 25-30 hours, including in-person events, preparatory tasks and all other course activities. The modules are taught in a blended learning environment and utilize e-learning, peer learning and interactive discussions with experts, on site lectures, workshops, and case studies. Small class sizes allow for large flexibility while at the same time permitting to profit from the lecturers' expertise.

- **AI Project** (3 ECTS)
- **Module 1: AI Fundamentals** (2 ECTS)
- **Module 2: Developing and validating AI** (3 ECTS)
- **Module 3: AI Applications in Clinical Settings** (3 ECTS)
- **Module 4: Approaching AI** (2 ECTS)
- **Module 5: Legal and Ethical Challenges** (2 ECTS)

Academic Degree

Our education programs are offered under the umbrella of the Medical Faculty at the University of Bern. Upon successful completion of the program, the University of Bern awards a Certificate of Advanced Studies (CAS).

Why Study With Us?

- **Recognized:** Gain an academic certificate from a prestigious university enabling you to take on leadership roles in your professional environment
- **Applicable and relevant:** Directly apply the acquired knowledge and skills to your daily work environment
- **Network:** Connect and exchange with peers and faculties from academia, industry and clinics
- **Interdisciplinary:** Learn from experts in different domains of medical imaging
- **Personalized:** Profit from small class sizes and flexibility of study formats

Industry Meets Academia

Our experts from academia, clinic and industry carry the teaching responsibility. They combine deep theoretical knowledge from their innovative research, with the latest practical insights from their extensive work with industry.

Who Is the Program for?

This course is designed for healthcare professionals, including physicians, nurses, outpatient and emergency care providers, as well as participants from other life science-related fields, who want to deepen their understanding in the development and application of AI in their work environment. It is also well-suited for researchers with a professional connection to healthcare, such as biologists working in the pharmaceutical industry.

Duration
CAS   2 semesters (1 year)

Language   English

Location   Bern, Switzerland
(online participation upon request)

Study Fees
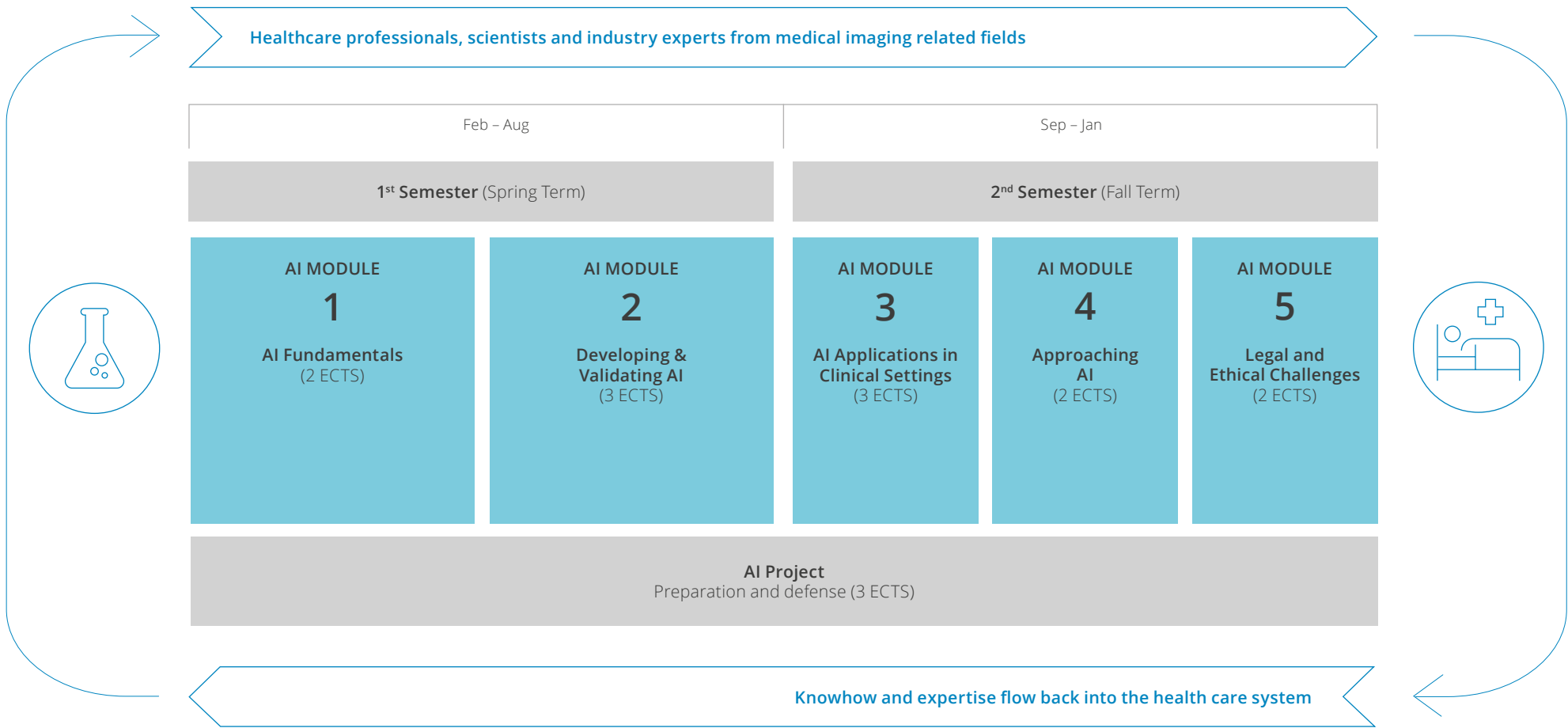CAS   CHF 10'080

Application Deadlines
Spring term   15 December

Contact
Prof. Dr. Antje-Christin Knopf
school.sitem@unibe.ch

Registration
Registration & more information

Healthcare professionals, scientists and industry experts from medical imaging related fields

Feb – Aug		Sep – Jan		
1st Semester (Spring Term)		**2nd Semester** (Fall Term)		
AI MODULE **1**	AI MODULE **2**	AI MODULE **3**	AI MODULE **4**	AI MODULE **5**
AI Fundamentals (2 ECTS)	Developing & Validating AI (3 ECTS)	AI Applications in Clinical Settings (3 ECTS)	Approaching AI (2 ECTS)	Legal and Ethical Challenges (2 ECTS)
AI Project Preparation and defense (3 ECTS)				

Knowhow and expertise flow back into the health care system

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