



^b
UNIVERSITÄT
BERN

DAS in Extended Intelligence

Study Plan

15.09.2022

The DAS Extended Intelligence is a university study program leading to a “Diploma of Advanced Studies in Extended Intelligence” awarded by the University of Bern (DAS XI Unibe) as laid out in the regulations of the Faculty of Science of the University of Bern for the continuing education programs in Extended Intelligence of 2021-12-09.

1. DAS Objectives

Objectives

In addition to the learning objectives of the CAS programs in Advanced Machine Learning (CAS AML, mandatory) and the CAS in Applied Data Science (CAS ADS, elective) or the CAS in Natural Language Processing (CAS NLP, elective), the participants are within their DAS thesis work able to independently design, carry out and communicate an Extended Intelligence project with current Machine Learning methods on a publication-ready level.

2. Duration, Outcomes and Objectives of individual Elements

Scope

The program comprises at least 38 ECTS credits. It consists of two CAS courses: the CAS AML course (mandatory, 16 ECTS), the CAS ADS course (elective, 16 ECTS) or the CAS NLP course (elective, 16 ECTS), a DAS module (2 ECTS) and a DAS thesis (4 ECTS). The modules and performance assessments of the study programs CAS AML, CAS ADS and CAS NLP are regulated in the respective study plans.

DAS Module

The module comprises 60 hours (2 ECTS credits) of which 24 (3 days) are attendance classes. The attendance requirement is 80%. The learning outcomes are (1) deepened and extended competencies of the CAS AML (mandatory) and the CAS ADS (elective) or the CAS NLP (elective), which are selected independently and achieved by attending further courses and events, and (2) competencies for realistically design a data science and machine learning project and being able to communicate critically in writing and orally such projects. The conceived project contains the deepened and extended competencies and serves as implementation basis for the DAS thesis.

The participants suggest their learning objectives for deepening and extending their competencies. The module responsible adjusts the suggestions together with the participants and finally approves them.

The assessment is an oral or written presentation of the project concept design and the plan of the deepening and expanding courses and events to be attended.

A multiyear experience with data science and machine learning projects is required, i.e. from the CAS ADS and CAS AML.

The learning methods include lectures, online courses, seminars, workshops, events and independent work with extended intelligence tools, typically with data science and machine learning software libraries.

The module language is English.

3. Performance Assessments

Assessments

The assessments are the following:

- a. A written or oral performance assessment for the DAS Module
- b. A written DAS thesis
- c. An oral presentation of the DAS work and thesis

Based on the assessment of the performance records and the fulfillment of the other performance requirements, the program management decides on the passing and granting of the DAS degree.

The program management guidelines on performance assessments regulate further details.

4. Final Regulations

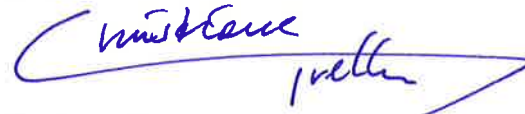
Entry into force

The present plan shall enter into force on 01.11.2022.

15.09.2022

Released by the program management:

Chair



Prof. Dr. Christiane Tretter

06.10.2022

Adopted by the Faculty of Science, University of Bern:

Dean



Prof. Dr. Marco Herwegh