

# Studienplan für den Zertifikatskurs CAS Medication Safety



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UNIVERSITÄT  
BERN

July 6, 2022

For successful completion of the “Medication Safety” course of studies, the “Bern University Certificate of Advanced Studies in Medication Safety” (CAS MS UniBE) is granted. Its legal foundations are the medical faculty’s “Regulations for the CAS in Medication Safety” of July 6, 2022.

## 1. Study goals

Goals

Medication-related problems are among the most common unintended events in the health care sector and are of prioritized interest in Switzerland in terms of improvement.

This course’s goal is to enable professionals within the field of medication safety and working in leading positions within their institutions to proactively improve interprofessional evidence-based medication safety.

## 2. Scope, goals and contents of the program elements

Scope

This program represents 10ECTS credits (approx. 300 work hours in total). It is split into 15 course days (100 hours of presence) and 200 hours of autonomous study and practice projects.

Module 1

### **Introduction to Medication Safety**

Scope: 4 days in-person study, 2 hours preparation (lectures) (1ECTS credit)

Goals:

- development of a comprehensive understanding of the meaning of medication safety from various professional perspectives
- anchoring of vital concepts and definitions surrounding medication safety
- development of a broad understanding of medication processes and possible sources of error in various health care settings

Content:

- introduction to the CAS Medication Safety–Organisation and Contextual Overview incl. self-study and practice work
- scope and background of thematic medication safety
- definition
- medication errors within various processes
- hidden mistakes

Module 1 is split into 3 blocks, which take place on days 1, 14 and 15.

Module 2

**Risk management**

Scope:

3 days in-person classes, 8 hours of post/preparation (1ECTS credit)

Goals:

- identification and first application of established methods of risk identification and analysis of medication-related problems.
- insights into the reporting of critical incidents as well as a reporting system for unwanted medication effects and problems with medical products.
- overview of various reporting systems (critical incidents, pharmacological vigilance, ((medical) materials vigilance)
- repetition of important aspects of project management
- introduction to risk management goals and possible content
- refreshing of knowledge of quantitative analysis; introduction to methods of qualitative analysis
- introduction to rudimentary development of a safety culture within your own team
- collecting experiences by using simulation as a teaching tool

Content:

- risk identification (FMEA, RCA, London Protocol, Trigger Tools, self-assessment, SWOTPDCA)
- methods of data assessment
- reporting (clinical incidents, pharmacological vigilance, materials vigilance)
- clinical risk management
- qualitative and quantitative analysis
- safety culture (human factors, just culture, second victim)
- simulation training

Module 2 is split into 3 blocks on days 2 and 3.

Module 3

### **System and Processes, Medication Management**

Scope: 2 days in-person study, 2 hours preparation (lectures) (0.5 ECTS credit)

Goals:

- deepening of systematic approaches to improving processes and the work environment
- acquisition of knowledge of the development and implementation of risk reduction strategies
- acknowledgment of the importance of the patients, their families and partners to medication processes as well as the collection of first experiences with methods and how to apply these actively and participatively

Content:

- performance and process improvement
- risk reduction strategies
- work environment (infrastructure, procedures, look-alike sound-alike thematic elements)
- medication management
- labelling/documentation
- care
- meaning and measurement of medication competencies
- patient education (i.e., teach-back method)
- interprofessional optimization of the exit management incl. integration of the pre- or post-care health professional)

Module 3 is split into 2 blocks on days 5 and 6.

Module 4

**Schooling of (soon-to-be) professionals**

Scope: 1 day of in-person classes, 8 hours post/ preparation (0.5 ECTS credits)

Goals:

- possibilities for interaction with didactic tools for practice-oriented schooling in medication safety

Content:

- useful teaching and learning techniques
- planning and executing lectures
- mutually constructive feedback
- conception of e-learning

This module consists of one block which takes place on day 7.

Module 5

**Interprofessional Collaboration**

Scope:

2 days of in-person classes

(0.5 ECTS credit)

Goals:

Engagement with own attitudes on interprofessional collaboration

- common reflection with members of other professions regarding interprofessional collaboration

Content:

- basics and goals of interprofessional collaboration
- requirements and goals of interprofessionalism
- possible aspects for implementation (facilitators, barriers and risks; examples from different settings—in institutions, terminals, ambulatory settings)
- communication techniques
- team-building
- in-depth role play

This module consists of 2 blocks, which take place on days 8 and 9.

Module 6

**Technologies in Medication Processes**

Scope: 1 day of in-person course work (0.25 ECTS credits)

Goals:

- the participants will learn about recent technologies in various areas of medication processes, as well as the prerequisites for their implementation and integration

Content:

- presentation of recent technologies and medication processes: barcode, CPOE, smart pumps, BCMA, unit dose, HER, ADC
- robotic pharmacy
- closed-loop medication process

This module is comprised of 1 block, which takes place on day 10.

Module 7:

Medication Safety Officer and Leadership

Scope:

3 days in-person course work and 3 hours preparation (0.75 ECTS credit)

Goals:

- build understanding regarding the development of possible roles in the area of medication safety
- introduce students to useful tools for planning, execution and controlling in the area of medication safety.

Content:

- roles and responsibilities of Medication Safety Officer incl. creation of duty book
- setting up an agenda for medication safety
- useful committees for the sustainable implementation of medication safety-related activities.
- leadership and change management
- economy and safety
- laws, regulatory influences and guidelines (i.e., position papers of the Cantonal Pharmacy Group of Switzerland)
- compliance with statutes
- document development
- risk audits
- RQS, MAIEA, ISO

### 3. Performance tests within the program

Performance tests

The performance tests encompass the following elements:

- a. Tasks for course grade  
Module 2: block 2.1; block 2.2  
Module 4: block 4.1  
(Must be submitted according to specifications)
- b. Final presentation and practical projects according to the assignment specifications
- c. On-time submission of practical projects as specified

Further details are governed by the provisions for performance review laid out by the program leaders.

In consultation with the experts responsible for each module, the program administrators will decide how performance will be graded, as well as what constitutes satisfactory fulfilment of other performance requirements for the issuance of the certificate.

### 3. Final regulations

Taking effect:

This study plan takes effect on 01.09.2023.

xx.yy.2015

decided by program administrators:

Chairperson

prof. dr. XY

xx.yy.2015

approved by the Medical Faculty

Dean

Prof. Dr. med. Claudio Bassetti