

Course Outline

Virtual Exchange Autumn Semester 2021_22

Internet Technology

Number of ECTS-Credits: 5 ECTS

Format of the course:

- synchronous online course (FIX timeslots)
- asynchronous online course (NO fix timeslots)
- mix of synchronous and asynchronous online course
- synchronous hybrid course (students can choose online OR on campus in FIX timeslots)
- asynchronous hybrid course (students can choose online OR on campus in NON-fix timeslots)
- mix of synchronous and asynchronous hybrid course
- other, namely:

Number of Students accepted

- Total number of students is limited to
- Total number of students is unlimited
- Total number of virtual exchange students is limited to
- Total number of virtual exchange students is unlimited

Responsible lecturer: Dr. Andreas Martin

Link to lecturer's profile at FHNW:

<https://www.fhnw.ch/en/people/andreas-martin>

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1. Course content

This module gives students an overview of the most important methods and concepts of a web architecture and focuses on the competent use of selected and state of the art web technologies, which are relevant in an enterprise application domain. Besides, this module drives the digitalisation process by reflecting concepts such as API or microservice design. Finally, this module sharpens the understanding of an economical software development architecture through the use of frameworks and selected libraries.

2. Learning objectives

The students ...

- ... know and understand the terms and concepts of a web architecture.
- ... know different diagram types to model and describe web architectures.
- ... know a current (Internet) technology to digitise business processes.
- ... know the potential of different methods of web engineering.
- ... can describe the use of web technologies using standardised methods and tools.
- ... can analyse and implement web applications.
- ... can describe and explain the significance of web technologies in practice.
- ... are able to analyse, interpret and describe requirements for a web application.
- ... are able to model a web application and design a corresponding architecture adequately.
- ... can explain the most critical tasks and activities of web engineering.
- ...can develop technical concepts with the help of written tutorials and framework documentation.

3. Prior knowledge and entry requirements

- As this module requires participants to be able to discuss complex issues fluently, a good level of English is required min. B2/C1 (CEFR), IELTS 5.5, TOEFL iBT 46-59 or equivalent
- Further formal entry requirements for this course are:
 - Programming or Software Engineering (BSc BIT module(s) or related)
 - Databases (BSc BIT module or related)

4. Course structure and dates

- There will be synchronized 12 sessions during the semester between 20.09.2021 and 20.12.2021. One can select a session on Monday mornings (08:15 – 12:00; Swiss time) or Monday afternoon (13:15 – 17:00; Swiss time). A detailed schedule will be announced.

5. Assessment

- Assessment with (online)presentation, report, groupwork, test etc. during semester
- Final written test on campus can be replaced for remote students with an additional assignment
- Final written test on campus can be replaced for remote students with oral testing

6. Literature

- Will be provided during the semester and available on the FHNW Moodle LMS.

7. Grading

- Pass-fail
- According to swiss grading system (see below)

Mark	6.0	5.5	5.0	4.5	4.0	below 4
In words	excellent	very good	good	satisfactory	pass	fail

The student has the right to appeal against the grading within a period of not more than 14 working days after its communication. Any appeal must be sent to io.business@fhnw.ch in writing and must be accompanied by valid arguments. It will be handled according to the Study and Examination Regulations for the Bachelor of Science Business Administration at FHNW.