

Supplementary Course (EVA) at ZHAW School of Engineering

Title: Methodology seminar: Quantitative methods from the fields of business engineering and data science

Short Code: rEVA_MethSem

ECTS Credits	3
Profile	Business Engineering (BE) and Data Science (DS)
Responsible Institute /Centre	Institute of Data Analysis and Process Design (IDP)
Responsible lecturer and contact information	Stephan Bütikofer (buts@zhaw.ch, +41794089662)
Type and duration of examinations	Presentation (duration min. 45 minutes plus questions and discussion), evaluation by seminar organizer, advisor, and supervisor.
Start date and duration	Semester: Autumn Detail: The dates for the presentations are distributed at the beginning of the semester. The actual start of the seminar depends on the number of participants. The seminar will take place on Friday morning.
Location	Winterthur
Course type	Seminar <ul style="list-style-type: none"> • Contact hours: 20 (hrs) • Guided self-study: 8 (hrs) • Independent self-study: 62 (hrs)
Language of instruction	English or German (depending on the language skills of the participants)
Short description (max. 300 characters)	Preparation of a scientific presentation for a professional audience (students, members of IDP). The aim is to present quantitative procedures and methods from the fields of business engineering and data science. Students receive an overview of methodological diversity from these areas.
Contents and Learning Objectives	In this methodology seminar, a quantitative method, typically from the field of business engineering or data science, should be presented. The method could e.g. be developed in the context of a specialization or Master's thesis or be based on a literature review. The focus of the presentation should be on the presentation of the quantitative method and not on the application context, implementation issues, or other technical specialties. The seminar serves to deepen students' methodological knowledge and provides insights into the diversity of quantitative methods in the field of business engineering and data science. In this seminar, students also have the opportunity to give a scientific presentation in front of a professional audience. The advisor/supervisor determines the topics together with the student. In addition to the student, at least the organizer, the advisor, and the supervisor of the Master's or specialization thesis must be present at the presentation (the supervisor is needed only if the organizer or advisor is not supervising the thesis themselves). The presentations will be publicly announced at the IDP and are

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	each given by one student alone and should last (at least) 45 minutes. Afterward, there should be enough time for discussion and questions.			
Prerequisites	All students from the Business Engineering and Data Science profiles.			
Literature	Will be determined in the course			
Special requirements	-			
Offer for profiles	Aviation (Avi)	<input checked="" type="checkbox"/>	Business Engineering (BE)	<input checked="" type="checkbox"/>
	Computer Science (CS)	<input type="checkbox"/>	Data Science (DS)	<input checked="" type="checkbox"/>
	Electrical Engineering (EIE)	<input type="checkbox"/>	Energy & Environment (EnEn)	<input type="checkbox"/>
	Mechanical Engineering (ME)	<input type="checkbox"/>	Mechatronics & Automation (MA)	<input type="checkbox"/>
	Medical Engineering (Med)	<input type="checkbox"/>	Photonics (Pho)	<input type="checkbox"/>
	Information and Cyber Security (ICS)	<input type="checkbox"/>	Civil Engineering (CE)	<input type="checkbox"/>