

Supplementary Course (EVA) at ZHAW School of Engineering

Title: Supply Chain Master Simulation

Short Code: rEVA_SCMMS

ECTS Credits	3
Profile	Business Engineering (BE)
Responsible Institute /Centre	Institute of Sustainable Development (INE)
Responsible lecturer and contact information	Stefan Dingerkus (stefan.dingerkus@zhaw.ch) Katharina Luban (katharina.luban@ost.ch)
Type and duration of examinations	<p>a) Pre-Reading one of the below mentioned books</p> <p>b) Participation in the 2-day simulation game on site at the campus in Rapperswil</p> <p>c) Performance record in the form of a reflection report</p> <ul style="list-style-type: none"> • Content: Reflection of the seminar in comparison to one of the two books. • Team dynamics: How was your collaboration? How did the decision process influence the results? • Reflection on knowledge transfer in comparison with previous learning at work and within studies
Start date and duration	Semester: Spring Duration: 2 Days Block Course Detail: Spring Semester (March)
Location	UAS OST Rapperswil
Course type	Block Seminar <ul style="list-style-type: none"> • Contact hours: 14 (hrs) • Guided self-study: 2 (hrs) • Independent self-study: 74 (hrs)
Language of instruction	English
Short description (max. 300 characters)	<p>In a two-day simulation reflecting processes of procurement, production and sales, participants learn about the interaction between lead times and inventory levels in an industrial value chain. Effects on delivery performance and cost will become transparent. In addition, the participants experience the relevance of external and internal information flows and their effects on business success.</p> <p>Specific Supply Chain topics covered in this course include:</p> <ul style="list-style-type: none"> • Supplier (Quality) Management • Replenishment and Delivery Concepts such as Kanban, JIT, VMI • Lot size, order management, production planning

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	<ul style="list-style-type: none"> • Transport system and capacity • Inventory planning, stock levels 			
Contents and Learning Objectives	<p>The approach of Action Learning balances academic learning (Theory) with hands-on practical work (Practice). In consequence, the course consists of a haptic simulation game as well as accompanying theory inputs and exercises.</p> <p>Knowledge-transfer focuses on experiencing the supply chain management approach through process flows. Participants learn and practice how improvement processes are organized in companies. Ideas are implemented directly in the simulation and resulting effects on the logistical and business performance will be tracked by various key figures.</p> <p>Intermediate presentations and reflections deepen the Lean Logistics approach methodically and illuminate specific aspects of the simulation in situ. During intensive discussion rounds, the participants learn to identify "waste" practically and to develop efficiency-enhancing measures in the sense of "lean processes".</p>			
Prerequisites	<ul style="list-style-type: none"> - Interest in Supply Chain Management and Logistics - Pre-Reading one of the below mentioned books 			
Literature	<ul style="list-style-type: none"> • Eliyahu Goldratt: The Goal – A Process of Ongoing Improvement • Martin Christopher: Supply Chain Management 			
Special requirements	Partly self-financing by participating students			
Offer for profiles	Aviation (Avi)	<input checked="" type="checkbox"/>	Business Engineering (BE)	<input checked="" type="checkbox"/>
	Computer Science (CS)	<input checked="" type="checkbox"/>	Data Science (DS)	<input checked="" type="checkbox"/>
	Electrical Engineering (EIE)	<input checked="" type="checkbox"/>	Energy & Environment (EnEn)	<input checked="" type="checkbox"/>
	Mechanical Engineering (ME)	<input checked="" type="checkbox"/>	Mechatronics & Automation (MA)	<input checked="" type="checkbox"/>
	Medical Engineering (Med)	<input checked="" type="checkbox"/>	Photonics and Laser Engineering (PHO)	<input checked="" type="checkbox"/>
	Cyber and Information Security (CIS)	<input checked="" type="checkbox"/>	Civil Engineering (CE)	<input checked="" type="checkbox"/>