

2019.HS

Module Name: Introduction to the Energy Sector			
Module Code	w.BA.XX.2GEW.XX		
Module Description	This module enables students to develop an in-depth understanding of the current challenges of the energy industry from the perspective of different players and institutions (energy companies, consumers, and policy-makers). The students are able to explain the mechanisms and functions of the current and future energy markets as well as other relevant markets (especially CO2). They understand the effects and the advantages and disadvantages of promotion mechanisms such as the compensatory feed-in remuneration scheme (KEV) or instruments for the promotion of energy efficiency. They use appropriate concepts (for example, business models, stakeholder analysis, scenario analysis) to analyze and discuss the opportunities and risks of new technological developments, societal changes, and economic needs in order to develop specific solutions for specific players in the energy system.		
Program and Specialization	<ul style="list-style-type: none"> § Business Administration - Accounting, Controlling, Auditing § Business Administration - Banking and Finance § Business Administration - Banking and Finance (FLEX) § Business Administration - Banking and Finance (PiE) § Business Administration - Economics and Politics § Business Administration - General Management § Business Administration - Risk and Insurance § Business Law 		
Legal Framework	Academic Regulations BSc dated 29.01.2009, Appendix to the Academic Regulations for the degree programs in Business Administration, Business Information Technology, and Business Law, first adopted on 12.05.2009		
Module Category	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Module Type: Compulsory Elective</td> <td style="width: 50%;">Program Phase: Main Study Period</td> </tr> </table>	Module Type: Compulsory Elective	Program Phase: Main Study Period
Module Type: Compulsory Elective	Program Phase: Main Study Period		
ECTS	3		
Organizational Unit	W Center Innov. und Entrepreneurship LtG		
Module Coordinator	Yann Blumer (blue)		
Deputy Module Coordinator	Christian Winzer (winc)		
Prerequisite Knowledge	- none		
Contribution to Program Learning Goals (Affected by Module)	<ul style="list-style-type: none"> § Professional Competence § Methodological Competence § Social Competence § Self-Competence 		
Contribution to Program Learning Objectives	<ul style="list-style-type: none"> Professional Competence <ul style="list-style-type: none"> § Knowing and Understanding Content of Theoretical and Practical Relevance § Apply, Analyze, and Synthesize Content of Theoretical and Practical Relevance § Evaluate Content of Theoretical and Practical Relevance Methodological Competence <ul style="list-style-type: none"> § Problem-Solving & Critical Thinking § Scientific Methodology § Work Methods, Techniques, and Procedures § Information Literacy § Creativity & Innovation Social Competence <ul style="list-style-type: none"> § Written Communication § Oral Communication § Teamwork & Conflict Management § Intercultural Insight & Ability to Change Perspective Self-Competence <ul style="list-style-type: none"> § Self-Management & Self-Reflection § Ethical & Social Responsibility § Learning & Change 		
Module Learning Objectives	<p>Students...</p> <ul style="list-style-type: none"> § explain the functions, structure, and value creation logic of the Swiss electricity market and the influence of neighboring countries § explain the political and economic background of climate and energy policy instruments in Switzerland and Europe § understand and evaluate challenges in the energy sector from the perspective of various players and stakeholder groups (business, society, environment, policy-makers) 		

	§ analyze scenarios for the future development of energy markets and evaluate their opportunities and risks from the perspective of various stakeholder groups § understand and compare different business models of energy companies and the role of disruptive technologies in the transformation of the energy system § develop a readiness to explore issues of energy policy and the energy business in more detail and mostly autonomously § use the correct jargon and terminology to comment on current measures and challenges of energy policy and the energy business § evaluate current events, trends, and developments in the political, technological, and economic environment in terms of their effects on markets and players in the energy sector		
Module Content	§ Part 1) Foundations of the energy sector. Students are provided with a broad overview of how the sector is organized, the roles of its players, and the various energy technologies along the value chains of the energy sector (production, networks, trade, services). § Part 2) Energy markets: Students are given an insight into the structure and mechanisms of the key current and potential future national and international energy markets (electricity market, capacity market, system services, etc.), as well as the relevant markets of the energy sector (in particular CO ₂) or promotion instruments such as the compensatory feed-in remuneration scheme (KEV). § Part 3) Future of the energy sector: In the final part of the module, students analyze current trends in the energy sector. They focus, on the one hand, on energy scenarios, and, on the other hand, on the role of disruptive technologies, new business models, and players in the transformation of the energy system.		
Links to other modules	The content of this module is linked to the following modules: w.BA.XX.2EEP.XX w.BA.XX.2EnR.XX		
Methods of Instruction	§ Lecture § Interactive Instruction § Problem-Oriented Teaching § Literature Review	Social Settings Used: § Individual Work § Pair Work	
Digital Resources	Reader		
Type of Instruction	Classroom Instruction	Guided Self-Study	Autonomous Self-Study
	Large Class	-	-
	Small Class	28 h	30 h
	Group Instruction	-	-
	Practical Work	-	-
	Seminar	-	-
	Total	28 h	30 h
			32 h
Performance Assessment			
	End-of-module exam	Form	Length (min.)
	Oral exam		20
	Permitted Resources	Permitted resources to be communicated.	
	Others	Assessment	Length (min.)
	Written Assignment	Grade	-
			40,00 %
Classroom Attendance Requirement	- none		
Language of Instruction/Examination	German		
Compulsory Reading	§ - to be made available on Moodle		
Recommended Reading	§ Servatius, H., Schneidewind, U. & Rohlfing, D. (2012). Smart Energy - Wandel zu einem nachhaltigen Energiesystem. Heidelberg: Springer. ISBN 978-3-642-21819-4. § Abegg, A., Hettich, P., Heselhaus, S. & Reich, J. (2017). Schriften zum Energiericht: Strommarkt 2023. Zürich: DIKE. ISBN 978-3-03751-945-5. § Sioshansi, F. (2017). Innovation and Disruption at the Grid's Edge - How distributed energy resources are disrupting the utility business model. 1st edition. Academic Press. ISBN 9780128117583.		
Comments	-		