

A: Brückenkurs/Preparatory Course in Energy Economics

Studiengang:	M. Eng. Energie- und Umweltmanagement / M. Eng. Energy and Environmental Management
Modulbezeichnung:	Brückenkurs/Preparatory Course in Energy Economics
ggf. Kürzel:	-
ggf. Untertitel:	Foundations of Energy Economics and Energy Management
ggf. Lehrveranstaltungen:	-
Semester:	Before the 1st semester
Modulverantwortliche(r):	Prof. Dr. Bernd Möller
Dozent(in):	Prof. Dr. Bernd Möller
Sprache:	English
Zuordnung zum Curriculum:	M.Eng. Energie- und Umweltmanagement for ‚Developing Countries‘, pre-course, Compulsory Module
Lehrform / SWS:	Seminar with max. 25 students
Arbeitsaufwand:	4 SWS
Kreditpunkte:	5 ECTS
Voraussetzungen:	none
Lernziele / Kompetenzen:	<p>The course introduces students to the field of Energy Economics and Energy Management as a qualification for the M.Eng. Energy and Environmental Management course.</p> <p>The main aims of the course are to gain basic insights into the field of energy economics and energy markets, in the first instance, neo-classical economics. Second, the students will be introduced to natural resource economics and touch on the associated environmental economics. Lastly, the course discusses the limitations of the neo-classical economic model to deal with energy and the environment and provides a brief introduction into alternative economic models, such as ecological economics.</p>
Inhalt:	<p>The course will focus on an international perspective of energy production and use and discusses academic and political contents.</p> <p>The economics of energy production and use within the concept of sustainable development form a major part of this course. It touches on possible strategies and methodologies to a more sustainable energy future.</p> <p>The following topics will be covered:</p> <ul style="list-style-type: none"> • Introduction to energy markets • Coal, oil and gas and electricity markets • Introduction to Resource Economics • Introduction to Ecological/Biophysical Economics • Energy risks • Energy security • Energy and sustainable development • Role of government in energy economics • Innovation in energy management • Concepts of sustainability • Law of entropy and energy • Energy and climate change

	<ul style="list-style-type: none"> • 1-2 short excursions to local companies (e.g. Stadtwerke Flensburg, WSTECH GmbH, Danfoss Silicon Power, artefact Glücksburg, TBZ Flensburg)
Studien- Prüfungsleistungen:	Essay (10 pages) on energy economic issues and proposed management practices in the home countries of students.
Literatur:	<ul style="list-style-type: none"> • Tietenberg, T. and Lewis, L. (2009) Environmental and Natural Resource Economics, Pearson International Edition, Eighth Edition, Pearson Addison Wesley, Boston, ISBN 13: 978-0-321-56046-9 • Dahl, C. A. (2004) International Energy Markets: Understanding Pricing, Policies, and Profits, Penn Well Corporation, USA, ISBN: 978-0-87814-799-1 • Deutscher, G. (2008) The Entropy Crisis, World Scientific Publishing Co. Pty. Ltd. Singapore, ISBN: 13 978-981-277-968-7