

E384 Economics of Renewable Energy

B.Sc.

ECTS-Credits	6
Workload Hours	Contact Hours: 45 Independent Study: 135
Duration	1 Semester
Cycle	WS
Recommended for this semester or higher	4
Language	English
Course Type/ Learning Methods	Lecture (2 SWS) and tutorial (1 SWS) / Oral participation, independent study, literature study
Course Work	--
Method of Assessment	Written exam (60 minutes) - 6 ECTS Credits / 100% of module grade
Prerequisite for	---
Prerequisites	---
Person Responsible	Dr. Matthias Ritter

This module can be taken as part of the following programs/areas:

<i>International Economics</i>	Focus Area Data Science, Focus Area Elective Studies
<i>Double Degree</i>	---
<i>Triple Degree</i>	---
<i>International Business Administration</i>	Focus Area Managerial Accounting & Organisation, Focus Area Data Science, Focus Area Elective Studies
<i>Economics and Business Administration</i>	
<i>Economics and Business Administration, Type Economics</i>	Focus Area Data Science, Focus Area Elective Studies
<i>Economics and Business Administration, Type Business Administration</i>	Focus Area Data Science, Focus Area Managerial Accounting & Organisation, Focus Area Elective Studies
<i>Economics and Business Administration, Type Economics and Business Administration</i>	Focus Area Managerial Accounting & Organisation, Focus Area Data Science, Focus Area Elective Studies
<i>Minor in Economics</i>	---
<i>Minor in Business Administration</i>	---
<i>B.Ed. Wirtschaftswissenschaft</i>	---

Content

This module deals with the economics of renewable energy, covering key concepts of energy economics with a special focus on renewable energy sources. It will describe the relationship between renewable energy and traditional energy sources, study the economic principles underlying renewable energy markets, and explore different economic concepts and tools used to analyze the renewable energy sector. In addition, it will introduce students to case studies and practical examples of how renewable energy economics is applied in real-world scenarios.

The following topics are covered:

- Energy demand
- Renewable energy sources
- Renewable energy costs and support
- Investments in renewable energy
- Energy pricing and market structures
- Electricity markets
- Climate policy and carbon markets
- Machine learning in energy economics

Objectives

Students will understand the economic principles specific to renewable energy and learn to apply analytical tools to evaluate renewable energy projects. They will be able to assess the impact of market conditions and policies on the sector and develop strategies for effective decision-making in the renewable energy landscape.