

COURSE DETAIL

ENERGY REVOLUTION

Country

Germany

Host Institution

Technical University Berlin

Program(s)

Technical University Summer

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Environmental Studies Economics

UCEAP Course Number

103

UCEAP Course Suffix**UCEAP Official Title**

ENERGY REVOLUTION

UCEAP Transcript Title

ENERGY REVOLUTION

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

There is no dispute that an average global temperature rise of more than 2°C above the pre-industrial levels would lead to severe environmental and economic costs for society. A major challenge in tackling global warming is the reduction of greenhouse gas emissions, especially in the electricity sector. The “Energiewende” in Germany proves that a decarbonization of the electricity sector in combination with a shutdown of all nuclear capacities is (technically) manageable and economically viable. As a result, learning effects and reduced investment costs enable a market-driven worldwide roll-out of new technologies. In 2014, already 144 countries set renewable targets. The resulting new global renewable generation installations in 2014 consequently outnumbered the combined new fossil and nuclear capacities. This course provides a general understanding of the economic, engineering, and political aspects of energy transitions. Additional insight is gained by guest lectures from practitioners and field excursions.

Language(s) of Instruction

English

Host Institution Course Number

Host Institution Course Title

ENERGY REVOLUTION

Host Institution Course Details

Host Institution Campus

TUBS

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed

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