

COURSE DETAIL

SUSTAINABLE ENERGY

Country

United Kingdom - England

Host Institution

University of London, Royal Holloway

Program(s)

University of London, Royal Holloway

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Earth & Space Sciences

UCEAP Course Number

120

UCEAP Course Suffix**UCEAP Official Title**

SUSTAINABLE ENERGY

UCEAP Transcript Title

SUSTAINABLE ENERGY

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

The course introduces the students to the concept of sustainable energy and the main renewable energy resources. Those covered in the course are geothermal, hydro, wind, solar, and marine energy, the emphasis being on geothermal energy. The current and potential use of these energy resources for producing electricity and space heating are discussed, with application to the UK where appropriate. The focus is on current and future use of these resources, as well as on quantitative aspects and understanding some of the relevant physics. The module covers the basic concepts of energy science, including conservation of energy, basic thermodynamic concepts, energy efficiency, and related topics presented at an elementary (easily understood) level. An emphasis is on the ideal combination between geothermal energy (which is a steady source – always there) and other but non-steady renewable sources (e.g., solar and wind energy).

Language(s) of Instruction

English

Host Institution Course Number

GL2740

Host Institution Course Title

SUSTAINABLE ENERGY

Host Institution Course Details

https://ssb-prod.ec.royalholloway.ac.uk/PROD/bwckctlg.p_disp_catalog_syllabus?c...

Host Institution Campus

Royal Holloway

Host Institution Faculty

Host Institution Degree

Host Institution Department

Earth Sciences

Course Last Reviewed

2023-2024

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