

COURSE DETAIL

INTRODUCTION TO ENERGY AND MATERIAL ANALYSIS

Country

Netherlands

Host Institution

Utrecht University

Program(s)

Utrecht University

UCEAP Course Level

Lower Division

UCEAP Subject Area(s)

Environmental Studies

UCEAP Course Number

51

UCEAP Course Suffix**UCEAP Official Title**

INTRODUCTION TO ENERGY AND MATERIAL ANALYSIS

UCEAP Transcript Title

INTRO ENGY&MAT ANL

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

The transition toward a carbon-neutral and circular economy demands concerted efforts across all levels and sectors of the economy. At micro and meso levels, companies, organizations, and sectors are therefore increasingly asked to make choices related to sustainable development. Yet, changing business operations is not always straightforward. It may necessitate significant transformations and innovations in existing processes. Multiple tools have been developed to identifying opportunities for energy conservation, improving resource utilization, and implementing sustainable practices. In the "Energy and Material Analysis" course, students are introduced to the most relevant tools for energy and material analysis. The primary focus of this course lies in investigating the impacts of innovations implemented at the micro and meso levels, such as hospitals, factory complexes, and neighborhoods, specifically in terms of energy and material effects. This course focuses on developing basic energy and material analysis that can then be applied to interdisciplinary innovation issues, e.g. in IP1 and IP2 courses.

Language(s) of Instruction

English

Host Institution Course Number

GEO1-2279

Host Institution Course Title

INTRODUCTION TO ENERGY AND MATERIAL ANALYSIS

Host Institution Course Details

<https://osiris-student.uu.nl/onderwijscatalogus/extern/cursus>

Host Institution Campus

Utrecht University

Host Institution Faculty

Faculty of Geosciences

Host Institution Degree
Host Institution Department
Course Last Reviewed 2025-2026

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