Renewable Energy Systems

NB1812 English course information

GENERAL

Official source section General

Official title	Renewable Energy Systems
Course code	NB1812
Study area	Natural Sciences
Credits	5 EC
Indicative price	From EUR 410

Course schedule

You may start this course at any time. Consult the annual timetable to see where it can be placed within your study programme.

Course content

A sound understanding of energy systems is essential for interpreting developments in energy supply and considering future options. This English-language course introduces the analysis of energy systems and energy technologies. It considers both systems that supply energy and systems that determine energy demand.

The course covers methods and tools for analysing energy systems, including energy in a social context; energy services and demand; energy production and conversion; energy markets; energy analysis and management; exergy analysis; energy chains; energy life-cycle assessment; measurements of energy efficiency and energy intensity; energy technologies; energy scenarios; and policies for efficient energy use and renewable energy.

The course is taught in English and is assessed through a number of assignments.

Learning objectives

After completing the course, you will be able to:

- explain which systems supply energy and which systems determine energy demand
- apply methods and tools for analysing energy systems, including energy management, energy life-cycle assessment, indicators of energy efficiency and intensity, energy-technology analysis, energy-scenario analysis, and energy-policy analysis

SIGNING UP

Official source section Signing Up

Eligibility

Anyone may register.

Prior knowledge

Numeracy and physics at Dutch pre-university education level are necessary to complete the course within the standard study load. You also need sufficient reading knowledge of English at the end-of-secondary-school level.

GUIDANCE

Official source section Guidance

Guidance format

You may start this course at any time. The course page in the online learning environment provides standard guidance and allows you to ask the lecturer questions about the subject matter.

Teaching staff

Dr Leonardo Rydin Gorjão, examiner, and Professor Dr Ir Joop de Kraker, examiner.

EXAM

Official source section Exam

Assessment method

Digital group examination with open questions and an assignment.

Registration for the examination

You must register for an examination yourself and do so before the applicable deadline.

Assessment dates

- Digital group examination: 9 November 2026 at 14:00
- Digital group examination: 4 February 2027 at 19:00
- Digital group examination: 20 April 2027 at 14:00
- Digital group examination: 6 July 2027 at 19:00
- Assignment: by arrangement

Permitted examination resources

- an unannotated Binas tables book
- an unannotated copy of Introduction to Energy Analysis, third edition, by Blok and Nieuwlaar

- the online dictionary
- the online mathematical calculator
- the online dictionary provided for ANS

MORE INFO

Official source section More Info

Course materials

The materials consist of a textbook and detailed feedback on all practice exercises in the online learning environment.

Online learning environment

OU recommends beginning the course on its page in the online learning environment at www.ou.nl/mijnOU. This page contains the latest course information, explanations of study tasks, sample examinations, recorded lectures where available, and a forum where students can ask questions and read answers.