Hanze

## Minor

**Qualification awarded**
-

**Length of the programme**
6 months

**ECTS credits**
30

**Level of qualification**
Bachelor

**Mode**
Full-time

**Language**
English

**School**
Institute of Engineering

**Locations**
Groningen

# Minor Energy Efficiency in the Process Industry

**Profile of the programme**

This program is offered in semester 1, starting September
In the minor ‘Energy Efficiency in the Process Industry' the focus is on saving energy in the process industry by implementing available technologies and equipment in an existing installation. Saving energy will often coincide with other objectives such as rationalizing maintenance, increasing production capacity and improving compliance.

This minor contains several courses which will provide students with the required knowledge concerning exergy and pinch analysis, utility systems and process data analysis, in order to be able to complete the case that is subject of the project in this minor. This 17 EC project calls for the skills to set up a project-organization and the deployment of knowledge that is gained during the lectures. Final result of this project is a motivated investment proposal, based on process data, energy savings results and return on investments. Besides that, students will present a plan that contains all the required components for the possible implementation of the plan. Students will work together in small groups during the project.

**Learning outcomes**

Students will learn how to discover, quantify and prioritize options for saving energy and learn to design compliant adaptations to the existing installation and control system that best serves the companies

## Programme

| **Minor Energy Efficiency in the Process Industry** | **credits** |
|---|---|
| Energy Efficiency | 30 |
| ▫ WBVH19EPI - Exergy & Process Integration | *4* |
| ▫ WBVH18PDA - Process Data Analysis | *4* |
| ▫ WBVH19US - Utility Systems | *5* |
| ▫ WBVH19IP - Industry Project | *17* |

share your talent. move the world.

Although every effort has been taken to ensure the accuracy of the information in the ECTS Course Catalogue, we cannot guarantee that the content and the information contained in it is always up-to-date, complete or true. Accordingly, no rights can be derived from the contents of the catalogue.