

CONTACT US

If you are interested in this study programme and you would like more information about studying at Avans, contact our International Office:
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For specific information about the programme and the courses:
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EXCHANGE PROGRAMME BIOREFINERY TECHNOLOGY

INTRODUCTION

A biorefinery is a facility that integrates biomass conversion processes and separation equipment for the sustainable co-production of food, feed, energy, fuels and chemicals.

With this integrated approach the biomass, as source for renewable energy and bio-based products, is used to its full potential. Are you a chemical engineering student? Do you have affinity with sustainable processes? Join this exchange programme to learn more about the challenges associated to biorefinery developments and implementation.

THE PROGRAMME

The body of the exchange

programme Biorefinery Technology consists of a group project with three to four students. In this group project, you work for a client (company or governmental organization) partially within Avans, partly at the company. Suitable project assignments are related to the development, design or optimization of a (partial) process on lab-, pilot- or production scale.

The biobased / sustainability aspect can relate to:

- raw material,
- process intensification,
- scaling and application of new technology in production,
- economic analysis and optimization,
- product design requirements.

Examples of recent research projects performed within the exchange programme include: feasibility study based on literature research and / or experiments (lab or pilot scale) for pyrolysis oil, scaling up bio-ethanol production from secondary streams

(from lab- to pilot scale), improvement bio-charcoal production on commercial scale.

Besides the project, you will follow several courses and a training focusing on the upscaling steps from lab to production scale in Biobased projects.

PRACTICAL INFORMATION

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|-----------------------------|---|
| Level | Bachelor |
| Language | This is an English-language programme |
| Student population | This exchange programme attracts Chemical Engineering students from all over the world. Candidates must have basic knowledge in the field of: <ul style="list-style-type: none"> · Laboratory skills, biochemistry, biotechnology, and enzymology. · Principles of unit operations (mass and energy balances, separation techniques) and reactor engineering |
| Programme start date | Beginning of February |
| Duration | <i>One semester; 30 ECTS</i> <ul style="list-style-type: none"> · Project Biorefinery technology (18 ECS) · Course Downstream processing (3 ECS) · Practicum Upscaling biomass conversion (2 ECS) · Course Projectmanagement (1 ECS) · Course Mass transfer (2 ECS) · Course Cost engineering (2 ECS) · Elective (2 ECS) |
| Tuition fees | <i>(Erasmus) exchange students</i> As an exchange student you do not need to pay tuition fees to Avans University of Applied Sciences, but you will continue to pay tuition fees to your home institution. <i>Other students</i> If your university is not a partner of Avans University of Applied Sciences, you can come as a regular paying student. For more details contact the Avans International Office on +31(0)88 - 525 80 01 or internationaloffice@avans.nl. |
| Location | Breda, the Netherlands. |

ADMISSION

If your university is an exchange partner of Avans University of Applied Sciences you can apply for this exchange programme via a study semester at the International Office of your own university. The International Office at your university will know if there is an exchange agreement in place with Avans. Once you have been nominated for this programme by your university you can register for it via our online portal www.avans.nl/international.

If your university is not an exchange partner, please contact the International Office for more information (internationaloffice@avans.nl).

ENGLISH LANGUAGE REQUIREMENTS

To maintain high standards of English language competencies in our international classrooms and in compliance with Dutch national guidelines, Avans has set minimum language requirements for foreign degree-seeking students. For this exchange programme foreign students must have English language skills equivalent to an academic IELTS test with an overall band score of at least 6.0.

You are exempted from this minimum language requirement if you have obtained a diploma of secondary education with English in a country listed in the diploma list, as published



in the Admission subsection of our website (www.avans.nl/international). Or if your prior education has officially been taught in the English language.

If you do not meet the language requirements, you must take a language course first and provide evidence of your language competencies in the form of an official certificate. If you are unsure whether you meet the English language skills requirements, please contact us by e-mail (internationaloffice@avans.nl)