

 Targeted job

DTU Global Top Student Programme - Internship in Sustainable Biomanufacturing Data and Feedstock Analysis



DTU Biotechnology Research Institute for the Green Transition

Government/ Charity/ Public Institution/ Other

Engineering

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Contract

Internship 4 to 9 months

Location

Kongens Lyngby, Region Hovedstaden (Denmark)

Start date

January 2027

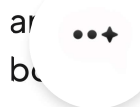
Salary

Information not provided

Remote working

No remote working

The Technical University of Denmark (DTU) is one of Europe's leading engineering universities, known for excellence in research, education, innovation, and scientific advice. We work closely with industry and international partners to apply science and technology for societal benefit in an interdisciplinary and inclusive environment.

This internship is offered through DTU's Global Top Student Programme. Only top bachelor students nominated by their home university are eligible to apply. As participants, you will join a  our academic environment where theory meets practice, and students develop both professionally and personally.

Job Description

BRIGHT is part of DTU and focuses on developing research-based, innovative, transformative biotechnology solutions to catalyse the green transition. The department works at the forefront of biotechnology, combining research, education, and collaboration with external partners. The department is characterized by a collaborative culture, high academic standards, and a strong focus on innovation and real-world impact.

You will join the Sustainable Innovation Office within the department. The team consists of researchers and students working closely together, continually assessing and quantifying the extent to which the Centre's research and innovations output contribute to bio-based production and suggesting strategies for maximizing economic and environmental performance. One of our key objectives is to “Develop a curated and visualized inventory of regional biomass and alternative feedstocks for biomanufacturing, focusing on Europe and Latin America.”

As an intern, you will work closely with experienced colleagues, including PhD students and professors from BRIGHT and DTU Bioengineering, who will support your learning and development, while also giving you the opportunity to contribute your own ideas and skills. We are seeking two students for the following projects:

Project 1: Feedstock Data Collection and Curation

Project 2: Data Visualization and Feedstock Landscape Analysis

Your tasks will include (but are not limited to):

- Conduct a comprehensive literature review of scientific publications, industrial reports, and publicly available databases.
- Identify and characterize feedstocks relevant to sustainable biomanufacturing. Organize, clean, and perform quality control of feedstock data collected through literature reviews and database development.
- Collect and curate data on: Agricultural residues, food-processing side streams, lignocellulosic biomass, algae, and emerging feedstocks (CO₂, methane, methanol, etc.)
- Harmonize data from multiple sources into a standardized format. Develop a structured feedstock database to support subsequent modelling and sustainability assessment activities.
- Support the integration of data generated within the FoundBio and FrameBio projects, working with PhD students.
- Develop data visualizations to communicate feedstock availability and characteristics. Create maps illustrating the geographical distribution of feedstocks across Europe and Latin America.
- Design dashboards and graphical summaries to support interactive exploration of feedstock data. Identify regional resource hotspots, underutilized feedstocks, and

existing data gaps.

- Contribute to communication materials and visual tools that support future techno-economic, environmental, and resource assessment activities within the FoundBio and FrameBio project frameworks.
- Participating in team meetings and project discussions
- Collaborating with internal and external stakeholders

The exact tasks and responsibilities will be adjusted based on your background, interests, and the needs of the team.

Qualifications

We are looking for a motivated and curious candidate who:

- Is currently enrolled in the final year of a Bachelor's degree programme
- Has a background in Chemical Engineering, Biotechnology, Data Science, Computer Science, or a related field.
- Has the ability to work independently while collaborating effectively within an interdisciplinary research team.
- Has relevant academic or practical experience (coursework, projects, student jobs, etc.). Skills in data analysis and visualization (e.g., Python, R, Excel, Power BI, Tableau, or similar tools) are desirable. Experience with AI-integrated workflows is an advantage.
- Has a strong interest in sustainable biomanufacturing, biotechnology, and bio-based production systems.
- Is analytical, structured, and able to work independently
- Has good collaboration and communication skills
- Has demonstrated proficiency in written and spoken English, documented by one of the following English language tests. Minimum required scores are:
 - Duolingo English Test (overall: 120)
 - TOEFL (old scale overall: 92, new scale overall: 4.5)
 - IELTS Academic (overall: 6.5)
 - CAE (overall: 180)

You can read more about the language test requirements [here](#).

What we offer

DTU offers a prestigious internship at the Lyngby Campus in Greater Copenhagen, providing hands-on research experience in an international academic environment. Interns collaborate with leading researchers on advanced projects while developing their professional skills in a supportive setting.

Living in Greater Copenhagen also offers international students a high quality of life, a strong academic community, and a vibrant city experience in Denmark's capital region.

As part of the internship, the student will also become a member of DTU's alumni community network, gaining access to a range of exclusive offers and support, including:

- Administrative and practical support – assistance with residence permits, housing, etc.
- Social and networking framework, including an introduction week, cultural activities, and semester events
- Parallel academic opportunities – coursework on the side

Practical information:

- Internship period: 25 January 2027 – 25 June 2027 (one semester) or until 18 December 2027 (two semesters)
- Working hours: 25–37 hours per week, either full-time or part-time depending on whether the student chooses to take courses alongside the internship.
- Location: DTU Lyngby Campus in the Greater Copenhagen area
- Compensation: this is an unpaid internship

You can read more about the department here: <https://bright.dtu.dk/> and here: <https://www.biosustain.dtu.dk/technologies/sustainable-innovations-office>

For useful information on the programme and student life at DTU, see [Global Top Student Programme](#) and [Student guide – DTU](#).

Application procedure

The application procedure consists of two steps.

Step 1: Nomination

In order to be considered for this programme, you must be nominated by your home university in the DTU Exchange Student system. Once you have been nominated, you must complete your nomination by uploading the following documents:

- Grade transcripts (in English) including an official description of the grading scale
- Documentation proving that you have passed one of the above English language tests

Step 2: Application

To apply, please open the link "Apply now", fill out the online application form, and attach all your materials in English as PDF files. The files must include:

- A CV including information about your education, relevant research experience, language skills, and other skills relevant to the internship position
- A motivated cover letter (max. 1 page)

Your complete online application must be submitted no later than 15 September 2026 (23:59 Danish time).

We look forward to receiving your application.

DTU – For the benefit of society since 1829

DTU is one of Europe's leading elite technical universities. Through research and education at an international top level, we create solutions to the major societal challenges of our time and help secure Europe's global leadership in sustainable technological development. Since Hans Christian Ørsted founded DTU almost 200 years ago, our mission has remained the same: We develop and create value through the natural and technical sciences for the benefit of society. DTU has 13,800 students, 1,600 PhD students, and 6,500 employees. We work in an international environment and have an inclusive, stimulating, and informal work culture. DTU has campuses in all parts of Denmark and in Greenland and collaborates with the best universities around the world.

Application deadline

16 September 2026

Study level

Bachelor level or equivalent

Job Category

Engineering

Related tags

