Move mountains

With your studies in
Circular Engineering

FIELD OF STUDY: PROCESSES

True progress combines technology and the environment.

Dora Bokun
Student
Circular Engineering

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Online pre-registration
for admission:

Technical University
of **Leoben**

Technical University
of **Leoben**

Move mountains

FIELD OF STUDY: PROCESSES

Circular Engineering

BACHELOR'S & MASTER'S PROGRAMMES

Circular Engineering

Circular engineering is a promise for the future.

Univ.-Prof. Dipl.-Ing. Dr.techn. Thomas Prohaska
Head of the Department of General and Analytical Chemistry, Vice-Rector for Teaching and International Affairs

Do you want to help shape solutions to global challenges?

As a circular engineer, you can work anywhere along the value chain, from ore to function-oriented materials, optimal products and back to recycling. Your decisions will help us use our resources in a sustainable and environmentally friendly way. Thus paving the way for a global circular economy to be a key figure in international research, politics or business. You can pursue a career as a sustainability consultant, quality and environmental manager, or process engineer just to name a few.

Start your studies now at: unileoben.ac.at/en/studying/bachelors-programmes/processes/circular-engineering-en/

CURRICULUM FOR BSC STUDENTS

Semester 1 and 2 – First Joint Year of Study (60 ECTS)

Introductory Module	Fundamentals of Engineering
■ Transferable Skills ■ Introduction to STEM (science, technology, engineering, mathematics)	■ Chemistry ■ Mathematics ■ Physics ■ Engineering Mechanics
Digital Competences and Statistics Fundamentals	**Introduction to Study Programme**
■ Introduction to Data Modeling ■ Algorithms and Programming ■ Statistics	■ Bacc Fundamentals ■ Do-it Lab Circular Economy ■ Do-it Lab Circular Engineering ■ Elective Bacc Fundamentals

Compulsory Courses, Semester 3 to 6 (120 ECTS)

- Module 1: Engineering Disciplines
- Module 2: Management Principles
- Module 3: Sustainable Development
- Module 4: Process Engineering
- Module 5: Materials
- Module 6: Primary and Secondary Raw Materials
- Do-it Lab Basics of Setting up a Business
- Free Electives
- Bachelor's Thesis Seminar

Semester 7 (30 ECTS)

Internship

Misprints and typographical errors excepted. Changes to the curriculum prior to the start of the programme are expressly reserved.

BACHELOR'S PROGRAMME

How do innovative solutions drive the circular economy?

In the Bachelor's programme in **Circular Engineering**, you will acquire theoretical and practical knowledge in the fields of technology, natural sciences, ecology and economics. You will learn to understand the interrelationships between the economy, the environment and society in order to optimise production and material flow systems. In doing so, you will explore circularity in material flows: from primary raw materials and processes to the finished product. You will also learn how to plan and implement the production of secondary raw materials from end-of-life products using innovative recycling processes. To do this, you will combine your interdisciplinary skills to take a holistic view of global challenges and create innovations for a sustainable circular economy.

MASTER'S PROGRAMME

Ready to deepen your knowledge?

In the Master's programme, you will acquire technical and scientific expertise covering the entire value creation cycle. This includes know-how on resource efficiency, greenhouse gas reduction and the development of sustainable and recyclable products.

You can choose from the following elective modules:
- Business Management and Logistics
- Mining
- Minerals
- Polymers
- Materials Science
- Metallurgy
- Plant Design and Optimization
- Digital Waste Treatment and Analytics

Detailed study plans for the degree programmes at the Technical University of Leoben can be found at: **unileoben.ac.at/studium/**