JLU NEUE WEGE. SEIT 1607.

CONTACT AND ADVICE

 STUDENT HOTLINE CALL JUSTUS

 O Moto Fr 8:30-12:00, 13:00-17:00 | (+49 641 99 16400)

CENTRAL STUDENT ADVISORY SERVICE

Goethestr. 58, 35390 Giessen | ⊠ zsb@uni-giessen.de t+496419916223(viaCallJustus) For consultation hours see homepage ⊃ www.uni-giessen.de/studium/zsb

INTERNATIONAL OFFICE

t +49 641 99 12143 | +49 641 99 12174
istudium-international@uni-giessen.de
> www.uni-giessen.de/international-pages

HEAD OF DEGREE PROGRAMME

Prof. Dr. Hermann A. Wegner
Institute of Organic Chemistry
Chemistry building, Heinrich-Buff-Ring 17, Room B 229
(+49 641 99 34330
⋈ hermann.a.wegner@org.chemie.uni-giessen.de

FACULTY 08 - BIOLOGY AND CHEMISTRY

www.uni-giessen.de/faculties/f08



100% Naturpapier | Auflage: 250 | Stand: April 2024 Bilder: Außen, Elisa Monte-JLU; Innen, artur_luczka-UNSPLASH-Public Domain

APPLICATION

ADMISSION REQUIREMENTS: B. SC. DEGREE WITH AT LEAST 180 ECTS IN CHEMICAL SCIENCE

- 4 SEMESTERS 180 CREDIT POINTS (CP)
- WS START IN WINTER SEMESTER (OCTOBER)
- LANGUAGE REQUIREMENTS

Application deadline: June 15

JLU application portal:

www.uni-giessen.de/studium/bewerbung

All applicants with a foreign university entrance certificate or a foreign Bachelor's degree must submit their application via:

No tuition fees are charged for this study programme. However, students have to pay a semester contribution of approx. 300 EUR for administration and the semester ticket (includes ticket for public transportation in the state of Hesse).

For further information contact: Registrar's Office Goethestr. 58, 35390 Giessen Postal address: Postfach 11 14 40, 35359 Giessen ℓ +49 641 99 16400 (via Call Justus) ⊠ international.admission@admin.uni-giessen.de

 FURTHER INFORMATION
 www.unigiessen.de/de/studium/studienangebot/ master/sustainable-chemistry





MASTER OF SCIENCE (M.SC.)



Study programme taught in English



Chemistry research is essential for global, sustainable development, and there is a high demand for experts with the necessary chemical expertise, butwho also know the criteria and specifications of sustainability. In the international Master of Science programme Sustainable Chemistry you will learn to design chemical processes, products, and methods in a way such that they meet the requirements of sustainability. Thus, environmental and social aspects including resource consumption, energy efficiency, climate protection, health, and safety are considered regarding development and use of chemical products and processes.

WHAT MAKES US SPECIAL

The M.Sc. Sustainable Chemistry is offered by internationally renowned experts in various areas of sustainable chemistry (such as catalysis, green chemistry, recycling, sustainable materials for, e.g., battery applications) of the Justus Liebig University Giessen. The M.Sc. programme provides students with both, theoretical and practical in-depth knowledge of chemical concepts of synthesis, analysis, and evaluation from a sustainability perspective. Beside lectures and seminars, students will be involved early on in cutting edge research projects. On completion of the programme, graduates will be equipped with the following skill sets:

- Fundamentals of sustainability and sustainable chemistry,
- Advanced topics in inorganic, organic, and physical chemistry such as heavy metal-free synthesis and catalysis, photochemistry, electrochemistry,
- Circular economy for chemical processes,

• Chemical research in the context of sustainability. The Master's programme is taught entirely in English. Together with the University of Padua (Italy), the University of Ljubljana (Slovenia) and the University of Zagreb (Croatia) of the network "DigiChem - Creating a digital study environment for sustainable chemistry", it offers various opportunities for international exchange.

ADMISSION REQUIREMENTS

The M.Sc. Sustainable Chemistry aims at students broadly interested in chemistry with a keen interest in sustainability. The prerequisite is a B.Sc. degree with at least 180 ECTS points, whose profile corresponds to the "Recommendations of the GDCh Study Commission for Bachelor's Studies in Chemistry at Universities". In order to be admitted to the M.Sc. programme, applicants must also demonstrate very good English language skills (CEFR B2, TOEFL iBT score of 80, IELTSscore of 6.0).

COMPOSITION OF THE STUDY PROGRAMME

The two years long course starts in the first year with modules (comprising lectures, seminars, exercises) on the following topics:



These are complemented by elective modules, which students can choose according to their interests (Energy Materials, Sustainable Water Treatment, SustainableMaterials Chemistry etc.). Likewise, soft skills (e.g., Scientific Writing and Data Dissemination) and professional skills (Innovation Management for Natural Scientists) can be enhanced. The second year of the programme is entirely devoted to research work. Students are directly involved in the current research of the chemistry working groups. They learn about the latest developments in sustainable synthesis and materials development, right through to the recovery of critical resources. At the end of the programme, students complete a

CAREER OPTIONS

Master's thesis.

Graduates have a wide range of career options from industry to academia to public service in the fields of chemical research, development and evaluation in the context of sustainability. They may pursue roles in environmental regulations, environmental organisations, public authorities, politics, and education. In addition to the potential to make a positive impact on the environment and society, the programme offers national and global career opportunities due to its international focus. These are fostered through international and translational networks with partner universities and people from the field.

FURTHER INFORMATION

The Justus Liebig University ranks as one of the nation's top universities in life sciences and cultural studies. With around 26,500 students, 11 faculties, and 8 scientific centres, the university has truly developed an international profile and is prepared to meet any challenges that the future may bring. JLU Faculty of Biology and Chemistry is a vibrant faculty with 2,500 students and 38 professors and their academicstaff representing the whole range of subjects in chemistry and biology.