

Leiden Institute of Chemistry MSc programmes

MSc Chemistry

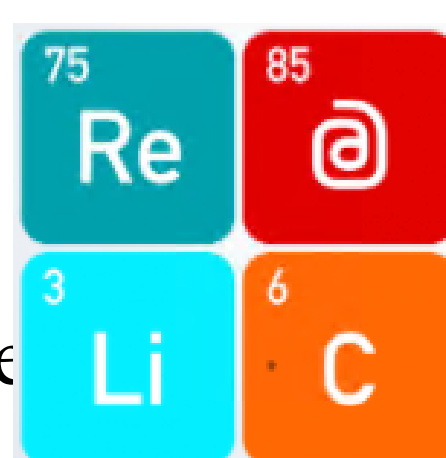
Research area

Researchers in the Leiden Institute of Chemistry take a fundamental approach in finding tailored solutions for complex societal problems in human health and environmental issues. The aim of this two-year MSc programme is to train you as an independent scientist and to develop the necessary skills and proficiency to advance your career. The MSc programme in Chemistry offers you access to cutting-edge chemical research.

The research is concentrated in two research areas:

Chemistry for Health: you will study fundamental biological and biomedical problems to understand physiological processes at the molecular level and to gather more knowledge on human health and illnesses.

Chemistry for Sustainability: you will focus on the development of new sources of sustainable energy as well as the development of means to decrease the demand for energy in e.g. industrial processes. More information about both areas can be found here: <https://edu.nl/mbvtu>



Why Chemistry at Leiden University?

- The programme offers flexibility and tailoring to meet your individual scientific interests and career aspirations.
- During your programme, you will be part of a multidisciplinary research team of internationally renowned researchers where you will conduct your MSc research training project.
- You will receive personal guidance from a mentor of choice, who is a member of one of our international and young research groups.

Programmes & Admission: <https://edu.nl/xtgpp>

- Students with a BSc degree in Molecular Science & Technology are admitted to the appropriate master program.
- All other students may apply for admission; the **Board of Admission** will base their decision on the expected study success. We welcome students from all over the world and every year a significant number of HBO students is admitted to the program. Check the entry requirements for HBO students here: <https://edu.nl/ehtgu>

Specialisations

The two-year MSc programme Chemistry offers four specialisations and comprises 120 EC. The table on the right gives an overview of the distribution of EC credits over the different components of the programme.

Research: work in one of the research themes to become an independent and creative scientist.

Business Studies: combine training in chemistry with learning about business and entrepreneurship.

Communication and Society: combine chemistry with various aspects of science communication.

Education: prepare for a career in teaching chemistry in secondary education.

Global Structure by Specialisation

	Research	Business	Communication	Education
Research Internship	60	30	30	30
Core courses	20	20	20	20
Academic & professional skills	10	10	10	10
Electives	30	20	20	0/30
Specialisation Components	-	40	40	60/30
Total	120	120	120	120

Core Courses of the Research Themes

Students have to choose four courses out of the core courses listed here, depending on their research area (Chemistry for Health or Chemistry for Sustainability).

Chemistry for Health	Chemistry for Sustainability
Chemical Biology	Computational Chemistry & Molecular Simulations
Computational Techniques in Chemical Biology	Spectroscopy on Chemical Reactions and Environments
Protein Structures for Drug Discovery	Density Functional Theory in Practice
Medicinal Chemistry & Drug Discovery	Electrochemistry
Modern Organic Chemistry	Surface Science for Heterogeneous Catalysis
Molecular Cell Biology	Photochemistry
Reactivity in Organic Chemistry	Photosynthesis & Bioenergy
Supramolecular Biomaterials	Solid State Chemistry

External projects @ companies or research institutes

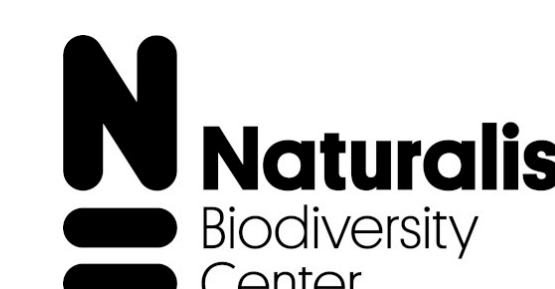
- Within the **research specialisation** it is possible to do an optional minor research project of 20 – 40 EC.



- Within the **business specialisation** it is mandatory to do a business internship of 20/30 EC to advance your business knowledge & skills.



- Within the **science communication specialisation** students can do an external project of 17 – 37 EC.



- Within the **High-tech Innovation specialisation** it is mandatory to do a 30 EC external project.



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