

# MASTER OF SCIENCE IN CHEMISTRY (MATERIALS AND NANO CHEMISTRY)

120 ECTS CREDITS - LANGUAGE: ENGLISH

## WHAT

**Materials and Nanochemistry** focuses on materials in which the “nano” refers to the almost atomic precision with which innovative materials are created and analysed, and which is needed to understand and develop their remarkable properties. This main subject offers a combination of experimental and theoretical chemistry with a focus on catalysis, optical materials, innovative coatings, structural analysis and spectroscopy in a context of sustainable development. We prepare you for a career as an innovation- and sustainability-driven chemist in the broad materials industry (ranging from blades for wind turbines to solar cells and smartphone screens) and the chemical manufacturing industry.

## STRUCTURE

Half of the curriculum consists of project-based education. Already in the first-year curriculum, you will take a start with your Master's dissertation. You end the Master's programme with a full-term work placement, which you can complete at a company or a foreign research laboratory.

In addition to the (domain) Master's programme described above, you can also choose a Master's Programme in Teaching (in Dutch: Educatieve Master). The Educatieve Master, however, is a Dutch-taught programme. Find out more at [www.ugent.be/educatievemaster](http://www.ugent.be/educatievemaster) (in Dutch).

## LABOUR MARKET

It is a fact that chemistry plays an important role in various branches of industry, which in turn, are crucial to the economy and employment. Take, for instance, the chemical industry, the pharmaceutical industry, or agriculture.

Our broad academic programme ensures that our graduates find employment opportunities in different branches of industry.

Their career opportunities are as ample as they are diverse. Chemistry graduates can for instance be involved in academic research, product development, quality control ... or they can take on managerial positions in companies as well as in government agencies. In addition, they are also well-equipped for a career in the public sector, including education. The most important assets of university graduates in Chemistry are their research-mindedness, their problem-solving skills and their polyvalence.

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## TOELATINGSVOORWAARDEN VOOR HOUDERS VAN EEN VLAAMS DIPLOMA

### 1 Rechtstreeks:

- Bachelor in de chemie

### 2 Na het met succes voltooien van een voorbereidingsprogramma:

#### 10 SP

- Bachelor in de ingenieurswetenschappen, afstudeerrichting: chemische technologie en materiaalkunde

#### 13 SP

- Bachelor in de bio-ingenieurswetenschappen, afstudeerrichting: chemie en voedingstechnologie

#### 20 SP

- Bachelor in de fysica
- Bachelor in de fysica en de sterrenkunde
- Bachelor in de ingenieurswetenschappen: toegepaste natuurkunde

#### 36 SP

- Bachelor in de industriële wetenschappen: chemie

### 3 Na het met succes voltooien van een schakelprogramma:

#### 61 SP

- Bachelor in de chemie

programme can be found on: [www.ugent.be/languagerequirements](http://www.ugent.be/languagerequirements)

## PRACTICAL INFORMATION

### Study programme

[studiekiezer.ugent.be/master-of-science-in-chemistry-materials-and-nano-chemistry-en/programma](http://studiekiezer.ugent.be/master-of-science-in-chemistry-materials-and-nano-chemistry-en/programma)

### Information sessions

#### EVOLV

[evolv.gent/en/students/further-studies](http://evolv.gent/en/students/further-studies)

### Enrolling institution

Information on enrolment at Ghent University.

### Application Deadline (for International degree students)

For students who **need a visa**: before 1st of April

For students who **do not need a visa**: before 1st of June

Read more

### Tuition fee

More information is to be found on: [www.ugent.be/tuitionfee](http://www.ugent.be/tuitionfee)

## ADMISSION REQUIREMENTS FOR INTERNATIONAL DEGREE STUDENTS

The course is open to students with at least a bachelor's degree in the field of chemistry with minimum 180 credits.

Information on admission requirements and the administrative procedure for admission on the basis of a diploma obtained abroad, can be found on the following page: [www.ugent.be/prospect/en/administration/enrolment-or-registration](http://www.ugent.be/prospect/en/administration/enrolment-or-registration).

### Learning path counsellor

T 09 264 50 53

[traject.we@UGent.be](mailto:traject.we@UGent.be)

### Contact (for international degree students)

[www.ugent.be/admission](http://www.ugent.be/admission)

## LANGUAGE REQUIREMENTS

Language requirements Dutch: no language requirements  
English: CEFR level B2

The language requirements for this study