

# Master thesis in chemical and materials engineering

**Titulaires**

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**Mnémonique du cours**

MEMO-H509

**Crédits ECTS**

24 crédits

**Langue(s) d'enseignement**

Anglais

**Période du cours**

Année académique

- Develop, plan, execute and manage engineering projects at the level of a starting professional
- Think critically about and evaluate projects, systems and processes, particularly when based on incomplete, contradictory and/or redundant information
- A creative, problem-solving, result-driven and evidence-based attitude, aiming at innovation and applicability in industry and society
- A critical attitude towards one's own results and those of others
- Consciousness of the ethical, social, environmental and economic context of his/her work and strives for sustainable solutions to engineering problems including safety and quality assurance aspects
- The flexibility and adaptability to work in an international and/or intercultural context
- An attitude of life-long learning as needed for the future development of his/her career
- An integrated insight in chemical process and materials' technology
- Insight in chemistry as a link between process and materials technology

## Méthodes d'enseignement et activités d'apprentissages

### Contribution au profil d'enseignement

This teaching unit contributes to the following competences:

- In-depth knowledge and understanding of exact sciences with the specificity of their application to engineering
- In-depth knowledge and understanding of the advanced methods and theories to schematize and model complex problems or processes
- Conceive, plan and execute a research project, based on an analysis of its objectives, existing knowledge and the relevant literature, with attention to innovation and valorization in industry and society
- Correctly report on research or design results in the form of a technical report or in the form of a scientific paper
- Present and defend results in a scientifically sound way, using contemporary communication tools, for a national as well as for an international professional or lay audience
- Collaborate in a (multidisciplinary) team

## Méthode(s) d'évaluation

Autre

## Programmes

### Programmes proposant ce cours à l'école polytechnique de Bruxelles

MA-IRMA | Master : ingénieur civil en chimie et science des matériaux | finalité Spécialisée/bloc 2