

# Master thesis in chemical and materials engineering

## Lecturers

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## Course mnemonic

MEMO-H509

## ECTS credits

24 credits

## Language(s) of instruction

English

## Course period

Academic year

- › 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

## Teaching method and learning activities

### Contribution to the teaching profile

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

## Evaluation method(s)

Other

## Programmes

### Programmes proposing this course at the Brussels School of Engineering

MA-IRMA | Master of Science in Chemical and Materials Engineering | finalité Professional/unit 2