KU LEUVEN

FACULTEIT INGENIEURSWETENSCHAPPEN

COBRA REPORT

Study programme: Master of Civil Engineering

Drawn up on: October, 2019.

Since 2010, the Faculty of Engineering Science acknowledged the opportunities and benefits of a transnational accreditation and sought contact with CTI. CTI or "Commission des titres d'ingénieur" (CTI) is a French accreditation organisation and is equally composed of representatives of employers and professional engineers and academia. CTI is also a member of ENQA (European Network for Quality Assurance) and EQAR (European Quality Assurance Register). Furthermore, CTI is authorised by ENAEE (European Network for Accreditation of the Engineering Education) to award the EUR-ACE label.

Therefore, the Faculty based its Quality Assurance on the accreditation process of the "Commission des titres d'ingénieur" (CTI) and the achievement of the EURACE label.

At institutional level, the KU Leuven uses the COBRA method to work on the quality of its study programmes. In this report the programme committee reports every four years on the quality of its programme(s) and describes the identified strength(s) and planned action(s) of its programme(s).. **Master of Civil Engineering; Preparatory programme: Master of Civil Engineering**

Strengths of the study programme(s)

- **Well-balanced programme**: A strong common core of 39 credits, supplemented with a choice between two options "Civil Construction and Hydraulic Engineering" and "Building Science and Services", allows for a solid base as well as a specialisation. Considerable room is left for personalisation of the study programme with the master's thesis (24 credits) and elective courses (18 credits).
- **Master's theses embedded in the research activities of the staff**: The different research sections of the Civil Engineering Department are internationally active and well recognised. There is a strong interaction between the research activities and teaching. This is emphasised in the master theses' research, where all research topics are linked to ongoing fundamental or engineering oriented research projects.
- **Link with the building industry:** Highly experienced professionals from industry teach a number of the more practically oriented courses. They bring students in direct contact with practice in the engineering profession. Next to the input of guest professors from industry, construction and manufacturing site visits are regularly organised.
- **Active participation of students**: A delegation of students is a member of the EC Civil Engineering and thus actively involved in the quality assurance of the programme. Students also have a representative in the council of the Department of Civil Engineering.
- **Satisfied alumni**: According to the KONDOR survey, 90% of the participants agreed or strongly agreed that the programme offered a sound scientific basis for their career. The programme is considered to prepare students sufficiently well for the job market. More than 80% of respondents expressed an overall satisfaction with the study programme

Planned actions

In the framework of quality assurance, a core element in the wider perspective of institutional reviews, several quality-monitoring actions have been structurally embedded since 2015. Concerning the EC, following stakeholders are taken into account: students, teaching staff, alumni and industry.

- High study load in the curriculum: several different student surveys indicate that the study load of the master programme is quite high. The programme committee is looking into this, to see where the problem arises and how it can be solved.
- Exercise solutions: there is a strong request from the students's side for more exercise solutions to be made available in the master's programme. There are mixed opinions on this subject, but the majority is in favour of this idea. This will be further developed over the following years.
- Digital tools in the programme: AutoCAD and other digital tools could briefly be introduced in short intro sessions, with subsequent references to online tutorials and possibly the completion of a short linked assignment.

Planned actions are described in detail in the programme development plan.

More information on CTI:

- https://www.cti-commission.fr/en/
- Remaud, B, Berbers Y, Jolly, AM, Nolland, J (2017), Accreditation of Flemish Civil Engineers programmes (2016): an experience of cross-border Quality Assurance, Proceedings of the SEFI Annual Conference 2017.
- Sànchez, T. (2015), ESG 2015, part 1: https://www.cti-commission.fr/wp-content/uploads/2017/04/colloque_cti_esg201508.pdf.