

Peer Review Master of Electronics and ICT Engineering Technology – public report

Most important conclusions off the peer review

The report of the peer review team identifies a number of strenghts of the programme, as well as suggestions for further improvement. These suggestions have already been incorporated into the programme development plan for the coming period. The most important conclusions of the peer review are summarized below.

Strengths of the programme

The programme occupies its **own position** vis-à-vis the professional bachelor's degree programmes and towards the civil engineering degree programmes in Flanders. The programme aims to train professionals with a solid scientific research base. The **roles** and **competencies** that have been developed - technology expert, researcher, team worker and citizen - make clear what the professional field and society can expect from an industrial engineer. Students learn to **solve complex problems** from design to realization. The master Electronics and ICT Engineering Technology builds on a solid **research base**, for example in IDlab and CoSys-Lab, which conducts fundamental and applied research into internet technologies and data science.

The curriculum maintains a balance between **theory and practice**. Gradually, the emphasis on **knowledge** acquisition shifts to more **skills** and **competence**-based education in the master's degree.

Guest lecturers, company visits and industry-oriented topics for the master's thesis bring the **professional field** into the programme. Students can also take a **company internship** as part of their master's thesis. Internship supervisors and other field representatives confirmed that they are satisfied with the students and alumni of the programme.

Students can always contact teachers and support staff with their questions. Students greatly appreciate the **brand new building** on Campus Groenenborger.

The peer review team was impressed by the **student participation** through the Student Advisory Councils (SARs) and through the student association Ingenium that organizes social, study-related and networking events. The review team praised the **iMaginelab**, a lab with university infrastructure where students work together on projects they initiate on their own initiative.

Suggestions for further improvement

The learning of students can be further strengthened by making **critical thinking**, the **job content** and **roles of the engineer and the design and research skills and the engineering attitude** more explicit in the programme and attuning them to each other in course units.

On the advice of the review team, the programme examines to what extent there is a good balance between **master's thesis topics** from companies on the one hand and from research groups on the other.

The review team recommended optimizing giving **feedback** to students in terms of timing, organization (classroom versus individual) and efficiency and to implement an explicit policy for it. The review team recommends focusing primarily on those learning moments in which students can realize a major learning gain. The programme may strengthen the students' **independence** and their academic pride. The programme will start an in-depth study to further understand all these points for improvement and to tackle them effectively. Although communication with students is already intensive, the programme will make the **communication** more effective through a more targeted communication policy towards students and between the SARs and students. The review team recommends clarifying the ambition regarding **interdisciplinarity** and continuing to work on appropriate and clearly defined actions to support the influx and advancement of **disadvantaged groups**. The programme also focuses on **blended learning** and **activating teaching methods** and on **collaborative learning** between advanced and starting students. Many PhD students like to devote themselves to education. The training continues to closely monitor the workload that this entails.



Most recent peer review Master of Electronics and ICT Engineering Technology

Timing

The site visit of the peer review team took place from 25th to 27th November 2019.

Peer review team

The programme suggested external and internal candidates as members of the peer review team. The student member was suggested by the Departement of Education, with approval of the Student association of UAntwerp. Chair of the peer review team was the vice-rector Education. The composition of the peer review team was validated on 29th April 2019 by the Board of Programme Evaluation.

Composition of the peer review team industrials sciences:

Chairwoman:

- Ann De Schepper, vice-rector Education at UAntwerp

External members:

- Prof. dr. ing. Jeroen Boydens, hoofddocent, Faculteit Industriële Ingenieurswetenschappen, programmadirecteur van de POC Elektronica-ICT Faculteit Industriële Ingenieurswetenschappen, KULeuven.
- Prof. dr. ir. Johan Baeten, hoogleraar, voorzitter onderwijsmanagementteam Elektromechanica en Energie (Elektrotechniek, Automatisering), UHasselt/KU Leuven.
- Prof. dr. ir. Hervé Degee, hoogleraar, voorzitter onderwijsmanagementteam master industriële wetenschappen: bouwkunde, UHasselt

Internal member:

- Prof. dr. ir. Siegfried Denys, Hoofddocent, Departement Bio-ingenieurswetenschappen, Faculteit Wetenschappen, UAntwerpen

Student member:

- Jeroen van Eijk, Student MA2 geneeskunde UAntwerpen

Result Peer Review

The peer review team decided to **confirm confidence** in the programme Master of Electronics and ICT Engineering Technology.

Creation

With regard to the peer review, the programme made a self-assessment report, describing its vision, good practices, challenges and future prospects. The Department of Education developed a datasheet in consultation with the programme, containing both qualitative (learning outcomes, study programme, staff information, etc.) and quantitative data (amount of enrolments, student success rates, cohort analysis, etc.) about the programme. In consultation with the Department of Education the programme created a time schedule to interview the staff responsible for the programme, students, lecturers, assistants, external partners and alumni. During the interviews between the peer review team and the programme the CIKO staff member of the Faculty was present.

The peer review team evaluated the programme based on qualitative and quantitative information, as the interviews and the preparatory documents: the self-assessment report, the datasheet and the education portfolio of the programme.

The peer review took place conform to the European Standards & Guidelines.



Report and follow up

All findings of the peer review team are written down in a review report. The review report names several strengths of the programme, and some suggestions for further improvement. The programme incorporated these suggestions in a development plan.

The integrated report – review report and development plan – was validated together with the public information by the Board of Programme Evaluation on 5th May 2020 and was presented to the Education Board on 26th May 2020 and the Executive Board of UAntwerp on 7th July 2020.