

Peer Review bachelor in de chemie and Master of Chemistry – public report

Most important conclusions of 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 review team concludes that the bachelor's and master's programmes in chemistry are **solid** programmes, aimed at, on the one hand, acquiring thorough **basic scientific knowledge** and understanding of a variety of **chemical sub-disciplines** and, on the other hand, developing **generic and subject-specific competences**. Students have a lot of **choices** in the programme. The programme connects theory and practice in courses by offering **practicals** where students acquire lab skills and by a nice combination of **fundamental chemistry** and **industrial orientation**. Company visits, company internships, guest lectures by external lecturers, guest professors from industry characterise the profile of the Antwerp programme. They strengthen the link with practice and provide competences relevant to practice. To this end, the programme actively uses the presence of the (petro)chemical sector in Antwerp.

In its communication to (new) students, the programme conveys the rhetoric that 'everything is chemistry'. The review team particularly appreciates the course 'Chemistry in daily life' in the first bachelor, which makes students aware of the impact of chemistry, and thus of the chemist, on society.

The **teaching team**, limited in size, is dedicated and very approachable, according to students and alumni. There is a strong commitment to education and a high level of engagement with students. Students therefore feel

Choosing an **English master** is a great added value for students and their employability in the field. The review team also finds it positive that attention is paid to the transition to the English master's already in the Bachelor's degree.

Suggestions for further improvement

The review team believes that the programme is **ambitious** and sets high standards for itself. One wants to do everything for the sake of the students. The flip side of this is that the programme formulates very many, perhaps even too many, **challenges** for itself. As suggested by the review team, the programme commits to **spreading its ambitions** over time. In the short term, it is mainly making **minor adjustments** to the programme to optimise, initially in the master's and then in the bachelor's degree. Specifically, the programme is taking stock of the **teaching and assessment methods** and the number of **lab reports** to rationalise them, simplifying the structure of the master's in terms of the **options** available, and looking at the possibility of **clustering** courses of limited size into a larger whole to optimise studyability. Consultation with the **sounding board group** will provide input on this. Strengthening theoretical chemistry in the bachelor in function of applications in **computational chemistry** in the Master will also be included in this process. The programme is also looking at how it can inform students about **following up on results of teaching evaluations**. To prepare for the **retirement wave** in a decade or so, the programme is thinking in the longer term about its desired profile and corresponding curriculum and the composition of the staff needed for this.

Most recent peer review bachelor in de chemie and Master of Chemistry

Timing

The site visit of the peer review team took place on 28 and 29 November 2023.

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 22 April 2024 by the Board of Programme Evaluation.

Composition of the peer review team:

Chairwoman:

- Ann De Schepper, vice-rector Education at UAntwerp

External members:

- Wesley Browne, ordinary professor Molecular Inorganic Chemistry, University of Groningen, the Netherlands
- Emelie Cleiren, lecturer Chemistry, Instrumental Analysis and Validation, AP University of Applied Sciences and Arts, Antwerp
- Sophie Lingier, research leader Formulations & Chemical Sourcing Manager, AGFA

Internal member:

- Walter Daems, professor, Faculteit Applied Engineering, UAntwerp

Student member:

- Cécile Taelman, Medicine student, UAntwerp

Result Peer Review

The peer review team decided to confirm confidence in the programme of chemie/Chemistry.

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 22 April 2024 and was presented to the Education Board on 4 June 2024 and the Executive Board of UAntwerp on 2 July 2024.