

Peer Review Bachelor and Master of Physics – public report

Most important conclusions off the peer review

The report of the peer review team identifies a number of strengths 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 physics programme at UAntwerpen is strong in terms of content and can compete with similar programmes nationally and internationally. The programme is supported by passionate lecturers who are genuinely concerned about the quality of the teaching and learning process of the students. The bachelor is a **broad academic programme** and there is a **strong link between teaching and research**, especially from 3rd bachelor onwards. Lecturers are passionate about passing on their profession to the next generation.

The programme is **small-scale**; about 30 new students enter every year. As a result, the programme has built up a **strong student guidance system**. In the first year, students are supported in their transition from secondary school with intake and follow-up interviews. In the future, master students will also be involved as peer-tutors for even more accessible guidance of bachelor students.

The programme is strongly committed to giving students **feedback**. To great satisfaction of students, all lecturers give classroom feedback, e.g. after exams. The programme aims to offer feedback as a 'standard' part of teaching and encourages students to learn from it, regardless of whether they performed well or poorly. The programme aims to encourage students to take more and more control of their learning throughout the programme.

Student participation is well organized and the programme pays close attention to **quality assurance** in all its facets. Specifically, the programme structurally collects feedback from students on courses and manages to convert it into improvements if necessary. In consultation with all lecturers, the contents of courses are mapped out and aligned even better. Learning line consultations between lecturers will support this.

A particularly nice initiative, according to the review team, is the project '**A little uni in the classroom**'. Students from 3rd bachelor present their bachelor's thesis in secondary school and thus develop presentation skills to communicate a scientific subject in an accessible way to a wider audience.

Both students and alumni are extremely satisfied with the programme. Alumni report having developed **broadly applicable skills** that allow them to move into various positions at short notice.

The review team saw great examples of **digital and blended** (distance and on-campus) learning in the teaching of several lecturers. For a number of courses, recordings of lectures are deliberately used as supplementary study materials.

Suggestions for further improvement

What makes the programme particularly attractive are the many choices: modules, electives and a wide range of topics for the bachelor's and master's thesis. At the suggestion of the review team, the programme is further developing information and **guidance for students on these choices**. The information will also be communicated more clearly.

The programme will highlight its many beautiful **unique selling points** even more on the website and in promotional activities.

The programme has already strongly committed to the **internationalization** of the study programme, e.g. by offering an English-language master's degree, and is committed to further crystallise and concretise the internationalization policy, e.g. by giving international researchers a more prominent place in the study programme, further investigating the possibilities of YUFE and supporting internationalization more administratively.

In order to strengthen physics in secondary education and thus eventually attract more and better prepared students, the review team recommends including the educational master's programme in physics as a fully-fledged programme in education policy.



Most recent peer review Physics

Timing

The site visit of the peer review team took place on **27-28 April 2022**.

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 19 November 2022 and on 15 December 2022 (written procedure) by the Board of Programme Evaluation.

Composition of the peer review team Physics:

Chair:

- Prof. dr. Paul Cos, Gewoon hoogleraar dept. Farmaceutische Wetenschappen, Faculteit Farmaceutische, Biomedische en Diergeneeskundige Wetenschappen UAntwerpen (plaatsvervangend voorzitter peer review)

External members:

- Prof. dr. E.J.J. Groenen, Professor emeritus of Experimental physics, Universiteit Leiden (Nederland)
- Prof. dr. D. Poelman, Gewoon hoogleraar Dept. Solid State Sciences, Universiteit Gent

Internal member:

- Prof. dr. Johan Springael, Hoogleraar Dept. Engineering Management, Faculteit Bedrijfswetenschappen en Economie, UAntwerpen

Student member:

- Marloes Tholhuijsen, Studente Master geneeskunde (Ma 3) UAntwerpen en voorzitter Studentenraad UAntwerpen

Result Peer Review

The peer review team decided to **confirm confidence** in the programme of Physics.

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 27 October 2022 and was presented to the Education Board on 15 November 2022 and the Executive Board of UAntwerp on 22 November 2022.