GHENT UNIVERSITY

# Course Specifications

Valid as from the academic year 2026-2027

## Professional Skills for Scientists (C004519)

**Course size** *(nominal values; actual values may depend on programme)*

**Credits 4.0** **Study time 120 h**

**Course offerings and teaching methods in academic year 2026-2027**

| | | | | |
|---|---|---|---|---|
| A (Year) | Dutch, English | Gent | group work | 0.0h |
| | | | seminar | 0.0h |
| | | | lecture | 0.0h |

**Lecturers in academic year 2026-2027**

| | | |
|---|---|---|
| Smet, Philippe | WE04 | lecturer-in-charge |
| Caluwaerts, Steven | WE05 | co-lecturer |

| **Offered in the following programmes in 2026-2027** | **crdts** | **offering** |
|---|---|---|
| Master of Science in Teaching in Science and Technology(main subject Physics and Astronomy) | 4 | A |
| Master of Science in Physics and Astronomy | 4 | A |
| Master of Science in Physics and Astronomy | 4 | A |

**Teaching languages**

English, Dutch

**Keywords**

science communication, scientific reporting, societal impact, AI, applying for jobs, science after graduation, preparation for the job markte

**Position of the course**

The following topics will be covered:
- Physics and society
- Scientific communication
- Use of AI-tools in a scientific context
- Media awareness and use of social media
- Preparation for the job market.

**Contents**

1. The lectures will focus on:
(a) The role of physics in society and global challenges
(b) Goals and formats of science communication
(c) Overview and preparation towards the job market (e.g. overview of funding sources for PhD research, CV writing)
(d) Public communication (e.g. use and awareness of social media, communication to stakeholders)
2. The practical exercises comprise:
(a) Use of AI tools in a research setting
(b) Designing a physics-related (research) topic for a guest lecture at a secondary school
(c) Job vacancy search and application (CV + cover letter)
The teaching activities will be followed by an info session on 'Physicists on the job market', where alumni physics share their experience.

**Initial competences**

Basic physics (Bachelor level)

**Final competences**

1 The student will have gained knowledge and understanding of the role of physics

in society and global challenges.
2 Students will know and gain experience in writing a job application letter and a CV, and acquire know-how to match with specific job vacancy.
3 Students will know the possibilities and limitations of AI tools in a research context.
4 Students will frame a physics topic within a broader scientific, but also societal and socio-economic context, using literature from the different domains.
5 Students can communicate on scientific, physics research to a broader audience.

**Conditions for credit contract**

Access to this course unit via a credit contract is determined after successful competences assessment

**Conditions for exam contract**

This course unit cannot be taken via an exam contract

**Teaching methods**

Group work, Seminar, Lecture

**Extra information on the teaching methods**

This course consists of lectures, seminars, guest lectures, and related assignments (including the use and evaluation of AI tools, the design of a guest lecture, and the writing of a CV and cover letter).

**Study material**

Type: Slides

Name: Slides
Indicative price: € 5
Optional: no
Language : English
Number of Slides : 100
Available on Ufora : Yes
Online Available : Yes
Available in the Library : No
Available through Student Association : No
Additional information: 5 euros is for the cost of printing the slides (which is not compulsory). Slides are also available digitally.

**References**

**Course content-related study coaching**

Via Ufora or after making an appointment with the lecturer(s).

**Assessment moments**

continuous assessment

**Examination methods in case of periodic assessment during the first examination period**

**Examination methods in case of periodic assessment during the second examination period**

**Examination methods in case of permanent assessment**

Professional practice, Participation, Presentation, Assignment

**Possibilities of retake in case of permanent assessment**

examination during the second examination period is possible in modified form

**Calculation of the examination mark**

The final grade is determined by a weighted average of the assignment scores. Students who are absent without valid justification from mandatory sessions or who fail to complete assignments may receive a non-deliberable final grade.