

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 market

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

(Approved)

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.