

Course Specifications

Valid as from the academic year 2024-2025

Project Work (C004226)

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

Credits 3.0 Study time 90 h

Course offerings and teaching methods in academic year 2024-2025

A (Year) Dutch Gent work placement

Lecturers in academic year 2024-2025

Detavernier, Christophe	WE04	lecturer-in-charge
De Rijcke, Sven	WE05	co-lecturer
Jachowicz, Natalie	WE05	co-lecturer
Van Waeyenberge, Bartel	WE04	co-lecturer

Offered in the following programmes in 2024-2025 crdts offering

Bachelor of Science in Physics and Astronomy 3 A

Teaching languages

Dutch

Keywords

projectwork in education, projectwork in research, internship at company or research institute, summer school.

Position of the course

This course unit belongs to the learning pathway "Interdisciplinarity & Broadening" in the Bachelor program Physics and Astronomy.

Knowledge and competences are applied in a research or educational context. Skills can be developed more broadly and/or in depth through participation in a summer school or an internship at a company or research institute.

Contents

The specific project work is defined through discussion with the lecturers and (in case of an educational or research project) with guidance from a member of one of the physics departments at UGent. A lot of initiative is expected from the student, who can propose a specific project idea to the lecturers, so that this idea can be discussed and concretised prior to chosing this course.

As examples of possible types of projects:

- Project work in an educational context can e.g. mean that the student gets involved in designing a new lab session for bachelor students, or improves an existing lab session, e.g. through software automation, or by developing course notes for a specific lab session.
- Project work in a research context implies that the student is trying to resolve a specific
 physical and/or astronomical research question. The student participates in a team effort, but
 executes a specific research assignment.
- This project work in a research context can take the form of an internship in a company or research institute. Also in this case, the student should take the initiative in securing an internship position, where the lecturers can of course provide advice.
- Participation in a relevant summer- or winterschool, possible extended with a related assignment.

Irrespective of the specific definition of the project work, the student explores the relevant scientific literature and context. Finally, the student reports on the project execution and the obtained results through a written report as well as an oral presentation.

Initial competences

Having passed the courses Experimenting in physics and astronomy 1 and 2.

(Approved) 1

Final competences

- 1 Actively and effectively participating in a team.
- 2 Effective planning of project work.
- 3 Implementing basic knowledge and skills in a broader context and effective communication related to this.
- 4 Clear and concise oral and written reporting.

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

Work placement

Extra information on the teaching methods

The specific project work is defined through discussion with the lecturers and (in case of an educational or research project) with guidance from a member of one of the physics departments at UGent. A lot of initiative is expected from the student, who can propose a specific project idea to the lecturers, so that this idea can be discussed and concretised prior to chosing this course.

Irrespective of the specific project definition, an effort of minimum 1-2 weeks of specific project activities is expected, with the literature study, oral and written reporting in addition to this. From the start of the project, the student is required to keep a logbook, to keep track of the entire process. This info can then be used as the basis for the written report, which is typically expected to be about 10-15 pages, and contains a description of the organisation and context in which the project was executed, the work that was performed, and a (self) evalution in terms of the achieved learning effect. Finally, the student is expected to give a 30 minute presentation on the project and its outcome.

Study material

None

References

Course content-related study coaching

Individual guidance at the location where the project is executed.

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, Oral assessment, Assignment

Possibilities of retake in case of permanent assessment

examination during the second examination period is possible in modified form

Extra information on the examination methods

A second exam chance is not possible for the project work itself, only for the written and oral reporting.

Calculation of the examination mark

- 60% on the activities while executing the project and the written reporting
- 40% on the oral presentation and answering of questions

(Approved) 2