

## Internship A: Engineering and Technology (H002301)

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

**Credits 4.0**

**Study time 108 h**

### Course offerings and teaching methods in academic year 2023-2024

A (Year)

Dutch

Gent

work placement

lecture

seminar

### Lecturers in academic year 2023-2024

Van Eeckhout, Hilde

GE51

staff member

Vanwetteren, Jan

TW06

staff member

Verstrynghe, Florine

GE51

staff member

wyffels, Francis

TW06

lecturer-in-charge

Brouns, Leen

TW05

co-lecturer

Montero Perez, Maribel

LW06

co-lecturer

### Offered in the following programmes in 2023-2024

**crdts**

**offering**

[Master of Science in Teaching in Science and Technology\(main subject Engineering and Technology\)](#)

4

A

[Master of Science in Teaching in Science and Technology \(abridged programme\)\(main subject Engineering and Technology\)](#)

4

A

### Teaching languages

Dutch

### Keywords

didacticism, pre-service training

### Position of the course

This course unit contributes to the realization of the basic competences for teachers and the educational competences of the educational master program UGent, as included in the training description and concretized in the competence matrix, to be Consultation on [www.ugent.be/educatievemaster](http://www.ugent.be/educatievemaster)

The internship A is in line with the course "didactics in sciences".

The learning content of the internship is in line with the professional development of the students in the master program.

There is a gradual build up from observing to the independent realization and

There is a gradual build up from observing to independently realizing and supervising educational activities, from (relatively) simple to more complex educational situations.

Reflection on one's own actions is central to the internship concept. For the internship within the educational master the following applies in general:

- Over the entire internship, each student is required to do at least 45 hours of internship focused on the independent design and supervision of learning processes for a group of learners:

A minimum of 30h is done in a formal educational setting with a maximum of 8h of parallel lessons allowed (this corresponds to 4 hours that can be given twice).

- At least 10h of internship is taken in the relevant subject area for each subject didactic course taken

- At least 12 hours of the total internship is completed in the 2nd and/or 3rd grade of secondary education. Only in certain justified cases where no or limited competencies are linked to the subject didactics in secondary education, this may be deviated from.

- Students who acquire the required competence in multiple forms of education are expected to

teach in 2 forms of education of the SO whereby a proportional distribution over the 2 is strived for.

- Depending on the specifics of the degree program, in addition to an internship in secondary education, there is also the possibility of an internship in an educational or professional bachelor program, DKO, adult education, basic education, HBO5 and Se-n-Se.
  - A maximum of 15 hours of the total internship depending on the specialization can be done in a broader educational setting (company training, youth work, museums, socio-cultural training work, educational internships abroad, etc.) linked to the student's own professional expertise. When determining the specific internship positions, attention is paid to the diversity of the internship setting in order to acquire the necessary competencies to adequately respond to the challenges of metropolitan education.
- respond to the challenges within metropolitan contexts, multilingualism, implementation of the Leersteundecree.
- Each Teaching Methodology can, in addition to the above minimum expectations, impose additional requirements on the interpretation/distribution of the internship hours. The content of the internship may also differ depending on the number of internship subjects that a student takes up in relation to a Teaching Methodology.

## Contents

This internship component is in line with the subject didactic(s) the student is taking on and the related teaching competence and comprises 1/3 of the compulsory 12 credits in the program line internship.

### Specifically, Internship A: STEM consists of

- 6h observation,
- 15h independent design and supervision of learning processes for a group of learners
- participation in 3 meso activities.

The distribution of the observation lessons, meso activities and independent design and guidance is done as follows:

For students with subject didactics of science + 1 subject didactics (B) in the curriculum:

4h observation, 2 meso-activities and 10 hours of independent design and supervision of learning activities in the discipline of subject didactics B

2h observation, 1 meso-activity and 5 hours independent design and realization of learning activities related to guiding specific groups of students in secondary education) (tutoring)

For students with subject didactics of science + 2 subject didactics (B + C) in the curriculum:

2 h observation, 1 meso-activity and 5 hours independent design and guidance of learning activities in each of the included subject didactics

2 h observation, 1 meso-activity and 5 h independent design and realization of learning activities related to guiding specific student groups in secondary education) (tutoring)

Students who take up an interim assignment in the course of the academic year may receive an internship reduction if the following conditions are met:

- it concerns a teaching assignment in 2nd-3rd grade SO
- reduction is only granted on the basis of teaching hours in a subject for which the required skills are acquired within the followed subject teaching methodology and linked internship. Within the school, a (preferably professional) colleague acts as a mentor who attends and evaluates at least 2 lessons (at the start and at the end of the assignment).
- Internship reduction will be granted in proportion to the size, duration and content of the teaching assignment according to a set schedule in the internship manual.

For students who receive negative evaluations at their interim assignment, the assigned internship reduction may be reconsidered.

Voice hygiene, and first aid and language policy (required seminars to be attended) will also be covered within this internship component.

## Initial competences

You can download the list of prerequisites on [oasis.ugent.be?cursuscode=H002301&taal=en](https://oasis.ugent.be/cursuscode=H002301&taal=en).

This course unit can only be included in the curriculum if prior credit was obtained for the corresponding subject didactics B (and C) or these subject didactics are taken concurrently.

## Final competences

- 1 Independently design a teaching-learning environment
- 2 Realizing real educational contexts in accordance with the vision, knowledge and skills developed in the other course units of the educational master's program

- 3 Matching learning objectives, teaching methods, and methods of evaluation to the initial situation of the target audience
- 4 Be able to critically reflect on own actions and learning process during and after the internship, either individually or in group
- 5 Be able to report in a structured manner on the work performed and the underlying decision process
- 6 Communicate appropriately and clearly with pupils/students, colleagues and parents and be able to maintain a professional and deontological attitude
- 7 Use the Dutch language correctly and appropriately
- 8 The student is aware of potential voice problems so that they can be prevented or identified in a timely manner. The student has an understanding of the options available to interrogate voice skills
- 9 The student can deal appropriately with students with health problems
- 10 The student will be able to perform urgent care and first aid tasks and call for assistance when necessary
- 11 The student is aware that health and safety are important values
- 12 Be able to deal with feedback in a constructive manner
- 13 Demonstrate appropriate attitudes
- 14 Framing the range of duties of a teacher within an educational context

#### **Conditions for credit contract**

This course unit cannot be taken via a credit contract

#### **Conditions for exam contract**

This course unit cannot be taken via an exam contract

#### **Teaching methods**

Seminar, Lecture, Work placement

#### **Extra information on the teaching methods**

There are intervision moments where students exchange internship experiences. Presence is mandatory.

Students participate in the cross-curricular seminars compulsorily in the learning path 'voice and speech', the practical session 'voice and speech', the lecture EHBO ( alternatively offered via e-learning), the practical session EHBO.

Language Policy: Students complete an online learning path in Ufora consisting of knowledge clips and exercises on language policy, multilingualism, and language developmental teaching.

For student teachers in an LIO job (= inservice internship), the objectives and competencies are realized through an alternative portfolio process. The assignments are elaborated in a manual. A number of contact moments are provided, as well as a number of compulsory classes and/or seminars and moments of guidance. In addition, LIO students and students with internship reduction at LIO level are obliged to participate in 3 cross-curricular intervisions.

A candidate with a LIO job of less than 200 hours (this corresponds to a teaching assignment of less than 5 hours per week) is not admitted to the portfolio route, but may be eligible for a limited internship reduction on an individual basis.

#### **Learning materials and price**

There are supporting internship documents for the various internship activities. These documents are available on the Ufora electronic learning environment.

For the cross-curricular seminars: compulsory enrolment in the UFORA cross-curricular seminar First Aid, Voice and Language Policy (HX00013)

Handbook: Red Cross Flanders: First Aid for Teachers (ISBN 9789068910629) 132p. Can be purchased from the Ghent department. Cost price approximately 8 euro.

#### **References**

#### **Course content-related study coaching**

The supervision of the internship at school is done by the mentor and subject teacher (= the subject mentor) where the student teaches. The guidance relates to the preparation and realization of the lesson. This is the work supervision. The mentor and the subject mentor evaluate the internship according to predetermined criteria laid down in a lesson evaluation document. The guidance and evaluation of the student by the mentor are laid down in an agreement, in which the rights and obligations of the student towards the internship school are formulated. The guidance by the mentor also concerns the ingrowth into the school and the

realization of the meso-activities.

The internship supervisor (affiliated with the program, in this case the educational didactician and/or educational supervisor) is responsible for the contacts with the schools, individual supervision, feedback and guidance (if possible during a visit to the internship school), coordination, monitoring and guidance of the internship trajectory. This is the learning support.

#### **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, 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**

The students create a portfolio containing observations, lesson preparations, learning materials, tests, etc.; evaluations by the mentor, the professional mentor and the internship supervisor; their own reflection reports; the interim learning objectives formulated by the student; a synthesis report with an assessment of their own learning progress. Within the program a concluding discussion takes place with the responsible teacher and/or internship supervisor.

Prior to the practical first aid exercises, a computer test is taken via UFORA/CURIOS to test the knowledge provided during the lectures. The test is mandatory in order to participate in the practical session.

After completing the learning path 'voice and speech' and the self-evaluation, the students can download a certificate of participation. Students will bring this as an admission ticket to the practical session 'voice and speech'.

Language Policy: After completing the learning path and passing all exercises, students can obtain their certificate through Ufora.

For the student teachers in an LLO job, continuous evaluation is provided through the alternative assignment they work out the portfolio track.

#### **Calculation of the examination mark**

The student is assessed on the totality of the evaluations at the various internships, including the basic competences for teachers and the components language and attitudes. This gives a total score of 100 points.

-75% of the marks relate to the actual teaching in the process the student goes through as a teacher. The final score for the lesson realization component explicitly remains a score that reflects the achieved end point and result of a process.

-25% of the points relates to the quality of the internship portfolio and the participation in the intervention sessions.

Within both components, each subject pedagogy can put forward sub-competencies specific to its own field that are essential to succeed. The responsible lecturer remains ultimately responsible for determining the final mark, whereby the final score is not an arithmetic mean of the partial scores if the sum of the components does not sufficiently reflect the achieved end point in the internship process.

Absence from a compulsory cross-curricular seminar is sanctioned by a reduction of the total score by 5 points. The responsible lecturer receives a certificate of the attended lectures and practical exercises and calculates this in the total score.

Internship lessons for which the time and location are not communicated to the subject didactics in time do not apply. LLO students also register for the first lesson.

The student who withdraws from (part of) the periodical and/or non-periodical evaluations will receive a final grade that cannot be deliberated

Students must be registered for the role for the educational master's program by 15 October at the latest. Since attendance in the exercises is mandatory, the student must be present from

the first lesson of the corresponding course didactics.

### **Facilities for Working Students**

Working students may contact the coordinator of the educational master of science and technology to discuss their specific situation