



Integrated Research Project (C004525)

Cursusomvang *(nominale waarden; effectieve waarden kunnen verschillen per opleiding)*

Studiepunten 8.0

Studietijd 210 u

Aanbodsessies in academiejaar 2026-2027

A (Jaar)

Engels

Gent

Lesgevers in academiejaar 2026-2027

De Clerck, Olivier

WE11

Verantwoordelijk lesgever

Bogaert, Kenny

WE11

Medelesgever

Braeckman, Ulrike

WE11

Medelesgever

Verleyen, Elie

WE11

Medelesgever

Wybouw, Nicky

WE11

Medelesgever

Aangeboden in onderstaande opleidingen in 2026-2027

[Master of Science in Biology](#)

stptn

aanbodsessie

8

A

Onderwijsstalen

Engels

Trefwoorden

Scientific method, experimental design, data acquisition, data management, statistical analyses, synthesis, literature

Situering

The Integrated Research Project implies the autonomous realisation of a research project within the context of the Master Biology Majors: Global Change Biology, Biodiversity and Evolutionary Biology or Functional Biology. During the project, which is conducted under the guidance of a supervisor, the student will put theoretical and practical competences that have been obtained during the bachelor and master program into practice. The student will decide on a research topic, in consultation with a supervisor and taking practical constraints into consideration (e.g. time, infrastructure and costs). The Integrated Research Project positions itself between the bachelor and master thesis, and presents the first opportunity for a student to independently recognise and formulate a scientific question, and translate that into an experimental and/or field study design. Trial and error is an inherent part of this process and therefore the Integrated Research Project emphasises the development of research skills rather than the end product itself. Alongside the practical aspects of the project (collecting, processing, analysing and interpreting the data), a number of transferable skills modules (data management, science communication, ethics) will provide the student with the competences necessary to handle, organize, preserve and communicate research data. The project finally results into a portfolio containing the structured research data, and a presentation of the project. The research project takes place within the own faculty departments, another faculty of the UGent or affiliated research institutions. For students that conduct their research in an affiliated research institute the responsible supervisor is a lecturer or invited lecturer in Master Biology.

Inhoud

At the start of the course, the students will either independently make a suggestion for a research topic and identify a potential supervisor, or select a topic provided by supervisors. The research topic is then further refined in consultation with the supervisor and results in a final research plan which is communicated through a

pitch presentation which includes a risk assessment and identification of milestones as well as a first version of a Data Management Plan. During this preparatory phase the student follows a series of modules aimed at developing necessary transferable and technical research skills. Following the preparatory phase, the student then gathers (in lab environment or in the field), analyses and interprets the research data. The end result is a presentation or equivalent, alongside the final version of the data management plan and the structured data files. The student realizes autonomously the research, but in interaction with the supervisor.

Begincompetenties

The Integrated Research Project builds upon the theoretical and practical competences obtained during the bachelor and master training. The project can only be started after having successfully completed the Bachelor education.

Eindcompetenties

- 1 In consultation with a supervisor, the student is able to rely on scientific literature to recognize and formulate a scientific problem, and to translate that into an experimental design.
- 2 The student can therefore rely on existing theories and models, and in a self-reliant manner use literature to modify these models so that they can be applied on their personal research project.
- 3 The student is able to practically realize the experiment, specifically designated to the hypotheses to be tested, and modify where necessary.
- 4 The student can realize in an accurate and critical manner the required data gathering, data management and data analysis using the appropriate statistical methods, and synthesise the own findings with the integration of recent specialized scientific literature.
- 5 Based on that, the proper conclusions can be drawn, including a critical evaluation of the applied analytical methods and obtained conclusions, as well as formulate suggestions for future research.
- 6 The obtained research competences allow the student to tackle both fundamental and applied biological problems, both individually and as a member of a research team.
- 7 The student can communicate the obtained research results, both in Dutch and English, and this by means of an oral (presentation) manner towards specialized and laymen audiences.
- 8 The student is capable to adapt the applied work frame (used in the master study), enabling him/her to perform in a self-reliant manner, accurate and reliable research within a professional context.

Creditcontractvoorwaarde

Toelating tot dit opleidingsonderdeel via creditcontract is mogelijk na gunstige beoordeling van de competenties

Examencontractvoorwaarde

Dit opleidingsonderdeel kan niet via examencontract gevuld worden

Didactische werkvormen

Hoorcollege, Zelfstandig werk

Toelichtingen bij de didactische werkvormen

Research project, online modules

Studiemateriaal

Geen

Referenties

NVT

Vakinhoudelijke studiebegeleiding

Tijdens het onderzoeksproject wordt de student op dagelijkse basis begeleid door een vaste promotor / begeleider. Tevens bestaat de mogelijkheid om de progressie en potentieel problemen te bespreken met de vaktitularis en promotor.

Evaluatiemomenten

periodegebonden en niet-periodegebonden evaluatie

Evaluatievormen bij periodegebonden evaluatie in de eerste examenperiode

Werkstuk

Evaluatievormen bij periodegebonden evaluatie in de tweede examenperiode

Werkstuk

Evaluatievormen bij niet-periodegebonden evaluatie

Participatie

Tweede examenkans in geval van niet-periodegebonden evaluatie

Examen in de tweede examenperiode is niet mogelijk

Eindscoreberekening

Student will be evaluated on the formulation of a first research idea (5%), the final research idea including the data management plan, milestones and risk assessment (15%), the practical work during the project (45%), the final presentation, data management plan and data file (20%). Transferable and technical modules account for an additional (15%) of the final mark.