



Utrecht University

Faculty of Geosciences

Towards a successful PhD journey

Quality assurance plan Doctoral education

Graduate School of Geosciences

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1. Introduction

This document constitutes the quality assurance plan for doctoral education at the Graduate School of Geosciences.

The main goal of doctoral education at the Graduate School of Geosciences (GSG) is to facilitate the development of PhD candidates into outstanding independent professionals in the field of Geosciences [1]. These professionals will be familiar with the latest developments in their scientific field, and able to develop this field further, based on scientific and socially relevant knowledge and questions. To this end, PhD candidates follow a programme of study in addition to conducting supervised PhD research.

The GSG is responsible for the quality assurance of the PhD training and for the organisation and coordination of PhD teaching (e.g., courses). The dean of the Faculty of Geosciences is in charge of the GSG and is assisted in this task by the Board of Studies (BoS) of the GSG. The research directors of the four departments are responsible for (most of) the practical implementation of the quality assurance mechanisms. In addition, they are responsible for the quality assurance of the PhD research.

The doctoral degrees themselves are awarded by the Board for the Conferral of Doctoral Degrees (*College voor Promoties*) of Utrecht University. This board also appoints the supervisors of PhD candidates. In doing so, it follows the Doctoral Degree Regulations of Utrecht University [2] - these regulations must be followed by all parties involved in the PhD trajectory.

This GSG quality assurance plan is in line with the Doctoral Degree Regulations of Utrecht University. It also follows the university's 'Minimum requirements for the quality assurance system for doctoral programmes' [3] and the Collective Labour Agreement of Dutch Universities (CAO-NU) [4].

This document is structured as follows. Chapter 2 introduces doctoral education at the GSG, followed by Chapter 3 which details its quality assurance. Chapters 4 and 5 address PhD representation and dealing with disputes, respectively. The responsibilities relating to the quality assurance mechanisms in this document are listed in Annex 1. Annex 2 provides an overview of the differences in this quality assurance plan for the various types of PhD candidates. The GSG view on PhD supervision is included in Annex 3.

2. Doctoral education at the GSG

2.1. GSG PhD candidates

Geosciences PhD candidates perform research in the realm of the research topics at the Faculty of Geosciences with the aim of writing and defending a doctoral thesis under the supervision of a supervisor (a professor or an associate professor holding the *Ius Promovendi*) at the faculty. PhD candidates can only register with the GSG if their first promotor is appointed at the Faculty of Geosciences of Utrecht University.

Many candidates work full-time at the Faculty of Geosciences, whereas others may, for example, primarily work on their thesis in their own time. Below is an overview of the five most common types of PhD candidates, based on the types distinguished by UNL [5]:

1. PhD candidates employed by Utrecht University (CAO-NU applicable):
 - a. *Standard PhD candidates* ('werknemer-promovendus'), that have appointments as PhD candidates at Utrecht University (usually of 0.8–1.0 FTE).
 - b. *Utrecht University employees who have other types of appointments* and an agreement to combine these tasks with working on their PhD degree ('promoverende werknemer').
2. *Scholarship PhD candidates* (not employed by Utrecht University), that have their PhD track financed by a scholarship from, e.g., a foreign government or an international organisation.

3. *Externally funded PhD candidates* (not employed by Utrecht University), that have their PhD track financed with time or money other than scholarships. An example is a PhD candidate whose employer provides them with time within their appointment to work towards a PhD degree.
4. *External PhD candidates* (not employed by Utrecht University), that do not have appointments at Utrecht University and do not have any external funding. They work towards their degree in their own time and with their own funds.

This quality assurance plan applies to all PhD candidates of GSG irrespective of their position. Where applicable, differences between types of candidates are made explicit. They are also listed in Annex 2.

2.2. GSG PhD programme

2.2.1. Overview

The GSG offers the following PhD subprogrammes, all of which are run by Faculty of Geosciences institutes:

- Earth Sciences (Institute for Earth Sciences Utrecht)
- Human Geography and Spatial Planning (Research Institute Urban Futures)
- Physical Geography (Physical Geography Research Institute)
- Sustainable Development (Copernicus Institute of Sustainable Development)

The full-time PhD programme takes a maximum of four years up to the submission of the thesis to the Assessment Committee¹. In extraordinary circumstances, exceptions may be made for standard PhD candidates on a case-by-case basis, respecting the CAO-NU.

2.2.2. Requirements and other learning outcomes

Upon successful completion of the PhD programme, GSG PhD candidates should meet the requirements formulated in article 9 of the Doctoral Degree Regulations of Utrecht University [2]:

The PhD candidate is responsible for ensuring that the research that will serve as the basis for the doctoral thesis shall fulfil the following requirements:

- The PhD candidate makes an original contribution to academic research of a quality which stands up to peer review at the level usual in the Netherlands;
- The PhD candidate has demonstrated their ability to independently apply the academic methods used in the discipline concerned for developing, interpreting and putting into practice new knowledge;
- The PhD candidate has acquired and worked with a substantial body of knowledge which, at the very least, embraces the principles and methods of international academic practice and of theorisation, methodology and study in the discipline concerned;
- The PhD candidate possesses the ability to design and implement a substantial project for the purpose of developing new knowledge;
- The PhD candidate is able to pass on knowledge and methods pertaining to their discipline or specialism in an effective way;
- The PhD candidate is able to exercise social responsibility in conducting, applying and making use of their own research;
- The research is conducted in compliance with legal and university regulations and codes of conduct.

In addition, the acquisition of the following competences, knowledge and attitudes are seen as essential for the development of the PhD candidate:

- Looking beyond their field of expertise and linking the knowledge of their field to other disciplines;

¹ Adapted requirements apply to part-time programmes.

- Valuing impact and the exchange of experiences and ideas between science and society as an integral way of working;
- Handling data carefully, through FAIR principles;
- Taking responsibility for their role in (project) teams and the direction of their project;
- Taking responsibility for their own personal and competence development.

2.2.3. Programme structure

PhD candidates undertake a research project and a programme of study. They follow specific courses to deepen and broaden their knowledge and expertise in a particular scientific area, to acquire the academic and career orientation skills necessary to become independent scientists and, depending on their choice of a future career, to prepare for a career outside academia. To this end, PhD candidates are encouraged to attend a variety of lectures and courses, to gain experience more practically and to acquire knowledge and skills in interaction with other scientists. They are the drivers of their own scientific and personal development and are expected to take the initiative, look for solutions and be proactive.

Because the programme of study is geared towards the research project, the future career, and the prior knowledge and skills of the individual candidate, there is no one-size-fits-all programme. However, the programme structure is the same for all PhD candidates at the GSG. It consists of several components, each serving one or more of the requirements and other learning outcomes from section 2.2.2 and explained in more detail in the box below.

- A. Discipline-specific knowledge and skills
 - ❖ Primary research project and final thesis
 - ❖ Training activities for discipline-specific knowledge and skills
- B. Academic competences and attitude
 - ❖ Work experience and training activities for academic competences and attitude
 - ❖ Learning to play an active role in the research community
 - ❖ Career orientation skills

A. Discipline-specific knowledge and skills

❖ Primary research project and final thesis

During the PhD programme, candidates conduct supervised PhD research. This is the most key component of the programme. It is carried out in the context of the defined PhD programmes of the Faculty of Geosciences. The PhD candidate's supervisors will commit themselves to providing proper supervision (see section 3.6). Part of the research project is the acquisition of discipline-specific knowledge (through reading and discussing) and the contribution to the scientific literature in the domain of the research project. When working on their research projects, the development of academic skills, such as project management and coordination, also play a role. Candidates must adhere to the rules set out in the Netherlands Code of Conduct for Research Integrity [6].

The track ends either with the thesis defence and subsequent conferral of a doctoral degree or with a premature ending of the unfinished research project. If the project is ended prematurely, the candidate delivers a final report on their work, if possible, in consideration of the possible continuation of the project by another researcher.

❖ Training activities for discipline-specific knowledge and skills

PhD candidates may follow specific courses and attend workshops to acquire discipline-specific knowledge. Discipline-specific courses may be offered by Utrecht University or other universities (such as summer schools or other courses), the national research schools, national and international research networks or the research institutes. Discipline-specific knowledge can also be acquired by engaging with other researchers by, for example, attending conferences.

B. Academic competences and attitude

❖ Work experience and training activities for academic competences and attitude

PhD candidates follow courses and attend workshops designed to help them to develop academic skills and attitudes, which are essential in our knowledge-based society. Examples of topics are writing and implementing a personal development plan, reflecting on one's own position as a PhD researcher vis-a-vis science and society, communication with academic and non-academic audiences, research methods (including data handling), teaching, responsible conduct of research and ethics, personal effectiveness, professional development, pursuing societal impact, writing grant proposals, and project management and coordination. Courses for enhancing academic skills and attitude are offered by the GSG and other institutes within and outside Utrecht University. To candidates starting their track from November 2022 onwards, the GSG offers the *PhD Cohort programme – developing your competences as a Geoscientist*, that includes several of the topics mentioned above.

Academic competences and attitude can also be acquired by learning on the job. For example, part of the research project involves writing articles and presenting work to peers. Some candidates may choose to communicate with the general public by, for example, writing press releases or popular magazine articles. Also, secondment to societal sectors involves learning academic skills. Teaching is a specific academic skill here. In principle, *Standard PhD candidates* are involved in teaching, to gain teaching experience and acquire qualifications for a future academic position. Specific teaching tasks may differ per department.

❖ Learning to play an active role in the research community

PhD candidates participate in activities designed to help them to play an active role in national and/or international research communities. Candidates are encouraged to attend meetings and seminars organised by the research institutes or national and/or international research networks and schools, to attend guest lectures, and to participate in national and international conferences, collaborative research, international exchange programmes, short research visits or longer stays abroad. The latter are excellent opportunities for candidates to gain additional experience and knowledge, feedback and ideas, improve their CVs and broaden their networks.

Special attention is given to community building through the GSG PhD Cohort Programme. A strong community encourages mutual learning and the mutual development of ideas, thus bringing knowledge and skills within the community to a higher level.

❖ Career orientation skills

People follow a PhD programme to acquire the competences demanded by knowledge-intensive jobs in society. These may be jobs inside or outside academia. PhD candidates should take charge of their own career development.

Candidates may want to attend career orientation courses and workshops, such as the annual UU PhD Activating Career Event (PhACE). Alternatively, more interaction with societal sectors, for example through secondment and collaboration, may help candidates to learn about opportunities and requested capabilities in societal sectors, and help them to broaden their networks.

PhD candidates are expected to start exploring career options inside or outside academia at the beginning of their third year at the latest. The candidates' initiative is important in this process, but they may need some extra help. The Geosciences Career Services offer coaching in career orientation to improve the employability of the graduates. The topic is also part of the *PhD Cohort programme – developing your competences as a Geoscientist*.

3. Quality assurance

3.1. Selection and acceptance

PhD candidates will be recruited, selected and accepted by the research institutes and the project leaders (and proposed (co-)supervisors). The faculty actively strives for the diversification and internationalisation of its research staff, while attracting talent.

3.1.1. Criteria

To get admission to a GSG PhD programme, candidates must adhere to the conditions as described in Chapter 1, section 2 of the Doctoral Degree Regulations of Utrecht University [2], describing the criteria for admission to the doctoral degree (article 4, including articles 7.18 and 17a.18 WHW). Basically, this means that candidates must have earned the degree of a Dutch Master's degree or equivalent. If the candidate does not have such a degree, the Board for the Conferral of Doctoral Degrees will decide on admission on a case-by-case basis. It is assessed whether the combination of prior education and work experience corresponds to a master's degree. A procedure has been established and is available.

In addition, the quality of the applicant is of vital importance. The research focus and scientific curiosity of the candidate are taken into account, for example, as is the scientific quality as shown by earlier study results such as a (research) master's thesis and possible publications. Furthermore, all PhD candidates must have oral and written proficiency in English at an advanced level (level C1). Proof of proficiency must be provided before selection or acceptance. Also, the fit of the proposed project in the research themes of the group and the GSG is of importance².

3.1.2. Procedure

The *four-eye principle* applies to the selection and acceptance procedures for all PhD candidates, regardless of the type of candidate. This implies that before accepting a candidate, at least two staff members must have been involved in the process, including a discussion of the proposed research with the prospective candidate. One of the members is the prospective first supervisor; the second is preferably the second supervisor or a co-supervisor. In addition, the prospective supervisor informs the research director about the job vacancy or PhD application and about the intended supervisory team. A point of attention here is the number of PhD candidates of each supervisor.

All vacant new jobs for university employees (i.e., type 1: *standard PhD candidates* and *other UU employment with a PhD track*) will be advertised. Interested parties may apply for these positions. The research institute establishes a selection committee made up of the proposed supervisor(s) and, if applicable, the project leader. The invited applicants are given the opportunity to share their vision of the project they applied for through the job opening. Furthermore, the usual recruitment and selection rules of Utrecht University and the Faculty of Geosciences apply.

Prospective *PhD candidates not employed by UU* (types 2, 3, 4) seek a supervisor for their PhD proposal themselves. Apart from adhering to the four-eye principle explained earlier, the envisaged supervisor will discuss the candidate with the research director before accepting the candidate.

The supervisor must check whether a prospective PhD candidate adheres to the admission criteria of the GSG, before selection or acceptance of the PhD candidate.

3.2. Enrolment and registration

If a research institute offers a PhD position to a candidate, the candidate is subject to a procedure for admission and registration. At Utrecht University, the PhD monitoring system MyPhD is used for this purpose. MyPhD supports the processes related to the registration and monitoring of the progress of

² Vacant positions that are advertised by UU are already approved on this criterion. It will therefore be assessed only during the selection and acceptance phase if the prospective candidate proposes their own research.

(individual) PhD candidates and provides management information to be used for quality assurance and reporting. The first supervisor is the final responsible person for the registration process.

The process of admission and registration must be initiated within 14 days after the start of the research leading to a doctoral degree. This start date is the commencement date of the (employment or other) contract with the university if such a contract exists. Otherwise, the start date is the date of the actual start of the programme, i.e. the start of supervision (supervision meetings), the start of data collection, or the date of ethics review (if relevant). Please note: in any case, the PhD candidate must be registered at least three years before the expected PhD defence date³.

The PhD candidate submits to the Board for the Conferral of Doctoral Degrees a request for admission to the doctoral programme. Submitting this request is mandatory. The request, which is subject to prior approval by the supervisors/co-supervisors, the research director and the Dean of the Faculty of Geosciences, is officially registered in MyPhD. At least the following data is provided: (1) starting date; (2) type of PhD candidate according to UNL; (3) faculty and graduate school; (4) supervision team. The Board for the Conferral of Doctoral Degrees checks the quality of the PhD candidate (i.e. their qualifications) and of the (co-)supervisors. If accepted, the PhD candidate is also accepted by the GSG. Following admission and registration, the PhD candidate has certain rights, as well as certain obligations, such as taking the initiative, having a proactive attitude and being self-organised.

3.3. Training and Supervision Agreement

Within three months after the start of the research leading to the doctoral degree (see 3.2), the PhD supervisor and the PhD candidate establish and submit an individual Training and Supervision Agreement (TSA). The TSA sets out the rights and obligations of the PhD candidate and their supervisors during the PhD programme. Its purpose is to ensure the quality of the training and supervision of the PhD candidate. The TSA is mandatory for all PhD candidates.

The candidate takes the initiative in preparing the TSA, for which a template is available. After completion of the TSA, it is confirmed by the PhD candidate and their supervisor(s), supported by MyPhD. The TSA serves as the basis for the first annual Progress Review (section 3.4). The first supervisor is the final responsible person.

The GSG determines the format of the TSA. It has at least the following components:

- project title and brief project description;
- supervision (supervisors and co-supervisors, mode, time, distribution of tasks between supervisors and co-supervisors);
- proposed training programme/specific modules (time spent, topics, mandatory elements):
 - domain-specific knowledge and skills;
 - academic skills and attitude, including teaching tasks and career orientation skills;
- research community activities (e.g. conferences);
- obligations related to reporting and evaluation;
- access to facilities and services;
- schedule for the final year (to be set by the (co)supervisors and the PhD candidate at the start of the planned final year).

The TSA may contain additional information depending on the research focus of the PhD candidate and whether or not they are enrolled in a full-time or part-time PhD programme.

3.4. Annual Progress Review

At least once a year the PhD candidate has a Progress Review: a meeting with the manager⁴ to evaluate the results and development in the past period together, and at the same time to look ahead to the

³ Hence, the PhD trajectory is assumed to take at least three years, from start to defence.

⁴ The manager has the Progress Review with their PhD candidate. Usually, the manager is the supervisor.

objectives for the coming year and what development is necessary and/or preferable. For *UU employees* (type 1), this is the Assessment and Development Interview (A&D, or B&O).

The manager is responsible for the planning and conduct of the meeting. Both the manager and the PhD may each bring someone else along, if desired, in consultation with each other. An example is a daily supervisor.

The PhD candidate provides a written progress report, to be discussed with the manager. *UU employees* (type 1) use the A&D form as a template for this report. Other PhD candidates use the Progress Review form for non-employees, established by the GSG. The report is based on the TRIPLE model as now applied by Utrecht University. It invites the PhD candidate to look back and look forward on various TRIPLE components, for example, the progress of the research, development as a researcher, education, societal impact, and contribution to the team. Being the driver of their own development, the PhD candidate is expected to take a proactive role in the meeting and its preparation.

The candidate sends the progress report to the manager at least one week before the meeting. The manager records the assessment and the agreements made in the meeting. The PhD candidate confirms this written, confidential report. The manager uploads it to the digital personnel file of the PhD candidate⁵. The agreements made during the meeting are addressed during the preparations for the next annual Progress Review.

Apart from the regular annual Progress Reviews, there are two special and interrelated Progress Reviews: the six-month and the ninth-month interviews. Six months after the start of their research, all PhD candidates⁶ have a Progress review in which their managers review their progress and performance so far. If progress is not satisfactory in the first six months, candidates are given three months to improve their performance. All PhD candidates have a 'go/no-go' meeting, nine months after the start of the research, during which performance and progress are reviewed again. A negative review in both progress reviews may lead to dismissal from the PhD programme.

As with regular annual progress reviews, both the supervisor and the PhD candidate may each bring someone else along. The first promotor and second (co-)promotor will be present at go/no-go reviews in any case. The Human Resources department is involved in the go/no-go process in cases where the progress is not satisfactory (for UU employees only).

3.5. Mandatory courses and other training aspects

The following courses are mandatory:

- The **GSG PhD Cohort programme** is a mandatory programme for all PhD candidates starting from November 2022. Exemptions may be granted only in exceptional cases, to be decided upon by the vice dean of research.
- Training in the field of **research integrity** through modules on Responsible Conduct of Research is mandatory for all PhD candidates (for PhD candidates starting from November 2022 onwards, this is integrated into the GSG PhD Cohort Programme). Exemptions may be granted only in exceptional cases, to be decided upon by the vice dean of research.
- All PhD candidates whose PhD tracks start from 1 September 2020 onwards and that have education tasks, should enroll in **education training**⁷. Exemptions may be granted if the candidate has sufficient experience in teaching, for example, as a junior teacher. The vice dean of research and the vice dean of education decide upon this together.

⁵ The report will be uploaded for UU employees (type 1) or guests that are registered as such with Human Resources. In other cases, the PhD candidate and supervisor keep a copy themselves.

⁶ Except for employees with a combined junior lecturer and doctoral candidate position as referred to in Article 6.12.2 of CAO-NU 2022-2023: they have the six-month interview, but not the go/no-go interview in month 9.

⁷ For other PhD candidates, following education training is optional.

The PhD candidate is responsible for following the courses; the supervisor informs the PhD candidate and encourages their participation in the course.

Teaching is an academic skill for which specific arrangements are made. *Standard PhD candidates* are in principle involved in teaching, to gain teaching experience and acquire qualifications for a future academic position. Specific teaching tasks may differ per department. Training on the job in teaching should not be at the expense of the progress of the thesis. PhD candidates cannot be asked to spend time teaching in the final year of their track. Teaching in the final year is allowed only voluntarily. Non-employees of the UU cannot be assigned any teaching tasks.

In principle, PhD candidates spend at least 80% of their time within the PhD track on research, at most 10% on education tasks and at least 10% on following courses. The exact time to be spent on training depends on the candidate's prior learning and experiences. The right to follow courses applies to time, not to financial resources. The supervisor should be asked for permission and advice.

3.6. Supervision

The promotor (supervisor) bears the ultimate responsibility for supervision. Supervisors are professors or other employees of Utrecht University holding the *Ius Promovendi*. Responsibilities of the supervisor(s) may be delegated to a daily supervisor (co-promotor). At most two promotors and two co-promotors may be involved. The minimum is one promotor and one (co-)promotor.

The candidate and the supervisors together determine the most efficient and adequate supervision style, depending on the subject, methods, required and available skills, progress and personal preferences. The supervisor facilitates that the PhD candidate is well-embedded within the research group and the department. During the project and evaluation of the doctoral thesis, the supervisor regularly assesses the extent to which the PhD candidate has achieved the required and other learning outcomes.

Supervisors and their PhD candidates are expected to meet frequently to discuss progress and expectations, e.g. a few times a month. If a candidate does not work full-time on their research project, the supervisor and candidate can decide together on a lower frequency. The meetings have an informal character and are focused on coaching, guiding, and information provision. Candidates are expected to be proactive and meticulously prepare for the meeting; this includes preparing and sending the agenda and relevant documents to their supervisors on time. The GSG has formulated a vision of the roles and collaboration of the PhD candidate and their supervisors in the *GSG View on PhD supervision* (see Annex 3). This view can be used to guide a discussion on mutual expectations.

As part of the supervisor's professional development, Utrecht University requires a course on supervising PhD candidates. This course is mandatory for researchers who start supervising PhD candidates on or after 1 September 2022 - completion of the course is a prerequisite for obtaining the SKOz. Utrecht University also recommends intervision for starting supervisors.

3.7. Counselling

Each PhD candidate has a personal mentor within their department (preferably not from the same research group and not a professor). The mentor and PhD candidate have a confidential meeting at the start of the trajectory, followed by annual meetings. Also, a faculty confidential PhD advisor is available for all PhD candidates in the GSG. The PhD advisor has a meeting with each new GSG PhD candidate. Moreover, PhD candidates may contact their mentor or the faculty confidential PhD advisor at any point during their programme with personal issues and/or issues that they do not want to discuss with their supervisor(s).

The role of the PhD mentors and the PhD advisor is to advise and support PhD candidates and to act in their interest. They are independent and they are responsible for their own actions. The PhD mentors and the advisor are bound to confidentiality and do not act without the consent of the PhD

candidate. If necessary, they report to the dean, taking into account privacy (with the consent of the PhD candidate).

If the nature of the problem is such that it is beyond the remit of the mentor or advisor, their formal role will end; if possible, the PhD advisor or mentor will refer the candidate to other counsellors or services, such as the staff welfare service, the confidential advisor for inappropriate behaviour or the confidential advisor for staff (university ombudsperson)⁸. PhD candidates can also contact these counsellors and services directly, for example, if they feel more comfortable discussing their problem with someone further away from their workplace. If a problem or a dispute between a PhD candidate and their supervisor cannot be solved by the PhD advisor or mentor, they may refer the candidate to the Dean of the Faculty of Geosciences, according to the Doctoral Degree Regulations of Utrecht University [2] (see also Chapter 5 on Disputes).

3.8. Final review of the thesis and defence

Admission to the doctoral degree is granted to any person who satisfies all the requirements laid down in Chapter 1, section 2 of the Doctoral Degree Regulations of Utrecht University [2]. In practice, this means that the pursuit of a doctoral degree is open to anyone who:

- a) has earned the degree of Master pursuant to article 7.10a WHW, first or second paragraphs, and
- b) has written a doctoral thesis to prove their competence for the independent pursuit of science or, as the case may be, has manufactured a doctoral design, and
- c) has satisfied the requirements set out in the regulations pertaining to the conferral of doctorates as referred to in Article 7.19 WHW.

The procedure for the final review of the thesis and defence is as follows. Before the end of the appointment or contract (or otherwise agreed duration of the PhD track), the PhD candidate submits the thesis manuscript to the supervisors (promoters and co-promoters). The supervisors are responsible for checking the quality of the manuscript. When the supervisors have approved the manuscript, it can be presented to an independent Assessment Committee. The procedures and assessment criteria for reviewing a doctoral thesis are laid down in the Doctoral Degree Regulations of Utrecht University. The Regulations also describe the procedures and conditions related to the appointment of members of the Assessment Committee. In addition to these conditions, the GSG requires the Assessment Committee to be of diverse composition.

Before admitting the candidate to the doctoral thesis defence, the Board for the Conferral of Doctoral Degrees checks both the supervisors' and the Assessment Committee's approval of the candidate's manuscript; both approvals must be officially registered in MyPhD. A doctoral thesis defence takes place in public, again following the Doctoral Degree Regulations. The GSG requires the Doctoral Examination Committee to be of diverse composition.

By default, no extension of an appointment/contract is granted if it ends before the thesis is ready for review and defence. Any provisions are considered on a case-by-case basis.

3.9. Review of GSG courses and curriculum

The GSG is responsible for monitoring the quality of the courses it offers and aims to maintain and improve the quality and quantity of its course offerings. Courses are evaluated using evaluation forms. The Graduate School submits the course evaluation results to the course coordinator for comment. Once a year the GSG reviews the evaluation results and makes suggestions for changes or improvements. Every year, the GSG also evaluates the curriculum it offers.

⁸ Some counsellors are available for all PhD candidates, where others are available for specific types only (for example, UU employees and/or scholarship candidates). An overview is available via the GSG website.

3.10. Review of PhD subprogrammes

Each year the departments discuss the duration and success rate of their PhD programme in the annual meetings with the Faculty Board.

A representation of the PhD students, such as the Young Geo Council, and GSG collaborate in performing a survey among the PhD candidates every two years. The results are discussed by the GSG and used in its periodic evaluation of the PhD programmes, to improve the PhD programmes and the quality assurance mechanisms.

The dean or a delegate of the dean has an annual discussion with all (co)promotors about the progress, duration and success rate of the PhD trajectories that they supervise. This is done through individual discussion in A&D meetings with the promotor and with the co-promotor.

3.11. Review of the quality assurance plan doctoral education

Each year, the GSG evaluates the quality assurance plan (the current document) and its implementation and adapts the plan if deemed necessary and appropriate.

4. PhD representatives

PhDs are encouraged to organize themselves to represent the PhDs in the departments, at the GSG level and the university level. For instance, the **Young Geo Council** is a platform consisting of PhD representatives from the four departments within the Faculty of Geosciences. The Council represents the PhD candidates at the GSG level, by discussing PhD-related issues with the BoS. The Council also serves as a signpost, showing PhD candidates where they might find answers to their PhD-related questions. It also organises PhD career events, as well as community-building activities and workshops.

Likewise, **Promovendi Overleg Utrecht (Prout)** – an association formed by volunteer PhD candidates from all graduate schools within the University – represents the interests of all PhD candidates at Utrecht University. It also provides information on many topics (e.g. income taxes for PhD candidates) and a PhD guide with information on, for example, the rights and regulations for PhD candidates (simplified version), finances and finishing a PhD.

Although neither of these platforms has a formal status within the GSG, the GSG is glad that they exist and makes grateful use of their activities and the results thereof.

5. Disputes

Section 7 on the 'Settlement of Disputes' of the Doctoral Degree Regulations of Utrecht University [2] applies in disputes concerning doctoral theses. However, in the case of a dispute or a controversy, PhD candidates are advised to first contact their PhD mentor or the faculty confidential advisor (see 3.7).

In the case of issues that cannot be handled according to the Doctoral Degree Regulations, all stakeholders may consult the GSG through its secretary. The GSG will react within four weeks and propose a procedure to resolve the dispute. PhD candidates may also seek mediation from the University's confidential advisor for staff (university ombudsperson).

Reference list

- [1] 'Graduate School of Geosciences: Profile and Governance', Faculty of Geosciences, Utrecht University, 19 September 2023.
- [2] 'Doctoral Degree Regulations Utrecht', Utrecht University, 2023, via <https://www.uu.nl/en/organisation/phd-programmes/practical-matters/regulations-and-forms> (2023.09.19).
- [3] '*Minimum requirements for the quality assurance system for doctoral programmes*', Utrecht University, 2020, via <https://www.uu.nl/en/organisation/phd-programmes/practical-matters/regulations-and-forms> (2023.04.06).
- [4] 'Collective Labour Agreement of Dutch Universities 1 April 2022 – 31 March 2023, https://www.universiteitenvannederland.nl/nl_NL/cao-universiteiten.html (in Dutch) (2023.04.06).
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- [6] 'Netherlands Code of Conduct for Research Integrity', KNAW, NFU, NWO, TO2, VH, VSNU, 2018, <https://www.universiteitenvannederland.nl/files/documents/Netherlands%20Code%20of%20Conduct%20for%20Research%20Integrity%202018.pdf> (2023.04.06)

Annex 1. Responsibilities

The table below lists the responsibilities of the GSG, research director, supervisor and PhD candidate. Each cell mentions the relevant chapter of section. If the section number is preceded by ~, the section states a more general responsibility, from which the specific responsibility can be derived.

	GSG	Research director	Supervisor	PhD candidate
Overall	Setting the frameworks, and monitoring and improving the quality of the doctoral programme (1)	Ensuring the implementation of the quality assurance plan in their institute (1)	The promotor (supervisor) bears the ultimate responsibility for supervision. These responsibilities may be delegated to a daily supervisor (co-promotor) (3.6)	Undertaking a research project and a programme of study (1)
Requirements and desired learning outcomes	Setting the requirements and desired learning outcomes (~3.11)		Regularly assessing the extent to which the PhD candidate has achieved the requirements and desired learning outcomes (3.6) Assessing the quality of the manuscript and following the proper procedures for the assessment and defence of a doctoral thesis (3.8)	Ensuring that the research that will serve as the basis for their doctoral thesis shall fulfil the requirements and making efforts to achieve the desired learning outcomes (2.2.2) Writing a doctoral thesis and submitting the manuscript (3.8) Publicly defending the doctoral thesis (3.8)
General structure of programme	Providing a general structure for the GSG PhD programme, including the specification of mandatory courses and the time to be spent on research, education tasks and courses (~3.11)	Ensuring the implementation of the structure in the institute, including the requirements on mandatory courses and the time to be spent on research, education tasks and courses (~1)	Encouraging participation of the PhD candidate in mandatory courses (3.5, ~3.6) Safeguarding time to be spent on research, education tasks and courses (3.5; ~3.6)	Following the mandatory courses (3.5)

	GSG	Research director	Supervisor	PhD candidate
General admission criteria	Setting down the general admission requirements for the programme, plus any specific admission requirements per specialization (~3.11)	Ensuring that the proper procedures are followed in the recruitment, selection, and acceptance of PhD candidates (~1)	Following the proper recruitment, selection, and acceptance procedures when attracting new PhD candidates; assessing whether a prospective PhD candidate adheres to the admission criteria of the GSG, among others quality, degree, English proficiency (3.1)	
Registration and TSA	Setting a process for the registration of PhD candidates and for submitting the TSA (~3.11) Determining the format of the TSA (3.3).	Ensuring that the proper procedures are followed in registering the PhD candidate and in submitting the TSA, within the requested timeframes (~1)	Being the final responsible person for registration of the PhD candidate and for establishing and submitting the TSA, within the requested timeframes (3.2, 3.3)	Registering in MyPhD and taking the initiative in preparing the TSA within the requested timeframes, using the GSG TSA format (the supervisor is the final responsible person) (3.2, 3.3)
Annual progress meeting	Setting a process for annual progress meetings between managers and PhD candidates (~3.11) Determining the format of the Progress review form (for non-employees) (3.4)	Ensuring that the proper procedures are followed in organizing and conducting annual progress reviews and drawing up the reports (~1)	Planning and conducting annual review meetings, reporting and taking care of administrative matters regarding these meetings; following the proper procedures if progress is not satisfactory (3.4) (Responsibility of the candidate's manager; usually this is the supervisor, however).	Preparing and attending the annual review meetings, using the progress review form / A&D format (3.4)

	GSG	Research director	Supervisor	PhD candidate
GSG courses	Evaluating and, if needed, improving the courses and curriculum offered by the GSG to the PhD candidates (3.9)			
PhD well-being and quality of supervision	Monitoring the well-being and the quality of supervision of PhD candidates and drawing up mechanisms such as counseling facilities, courses, and a procedure for handling disputes (~1, ~3.10, ~3.11)	Implementing the personal mentoring system for PhD candidates (~1) Ensuring the quality of the supervision of PhD candidates within the institute, including the participation of PhD supervisors in the mandatory course (~1)	Supervising, coaching, and informing PhD candidates; discussing mutual expectations with the PhD candidate; having regular meetings with the PhD candidate; Facilitating the PhD candidate to be well-embedded within the research group and the department; Following the mandatory course on supervision (if applicable) (3.6)	Being proactive and discussing mutual expectations with the supervisor; preparing for the regular meetings with the supervisor, including preparing and sending the agenda and relevant documents to their supervisors on time (3.6)
Management information	Monitoring the progress, duration and exit rates of PhD candidates in the programme through individual meetings of the dean or a representative of the dean and PhD supervisors and co-supervisors (3.10)			

Annex 2. Differences between PhD types

PhD candidates GSG	Employed by UU Type 1a: Standard Type 1b: Other type of appointment	Not employed by UU Type 2: Scholarship Type 3: Externally funded Type 4: External
Selection and acceptance process	Candidate applies for advertised vacant position.	Candidate seeks supervisor for their PhD proposal. Supervisor discusses candidate with research director.
Criterion "Fit of project in group and GSG"	Already assessed before advertising job.	Assessed during acceptance procedure.
Start date	Starting date mentioned in contract.	<ul style="list-style-type: none"> ➤ Contract or agreement with UU? Starting date mentioned therein. ➤ Otherwise: date of actual start of programme.
Progress review	Assessment and Development Interview (A&D) takes the role of Progress Review. Use A&D form.	Use GSG Progress Review form.
Progress review report	Manager uploads report to digital personnel file of PhD candidate.	<ul style="list-style-type: none"> ➤ Registered as guest with Geo HR? Manager uploads report to digital personnel file of PhD candidate. ➤ Otherwise: candidate and supervisor keep a copy themselves.
Go/no-go interview after nine months	<ul style="list-style-type: none"> ➤ Employee with combined junior lecturer and PhD candidate position? No. ➤ Otherwise: Yes. 	Yes.
Education tasks	<ul style="list-style-type: none"> ➤ Type 1a? In principle involved in teaching. ➤ Type 1b? Depending on contract 	Not involved in teaching.
Education training mandatory	<ul style="list-style-type: none"> ➤ PhD track starts from 1 Sept 2020 onwards and candidate has education tasks? Mandatory. ➤ Otherwise: optional. 	Optional.

Annex 3. GSG View on PhD supervision



Graduate School of Geosciences View on PhD supervision

A successful PhD project requires dedication and commitment of all persons involved. The mutual expectations of PhD candidates and supervisors within the [Graduate School of Geosciences](#) are formulated in the GSG View on PhD supervision.

This view is taken from the Graduate School of Humanities View on PhD supervision¹, which is based on Leiden University's ['Golden rules for PhD supervision'](#).

	Supervisor	PhD Candidate
Be professional	<p>Be aware that all PhD candidates are unique human beings, with their own individual story, culture, competences, and needs.</p> <p>Being a supervisor is a demanding job. There is no template for supervision. Keep an open mind and adapt to the PhD candidate.</p> <p>Co-supervision can be difficult. Invest time to come to a joint view on the process so that the PhD candidate is not left in a quandary.</p> <p>For a professional environment to function well it needs to be a safe environment. Be aware of the hierarchical character that marks the relationship supervisor-PhD candidate. Build bridges to overcome the distance. Respect the social boundaries that mark a professional relationship.</p>	<p>Be aware that all supervisors are unique human beings, with their strengths and weaknesses.</p> <p>In the supervision process you will encounter your supervisors' personality and leadership style. If something bothers you, address it.</p> <p>The four-eye principle is there to help you and to support the supervision process. If you observe friction in the supervision, this must be addressed, if necessary, with the help of a neutral conversation partner.</p> <p>A professional environment is created by all who participate in it. A professional relationship requires respect for the social boundaries that come with it. If you feel a lack of respect in the way you are approached, or if other problems occur that you cannot solve on your own, people like your departmental mentor or the Graduate School PhD-advisor are there to give advice and support.</p>
Be committed	<p>Be aware that doing a PhD is a lengthy process that requires long-term commitment from both sides.</p> <p>PhD candidates need to feel that you care about the project's progress and outcome. Your input on the</p>	<p>Be aware that the PhD journey will be lengthy and not always easy, and that it can, at times, be hard to maintain your initial motivation and enthusiasm.</p> <p>If things are tough and motivation is less, bring this in in conversations with your supervisors and</p>

¹ References to Graduate School-specific aspects have been adapted.

	<p>project and its development is essential for the PhD candidate to grow and carry on.</p> <p>Take responsibility for the project. Be up to date, provide your PhD candidate with valuable scientific input and fair feedback on how (s)he is functioning, and involve your network in the process. Be a coach when the spirit is low.</p>	<p>colleagues. These are stages that all PhD candidates go through.</p> <p>If working conditions are not optimal, be aware that there is not one fixed structure. You are free to bring up suggestions for change if you think this will improve the situation.</p> <p>As a PhD candidate you are member of a larger academic community that is there to support you and invites you to contribute to it.</p>
<p>Be available</p>	<p>Be aware that your regular availability is key to the success of the project.</p> <p>It is part of your responsibility as a supervisor to take initiative in planning regular supervision meetings.</p> <p>You are expected to be sufficiently available to the PhD candidate in a professional way. The frequency of meetings and who participate(s) when may vary through the process. Be aware that previous arrangements may need regular adjustment.</p>	<p>Be aware that the success of your project is a joint responsibility.</p> <p>It is your PhD-project and you have a responsibility towards the success of the regular meetings with your supervisor. Be well prepared when meeting with your supervisor and ensure that your supervisor can be prepared, too.</p> <p>Make sure that you get the time you need from your supervisors while being aware of their time constraints.</p>
<p>Be a team-player</p>	<p>Be aware that your supervision includes team building.</p> <p>Supervision is by definition a joint enterprise: together with your PhD candidate, possible other researchers, and the co-supervisor(s) you are a team. Make sure you define your roles and act jointly towards the PhD candidate. If you supervise a team of young researchers, it is your task to balance the common good as well as each individual's needs. The division of tasks within the team is your responsibility. Train yourself as a team builder and be a team player yourself.</p>	<p>Be aware that you are, with your research project, part of a team that can have various shapes and sizes.</p> <p>Doing research is teamwork. Apart from you and your supervisors, there will often be other researchers involved. Define your contribution to the team that you are part of.</p>

	Be aware that you combine different roles and responsibilities as a supervisor and a project leader.	Be willing to develop as a team player and to contribute to the teamwork that you are part of, be it the collaboration with your supervisors, your local research team, the department or other (national or international) collaborations.
Be part of the Graduate School	<p>Be aware that the PhD projects you supervise are part of the Graduate School</p> <p>The relationship between a supervisor and a PhD candidate can suffer from (perceived) interdependence. At the same time, the Graduate School forms the larger academic context in which you as an academic supervisor and your PhD candidate as an academic researcher work and relate to.</p> <p>Be aware of and commit to the rules and regulations of the Graduate School as well as its expectations in respect to professionalism. Be aware of the responsibility the Graduate School has towards the quality assurance of all PhD trajectories. Encourage the PhD candidates to benefit from the training program offered by the Graduate School and provide room for this.</p>	<p>Be aware that your PhD trajectory is part of the Graduate School</p> <p>The relationship between a supervisor and a PhD candidate can suffer from (perceived) interdependence. Be aware of the larger context in which you work as a PhD candidate and member of the Graduate School.</p> <p>Be aware of the possibilities the Graduate School offers in terms of professional development and support. The Graduate School also offers support in case of difficulties with regard to the supervision.</p>
Be consistent and clear	<p>Be aware that the (perception of) research progress should be addressed. Be open and realistic about your expectations.</p> <p>Doing research is, by definition, charting unknown territory. Your view on the best next step may change with the development of the project. Be honest about this and communicate about your possibly changed views. Remember what you say and advise.</p>	<p>Be aware that being honest about your progress is key to the success of your project. Be open about what you need and expect from your supervisors.</p> <p>Meetings are there to discuss progress as well as struggles and obstacles. Include your questions and uncertainties in the documents that prepare the meeting. Make notes of the discussion and what next steps to take.</p>
Be time aware	<p>Be aware that realistic planning is essential for a PhD candidate.</p> <p>The plan as initially foreseen will undoubtedly change during the</p>	<p>Be aware that planning is one of the harder things to do in research and that the original plan is almost certainly going to change.</p> <p>Keep track of the time you spend on a particular issue. Discuss planning</p>

	<p>course of the project. Be prepared for a change by thinking about a plan B when the original plan needs revision. Set short term goals and celebrate the successes with the PhD candidate.</p> <p>Make certain that the PhD candidate knows what, in terms of thesis content, is sufficient to graduate.</p>	<p>issues with your supervisor at a regular basis. Discuss short term goals with your supervisor and celebrate your successes together.</p> <p>Be informed about the expected level and scope of the dissertation and be realistic about its contents. You write a master proof, not a life's work.</p>
<p>Be willing to receive feedback</p>	<p>Be aware that feedback is a two-way exchange.</p> <p>You should expect feedback from the PhD candidate just as the latter expects it from you. Be open to the feedback you receive and take it seriously. If no feedback is given, ask for it. You are encouraged to do so several times a year, but, in any case, during the yearly progress interview with the PhD candidate.</p> <p>Remember that your reaction to the feedback will have an impact on the openness of your discussions with the PhD candidate.</p>	<p>Be aware that receiving feedback is very helpful for your progress.</p> <p>Keep in mind that feedback is meant to help you and is not targeted against you as a person. Feedback is needed to advance your project. If it is not forthcoming, ask for it and use the feedback to your best advantage. Do not be afraid to ask for feedback in an early stage; this prevents you and your supervisor from going in separate directions.</p> <p>If you experience the feedback as unhelpful, reflect on it for a while (possibly with others) and discuss it with your supervisor in a professional and inoffensive way.</p>
<p>Be willing to give feedback</p>	<p>Be aware that a PhD candidate needs regular feedback that must be professional, objective, constructive, and balanced.</p> <p>Feedback may have a large (emotional) impact on the PhD candidate. Be cautious in choosing where and when to give feedback and be aware of the cultural/ethnic/gender/etc. variation in the research group. Employ language that is inclusive and not hurtful to people with different backgrounds and traditions. Positive feedback is as important as critical comments.</p>	<p>Be aware that your project will benefit from your feedback on the supervision.</p> <p>Supervision is meant to guide and accompany you through your PhD trajectory. You can contribute to the supervision by giving open feedback to your supervisors, always with respect and consideration.</p>
<p>Be aware of stressors</p>	<p>Be aware that as a supervisor you are a role model for the PhD candidate, also in terms of stress management and work-life balance.</p>	<p>Be aware that your life involves more than your work.</p>

	<p>Be aware that your work attitudes are easily seen as a professional standard. Stimulate the PhD candidates to take breaks and set an example by your own practice.</p> <p>Be aware that the PhD candidate's personal life story can affect their work and have an open ear for signals that might indicate (too much) stress.</p>	<p>Manage your stress level and respect your boundaries. Also talk to your colleagues and peers about their struggles with doing research. Sharing experiences may help make life as a PhD candidate more agreeable.</p> <p>Maintain the communication with your supervisor and remember that your supervisor has followed the same path before you and can also help you to put things in perspective.</p>
<p>Be future-oriented</p>	<p>Be aware that your PhD candidates need stimulation to think about their career after graduation.</p> <p>Many PhD candidates focus on an academic career only, where jobs are rare and competition is stern. Anxiety about future career development triggers and increases stress. You can make a difference in discussing this point timely and with well-balanced frequency with your PhD candidate.</p> <p>Make your professional network available to your PhD candidates.</p> <p>Make your PhD candidates aware of ways to explore the job market outside academia.</p>	<p>Be aware that you need to think about your career after graduation.</p> <p>Consider your future career, in- or outside academia. Spend some dedicated time on this issue. Pursuing an academic career can be stressful and is highly competitive. There are very few jobs in academia. Your supervisor knows you well and can advise you, also if this entails orientation on the job market outside academia.</p> <p>Work on your network. Let the outside world know who you are.</p> <p>Invest time in (university wide) career events.</p>