2024 Annual Education Report

Twente Graduate School

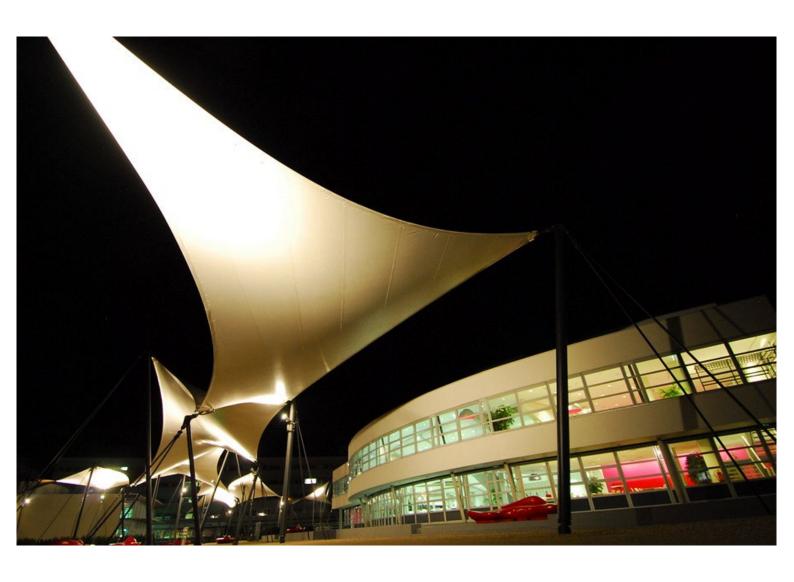


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KEY TAKEAWAYS

Successes:

- Evaluations show that the PhD generic courses organized by the TGS were very well received by participants, perhaps even better than in 2023.
- The Nature Masterclasses were successfully incorporated into the curriculum of two
 mandatory and one elective PhD course. PhD exposure to the views of leading journal
 editors and other scientific experts, the opportunity for all UT staff members and students to
 participate in the nature Masterclasses and financial savings are three advantages compared
 to the previous course designs.
- In addition to the academic integrity course launched in 2018, since 2024 all PhD candidates also received a 2.5-hour awareness training on ethical issues at the start of their PhD.

Challenges:

- Several of the highest rated elective PhD courses will not run in 2025 because the university currently cannot afford external teachers, and the UT currently lacks internal expert teachers on those specialized generic (transferable) topics. The courses we will not offer in 2025 are¹:
 - 1. Analytic storytelling (scores: 8,8 and 8,7)
 - 2. Brain training speed reading & memory techniques (scores: 8,0 and 8,6)
 - 3. Brain training focus management (scores: 7,8 and 9,0),
 - 4. Career orientation and application (scores: 8,5 and 8,9)
 - 5. Career prospects young professionals average (scores: 8,8 and 9,2)
 - 6. Fundamentals of science communication and citizen science (pending decision) (score: 9.1)
 - 7. Getting ready for your first individual research grant (score: 8,6)
 - 8. Professional effectiveness (score: 9,1)
 - 9. Project management workshop (focusing on time management) at the PhD Introductory Workshop (score: 7,9)
 - 10. Project management (scores: 8,0 and 8,5)
 - 11. Qualifier workshop for PhDs (score: 9,5)
 - 12. Science writing (score: 9,3)
 - 13. Visual storytelling (score: 8,3)
 - 14. Work smarter less stress (scores: 7,7 and 9,2)
- In 2024, the Scientific Information bootcamp experienced longer than desired waiting times for candidates to be able to begin the course due to backlog issues at LISA. An online course from University of Copenhagen was recommended as alternative.
- Similarly to the UPark, The Gallery introduced a mandatory lunch policy for whole day courses in 2024. Because the costs of the Introductory Workshop became too high, this workshop can not be offered on campus anymore.
- In general, budget cuts, a limited course offer, and a large reliance on web courses will negatively impact not only the skills of PhDs but also their well-being. In the short term, the

¹ Average score(s) in 2024. If two scores are presented, it is because of the launch of the new evaluation questionnaire in April 2024. Refer to section '3.1 Course evaluations' for the background to this change.

TGS budget is within its limits, but the current changes threaten the duration and quality of PhD trajectories. For the next year, the TGS will aim to do its utmost best to offer a minimum course offer with face-to-face options for all PhDs. Without substantial investment, the risk of delays and lower PhD quality will grow.

1. INTRODUCTION

Transferable skills, those abilities that transcend disciplinary boundaries and empower individuals to adapt to changing circumstances, innovate, and communicate effectively are essential for success inside and outside of academia. On behalf of the Doctorate Board, the Twente Graduate School (TGS), through its offer of generic skills courses, aims to empower PhD candidates during their PhD trajectory and their future career. Because the University of Twente (UT) has 5 faculties and often disciplines with only a few new PhDs per year, the TGS prioritizes offering generic skills courses.

This annual education report focuses on courses paid for from the TGS education budget only. First, it summarizes the results of the 2024 course participant evaluations and presents the envisaged improvement plans of the lecturers. Second, it describes the main innovation initiatives deployed in 2024. Third, it explains challenges faced and the resulting changes in the TGS educational offer.

This report serves as a testament to the collaborative efforts of the education units HR-CTD, CELT, ULTC and LISA, NovelT, several faculty research groups and external training bureaus which were involved in either co-coordinating or teaching doctorate courses during 2024. The Twente Graduate School deeply values their involvement and commitment to delivering high-quality relevant generic doctoral training at the University of Twente.

2. STRUCTURE OF THE DOCTORATE EDUCATIONAL PROGRAM

The PhD educational program consist of generic (transferable) and disciplinary components. The PhD programme is flexible as it allows an individualized mix of formal courses, on the job training or informal learning. For example, ECs can be claimed for taught courses, *Capita Selectas* (i.e. supervised self-learning), paper or poster presentations at conferences, teaching/supervision, organization of research events and peer-review. These educational activities are different ways of meeting the exit criteria listed on Article 4 of the Charter for Doctorate Candidates (i.e. the 'PhD Charter'). (i.e. the 'PhD Charter').

The TGS provides generic (transferable) skills' courses and a few programming and remedial research methodology courses which benefit PhDs from several faculties. Most PhDs fulfill their field-specific disciplinary needs via courses from national research schools, the 4TU, summer/winter schools, master courses or *Capita Selecta* courses. For more information, refer to Annex 2 of the <u>Charter for Doctorate Candidates</u> (i.e. the Doctoral Education Guidelines).

2.1 MANDATORY COURSES

2.1.1 PhD programme

The PhD program consists of a minimum of 30 ECs, 7.0 of which relate to mandatory courses covering basic transferable research skills. The mandatory courses together with other creditable activities listed in the <u>Doctoral Education Guidelines</u> are aligned with the Exit Qualifications listed in Article 4 of the <u>Charter for Doctorate Candidates</u>. The mandatory PhD courses are:

- 1. *PhD Introductory Workshop*. In 2024, this workshop included workshops on project management, *ethical issues* and the first part of the *Academic integrity* course. The second part of the Academic integrity course is done online in a self-paced manner. (1,5 EC).
- 2. Academic Publications (2 EC),
- 3. Presentations Skills (2 EC),
- 4. Scientific Information bootcamp (0,5 EC) and,
- 5. Data Management bootcamp. This course is linked to the Data Management Plan, a faculty requirement. Since data protocols and repositories are faculty-specific, this course is run for individual faculties (1 EC).

2.2 ELECTIVE COURSES

The list of elective courses has been developed mainly based on the PhD exit competencies listed in Article 4 of the PhD Charter, but also on requests from academic staff, support staff with academic background, the doctorate candidates themselves via course evaluations, the PE-NUT doctorate network and with input from the 4TU doctorate education working group.

2.2.1 Generic elective courses

The following elective generic PhD courses were available at UT in 2024:

- 1. Advanced workshop (systematic) literature reviews
- 2. Analytic storytelling
- 3. Brain training speed reading & memory techniques
- 4. Brain training focus management
- 5. Build your intercultural muscle
- 6. Career orientation and application
- 7. Career prospects young professionals
- 8. Creative and design thinking
- 9. Deliberate governance of knowledge and innovation
- 10. Research methodology and descriptive statistics
- 11. English for lectures
- 12. Entrepreneurial researcher programme
- 13. Fundamentals of science communication and citizen science
- 14. Getting ready for your first individual research grant
- 15. Interview skills
- 16. Lean green belt
- 17. Professional effectiveness
- 18. Project management workshop (part of the TGS Introductory Workshop focusing on time management)
- 19. Project management
- 20. Qualifier workshop for PhDs
- 21. Science writing
- 22. Taste of teaching
- 23. Visual storytelling
- 24. Work smarter stress less

2.2.2 Research methodology and data science elective courses

The Twente Graduate Schools offers a limited number of disciplinary courses on topics related to research methodology and data science. Such courses are offered by TGS if a) they are of interest to candidates from at least two faculties, b) they have been requested via the open question in the course evaluations by several candidates or c) have been requested by several supervisors. These are the courses which were offered in 2024:

- 1. Introduction to R,
- 2. Coding clinic
- 3. Data visualization using R,
- 4. Python,
- 5. C++,
- 6. Qualitative data and analysis using ATLAS Ti.
- 7. Two pre-master courses were offered to doctorate candidates who needed to build knowledge from scratch. If possible, the doctorate candidates were put in a separate group because of the expectation that they would learn faster and need more advanced assignments.
 - a. Research methodology and descriptive statistics.
 - b. *Inferential statistics*. In 2024, 5 candidates enrolled in this course but they dropped out.

2.2.4 New courses or course redesigns

Courses redesigned incorporating Nature Journal's 'Nature Masterclasses':

ULTC and TGS piloted improvements for the *Academic Publishing* and the *Presentations Skills* mandatory courses in late 2023. The pilots tested whether a blended course format incorporating course material from the Nature Masterclasses learning platform could:

- a. Increase the quality of doctorate education and,
- b. Provide more flexibility to doctorate candidates due to the self-pacing nature of the Nature Masterclasses.

Both pilots were very successful. The overall course ratings were 9.4 and 9.6 respectively, both higher than the 'old' course designs. Therefore, the new course designs were implemented in 2024.

3. MANDATORY COURSES WITH TWO MODALITIES

The <u>Doctoral Education Guidelines</u> issued by the Doctorate Board on August 28th, 2024 include significant changes applicable to the mandatory courses. A second modality was introduced allowing candidates to do self-study, practice at the research chair and have the training evaluated by their (co)promotor. This option was introduced for a variety of reasons:

- To give PhDs more control over their training and encourage their independence,
- To cater to PhDs who need a more flexible approach to learning (e.g. external PhD candidates, candidates who are abroad when the trajectory starts, PhDs with different educational needs),

- To provide an alternative training option if an educational unit cannot deliver sufficient seats
 via the traditional taught course due to teacher limitations (e.g. due to illness, parental leave,
 budget limitations to external hiring),
- To enable supervisors who feel that they can teach the subjects better than expert trainers to do so,
- To cater to PhDs who want the training to be closely linked to their field, and
- To maintain high quality training levels while staying within budget.

Because the second course modality was launched at the end of 2024, it is not evaluated in this report. Preliminary verbal feedback from candidates and (co)promotors is positive, but PhDs miss the productive learning environment that comes from face to face contact with their peers during courses. The second modality for the Data Management course was stopped as of mid-March 2025 because of technical reasons and because several faculties voiced a strong preference for the first modality.

4. QUALITY ASSURANCE

The Twente Graduate School is responsible for the quality assurance process of the PhD courses paid from its budget. The input for quality assurance involves the course evaluations by candidates, the course improvement plans submitted by the lecturers and discussions with trainers and course coordinators. The TGS also holds discussions with the PE-NUT board and with candidates or supervisors who provide feedback outside of the formal course evaluation process. Their feedback is discussed in Section 6 of this report.

The TGS makes sure that all PhD courses are evaluated by participants. The TGS Education Manager meets bi-laterally with the HR-CTD/CELT/ULTC/LISA education coordinators, NovelT and faculty lectures who provide PhD courses. During these meetings, issues raised by participants in the course evaluations are analyzed and strategies are defined accordingly. In addition, potential pilots or new course set-ups are discussed as well.

The TGS Education Manager also participates in periodic meetings attended by the HR-CTD/CELT/ULTC/LISA education coordinators. Those meetings take place at least 4 times per year and are used to keep the various educational units up to date regarding developments, to discuss issues related to venue access, course registration/evaluation infrastructure and to identify possible strategies or solutions for dealing with the various logistical challenges.

3.1 Course evaluations

Both PhD and staff courses at UT are managed and evaluated using Webhare. TGS is one of many Webhare course platform users. At the beginning of 2024, the Webhare course platform users together decided to reformulate the course evaluation questions mainly because no question addressed the issue of the course's content, and one question was not clearly formulated. The new questionnaire was launched in April 2024. The questionnaire change unfortunately prevents a time

series comparison of trends over time as some questions got reworded. The launch in April 2024 also means that TGS presents two overviews in this report, one with the old questions wording and one with the new question wording.

The old questionnaire consisted of the following 5 questions:

- 1. I can use the knowledge and skills acquired in my own situation (on a scale of 1 to 5),
- 2. As to the qualities of the trainer I am satisfied (on a scale of 1 to 5),
- 3. As to the teaching material/training I am satisfied (on a scale of 1 to 5),
- 4. As a total mark for the course, I give (on a scale of 1 to 10),
- 5. Do you need a specific course that should be added to the courses on the CTD-website? (open question), and
- 6. Do you have any further comments about the course or suggestions for improvement? (open question).

The new course evaluation questionnaire consists of the following 8 questions:

- 1. How do you rate the content of the course in which you participated? (on a scale of 1-10),
- 2. To what extent can the things that you learnt be applied in practice? (on a scale of 1-10),
- 3. How satisfied were you with the teaching materials? (on a scale of 1-10),
- 4. What is the name of your trainer? (open question),
- 5. How satisfied were you with the trainer's capabilities? (on a scale of 1-10),
- 6. How do you rate the (online) location where the course was held? (on a scale of 1-10),
- 7. Would you recommend this course to others? (on a scale of 1-10), and
- 8. Is there anything else you would like to share with us about this course? (open question).

Since the new questionnaire does not include a question on the course as a whole, we computed it on the basis of questions 1, 2, 3, 5 and 7 in order to make a comparison with the results of 2023.

Table 1 (using the old questionnaire) and Table 2 (using the new questionnaire) present an overview of the scores of the evaluation questions per course. Additional details are included in <u>Appendix A</u>.

The courses were well received and the average mark of all courses combined in 2024 is higher than in 2023. The TGS is satisfied with the improvements done to address the candidates' feedback. The Academic Integrity, Data Management, Scientific Information, Advanced Workshop (systematic) Literature Reviews and Python/Matlab/C++ had been the focus of discussions with the coordinators/lecturers and they all scored higher in 2024 as compared to 2023.

The most mentioned issue in the 2024 evaluations relates to the wish for generic training to be closely linked to the disciplinary field. For participants with such wishes the second modality of the mandatory courses (i.e. self-study, practice at the research group and assessment by the (co)promotor is now an option.

A second issue mentioned by many relates to the fact that PhDs perceive they already possess the knowledge or skills taught in some mandatory PhD courses. Since August 2024, the <u>Doctoral</u> <u>Education Guidelines</u> are more explicit regarding the exemption process. The increased awareness of the exemption process is evidenced by the increase in exemption requests, particularly by those PhDs with prior publishing, scientific information seeking and academic presentations experience.

The Academic Publishing and Presentations evaluation scores were slightly lower than those of 2023. That is not surprising considering that those courses had to be redesigned in a short period of time

because they could not continue to be run using external trainers. That said, both courses were well received in 2024 and some participants praised the internal teachers who taught the courses.

Despite its average score being higher in 2024 compared to 2023, the Introduction to Programming in Python course was the only course with an overall score below 7. The feedback shows that the issue does not relate to the quality of the course, but to the entry level of a large portion of the participants. The course was advertised as a beginner course, but many candidates did not agree that it was a beginner course.

3.2 Course Improvement Plans

The course improvement plans are submitted by course coordinators/trainers to the TGS Education Manager at the beginning of each year. The course improvement plans of the a) Building your Intercultural Muscle, b) Getting Ready for your First Individual Grant and the c) English for Lecturers were not submitted despite reminders. The course improvement plans are presented in Appendix A.

5. CHALLENGES AND CHOICES

The delivery of doctorate education comes with some organizational challenges. The following sections describe these challenges and how the TGS has addressed them.

4.1 Course offer reduction and course re-designs

The TGS is deeply concerned about not being able to provide sufficient generic training for the increasing number of PhDs. In 2024, we observed a steep increase in the number of new PhDs registrations i.e. 100 more PhDs starting their trajectories in 2024 compared to 2023. In addition, the TGS budget was decreased with 10% and some courses (including some of the best-rated ones) could not be offered anymore because they were taught by external trainers, and no suitable internal trainers could be found. As a result, we will not offer the following courses in 2025 (the average 2024 course grading is presented between brackets):

- 1. Analytic storytelling (scores: 8,8 and 8,7),
- 2. Brain training speed reading & memory techniques (scores: 8,0 and 8,6),
- 3. Brain training focus management (scores: 7,8 and 9,0),
- 4. Career orientation and application (scores: 8,5 and 8,9),
- 5. Career prospects young professionals average (scores: 8,8 and 9,2),
- 6. English for lecturers (score: 9,6),
- 7. Fundamentals of science communication and citizen science (pending decision because one of the two teachers is an external teacher) (score: 9,1),
- 8. Getting ready for your first individual research grant (score: 8,6),
- 9. Professional effectiveness (score: 9,1),
- 10. Project management workshop (focusing on time management) at the PhD Introductory Workshop (score: 7,9),

- 11. Project management (scores: 8,0 and 8,5),
- 12. Qualifier workshop for PhDs (score: 9,5),
- 13. Science writing (score: 9,3),

Table 1: Summary of evaluation scores given in the first quarter of 2024 using the old questionnaire.

Scores: questions 1-3 (1= very low; 5= very high); question 4 (1= very low; 10= very high).

	Course name	Unit or faculty	Type of course	1. Satisfaction with the Application of knowledge and skills (1-5)	2. Satisfaction with the Qualities of the trainer(s) (1-5)	3. Satisfaction with the Teaching material - training (1-5)	4. Satisfaction with the Overall course score (1-10)	N ²
1	Presentations course (previously 'Academic Presentations')	UTLC	mandatory	4,4	4,4	3,8	8,0	120
2	Academic publishing course	UTLC	mandatory	4,3	4,7	4,0	8,4	90
3	Analytic storytelling	HR	elective	4,5	4,8	4,5	8,8	13
4	Braintraining: speedreading & memory techniques	UTLC	elective	4,2	4,0	3,8	8,0	5
5	Braintraining: focus management	UTLC	elective	4,5	4,3	3,8	7,8	8
6	Build your intercultural muscle	UTLC	elective	4,7	5,0	4,7	9,6	6
7	Career orientation and application	HR	elective	4,8	4,8	4,3	8,5	4
8	Career prospects young professionals	HR	elective	5,0	5,0	4,8	8,8	4
9	Getting ready for your first individual research grant	HR / SBD	elective	4,4	4,8	4,2	8,6	5
10	Interview skills	UTLC/TCP	elective	4,5	5,0	4,5	9,0	2
11	Project management	HR	elective	4,0	4,3	3,8	8,0	4
12	Science writing	UTLC/TCP	elective	4,5	4,6	4,2	8,8	38
13	Visual storytelling	BMS	Elective	4,4	4,6	3,9	8,3	7
14	Work smarter less stress	HR	elective	4,3	4,3	4,0	7,7	3
	Average score			4,5	4,6	4,2	8,5	

Table 2: Summary of evaluation scores given in the last 3 quarters of 2024 using the new questionnaire.

	Course name	Unit or faculty	Type of course	1.Satisfaction with the Content (1-10)	2.Satisfaction with the Application of knowledge in the practice (1-10)	3.Satisfaction with the Teaching material - training (1-10)	5. Satisfaction with the Trainer's capabilities (1-10)	6. Satisfaction with the Venue (1-10)	7.Worth recommending (1-10)	N ³	Average⁴
1	Academic integrity	BMS	mandatory	7,6	7,7	7,3	7,9	7,7	7,4	93	7,6
2	Presentations course (previously 'Academic Presentations')	UTLC	mandatory	7,7	8,5	7,7	9,2	8,1	7,5	66	8,1
3	Academic publishing course	UTLC	mandatory	8,3	8,5	8,0	9,2	8,2	8,1	67	8,4
4	Data management bootcamp	LISA	mandatory	7,9	8,1	7,7	8,8	8,1	8,2	101	8,2
5	Project management workshop at PhD/EngD Introductory Workshop	TGS	mandatory	7,9	7,7	7,4	8,4	8,0	7,8	52	7,9
6	Scientific information bootcamp	LISA	mandatory	7,8	8,0	7,8	8,3	8,2	7,8	75	7,9
7	Advanced workshop (systematic) literature reviews	LISA	elective	8,9	8,6	8,1	8,9	8,7	9,0	15	8,7

² Evaluation responses received.

³ Evaluation responses received.

⁴ Not part of the questionnaire but was computed it on the basis of questions 1, 2, 3, 5 and 7 to allow for a comparison with the results of 2023 and with the results of the first trimester of 2024.

	Course name	Unit or faculty	Type of course	1.Satisfaction with the Content (1-10)	2.Satisfaction with the Application of knowledge in the practice (1-10)	3.Satisfaction with the Teaching material - training (1-10)	5. Satisfaction with the Trainer's capabilities (1-10)	6. Satisfaction with the Venue (1-10)	7.Worth recommending (1-10)	N ³	Average ⁴
8	Analytic storytelling	HR	elective	8,5	8,5	8,4	9,3	8,4	8,7	33	8,7
9	Braintraining: speedreading & memory techniques	UTLC	elective	8,6	9,0	7,8	8,8	8,4	8,8	5	8,6
10	Braintraining: focus management	UTLC	elective	9,5	7,5	9,0	10,0	10,0	9,0	2	9,0
11	Build your intercultural muscle	UTLC	elective	8,9	8,4	8,8	9,1	7,8	8,8	18	8,8
12	Career orientation and application	HR	elective	9,0	8,8	8,7	9,1	8,9	9,0	16	8,9
13	Career prospects young professionals	HR	elective	8,9	9,2	8,9	9,5	8,3	9,4	23	9,2
14	Coding clinic	EEMCS	Elective	8,0	9,0	8,0	10,0	10,0	9,0	2	9,0
15	Creative and design thinking	HR	elective	9,3	9,3	9,1	9,6	9,2	9,5	11	9,3
16	Data visualization using R workshop	BMS	elective - disciplinary	8,3	8,7	8,6	9,1	8,8	9,0	23	8,7
17	Deliberate governance of knowledge and innovation	BMS	elective	8,0	7,0	7,0	8,0	8,0	8,0	1	7,6
18	English for lectures	UTLC	elective	9,2	9,8	9,6	10,0	9,2	9,6	5	9,6
19	Entrepreneurial researcher programme	TGS	elective	8,3	7,8	8,1	8,3	8,5	8,8	13	8,3
20	Fundamentals of science communication & citizen science	BMS	elective	8,3	8,4	8,2	9,1	8,1	8,7	18	9,1
21	Interview skills	UTLC/TC P	elective	9,1	9,7	9,0	9,6	9,3	9,7	7	9,4
22	Introduction to R workshop	BMS	elective - disciplinary	8,7	8,7	8,5	9,1	8,6	9,2	13	8,8
23	Lean, green belt	HR	elective	9,4	9,2	8,2	9,4	9,7	9,4	9	9,1
24	Professional effectiveness	HR	elective	8,9	8,6	9,0	9,4	8,7	9,4	23	9,1
25	Project management	HR	elective	8,5	8,5	8,2	9,1	6,9	8,4	25	8,5
26	Programming in Python	ET	elective - disciplinary	6,5	6,6	6,5	8,4	7,5	6,5	11	6,9
27	Programming in C++	ET	elective- disciplinary	10,0	10,0	10,0	10,0	10,0	10,0	1	10,0
28	Qualifier workshop for PhDs	TGS	elective	9,0	9,5	9,0	10,0	10,0	10	2	9,5
29	Qualitative data and analysis using ATLAS Ti	ITC	elective - disciplinary	8,6	9,0	8,7	9,4	8,7	9,1	7	9,0
30	Research methodology and descriptive statistics course	BMS	elective - disciplinary	8,0	6,0	9,0	8,0	10,0	8,0	1	7,8
31	Science writing	UTLC/TC P	elective	9,1	9,3	9,1	9,7	8,5	9,4	42	9,3
32	Taste of teaching	CELT	elective	8,3	8,2	7,9	8,7	8,5	9,0	67	8,4
33	Work smarter less stress	HR	elective	9,0	9,4	8,8	9,4	8,9	9,5	11	9,2
	Average score			8,6	8,5	8,4	9,1	8,6	8,8		8,7

- 14. Visual storytelling (pending decision because one of the two teachers is an external teacher) (score: 8,3), and
- 15. Work smarter less stress (scores: 7,7 and 9,2)

The TGS identified in 2024 some alternative online courses which can help to bridge the gap until internal trainers who can teach these courses are identified:

- 1. Analytic storytelling (Nature Masterclasses alternative: Narrative tools for researchers),
- 2. Fundamentals of science communication and citizen science (Nature Masterclasses alternative: Effective science communication),
- Getting ready for your first individual research grant (Nature Masterclasses alternative: <u>Persuasive grant writing</u>). However, this alternative course focusses on convincing grant writing.
- 4. Professional effectiveness (the <u>Time Management</u> course offered by the HR-CTD department plus several Nature Masterclasses combined would constitute an alternative: <u>Networking for researchers</u>, <u>Introduction to collaboration</u> and <u>Participating in a collaboration</u>), and
- 5. Project management workshop (focusing on time management) at the PhD Introductory Workshop (the <u>Time Management</u> course offered by the HR-CTD department),
- 6. Science writing (Nature Masterclasses alternative: Writing a research paper: 2nd edition).

The resulting gap therefore involves the following courses:

- 1. Brain training speed reading & memory techniques,
- 2. Brain training focus management,
- 3. Career orientation and application,
- 4. Career prospects young professionals,
- 5. English for lecturers (we don't consider this course to be necessary for PhDs),
- 6. Project management,
- 7. Qualifier workshop for PhDs,
- 8. Visual storytelling, and
- 9. Work smarter less stress.

PhDs can also follow PhD courses from other 4TU universities free-of-charge if there are seats available.

4.2. Teacher input to courses

Two mandatory PhD courses (Academic Publishing and the Presentation Skills) had to be redesigned at the end of 2024 because they relied heavily on external trainers and suitable internal ones could not be found. The new course designs include less expert trainer input and more online self-study via the Nature Masterclasses.

4.3 Visibility of the TGS education offer

Some of the feedback received in 2024 included requests for courses which the TGS was already offering. Therefore, as part of a major overhaul of the <u>education program webpage</u>, the course offer information was given a more prominent place.

4.4 Late registration cancellations, no-shows and drop-outs

Late registration cancellations, not showing up to a course, or dropping out during the course of the training remained issues throughout 2024. This phenomenon is not unique to the doctorate education, in general it seems to affect courses and activities which are free-of-charge.

The TGS tried several possible solutions during 2024, for example: awareness raising during the TGS intake meeting, improving the text of the registration confirmation emails and oversubscribing courses. We will continue to give these issues our attention in the coming years.

4.5 Venue availability and options explored

Finding suitable venues for doctorate courses remained a challenge during 2024, particularly for courses with a high number of participants. This is mainly because lecture rooms for doctorate courses can be booked only after the room bookings for the BSc and MSc program have been finalized. Venue options were researched extensively in 2024. In some cases (e.g. the PhD Introductory Workshop), the only option was to continue running the course online.

4.6 Staffing issues

In 2024 a backlog still impacted the mandatory course Scientific Information bootcamp run by the LISA department. At the time of the writing of this report, the course was unavailable. The Academic Information Seeking (Coursera) course from the University of Copenhagen was mentioned as alternative to all new candidates during the intake briefing.

Because of the varying levels of new PhD registrations and the backlog issue, TGS and LISA have agreed that in future, for the Scientific Information bootcamp the number of seats for the next calendar year will be set based on expressed demand. Therefore, in July, TGS will email active PhD candidates who haven't done the course. They will be asked to contact TGS if they want to do the taught course during the next calendar year. LISA will do their planning based on the number of persons who contacted TGS.

6. Feedback from PE-NUT

TGS held a meeting with PE-NUT board members in April 2025 to discuss the educational offer and related issues. The issues raised by PE-NUT were the following:

- Four courses which were stopped are essential for PhD skill development and well-being:
 - Career orientation
 - Professional effectiveness
 - Work smarter stress less
 - Science writing
- Programming courses are readily available in online educational platforms,
- Some courses had few participants, PE-NUT wonders whether the TGS should continue to offer such courses,
- The waiting time on some courses is longer than desired,

- The academic integrity course could be improved via faculty specific components, and
- In-person interaction during courses is crucial; unfortunately, it has been reduced due to the increase in online education.

7. Outlook

Based on the feedback received during the last twelve months, TGS will focus on the following issues in the coming years:

- Improved courses' seat allocation planning. The number of seats needed for the Taste of Teaching course and for the taught versions of the Publishing, Presentations and Scientific Information mandatory courses for the following calendar year will be defined based on expressed demand. TGS will discuss with the educational units HR-CTD, CELT, LISA.
- Covering of important gaps. TGS will focus their offer on the most important PhD courses, and tries to offer these courses face to face whenever possible. To that effect, we will look into the possible delivery for 2026 and onwards of courses on career profiling/orientation, professional effectiveness, handling of stress and scientific writing.
- o Eliminating redundancy and maximizing financial resources. Suitable online self-paced programming courses will be identified, and the current ones will be phased out. With the exception of the Taste of Teaching bootcamp, which is mandatory for those PhDs who have lecturing tasks, the PhD course offer will be closely aligned to the exit qualifications. This means that some courses which are nice to offer but not crucial to offer or who were attended by few participants will be phased out.
- Enabling in-person contact. TGS will offer as much in-person training as its budget is able to cope with. It will also analyze which courses could offer group assignments alongside or instead of individual assignments.
- Faculty-specific components. TGS will discuss with lecturers, ways to add field-specific components to the training. However, for the mandatory courses this is already handled via the second training modality.

APPENDIX A: SUMMARY OF PARTICIPANT FEEDBACK AND COURSE IMPROVEMENT PLANS

Table 1 and Table 2 provide the course evaluation scores. This appendix provides further details by presenting:

- A detailed summary of the qualitative feedback received from participants of the mandatory courses and of the Taste of Teaching bootcamp, which is mandatory for those PhDs who lecture. The qualitative feedback received was summarized by TGS and covers the following 6 topics:
 - course content and applicability to own situation,
 - course materials,
 - course management,
 - course mode(s),
 - course workload and,
 - qualities of the trainer(s).
- 2. The course improvement plans submitted by the trainers/course coordinators. As was the case in previous years, in the coming months, the TGS Education Manager will hold discussions with (some) of the trainers/course coordinators about the implementation of the planned changes to the courses.

TGS contacted all external trainers to explain the importance of submitting the course improvement plan. Despite reminders, the plans of these courses were not submitted: Building your Intercultural Muscle, Getting your First Individual Grant and English for Lecturers.

A.1 ACADEMIC INTEGRITY WORKSHOP

A.1.1 Participant feedback summarized by TGS

Course Content and Applicability to Own Situation

Some candidates indicated that the course was a good foundation course. However, others claim that the course included content already covered in their BSc and MSc studies. The case study was appreciated for being a practical homework assignment. Candidates would like more real-life, field-specific examples of academic integrity violations.

Course Materials

Assignments were seen as useful for reinforcing what was learned. Candidates felt that the course had an excessive amount of text and Canvas exercises. Some candidates said that they were confused because key definitions and concepts were not clearly connected or explained in the materials.

Course Management

Some candidates see the need for clearer structuring, particularly regarding how concepts relate to each other and to the assignments.

Course Modality

The online format was considered fine, especially the structure with videos followed by Q&A. However, many would have preferred a face-to-face format for better engagement and interaction. Some candidates felt that more practical discussions of real-life cases and more interactive opportunities could improve the online learning experience.

Course Workload

There were many assignments but some candidates said that they helped them understand the course content. Conversely, some candidates felt that the course content was overwhelming, and the amount of material could be trimmed or focused more. Some recommended including more group work or tutorials to help manage the workload and enhance understanding.

Qualities of the Trainer(s)

Candidates appreciated the trainer's approach and the content covered. Some recommended more opportunities for interaction and discussion with the trainer(s) to enhance the learning experience.

A.1.2 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	-
Number of candidates registered for the course	364
Number of candidates who finished the course	205 (the rest are working on it)
Drop-out rate (registered*100/finished)	n/a (candidates have 1 year to finish)
Percentage of candidates who passed the course	100%
Overall course score (score given by candidates)	7,6
Average grade of candidates who passed the course (if pass/fail, this is n/a)	n/a
Evaluation questionnaire response rate	26%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

Successes:

Grading overall for the integrity component is very good (7.3-7.9), particularly considering we are catering to students from a very diverse set of disciplines. Only a tiny minority seem to have very strong views against the course. Average grade last year was 6.7.

Some of the survey results reflect previous changes made to the course in September. The overall length was cut and the language was improved. Complaints/comments on those issues have dropped as a result (existing complaints may be from students who took the course before the modifications). Relatively "low content" modules were removed.

Areas for Improvement:

- Students still have some issues with relevance to their particular work.
- There are still likely some issues with overall length

How will you deal with red traffic lights?

- Some effort will be made to find more representative case studies.
- Some more improvements will be made to reduce the text in the online components.

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

- I plan to talk to various groups and ask them for useful case studies from their own disciplines. I will also follow-up through my own investigations (online reports etc..)
- I plan to go through the text closely again, simplify and remove redundancies.

A.2 ACADEMIC PUBLISHING BOOTCAMP

A.2.1 Participant feedback summarized by TGS

Course Content and Applicability to Own Situation

Some candidates mentioned that a positive aspect was that the course encourages cross-disciplinary collaboration. Conversely, some recommended more field-specific content. Others mentioned that the course effectively introduces the academic publishing process, especially in terms of structuring papers, peer reviews, and common publishing practices.

Course Materials

Materials, especially from the Nature Masterclasses, were considered by some to be informative and well-structured. Others felt that the Nature Masterclasses' materials were lengthy and somewhat repetitive. Some candidates mentioned that the slides from interactive days and other key course materials should be made easily accessible on the course platform (Canvas) so they can revisit the material later.

Course Management

Candidates considered that the course included useful interactive components such as peer feedback and discussions, which helped reinforce learning. Some candidates mentioned that it was difficult to find an available seat in the course. Some candidates felt the interactive sessions to be somewhat redundant, because content was repeated from the online modules.

Course Modality (Online vs. Face to Face)

The flexibility of the online modules was considered positive because it enabled candidates to work at their own pace. Some felt that the face-to-face day was useful because it provided opportunities for

hands-on practice and discussions. Many candidates recommended face-to-face sessions over online learning to increase participant engagement, especially for interactive and peer-feedback activities.

Course Workload

Some candidates felt that the workload was excessive, especially when considering the credit given for the course. For example, they mentioned that the Nature Masterclasses took longer than the suggested time.

Qualities of the Trainer(s)

The trainers were praised for their clear and engaging teaching style. Candidates mentioned that their experience was evident in how they guided the course. Some felt that trainers spent too much time on presentations rather than facilitating interactive learning. Some recommended to give more focus to the guiding of discussions and peer feedback.

A.2.2. Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	-
Number of candidates registered for the course	359
Number of candidates who finished the course	359
Drop-out rate [100-(total finished*100/total registered)]	0
Percentage of candidates who passed the course	100%
Overall course score (score given by candidates)	8,4
Average grade of candidates who passed the course (if	n/a
pass/fail, this is n/a)	
Evaluation questionnaire response rate	43.7%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (<u>red traffic lights</u>) or highlighting any events that may have impacted the course. Please ensure that the views of **all** team members/components are represented.

General overview & reflection

- In general, participants liked the setup with the Nature Master Classes as they are flexible in spreading out the workload.
- Some participants do indicate that this self-study part comes at the cost of some quality of the course.
- Most participants indicated to appreciate the content of the Nature MCs, but some indicate that they felt that the examples were not field-specific enough for them.
- Participants appreciated the group discussions on the in-person sessions (Kick-off and Interactive Day) and the quality of the trainers.

How will you deal with red traffic lights?

The course will not continue under the 2024 setup because it was ran by external expert trainers. UTLC cannot find internal staff with availability to teach the course. A different design will be implemented in 2025.

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended): This course design will not be re-used in 2025 due to financial measures affecting the use of external trainers. However, if this course design had continued to be used, the trainers reported that they would have:

Provided ways to group people per research area or faculty.

A.3 ACADEMIC PRESENTATION SKILLS BOOTCAMP

A.3.1 Participant feedback summarized by TGS

Course Content and Applicability to Own Situation

Candidates mentioned that the course provides a useful and interactive learning experience. The peer feedback is controversial. Some consider that the variety of participants allows for diverse perspectives and that it enhances the learning experience. Some found the feedback from both trainers and peers to be valuable. Others want more trainer feedback or peer feedback only from candidates from similar fields. Some candidates recommended adding content on visualization tools like Adobe Illustrator/Photoshop. Others recommended more focus on practice and feedback on presentation techniques (body language, speech, engagement). Candidates also recommended to add an alternative course for participants with significant prior experience in presentations [note: such a course was available in 2024 – Fundamentals of Science Communication and Citizen Science].

Course Materials

Participants found the Nature Masterclasses on presentation skills to be informative, well-structured and with helpful additional resources. However, some participants found the Nature Masterclasses to be lengthy and have some redundancy. Some candidates recommended more practical materials on creating effective visuals (posters, graphical elements, etc.) [note from TGS: such a course was available in 2024 – Visual Storytelling]. Some candidates mentioned that they found some broken links on Canvas.

Course Management

Candidates mentioned that the course is well-organized, and trainers handle sessions effectively. Some recommended more structured feedback from the trainers. Others felt that the interactive day felt chaotic and recommended sharing a clear plan in advance to maintain participant engagement.

Course Modality (Online vs. Face-to-Face)

Candidates mentioned that the face-to-face sessions were engaging and interactive. They also appreciated the combination with self-paced online learning because this allowed them to manage their time better. Some candidates felt that the online platform used for poster sessions was not ideal and that alternative platforms should be considered.

Course Workload

They consider that the time allocated to poster and presentation preparation was enough. However, some recommended spreading the course over a period of 4-6 weeks so that there is enough time to finish the Nature Masterclasses. Some consider that the final interactive day was too long and exhausting and therefore recommended it to be split it into two half-days.

Qualities of the Trainer(s)

The trainers received a lot of praises for their professionalism, support, for creating a constructive learning environment and for effectively facilitating discussions. Some recommended adding trainers with expertise in visual design and storytelling. Some participants were surprised about a trainer who read directly from slides during presentations.

A.3.2. Course improvement plan

<u>Indicators partly from candidate evaluative questionnaire (SEQ):</u>

Indicators	
Feedback received from teachers	-
Number of candidates registered for the course	367
Number of candidates who finished the course	367
Drop-out rate [100-(total finished*100/total registered)]	0
Percentage of candidates who passed the course	100%
Overall course score (score given by candidates)	8,0 and 8,1 respectively
Average grade of candidates who passed the course (if	n/a
pass/fail, this is n/a)	
Evaluation questionnaire response rate	50.7%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

- The Nature Masterclasses were appreciated well.
- Participants did indicate to have too little time to do both Nature Masterclasses and the homework assignments in the given time.
- Participants found the conference-style interactive day very useful, but quite intensive and tiring
- Some participants thought the reliance on peer feedback was too heavy. They prefered to have more feedback from a trainer.

How will you deal with red traffic lights?

The course will not continue under the 2024 setup because it was ran by external expert trainers. UTLC cannot find internal staff with availability to teach the course. A different design will be implemented in 2025.

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended): This course design will not be de used in 2025 due to financial measures affecting the use of external trainers. However, if this course design had continued to be used, the trainers reported that they would have:

- Added more time between the Kick-off and the interactive day to leave more time for the Nature Masterclasses and the homework assignments
- Considered adding more trainers to rely less on peer feedback. However, this would have made the course more expensive.

A.4 ADVANCED WORKSHOP SYSTEMATIC (LITERATURE) REVIEW

A.4.1. Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	After each course round, the course was
	evaluated (4 times in 2024)
Number of candidates registered for the course	56
Number of candidates who finished the course	46
Drop-out rate [100-(total finished*100/total registered)]	18%
Percentage of candidates who passed the course	95%
Overall course score (score given by candidates)	8,7
Average grade of candidates who passed the course (if	n/a
pass/fail, this is n/a)	
Evaluation questionnaire response rate	21%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

Successes:

Participants really appreciate the course because of the way they can directly apply the
content at the stage of their review they are in. We keep receiving this as the main
feedback to our course. We focus and emphasize this also as most important
recommendation for researchers to start the course.

Areas for Improvement:

- There are enough researchers who want to take the Advanced Systematic Literature Review course. The main requirement for this course is completion of the Scientific Information (SI) bootcamp. However, if we maintain the entry requirement, we would be left with half empty courses, because the SI bootcamp is fully booked until the end of the year. The biggest improvement that needs to be done is getting a clear overview through proper administration of registered PhD's and their course needs in communication by TGS.
- Note by TGS: TGS considers that . The <u>registration page</u> maintained by LISA page states
 that the Scientific Information bootcamp is a highly recommended pre-requisite (not a
 mandatory one). The website also states what is the expectation regarding the entry
 knowledge subjects.

How will you deal with red traffic lights?

We deal with these by asking TGS for insight and information in order to provide our course to everyone who wants to take it.

Note by TGS: TGS does not consider this a red flag. On the <u>registration page</u> maintained by LISA it is stated that the Scientific Information bootcamp is a recommended (not a mandatory) pre-requisite.

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

- Align expectations of all parties involved (TGS, PhD's, LISA) in order to provide our course
 to everyone who is in the process of starting up a (systematic) literature review and wants
 to take our course.
- Note by TGS: TGS considers that the issue was dealt with already since the registration page maintained by LISA states that the Scientific Information bootcamp is a highly recommended pre-requisite (not a mandatory one). The website also states what is the expectation regarding the entry knowledge subjects.

A.5 ANALYTIC STORYTELLING

A.5.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	Nothing about the overall course. We have an ongoing conversation throughout the year; if ideas come up, we discuss these immediately.
Number of candidates registered for the course	104
Number of candidates who finished the course	93
Drop-out rate (registered*100/finished)	11%

Percentage of candidates who passed the course	100%
Overall course score (score given by candidates)	8,7 and 8,8 respectively
Average grade of candidates who passed the course (if pass/fail, this is n/a)	n/a
Evaluation questionnaire response rate	55%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

Successes:

The quantitative evaluations were still good, some even slightly higher than 2023: the course received a 8,7 mark overall, with high marks for the applicability in practice (8,7), and the trainer (9,4).

There are very few qualitative comments, perhaps because of the new evaluation format? Almost all the additional comments are directed at the trainer / thanking the trainer.

Areas for Improvement:

Based on the remarks in the evaluations, only two things are mentioned by students: 4
students suggested the course would be better in person; 4 more students suggested
they'd like to have more sessions and/or another round of feedback from the trainer.

How will you deal with red traffic lights?

We see no reasons for concern. If you decide to offer the training again in the future, we could consider offering more offline versions, rather than online, as some people who participated in the online version thought they would have enjoyed a live version better.

The suggestions for more sessions/more feedback rounds is possible for us, we have different formats and can easily offer a longer program with more in-depth learning. The question is more for the UT: does the UT have the means and interest in extending the Analytic Storytelling course?

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

 None for now, as no negative points or suggestions for the content program have come up. Instead, participants were happy and satisfied.
 Moreover, no trainings are planned for the upcoming year.

Evaluation of previous year's actions and improvements

Action point	Evaluation
The addition and finetuning of a visualization exercise/module. For the offline/in-person format, this is relatively straightforward; for the online format, we are exploring what works.	We have changed the afternoon program to include a visualization exercise. This has worked well. We can adapt the program on the needs/wishes of the participants, so decide to include the visualization or spend more time practicing making your story more tangible.

A.6 BRAIN TRAINING: SPEED READING AND MEMORY TECHNIQUES

A.6.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	-
Number of candidates registered for the course	58
Number of candidates who finished the course	46
Drop-out rate [100-(total finished*100/total registered)]	-
Percentage of candidates who passed the course	79.3%
Overall course score (score given by candidates)	8,6
Average grade of candidates who passed the course (if pass/fail, this is n/a)	n/a
Evaluation questionnaire response rate	19%

General overview & reflection

Successes:

- Despite the low response rate, good reviews for the sessions
- Practical for the PhD-candidates to use straight away

Areas for Improvement:

- More interactive session
- Tell students to leave their camera on for more interaction

How will you deal with red traffic lights?

Not applicable

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

• n/a

A.7 BRAIN TRAINING: FOCUS MANAGEMENT

A.7.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	-
Number of candidates registered for the course	44
Number of candidates who finished the course	38
Drop-out rate [100-(total finished*100/total registered)]	-
Percentage of candidates who passed the course	86.4%
Overall course score (score given by candidates)	9.0
Average grade of candidates who passed the course (if	Not applicable
pass/fail, this is n/a)	
Evaluation questionnaire response rate	19%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

Successes:

- Despite the low response rate, good reviews for the session
- Very practical for the PhD-candidates

Areas for Improvement:

- More interactive session
- Tell students to leave their camera on for more interaction

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

• n/a

A.8 BUILD YOUR INTERCULTURAL MUSCLE

A.8.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	yes
Number of candidates registered for the course	45
Number of candidates who finished the course	38
Drop-out rate [100-(total finished*100/total registered)]	84.4%

Percentage of candidates who passed the course	Not applicable
Overall course score (score given by candidates)	9,6 and 8,8 respectively
Average grade of candidates who passed the course (if	n/a
pass/fail, this is n/a)	
Evaluation questionnaire response rate	54%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

The lecturers did not provide further details. This is possibly due to the fact that they can not run the course in 2025 because they are not internal trainers. In 2023 this course had been the highest rated course out of all the TGS courses.

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

n/a

A.9 CAREER PROSPECTS FOR YOUNG PROFESSIONALS

A.9.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	-
Number of candidates registered for the course	45
Number of candidates who finished the course	35
Drop-out rate (registered*100/finished)	12%
Percentage of candidates who passed the course	100%
Overall course score (score given by candidates)	8,8 and 9,2 respectively
Average grade of candidates who passed the course (if	n/a
pass/fail, this is n/a)	
Evaluation questionnaire response rate	51%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

Successes:

The participants are very satisfied with the course. Both with the live and with the online course.

Areas for Improvement:

No areas for improvement.

How will you deal with red traffic lights?

No red lights

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

• I will not be facilitating this course next, because of changed UT policy, so I have no improvements planned.

A.10 CAREER ORIENTATION AND APPLICATION

A.10.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	-
Number of candidates registered for the course	60
Number of candidates who finished the course	19
Drop-out rate (registered*100/finished)	32%
Percentage of candidates who passed the course	100%
Overall course score (score given by candidates)	8,5 and 8,9 respectively
Average grade of candidates who passed the course (if pass/fail, this is n/a)	n/a
Evaluation questionnaire response rate	27%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

<u>Successes</u>: Give the candidates a tool kit to start a independent as possible to explore their opportunities on labor market by networking following their career target.

Areas for Improvement:

Give all the candidates the opportunity to do a job interview practice.

After the course a moment for individual guiding.

How will you deal with red traffic lights?

Analyze the suggestions and take action when possible

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended): Continue like it is done the last 17 years.

A.11 CODING CLINIC

A.11.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	-
Number of candidates registered for the course	4
Number of candidates who finished the course	2
Drop-out rate [100-(total finished*100/total registered)]	50%
Percentage of candidates who passed the course	50%
Overall course score (score given by candidates)	9
Average grade of candidates who passed the course (if pass/fail, this is n/a)	n/a
Evaluation questionnaire response rate	50%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

Successes:

• The course was very appealing to the PhDs as it is directly related to the automation of their own project. It provides students with an opportunity to zoom out from day-to-day burdens of their own research, look at the project from a 'helicopter view' perspective, identify the bottlenecks in the data acquisition/analysis pipeline. Also course provides ample time for learning and implementation of the learned material (duration 6 months)

Areas for Improvement:

• For students not skilled in computer science, grasping the intricacies of data automation by themselves, even under the guidance of teachers can be quite challenging.

How will you deal with red traffic lights?

There were none.

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

• I plan to offer following an EDX course on Computer science either prior to taking this course or along with it for students who also want to master their coding skills along with automating their project data pipeline.

A.12 DATA MANAGEMENT BOOTCAMP

A.12.1 Participant feedback summarized by TGS

Despite receiving 101 course evaluations, the qualitative feedback received was very limited.

Course Content and Applicability to Own Situation

Candidates consider this to be a good starting course and mention data preservation as a topic they appreciated most. Some candidates reported redundancy between the online and the face to face sessions.

Course Materials

No particular comments

Course Management

Some felt that the course should be entirely run in Canvas.

Course Modality (online versus face to face)

Some candidates felt the course should have been online. Conversely, others recommended to scrap the online part.

Course Workload

Candidates mentioned that 1 EC is low given the workload of the course.

Qualities of the Trainer(s).

Some candidates mentioned that they appreciated the interaction with the data steward, and the insights gained e.g. on data types, storing and preservation.

A.12.2 Course Improvement Plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	Yes, formal via Qualtrics survey after each
	bootcamp
Number of candidates registered for the course	456
Number of candidates who finished the course	302 (as of 28-3-2025)
Drop-out rate (cancelations*100/registered)	14% cancellations
Percentage of candidates who passed the course	66% (the rest are in progress)
Overall course score (score given by candidates)	8,2
Average grade of candidates who passed the course (if	n/a
pass/fail, this is n/a)	
Evaluation questionnaire response rate	29%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

Successes:

- Participants value the approachable and knowledgeable support provided by the data stewards.
- Personal, tailored one on one feedback from data stewards offered to each candidate separately.
- The interactive session, which offers practical tips and encourage peer interaction, are appreciated by participants.
- The alignment between the DMP sections and the self-study Canvas modules is considered as an
 effective and cohesive structure for participants, helping participants completing their DMPs
 more easily.

Areas for Improvement:

- Self-study part in Canvas: length & lack of interactive elements
- Updates required for improvement of the DMP tool

How will you deal with red traffic lights?

- Self-study part in Canvas: length & lack of interactive elements: Evaluation and revision of the
 content has started in 2024 and the content will be revised, outdated information will be updated
 and interactive elements (where and when possible) will be added to the self- study part of the
 Canvas course by the data stewards.
- Regular DMP tool updates: DMP-tool is periodically updated to incorporate the feedback received from both students and data stewards.

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

- Revision of the content of the RDM Canvas self-study part
- Adding interactive elements where and when possible to the RDM Canvas self-study part
- Updating the outdated information on the RDM Canvas self-study part and regular check points

Continuously reviewing and updating the DMP-tool

Evaluation of previous year's actions and improvements

Action point	Evaluation
Reviewing, updating and improving the self-study part of the course in Canvas	Broken links and outdated information on Canvas was partially updated and more extensive revision is needed based on the internal evaluation. More extensive evaluation and improvement of the course is to follow in 2025.
Continuously reviewing and updating the DMP-tool	Regular updates based on the feedback took place throughout 2024 and the same has been planned for 2025.

A.13 CREATIVE AND DESIGN THINKING

A.13.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	-
Number of candidates registered for the course	34
Number of candidates who finished the course	26
Drop-out rate (registered*100/finished)	23%
Percentage of candidates who passed the course	100%
Overall course score (score given by candidates)	9,3
Average grade of candidates who passed the course (if pass/fail, this is n/a)	n/a
Evaluation questionnaire response rate	32%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (<u>red traffic lights</u>) or highlighting any events that may have impacted the course. Please ensure that the views of **all** team members/components are represented.

General overview & reflection

Successes:

The changes made to the course compared to the 2023 editions have continued to yield positive results, with scores improving across all areas based on the latest report.

We have further enhanced the integration between pre-workshop reading and workshop discussions.

All practical aspects of the course, which participants appreciated, have been retained.

Additionally, we have decreased the workload by condensing the practical exercises and eliminating redundant exercises. This change has helped maintain engagement while reducing the course's overall mental workload.

Areas for Improvement:

Participants did not indicate any areas for improvement. However, the trainers are seeking financial support to acquire additional props, such as plastic hats for the Six Thinking Hats exercise and the LEGO Set "Duplo Build Your Own Animals – As You Wish" (30503) for the introductory icebreaker activity.

How will you deal with red traffic lights?

To ensure sufficient attendance of PhDs at the workshop, we will inform TGS of the course dates three months in advance.

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for 2025:

- Enhance visual resources (e.g., slide presentations) to improve clarity (e.g., framework adopted) and engagement in the workshop.
- Incorporate extra physical props for the icebreaker and creative exercises.
- Emphasize the diversity among PhD candidates by focusing on creative problem-solving that addresses challenges relevant to their needs.

A.14 DATA VISUALIZATION USING R

A.14.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	-
Number of candidates registered for the course	47
Number of candidates who finished the course	37
Drop-out rate (registered*100/finished)	78.72% finished (21.28% dropped out (did not come)
Percentage of candidates who passed the course	100% of people who finished (attendance was the requirement)
Overall course score (score given by candidates)	8.7
Average grade of candidates who passed the course (if pass/fail, this is n/a)	n/a
Evaluation questionnaire response rate	62.16%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

Successes:

Pro's & con's of certain plots

Variety of examples

Low workload for trainer

Areas for Improvement:

Areas for improvement mentioned by the participants are:

Basic course / mostly for beginners

Should be longer

Geospatial applications

How will you deal with red traffic lights?

No red traffic lights were highlighted, however these would be assigned high priority. If possible, I would like to get in contact with the person raising it, in order to fully understand the issue, such that I can tackle it appropriately.

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

Add examples from the geospatial sciences

It is planned to revamp the course over the summer by adding more general information on visualizations and aligning it with the planned course by Yuri Engelhardt.

A.15 DELIBERATIVE GOVERNANCE OF KNOWLEDGE AND INNOVATION

A.15.1 Course improvement plan

<u>Indicators partly from candidate evaluative questionnaire (SEQ):</u>

Indicators	
Feedback received from teachers	-
Number of candidates registered for the course	1 (originally 7 but 6 cancelled ahead of the course)
Number of candidates who finished the course	1
Drop-out rate [100-(total finished*100/total registered)]	0%
Percentage of candidates who passed the course	100%
Overall course score (score given by candidates)	7,6
Average grade of candidates who passed the course (if pass/fail, this is n/a)	n/a
Evaluation questionnaire response rate	100%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data

(<u>red traffic lights</u>) or highlighting any events that may have impacted the course. Please ensure that the views of **all** team members/components are represented.

General overview & reflection

Successes:

- The classes were better plannable with discussions and exercises because all the students were always there: attendance was compulsory. You can't do practical exercises when everyone comes and goes as they please.
- The presence and collaboration of the PhD student (from the TGS program) raised the level. She always made substantial contributions and had an intrinsic interest in participating.

Areas for Improvement:

- The course is demanding for Master's students because they have to work practically instead of being entertained (simply listening to the lecture). This must be communicated more clearly in advance by the PA Master's program so that the expectations of everyone involved match.
- In future editions, more leeway will be given to incorporate your own (PhD) projects and more group work will be done (to increase activity levels).

How will you deal with red traffic lights?

No read lights given.

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

None

A.16 ENGLISH FOR LECTURERS

A.16.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	-
Number of candidates registered for the course	6
Number of candidates who finished the course	4
Drop-out rate [100-(total finished*100/total registered)]	33%
Percentage of candidates who passed the course	66%
Overall course score (score given by candidates)	9,6
Average grade of candidates who passed the course (if pass/fail, this is n/a)	n/a
Evaluation questionnaire response rate	83%

The lecturer did not submit the course improvement plan. The course will not be offered in 2025.

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

• n/a

A.17 ENTREPRENEURIAL RESEARCHER PROGRAM

A.17.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	Yes received after each program, as it is
	part of our internal workflow. We, as
	Novel-T, also send feedback forms to the
	participants.
Number of candidates registered for the course	75
Number of candidates who finished the course	+/-68. 7 people didn't want to do the final
	pitch, but it is a mandatory part of the
	program.
Drop-out rate (registered*100/finished)	+/- 10%
Percentage of candidates who passed the course	100%
Overall course score (score given by candidates)	8,3
Average grade of candidates who passed the course (if	n/a
pass/fail, this is n/a)	
Evaluation questionnaire response rate	21%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

Successes:

High scores for the course, trainers and materials.

Practical course with much experience in the team.

A lot of invaluable connections to the program.

Program related to real-world entrepreneurship.

"This training should be considered as one of the mandatory courses for PhDs"

Areas for Improvement:

Some overlap in lectures.

Guest lecture from a successful business owner with scientific background.

How will you deal with red traffic lights?

-

What is the **text about course improvements you want to be published** on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

- Improve the pitches and given timeslots. 3-minute pitches instead of 7. Inform better on take-off grants.
- Maybe connect a successful entrepreneur to the course for a small, relevant talk.
- Clearly describe the route to take in order to start the business after/during PhD trajectory. Sketch the roadmap.

A.18 FOCUS MANAGEMENT

A.18.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	-
Number of candidates registered for the course	44
Number of candidates who finished the course	38
Drop-out rate [100-(total finished*100/total registered)]	14%
Percentage of candidates who passed the course	84%
Overall course score (score given by candidates)	7,8 (based on 8 responses) and 9,0 (the
	based only on 2 responses) respectively
Average grade of candidates who passed the course (if	n/a
pass/fail, this is n/a)	
Evaluation questionnaire response rate	19%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data

(<u>red traffic lights</u>) or highlighting any events that may have impacted the course. Please ensure that the views of **all** team members/components are represented.

General overview & reflection

Successes:

- Despite the low response rate, good reviews for the session.
- Very practical for the PhD-candidates.

Areas for Improvement:

- More interactive session.
- Tell students to leave their camera on for more interaction.

How will you deal with red traffic lights?

Not applicable

Actions and improvements planned for next year (3-4 bullet points recommended):

• The course will not be offered in 2025.

A.19 FUNDAMENTALS OF SCIENCE COMMUNICATION AND CITIZEN SCIENCE

A.19.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	-
Number of candidates registered for the course	13 (plus 2 'no-shows')
Number of candidates who finished the course	12 participants completed the course
Drop-out rate [100-(total finished*100/total registered)]	8%
Percentage of candidates who passed the course	92%
Overall course score (score given by candidates)	9,1
Average grade of candidates who passed the course (if	n/a
pass/fail, this is n/a)	
Evaluation questionnaire response rate	50%; additionally, we held a reflection
	session during the last meeting collecting
	feedback from the participants.

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

Successes:

- No comments are provided from the questionnaire results other than good.
- We also held a qualitative feedback session during the last meeting. Generally, the participants were satisfied. It raises participants awareness of what science

communication is and can do, it trains their writing skills and provides insights in science communication theory and practice.

• It provides a good insight in the fundamentals of science communication

Areas for Improvement:

- To make it even more interactive.
- Various participants indicated that providing more 'homework' would be okay.

How will you deal with red traffic lights?

This course has been developed in 2024 and we ran it two times. The outcomes of the course will be used for the senior teacher qualification for the UT coordinator of the course (SUTQ). This means that currently the plan for improvement of the course which is developed based on a literature review on designing science communication training, will be validated by interviews and (possibly) a broader questionnaire, whereafter also expert advice from experts in the field of science communication will be collected. The total will lead to further insight whether the course indeed trains participants in the fundamentals of science communication and citizen science.

In short: we will include suggestions for improvement based on (the study) results and literature.

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

- To redesign the course according to the outcomes provided by amongst others the interviews with participants.
- To find funding for teaching the course.

A.20 GETTING READY FOR YOUR FIRST INDIVIDUAL GRANT

A.20.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	-
Number of candidates registered for the course	19
Number of candidates who finished the course	19
Drop-out rate [100-(total finished*100/total registered)]	0%
Percentage of candidates who passed the course	100%
Overall course score (score given by candidates)	8,6
Average grade of candidates who passed the course (if pass/fail, this is n/a)	n/a
Evaluation questionnaire response rate	26%

Despite a reminder, the lecturers did not provide further details. This is possibly due to the fact that they can not run the course in 2025 because they are not internal trainers.

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

• n/a

A.21 INTERVIEW SKILLS

A.21.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	yes
Number of candidates registered for the course	19
Number of candidates who finished the course	10
Drop-out rate [100-(total finished*100/total registered)]	10,5%
Percentage of candidates who passed the course	Not applicable
Overall course score (score given by candidates)	9,0 and 9,4 respectively
Average grade of candidates who passed the course (if	n/a
pass/fail, this is n/a)	
Evaluation questionnaire response rate	44%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

Successes:

- The course has received positive and enthusiastic evaluations and feedback from participants.
- Identify and implement practices and information most beneficial to the participants.
- Improve/update course structure to maximize the time spent on speaking practice, role play, discussion and feedback.
- Improve/update/modernize course information and materials as needed to make the course more up-to-date.
- Agree upon and establish a plan to accommodate certain dedicated participants who
 otherwise would not have been able to attend and/or complete the course.

Areas for Improvement:

 Continue to improve and update the course structure, information, and materials as needed, based on observations during the course and on the feedback and needs of the participants

How will you deal with red traffic lights?

Not applicable

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

- Continue to identify and implement practices and information most beneficial to the participants.
- Continue to improve and update the course structure, information and materials as needed, based on observations during the course and on the feedback and needs of the participants.

A.22 INTRODUCTION TO PROGRAMMING IN C++ AND PYTHON

A.22.1 Course Improvement Plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	Python	C++
Feedback received from teachers	-	-
Number of candidates registered for the course	32	8
Number of candidates who finished the course	10	0
Drop-out rate (registered*100/finished)	-	-
Percentage of candidates who passed the course	31%	-
Overall course score (score given by candidates)	6,9	10 (only 1 evaluation response)
Average grade of candidates who passed the course (if pass/fail, this is n/a)	n/a	n/a
Evaluation questionnaire response rate	34%	12.5%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

Successes:

- People who were interested in the course material rated the course very high in all aspects.
- Large fraction of people who registered have submitted their final assignments and received high final grades.
- The interactive communication in the class was rather successful, students generally enjoyed participating in-class activities.

Areas for Improvement:

- Many students found the course 'super hard for beginners'.
- Several students complained about unnecessary mathematics and physics in a context of learning programming.

How will you deal with red traffic lights?

In spite of series of simplifications that the course underwent in 2021-2024, many students were still finding the course difficult to follow. I believe that the re-emergence of any programming course in TGS should build on this experience and take this into account.

What is the text about **course improvements you want to be published** on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

Note from TGS: The lecturer is not planning to offer the course in 2025. He will only offer the course Programming in Engineering. That course is a master course which the lecturer considers not suitable for a general audience looking for a basic programming course. However, basic programming courses are easily found in online platforms such as Coursera.

A.23 INTRODUCTION TO R WORKSHOP

A.23.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	-
Number of candidates registered for the course	55
Number of candidates who finished the course	46
Drop-out rate (registered*100/finished)	83,64% finished (16,36% no shows)
Percentage of candidates who passed the course	100%
Overall course score (score given by candidates)	8,8
Average grade of candidates who passed the course (if	n/a
pass/fail, this is n/a)	
Evaluation questionnaire response rate	28,26%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

Successes:

Grades on all questions were overall high. Given some basic knowledge (see third point of improvement) this workshop seems to be a good, comprehensive introduction. Low workload on trainer

Areas for Improvement:

In line with R education in Bachelor programs at BMS the workshop will be revamped during the summer. It will be split in three parts:

Basic organization of files on your computer & R-projects.

Objects, functions, troubleshooting, installing and loading packages, data manipulation using tidy verse, conditional statements and loops.

Displaying data using ggplot2.

For PhD candidates there will be additional materials on different data structures in R (skipped in the Bachelor programs).

How will you deal with red traffic lights?

No red traffic lights were highlighted, however these would be assigned high priority. If possible, I would like to get in contact with the person raising it, in order to fully understand the issue, such that I can tackle it appropriately.

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

More focus on data handling, e.g. through small assignments for practice.

Alignment with Bachelor programs to be discussed, especially in terms of timing of sessions.

A.24 LEAN GREEN BELT (ENGLISH COURSE)

A.24.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	-
Number of candidates registered for the course	12
Number of candidates who finished the course	8
Drop-out rate (registered*100/finished)	33%
Percentage of candidates who passed the course	8
Overall course score (score given by candidates)	9,1
Average grade of candidates who passed the course (if	n/a
Evaluation questionnaire response rate	100%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

Remarks: Due to the UT LCS accreditation for the international Lean Certificates, the procedure of evaluation is a bit different. All participants have to fill in a final course evaluation at the end of this course. Without this evaluation form, they do not receive their certificate.

Successes (from the participants evaluation):

- Topics, hands-on experience, and games.
- A real case to apply the learnings.
- Interactive Ness of the course.

Areas for Improvement:

- 1. More explanation, adjusted templated of the A3 template.
- 2. More practice with the value stream mapping skill.
- 3. Slide deck.
- 4. Add the topic of six sigma (out of scope of this course).
- 5. Lower dropout rate (from the trainers).

How will you deal with red traffic lights?

The course participants did not report any red traffic lights. However, areas for improvement were mentioned (yellow/orange traffic light).

Procedure after each course:

Course trainers together reflect on participants remarks. Select those areas where we will improve next course. Brainstorm about possible countermeasures and implement a selected countermeasure.

Once a year a calibration session is organized between the Dutch and English course (some PhD participants also join the Dutch course).

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended) – related to the areas of improvement mentioned by the participants:

- Ad. 5: dropout rate: (root cause: participants are not aware that attendance is mandatory)
 Before the course send a mail to all participants with the requirements of attendance of
 this course (6 days mandatory). Highlight the fact that without attendance they will not
 receive the certificate. Ask them to cancel their registration whenever they can not meet
 the requirements.
- Ad. 1: Already in the reminder e-mail ask the participants tot think about a topic for their assignment.
- Ad. 2. Further improve the slide deck and remove all the hidden slides that are background information in case of any questions.
- Ad. 3. More exercises. The course is already full of exercises. We will pay extra attention during the course to practicing.
- Ad. 4. This topic is out of scope for the UT and will not be provided during this course.

Evaluation of previous year's actions and improvements

Action point	Evaluation
More clear expectations	Before we started participants received an explorative e-mail to
	share expectations and to ask them to confirm their attendance.
	We will keep this information e-mail to the participants.

A.25 PROFESSIONAL EFFECTIVENESS

A.25.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	
Number of candidates registered for the course	61
Number of candidates who finished the course	54
Drop-out rate (registered*100/finished)	11%
Percentage of candidates who passed the course	100%
Overall course score (score given by candidates)	9,1
Average grade of candidates who passed the course (if	nvt
pass/fail, this is n/a)	
Evaluation questionnaire response rate	37,7%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

Successes:

- The participants highly appreciate the training.
- Participants regularly mention during the course that they are able to apply elements of the course to their PhD/EngD immediately.

Areas for Improvement:

Some participants find the online modules more tiring. We will make sure to prepare
participants for the online modules, so that they can arrange a suitable workspace where
they are not distracted or interrupted.

How will you deal with red traffic lights?

We will notice them during the program and/or on the evaluation form, discuss them and change parts of the program if necessary.

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

 Nothing, when we discover a fault/ improvement/ idea/ suggestion we (the trainers) adjust it immediately.

A.26 PROJECT MANAGEMENT

(old course format; this course will be replaced by the workshop at the TGS Introductory Workshop)

A.26.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	-
Number of candidates registered for the course	51
Number of candidates who finished the course	51
Drop-out rate (registered*100/finished)	8 no shows
Percentage of candidates who passed the course	100%
Overall course score (score given by candidates)	8,0 and 8,5 respectively
Average grade of candidates who passed the course (if	n/a
pass/fail, this is n/a)	
Evaluation questionnaire response rate	43%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (<u>red traffic lights</u>) or highlighting any events that may have impacted the course. Please ensure that the views of **all** team members/components are represented.

General overview & reflection

Successes:

- The high level of 'analog interaction'.
- Customized zooming into to individual issues, and learning from each other's experiences.
- Trainer's enthusiasm, playful and goal oriented at the same time.
- Relative small group, the course not being a slide-show with bullet points.
- Very well evaluated.

Areas for Improvement:

- The room at Vrijhof was not very well ventilated.
- Letting the participants make an actual and very concrete three 3 Month Action Plan.
- Staying away from online training, it still works but for these personal tailored-made courses real interaction is what to look for.

How will you deal with red traffic lights?

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

- Live courses
- Finding ways to let participants make and share concrete action plan.
- Provide a set of preparatory questions, and on forehand let participants shortly begin to think of their own successes and frustrations.

A.27 PROJECT MANAGEMENT

(new course format, workshop part of TGS Introductory Workshop)

A.27.2 Course Improvement Plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	Yes, evaluation moments, positive
Number of candidates registered for the course	364
Number of candidates who finished the course	179
Drop-out rate (registered*100/finished)	0%
Percentage of candidates who passed the course	100%
Overall course score (score given by candidates)	7,9
Average grade of candidates who passed the course (if pass/fail, this is n/a)	n/a
Evaluation questionnaire response rate	14%

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General overview & reflection

Successes:

The training had a evaluation score of 7.9.

A few negative marks dealt mainly with the fact that participants already took a course in which the topics were covered.

Areas for Improvement:

We will better align the other, longer course with this one, in order to avoid duplications.

How will you deal with red traffic lights?

We will notice them during the program and/or on the evaluation form, discuss them and change parts of the program if necessary.

What is the text about **course improvements you want to be published** on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended): Nothing, when we discover a fault/ improvement/ idea/ suggestion we (the trainers) adjust it immediately.

A.28 QUALIFIER WORKSHOP FOR PHDS

A.28.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	-
Number of candidates registered for the course	16
Number of candidates who finished the course	8
Drop-out rate [100-(total finished*100/total registered)]	-
Percentage of candidates who passed the course	50%
Overall course score (score given by candidates)	9,5 (only 2 evaluation responses)
Average grade of candidates who passed the course (if pass/fail, this is n/a)	n/a
Evaluation questionnaire response rate	25%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

Successes:

- I think it was a great course to help understand how the qualifiers work.
- I think this course should be a mandatory course as it is very helpful and the qualifier is a requisite for the PhD students. In addition to myself, most PhD students found informative meaning that without the qualifier a lot of the uncertainties are not addressed.
- Excellent structure and insights.

Areas for Improvement:

• The examples about what the supervisors answered to the questions were a bit too many.

How will you deal with red traffic lights?

The slide with examples from the supervisors has been adapted, after the first time it was a part of the presentation. So issue solved.

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

The program of the workshop will be reviewed before delivery.

A.29 QUALITATIVE DATA AND ANALYSIS USING ATLAS TI

A.29.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	Formal, together with the participants, at the end of the course
Number of candidates registered for the course	17
Number of candidates who finished the course	10
Drop-out rate [100-(total finished*100/total registered)]	40
Percentage of candidates who passed the course	60%
Overall course score (score given by candidates)	9,0
Average grade of candidates who passed the course (if pass/fail, this is n/a)	n/a
Evaluation questionnaire response rate	41%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

Successes: (same as in 2023)

- well organized.
- participants appreciate the clear link with their own research projects.
- small assignments intertwined with content part.
- practical course.
- very well accepted by the participants.

Areas for Improvement:

- As suggested by the participants:
 - o Remove ethics.
 - Add more time to code groups and categories.
 - o Increase time with exercises.
 - o Bring back children exercises and video.
 - o Concrete, small scale exercises, with dummy data or your own data.
 - o Peer-feed-back
 - o 5 sessions instead of 4?

How will you deal with red traffic lights?

Most of the suggestions above are implementable. We need to consider if there is enough time for staff to be present in 5 sessions instead of the current 4, and if ethics is removed, then 4 sessions would be enough.

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

- remove ethics (which means more time for the remaining content and exercises).
- add more time to code groups and categories using small scale exercises.
- introduce the children geographies exercise, together with existing qualitative GIS, in a peer-review format.

A.30 RESEARCH METHODOLOGY AND DESCRIPTIVE STATISTICS

NOTE: This course improvement plan is for the course as a whole. This course is a pre-master course. Therefore most of the participants are pre- and master students. The teacher submitted the course improvement plan on a different template.

A.30.1 Course improvement plan

Indicators partly from student evaluative questionnaire (SEQ):

Indicator from SEQ		Score
Feedback received from teachers	(score on Q5.6)	2.4 (out of 5)
Overall score (grade given by students)	(score on Q2.1)	7.4 (out of 10)
Count of response/ response rate	(in title box)	n=29, response 16%
Study duration	(Mode of Q2.8)	86% of the respondents spend
		more than 60% of the time on
		the course. Mode 81-100 %
Number of students overall		174 (of the 196 registered
		students took at least one exam)
Percentage of students that passed course		156/174=90%
Average grade of students		7.3 (including 0,5 bonus)
Standard deviation average grade of students		1.1

Note: This report forms part of the annual improvement plan of the course. By analysing the data from the SEQ and course results, together with general feedback received throughout the course, please complete the sections below taking care to address any issues highlighted in the data (<u>red traffic lights</u>) or highlighting any events that may have impacted the course.

What went particularly well and would you like to build upon?

All course quality aspects are rated high and similar to previous evaluations. The teaching part is well organized (4,2) and the students subscribe the relevance of the course (4,1). The digital course environment is good (4,2). The course objectives are clearly connected to the study materials (4,3).

The on-campus Q&A lectures (flipped class-room) are considered as good (average of 4 items 3,5). They are well attended until the end, the class climate was relaxed. These lectures helped students to solve the remaining issues in the course material and summarized the most important/difficult topics. After the Q&A lecture there was always enough time to receive personal feedback. Furthermore, the consultation hours provided in an additional opportunity for the students to ask question about study material. The attendance rate of this 'walk-in walk-out' hour was quite low.

The five on-campus tutorials were considered useful (3,8) will remain part of the course in the future courses.

What would you like to add?

Unfortunately, we had to reduce the number of SA and deployment of colleague teachers in the course. The grading of the 24 assignments on which the bonus point determination is based was performed checked by a teacher (RM). I would like to have more assistance of SA for the tutorials and grading of the assignments.

What would you like to stop doing?

Nothing, I reintroduced the bonus point system since the passing rate dropped in the former block 2a (2023-2024). The grading of the 24 assignments was done as efficient as possible but it still means a lot of work for a teacher.

What is the <u>text about course improvements you want to publish</u> on the quality assurance website (bullet list of successes + bullet list of planned actions/improvements). If left blank, the text of the two boxes above will be used.

Successes in Q1 2024-2025

- The high percentage students that passed the theorical tests and R test, although they had to work hard and the exams are difficult as the balance items of the survey indicate.
- The teaching is well structured, the learning goals are clear and the online teaching material is diverse and clearly related to the learning goals.
- The student's high scores on the evaluation questions, like attaining sufficient knowledge of the subject and considering the course topics as relevant.
- The R-tutorials are very helpful to attained the required R skills and provide another opportunity to receive personal feedback.

Planned actions and improvements planned for 2024-2025:

I update the whole course in Q3 2024-2025 and there is no need to change major things.
 Maybe the bonus point will disappear again (too much work and a lower passing rate is not immediately problematic).

Note: Please use the points from *Actions and improvements planned* during the introduction of the following year's study unit to give students an overview of what has been evaluated and what has changed. This forms part of the study unit PDCA cycle of continuous development and improvement.

A.31 SCIENCE WRITING

A.31.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	-
Number of candidates registered for the course	121
Number of candidates who finished the course	121
Drop-out rate [100-(total finished*100/total registered)]	0
Percentage of candidates who passed the course	100
Overall course score (score given by candidates)	8,8 and 9,3 respectively
Average grade of candidates who passed the course (if	n/a
pass/fail, this is n/a)	

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

- In general, participants found the 5 consecutive mornings not convenient.
- Pre-recorded videos were not appreciated that much.
- The on-campus and in-person version of the course was preferred.
- The session on avoiding plagiarism was generally felt as too long.
- Some participants asked to include some information about collaborative writing

How will you deal with red traffic lights?

The course will not continue under the 2024 setup because it was ran by external expert trainers. UTLC cannot find internal staff with availability to teach the course.

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

This course will not run in 2025 due to financial measures affecting the hiring of external trainers. Internal expert trainers were not found. However, if this course design had continued to be used, the trainers reported that they would have:

- Re-structured the course in a different time format, possibly spread out over more weeks.
- Reduced the content on plagiarism and add info on collaborative writing and the use of AI.
- Given more individual feedback on writing tasks by professional trainers, less use of peer feedback.
- Worked in field specific writing groups under the guidance of a trainer who has a similar background.

A.32 SCIENTIFIC INFORMATION BOOTCAMP

A.32.1 Participant feedback summarized by TGS

Despite receiving 75 course evaluations, the qualitative feedback received was very limited.

Course Content and Applicability to Own Situation

Candidates mentioned that the course helped them optimize literature search and that they valued the feedback on drafts. Others felt that the course was redundant because they had already taken similar courses multiple times and therefore, recommended to make this course optional. Some candidates mentioned that the course should be taken at the beginning of the PhD. Candidates recommended to focus more on AI and its role in literature search and management.

Course Materials

No particular comments.

Course Management

Some candidates mentioned that the course organization should be improved to make learning objectives and assignment expectations clearer.

Course Modality (Online vs. Face-to-Face)

Having an online section online was found to be fine but candidates mentioned that there were some technical issues (e.g., the teacher being muted, platform malfunctions) which the trainers should have tested in advance.

Course Workload

Some candidates found the workload excessive, particularly regarding assignments that they felt did not add value because lacked a clear purpose.

Qualities of the Trainer(s)

The trainer was generally well-regarded. No specific suggestions for improvement related to the trainer's qualities, aside from ensuring that technical issues (e.g., being muted) are resolved for online teaching.

A.32.2 Course Improvement Plan

<u>Indicators partly from candidate evaluative questionnaire (SEQ):</u>

Indicators	
Feedback received from teachers	6 times, after each course round
Number of candidates registered for the course	339
Number of candidates who finished the course	294
Drop-out rate [100-(total finished*100/total registered)]	13%
Percentage of candidates who passed the course	290 (as of 28-3-2025)
Overall course score (score given by candidates)	7,9
Average grade of candidates who passed the course (if pass/fail, this is n/a)	n/a
Evaluation questionnaire response rate	22%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

Successes:

• We improved the alignment of our course outcomes with the requirements for the follow up course: Advanced (systematic) literature review.

Areas for Improvement:

- Improvement of course registrations whereby cancellation for this course has consequences. This needs to be approved/worked out by TGS. – pending since previous improvement plan.
 - Note by TGS based on communication to LISA during 2-4-2024 meeting: cancellation fees will not be implemented.
- Discussion with TGS on competitive aims (large numbers of PhD students that have to follow this course and level of information skills taught by this course) pending since previous improvement plan.
 - Note by TGS: This is a beginner course, candidates who already have the skills as evidence by journal/conference publications with the first author role are eligible for an exemption.
- Administration of registered PhD's and their course needs should be communicated to us.
 This is the only solution to avoiding the large waiting list that exists for this course.
 Note by TGS based pm 2-4-2024 meeting: LISA will inform TGS whether they can increase capacity.

How will you deal with red traffic lights?

We deal with these by asking TGS for insight and information in order to provide our course to everyone who has to take it.

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

- Information and communication about the number of PhD candidates (based on existing data) that we need to provide this course to will be improved and provided by TGS;
- Agreements between TGS and LISA about how to handle the waiting list will be followed up and executed by all parties involved.

Evaluation of previous year's actions and improvements

Action point	Evaluation
 Improvement of course registrations whereby cancellation for this course has consequences. This needs to be approved/worked out by TGS. 	Still pending Note by TGS based on communication to LISA during 2-4-2024 meeting: cancellation fees will not be implemented.
 Further adjustment of the bootcamp towards the follow-up (advanced workshop (systematic) literature reviews 	Completed, teachers of both courses will keep each other updated about changes or adjustments that could affect the other course.
 Discussion with TGS on competitive aims (large numbers of PhD students that have to follow this course and level of information skills taught by this course) 	Discussion was started, the agreements made have not been followed up yet Note by TGS: This is a beginner course, candidates who already have the skills as evidence by journal/conference publications with the first author role are eligible for an exemption.
Elaboration in this course on setting up a research question as a starting	Completed, extra information and tools have been added about this in the lecture, including worked out examples.

point for searching literature;
preferably with an additional exercise
or assignment

A.33 TASTE OF TEACHING BOOTCAMP

A.33.1 Participants feedback summarized by TGS

Course Content and Applicability to Own Situation

Participants mentioned that the course was helpful and that they appreciated its practical approach. They found group work and discussions engaging and valuable. Others felt that the course was too general and recommended running it per discipline. Some candidates recommended more focus on supervising and teaching tutorials. Others mentioned that while they found interactive teaching techniques (e.g., Kahoot) to be useful, these are not always be applicable in all fields.

Course Materials

Some candidates felt that the slides were outdated and that some material felt redundant (e.g., introduction video was unnecessary). Other candidates recommended to add variety to the materials.

Course Management

Candidates mentioned that the structure of the course was good. Some mentioned that the Canvas page structure should be improved but did not specify with respect to what specifically. Some candidates mentioned that the tempo of the first two sessions could be higher. Others found it odd that candidates were teaching other candidates despite not being highly skilled themselves.

Course Modality (Online vs. Face-to-Face)

No particular comments.

Course Workload

Some candidates said that the course was too short and that more time was necessary to prepare properly.

Qualities of the Trainer(s)

Candidates found the trainers were engaging and encouraged participation. Many candidates praised their trainer and even said that the trainer was a highlight of the course.

A.33.1 Course improvement plan

<u>Indicators partly from candidate evaluative questionnaire (SEQ):</u>

Indicators	
Feedback received from teachers	Informal
Number of candidates registered for the course	203
Number of candidates who finished the course	197
Drop-out rate [100-(total finished*100/total registered)]	12,2%

Percentage of candidates who passed the course	87,8%
Overall course score (score given by candidates)	8,4
Average grade of candidates who passed the course (if	n/a
pass/fail, this is n/a)	
Evaluation questionnaire response rate	33%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (<u>red traffic lights</u>) or highlighting any events that may have impacted the course. Please ensure that the views of **all** team members/components are represented.

General overview & reflection

Successes:

- See successes previous year
- Interaction with the peers
- The training makes participants more open/interested in teaching
- Mini lectures are highly valued
- Putting theory in practice
- The models that are used (e.g. Nine events of Gagné)

<u>Areas for Improvement:</u>

- Improve the focus of the first assignment (PhD's do not see the value of this assignment)
- More practice for supervising
- More information on how to engage students
- Clearer instructions for the 2nd assignment (PhD were somewhat confused)
- Practicing giving feedback (participants are sometimes hesitant because they do not want to offend their colleague)
- Add more resources to Canvas

How will you deal with red traffic lights?

The above areas for improvement are not seen as 'red lights'. If there are any, they will be addressed immediately. The trainers have drawn up an action plan to address the areas for improvement, which will be finalized in the coming months.

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

- Improve the focus of the first assignment (PhD's do not see the value of this assignment)
- More practice for supervising
- More information on how to engage students
- Clearer instructions for the 2nd assignment (PhD were somewhat confused)
- Practicing giving feedback (participants are sometimes hesitant because they do not want to offend their colleague)
- Add more resources to Canvas

A.34 VISUAL STORYTELLING

A.34.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	We discussed the feedback and how to make improvements for the course. We mainly looked at possibilities to keep giving the course now the budgets has been cut down. Thus, how we can keep collaborating since we believe we each of us brings in original expertise that together makes the course more interesting than we could do separately.
Number of candidates registered for the course	13, but 2 were no-shows
Number of candidates who finished the course	10
Drop-out rate [100-(total finished*100/total registered)]	9%
Percentage of candidates who passed the course	91%
Overall course score (score given by candidates)	8,3
Average grade of candidates who passed the course (if pass/fail, this is n/a)	n/a
Evaluation questionnaire response rate	70%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (red traffic lights) or highlighting any events that may have impacted the course. Please ensure that the views of all team members/components are represented.

General overview & reflection

Successes:

- Total marks are good (average 4.3), added value of VS is acknowledged.
- High scores.
- Majority of the respondents intends to continue to use parts of the course in their future career

Areas for Improvement:

- From the discussion during class: To include also instructions / guidelines on how to use supporting programs like illustrator, video editing or developing a story.
- To rethink the teaching materials, although the remark given is too general to know what is meant and also, we do not have one hour classes so we are not sure what this person refers to.

How will you deal with red traffic lights?

We discuss them and carefully consider the next design of the course. When feedback is given during the time the course runs, we pay attention to the feedback during the class. Generally, we engage in meaningful conversations with the participants.

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

- For next year, first we aim to get funding for the course.
- On the supporting canvas site we will include more references and examples that can support the practical development of a visual storytelling product (like how to use illustrator etc.)

Evaluation of previous year's actions and improvements

Action point	Evaluation
Every run the course will be	We did adapt the lesson plan accordingly and updated the
updated according to the latest	Canvas site.
insights.	

A.35 WORK SMARTER STRESS LESS

A.35.1 Course improvement plan

Indicators partly from candidate evaluative questionnaire (SEQ):

Indicators	
Feedback received from teachers	-
Number of candidates registered for the course	42
Number of candidates who finished the course	39
Drop-out rate (registered*100/finished)	7%
Percentage of candidates who passed the course	100%
Overall course score (score given by candidates)	7,7 and 9,0 respectively
Average grade of candidates who passed the course (if	n/a
Evaluation questionnaire response rate	37%

Note: This report forms part of the annual improvement plan of the PhD/EngD doctoral education. After analyzing the data from the course evaluations and feedback received from the individual teachers, please complete the sections below taking care to address any issues highlighted in the data (<u>red traffic lights</u>) or highlighting any events that may have impacted the course. Please ensure that the views of **all** team members/components are represented.

General overview & reflection

Successes:

- multiple participants report orally to the trainer that they find this course the most useful they have had so far. They indicate as key factors: peer support as organized within this course, practical tips and individual coaching.
- The course lowers the threshold for struggling PhD's to seek help from e.g. psychologist or ombudsman and supports PhD's with previous issues (such as burnout, depression, anxiety, and culture shock) to prevent relapses and to transfer insights from their therapies to day-to-day PhD life.

Areas for Improvement:

- struggles of EngD candidates differ significantly from those of 3rd and 4th year PhD candidates and fit less well in the course group.
- enhance effectiveness: self-study modules offer flexibility (esp. for distance learning PhD's), but are less effective, compact training days are long and intense.
- peer-group contact through Whatsapp does not seem to add much benefit for participants and is quite time consuming for the trainer.

How will you deal with red traffic lights?

n/a

What is the <u>text about course improvements you want to be published</u> on the quality assurance website (bullet list of planned actions and improvements).

Actions and improvements planned for next year (3-4 bullet points recommended):

- adjust course description: not recommended for EngD candidates
- consider restructuring the course into smaller chunks to shorten training days
- connect peer groups for mastermind sessions in different way

Evaluation of previous year's actions and improvements

Action point	Evaluation
Online on-demand course offering	Not desirable or feasible. We have decided to focus on campus course set-up with a backup option of online self-study modules.
Long, intense training days	This is the draw back of a flexible and compact in person course set-up. It is a choice that we made.