



**B Global Sustainability Science
Utrecht University**

© 2024 Academion

www.academion.nl
info@academion.nl

Project code P2304

Contents

- Summary 4
 - Score table 6
- Introduction..... 7
 - Procedure..... 7
 - Panel 8
 - Information on the programme 9
- Description of the assessment..... 10
 - Previous accreditation’s panel’s recommendations..... 10
 - Standard 1. Intended learning outcomes 10
 - Standard 2. Teaching-learning environment..... 11
 - Standard 3. Student assessment 16
 - Standard 4. Achieved learning outcomes 19
 - General conclusion 20
 - Development points 20
- Appendix 1. Intended learning outcomes 21
- Appendix 2. Programme curriculum..... 23
- Appendix 3. Programme of the site visit..... 24
- Appendix 4. Materials..... 25

Summary

Standard 1. Intended learning outcomes

The panel concludes that the programme has a clear and unique profile, providing students with a broad perspective, both multidisciplinary, thematic and integrative, on complex sustainability challenges. The panel appreciates the combination of natural and social sciences throughout the programme, as well as the efforts of the programme to optimize the balance between the natural and social sciences. It also values the programme's focus on the development of a critical and reflective attitude, stimulating students to become change agents. Furthermore, the programme is highly responsive to contemporary academic and societal debates, due to its strong connections with the professional and societal field. The panel considers the ILOs to be appropriate to an academic bachelor's level and in alignment with expectations of the academic and professional field.

Standard 2. Teaching-learning environment

The panel considers the curriculum to be well-structured and coherent. It appreciates how the curriculum is appealing to both national and international students, and is continually updated in response to developments in the professional and academic field. The curriculum covers all ILOs and provides students with a solid, interdisciplinary foundation in Sustainability Science, with clear specialization paths in the form of tracks. The profile of these tracks has recently been strengthened with, amongst others, a fifth track on 'Sustainable & Healthy Food'. The curriculum addresses a wide variety of topics while at the same time providing flexibility for students to diversify, offering sufficient room for specialization and in-depth research. The diversity in student intake may lead to some overlap in course content, but also adds value through the difference in perspectives. In addition, the programme is looking at ways to reduce unnecessary overlap between courses. The panel appreciates the set-up of the courses and the integration projects linked with societal actors. It concludes that the development of academic and professional skills is sufficiently addressed in all courses. To further strengthen the coherence of skills development within the curriculum and make this more explicit to students, the panel suggests developing skills learning lines.

The panel values the student-centred learning environment, with the focus on small-group, interactive teaching and the high level of student involvement. According to the panel, there is adequate supervision, feedback and support. The courses offer varied teaching methods, including guest lectures to introduce students to different perspectives, projects based on real-life cases, and ample opportunity for peer learning. Moreover, the programme provides flexibility and freedom of choice for students in determining their study route and developing their own profile.

The feasibility of the programme is in order. Students receive proper information and guidance during the programme, and sufficient extra guidance and support if needed. They appreciate the guidance offered by lecturers, study advisers and tutors and find them easily accessible. In addition, there is a student-mentoring and buddy system set up by the very active study association Storm, which serves as the link between students, teachers and graduates.

The panel is impressed with the quality and enthusiasm of the teaching staff. They are all didactically qualified and are internationally recognized experts in their field, covering the academic scope of the programme. The lecturers all combine teaching and research and have strong connections with the professional and societal field through their own research activities. Thus, the Copernicus Institute with its societal impact orientation provides an excellent research base and practical input for the programme. The alignment and cohesion of the curriculum and teaching team are ensured by regular meetings and

calibration among staff members. The panel sees a positive trend with respect to teachers' perceived high workload, but recommends continued monitoring and evaluation of this workload.

The English-taught programme is internationally oriented, which is reflected in the international community of students and staff. According to the panel, the choice for an English name and language of instruction is well substantiated and in alignment with the international nature of the professional and academic field.

Standard 3. Student assessment

The panel concludes that the assessment system is transparent and well designed. Adequate procedures, such as the four-eyes principle, are in place to ensure and enhance the quality of assessment. The assessment methods used are diverse and appropriate, and include structural formative feedback. The panel appreciates the attention for the coherency of assessment and the strong culture of calibration among teachers, as well as the efforts to reduce the workload of teachers with regard to continuous assessment, and to realign the standard rubric forms. Given subsequent course-level modifications, which the programme is well aware of, the panel suggests monitoring the ongoing consistency of the rubrics.

There is a good balance between individual and group assignments, with sufficient attention to skills. The panel endorses the implementation of the larger individual writing assignments in each of the tracks, and the improved assessment of individual contributions to group work. The panel understands the faculty's considerations for adopting a strict resit policy. Nevertheless, it encourages the faculty to look into other possibilities. In addition, the panel advises the programme to establish uniform rules for preparatory exams. To communicate these clearly to students, the panel recommends including more detailed information in the course guides.

The bachelor's thesis covers all ILOs of the programme at an individual level and is always independently assessed by two examiners. The panel considers the thesis assessment procedure to be well thought out. According to the panel, the grades awarded are sufficiently substantiated and detailed feedback is provided, although the panel noted that the level of substantive feedback varies. In some cases, the panel suggests giving more specific feedback would be helpful for the students. Also, the panel suggests that sometimes adding a research question would make the thesis better readable. There are regular calibration sessions about assessment, with subsequent adjustments if needed, such as the recent modification of the assessment forms.

According to the panel, the Board of Examiners proactively contributes to the quality of assessment in the programme. It safeguards the quality of assessment in the programme in various ways. In particular, the panel appreciates the recent evaluation of the rubrics and the elaborated proposal for a peer review process to encourage alignment between courses and course assessments.

Standard 4. Achieved learning outcomes

Based on the examination of a selection of 15 theses from the programme, the panel concludes that the level of the theses is appropriate for an academic bachelor's programme. The theses demonstrate the achievement of the ILOs. The documentation and interviews show that alumni are generally content with the programme and are well prepared to perform successfully in a wide variety of master's programmes in both the Netherlands and abroad, and the professional field.

Score table

The panel assesses the programme as follows:

Bachelor's programme Global Sustainability Science

Standard 1: Intended learning outcomes

meets the standard

Standard 2: Teaching-learning environment

meets the standard

Standard 3: Student assessment

meets the standard

Standard 4: Achieved learning outcomes

meets the standard

General conclusion

positive

Em. prof. dr. J.T.A. (Hans) Bressers, panel chair

C. (Carlijn) Braam, panel secretary

Date: 20 September 2024

Introduction

Procedure

Assessment

On 18 and 19 June 2024, the bachelor's programme Global Sustainability Science of Utrecht University was assessed by an independent peer review panel as part of the cluster assessment Environmental Sciences. The assessment cluster consisted of 17 programmes, offered by the institutions Open University, University of Amsterdam, Wageningen University, Delft University of Technology, Radboud University, Vrije Universiteit Amsterdam, University of Groningen, Maastricht University, Leiden University, and Utrecht University. The assessment followed the procedure and standards of the NVAO Assessment Framework for the Higher Education Accreditation System of the Netherlands (September 2018).

Quality assurance agency Academion coordinated the assessment upon request of the cluster Environmental Sciences. Peter Hilderling and Jessica van Rossum acted as coordinator and as panel secretaries. Annemarie Venemans, Esther Poort, Anne-Lise Kamphuis, Linda te Marvelde, Carlijn Braam and Jessica van Rossum also acted as secretaries in the cluster assessment. They have been certified and registered by the NVAO. Carlijn Braam acted as panel secretary in the assessment of the bachelor's programme Global Sustainability Science of Utrecht University.

Preparation

Academion composed the peer review panel in cooperation with the institutions and taking into account the expertise and independence of the members as well as consistency within the cluster. On 15 December 2023, the NVAO approved the composition of the panel. The coordinator instructed the panel chair on his role in the site visit according to the Panel chair profile (NVAO 2016).

The programme composed a site visit schedule in consultation with the coordinator (see appendix 3). The programme selected representative partners for the various interviews. It also determined that the development dialogue would be made part of the site visit. A separate development report was made based on this dialogue.

The programme provided the coordinator with a list of graduates from academic year 2022-2023. In consultation with the coordinator, the panel chair selected 15 theses of the programme. They took the diversity of final grades and examiners into account, as well as the various tracks. From track Business & Innovation 2 theses were selected, from track Energy & Resources 2, from track Governance & Societal Transformation 3, from track Water, Climate and Ecosystems 5 and 3 theses were selected that fall under two tracks. Prior to the site visit, the programme provided the panel with the theses and the accompanying assessment forms. It also provided the panel with a self-evaluation report and additional materials (see appendix 4).

The panel members studied the information and sent their findings to the secretary. The secretary collected the panel's questions and remarks in a document and shared this with the panel members. In a preliminary meeting, the panel discussed the initial findings on the self-evaluation report and the theses, as well as the division of tasks during the site visit. The panel was also informed on the assessment framework, the working method and the planning of the site visits and reports.

Site visit

During the site visit, the panel interviewed various programme representatives (see appendix 3). The panel also offered students and staff members an opportunity for confidential discussion during a consultation hour. No consultation was requested. The panel used the final part of the site visit to discuss its findings in an internal meeting. Afterwards, the panel chair publicly presented the preliminary findings.

Report

The secretary wrote a draft report based on the panel's findings and submitted it to the coordinator for peer assessment. Subsequently, the secretary sent the report to the panel for feedback. After processing this feedback, the secretary sent the draft report to the programme in order to have it checked for factual irregularities. The secretary discussed the ensuing comments with the panel chair and changes were implemented accordingly. The panel then finalized the report, and the coordinator sent it to the Faculty of Geosciences of Utrecht University.

Panel

The following panel members were involved in the cluster assessment Environmental Sciences:

- Em. prof. dr. J.T.A. (Hans) Bressers, emeritus professor in Policy Studies and Environmental Policy at the University of Twente (chair);
- Prof. dr. A.C. (Arthur) Petersen, professor in Science, Technology and Public Policy at the University College London (United Kingdom);
- Dr. A.R. (Ana) Vasques, lecturer at the Erasmus University College of Erasmus University Rotterdam;
- Dr. S.E. (Sarah) Cornell, associate professor at the Stockholm Resilience Centre of Stockholm University (Sweden);
- Em. prof. dr. M.C. E. (Rietje) van Dam-Mieras, emeritus professor in Sustainable Development and Innovation of Education at Leiden University, and member of the Top Consortium for Knowledge and Innovation (TKI) Biobased Circular (focus Human Capacity Agenda);
- Dr. ir. T. (Thijs) Bosker, associate professor in Environmental Sciences at Leiden University;
- Prof. dr. ir. S.E. (Siegfried) Vlaeminck, professor in Microbial Cleantech and Environmental Systems Analyses at the Universiteit of Antwerpen (Belgium);
- Prof. dr. M.P.J. (Maarten) Loopmans, professor in Human Geography and Political Ecology at the KU Leuven (Belgium);
- Dr. ir. S.G. (Gerd) Weitkamp, associate professor in Health Geography, Mobility, and Geospatial Technologies at the University of Groningen;
- Prof. dr. P. (Paquita) Perez Salgado, professor in Natural Sciences at the Open Universiteit Nederland;
- Prof. dr. E. (Esther) Turnhout, professor in Science, Technology and Society at the University of Twente;
- Em. prof. dr. ir. J.T. (Hans) Mommaas, emeritus professor in Regional Sustainability Governance at Tilburg University, and chair of the Ecological Authority;
- Dr. P. (Patricia) de Cocq, director Nature & Society at HAS green academy;
- Prof. dr. ir. Z. (Zofia) Lukszo, professor in Smart Energy Systems at the Delft University of Technology;
- M. M. (Marisa) Beunk MSc., alumn (March 2023) of the master's programme Environmental Sciences (Policy Track) of Wageningen University (student member);
- F.O. (Fenna) Oostrum, alumn (September 2023) of the master's programme Environment and Society Studies of Radboud University (student member).

The panel assessing the bachelor's programme Global Sustainability Science of Utrecht University consisted of the following members:

- Em. prof. dr. J.T.A. (Hans) Bressers, emeritus professor in Policy Studies and Environmental Policy at the University of Twente (chair);
- Prof. dr. A.C. (Arthur) Petersen, professor in Science, Technology and Public Policy at the University College London (United Kingdom);
- Dr. P. (Patricia) de Cocq, director Nature & Society at HAS green academy;
- Prof. dr. ir. Z. (Zofia) Lukszo, professor in Smart Energy Systems at the Delft University of Technology;
- F.O. (Fenna) Oostrum, alumn (September 2023) of the master's programme Environment and Society Studies of Radboud University (student member).

Information on the programme

Name of the institution:	Utrecht University
Status of the institution:	Publicly funded institution
Result institutional quality assurance assessment:	Positive
Programme name:	Global Sustainability Science
CROHO number:	56987
Level:	Bachelor
Orientation:	Academic
Number of credits:	180 EC
Specialisations or tracks:	- Water, Climate and Ecosystems - Energy and Resources - Sustainable & Healthy Food - Governance and Societal Transformation - Business and Innovation
Location:	Utrecht
Mode(s) of study:	Fulltime
Language of instruction:	English
Submission date NVAO:	1 November 2024

Description of the assessment

Previous accreditation's panel's recommendations

The previous accreditation of the bachelor's programme Global Sustainability Science of Utrecht University took place in 2018. In the self-evaluation report of the current assessment, the programme described the actions undertaken in response to the recommendations. Also, several improvements were discussed in the interviews during the site visit. The improvements included addressing the development of skills and attitudes more explicitly, developing material to remedy deficiencies of students entering the programme, revising the regulations regarding the teaching qualifications, and organizing teacher meetings to discuss assessment and grading of theses and other products. The panel concludes that the recommendations have been seriously acted upon by the programme and is generally content with the improvement measures taken.

Standard 1. Intended learning outcomes

The intended learning outcomes tie in with the level and orientation of the programme; they are geared to the expectations of the professional field, the discipline, and international requirements.

Findings

Profile

The bachelor's programme Global Sustainability Science (GSS) aims to educate students to become change agents who are able to contribute to transformations towards sustainable and just societies. Students acquire the knowledge, skills and attitudes that enable them to analyse, understand and find solutions for complex sustainability challenges. The programme offers thematic specialization in five tracks on Water, Climate & Ecosystems, Energy & Resources, Sustainable & Healthy Food (newly added), Governance & Societal Transformation and Business & Innovation. The GSS programme is embedded in the Department of Sustainable Development, also known as the Copernicus Institute of Sustainable Development. The department aims to help accelerate the transition to a sustainable and just society by developing relevant knowledge and collaboration with citizens, politicians, policymakers, NGOs and firms.

The panel is very positive about the programme's profile, with the systems analysis approach that combines and integrates natural and social sciences throughout the English-taught programme. It also values the conceptually strong basis in sustainability science. GSS places itself as a multidisciplinary and interdisciplinary programme with transdisciplinary components. According to the panel, all components are of a sufficient bachelor's level. In integration projects, students apply their knowledge and analytical skills to real-world sustainability problems in collaboration with societal partners. The programme provides students with a general multidisciplinary systems analysis perspective, an in-depth thematic perspective and an integrative perspective. These perspectives were evident throughout the interviews during the site visit. The programme clearly stimulates students to become change agents, through acquiring academic key competencies such as a critical and reflective attitude, integrated problem solving, systems thinking, collaboration and communication skills in all courses. According to the panel, the programme is highly responsive to developments in the dynamic field and contemporary academic and societal debates, also through its strong connection with the Copernicus Institute.

The panel noticed that students experience an imbalance between the natural and social sciences in the programme, with more emphasis on the social sciences. Based on the elaborations during the site visit, the

panel concludes that the programme is aware of this perception and is in the process of optimizing the balance in the integrated courses, taking into account students' backgrounds. Since a majority of the students have a natural science background, it is necessary to bring all students to the same level, which the panel agrees is probably the source of the perceived emphasis on social sciences. The panel encourages the programme to keep explaining this to students, so that the interdisciplinary balance of the programme remains clear for students.

A large proportion of bachelor's graduates, some with several years of professional experience, continue with a master's programme. The programme also prepares for a professional (scientific and social) context. The panel noted that the previous accreditation's panel recommendation to strengthen the professional qualifications of the students has been taken up by the programme. For example, the labour market is explicitly addressed in (guest) lectures and course manuals.

Intended learning outcomes

The panel was presented with a clear overview of intended learning outcomes (ILOs), both general and domain specific, and encompassing research skills as well as clearly articulated soft skills. These ILOs are derived from the domain-specific framework for academic programmes in Environment and Sustainability and are formulated in accordance with the Dublin Descriptors. The panel considers the ILOs to be well formulated and appropriate for the academic bachelor's level. They cover all relevant aspects of the bachelor's programme. Moreover, the programme will reformulate the ILOs to include aspects of transdisciplinary learning and skills.

According to the panel, the programme is well-connected to the professional field and society as there are many interactions in the context of research projects of teaching staff, guest lectures, activities of the study association Storm and contacts with alumni. Further alignment with the field is pursued through the Societal Advisory Board. The panel was pleased to learn that the Advisory Board advises GSS on developments within the domain as well as the needs of society and the professional field that are relevant to the content of the programme.

Considerations

The panel concludes that the programme has a clear and unique profile, providing students with a broad perspective, both multidisciplinary, thematic and integrative, on complex sustainability challenges. The panel appreciates the combination of natural and social sciences throughout the programme, as well as the efforts of the programme to optimize the balance between the natural and social sciences. It also values the programme's focus on the development of a critical and reflective attitude, stimulating students to become change agents. Furthermore, the programme is highly responsive to contemporary academic and societal debates, due to its strong connections with the professional and societal field. The panel considers the ILOs to be appropriate to an academic bachelor's level and in alignment with expectations of the academic and professional field.

Conclusion

The panel concludes that the programme meets standard 1.

Standard 2. Teaching-learning environment

The curriculum, the teaching-learning environment and the quality of the teaching staff enable the incoming students to achieve the intended learning outcomes.

Findings

Curriculum

The three-year GSS programme amounts to 180 EC and consists of a major of 135 EC and an elective course profile of 45 EC. The major (135 EC) consists of compulsory courses (67.5 EC), a general major elective course ('Philosophy of Science and Ethics' or 'Environmental Communication and Behaviour', 7.5 EC) and major elective courses (60 EC). At the end of the first year, students deepen and extend their knowledge by choosing one of five tracks: Water, Climate & Ecosystems, Energy & Resources, Sustainable & Healthy Food, Governance & Societal Transformation and Business & Innovation. As a result of a curriculum evaluation, a renewed curriculum has been implemented in 2023-2024 to strengthen the profile of the tracks by introducing a track-specific level 3 course for each of the tracks. In addition, thanks to large student numbers and an increase in staff and inspired by the development of a new research theme 'Future food' at university level, the number of courses has been increased and a fifth track on 'Sustainable & Healthy Food' has been introduced.

At the end of each year, students are challenged to apply the knowledge and skills that they have acquired in an interdisciplinary sustainability project. In these projects, students learn how to effectively work in groups while working on real-life sustainability challenges in close contact with societal stakeholders. The first year concludes with the Regional Integration Project, which is a group research project on regional sustainability challenges. Year 2 concludes with the Global Integration Project, focused on systems transformation and future thinking. The Consultancy Project in year 3 is a transdisciplinary group research project for an actual client, for example, an NGO or the Province of Utrecht. Group work is usually done in groups of 3 to 4 students and involves a group contract and reflection at the end. The final assignment of the programme is the bachelor's thesis of 15 EC. In this individual research project, students apply the knowledge gained on sustainability challenges, solutions and research methods in the field of their track.

Students have ample opportunities to follow their personal interests within their major courses, electives and minors. The latter can be selected from the total range of course modules that are offered at Utrecht University or, after approval by the Board of Examiners, elsewhere. The range of course modules at the UU includes an approved subset of electives, which makes it easier for students to design their own path. The major includes (A) Sustainability Science courses, (B) research methods courses, (C) courses related to a thematic sustainability domain ('track'), and (D) integration projects in which students apply their knowledge and analytical skills to real-world sustainability problems in collaboration with societal partners, as well as the bachelor's thesis in which students do their final individual research project. The courses are taught at three distinct levels: introductory, greater depth, and advanced. Parallel to this, academic skills are trained in the courses on these three levels.

The panel studied the curriculum of the programmes and a selection of courses as well as the programme-specific assessment plan, in which the contribution of each major course to realising the ILOs of the GSS programme is outlined. It concludes that the programme has translated the ILOs in a coherent and well-structured curriculum. The panel was able to verify that all ILOs are accurately mapped to the various curriculum components. The programme provides a broad and interdisciplinary introduction to Sustainability Science, which according to the panel provides a solid foundation for students. In addition, it has clear specialization paths (tracks) related to major sustainability challenges. The panel appreciates the newly added track and the opportunities for in-depth research in the track and electives of a student's choice. The five tracks are closely linked both to sustainability challenges and to the research conducted at the Copernicus Institute. The panel also learned that possible overlap or gaps within the tracks have been reduced; for example, a lab component and field courses have been added in the track on Water, Climate &

Ecosystems. Furthermore, it appreciates how the programme continually reflects on the relevance of the tracks in light of the professional and academic field, as is evidenced by the changes implemented in the curriculum. The curriculum's coherence, focus and alignment with developments in academic research are supported by the fact that the programme is embedded in the Department of Sustainable Development (Copernicus Institute), linked to the Faculty of Geosciences.

The panel is positive about the set-up of the courses and the integration projects linked with societal actors. It describes the programme as globally appealing, thus attracting a large group of students. The students are highly motivated, as is also reflected in the fact that more than 10% of the students are enrolled in the Honours Programme. This programme comprises 30 EC, of which 15 EC are supplementary to the regular bachelor's programme. Furthermore, in collaboration with other higher education institutions additional challenging interdisciplinary electives are offered. Ambitious students can also opt for a tailor-made course, in which they can, for example, do an internship.

The self-evaluation report mentions that due to the diversity in the inflow of students, the content of the major, especially the natural science subjects, was seen as less challenging than expected by some students. For lecturers, the different backgrounds and knowledge levels of students can be a challenge, but they see the different perspectives as an added value. Students who the panel spoke with are satisfied with the level of the courses, although they find the introductory, general courses relatively easy. The panel concludes that the programme handles the diversity in intake as well as can be expected.

The panel observed that the previous accreditation's panel recommendation to report the academic skills in the curriculum more explicitly has been taken up by the programme. The training of skills is integrated in all courses in the programme, most notably in the integration projects, starting with a series of workshops on academic writing and presenting in the course Sustainability Challenges. The attention to skills is reflected in the course descriptions, which make explicit how each course contributes to academic and professional skills development. Students feel well prepared in this regard and indicate that they learn a lot from group work, with the support of teachers. The panel also appreciates the attention to skills around data analysis and AI. Students are informed about how to use AI, while more top-down guidelines at faculty/ university level are pending. The panel recommends that the programme considers developing learning lines for skills as a 'finishing touch', to strengthen and highlight the already existing attention to skills in all courses. Adding learning lines could contribute to the coherence of skills development in relation to the ILOs, and make this more explicit for students.

Learning environment

Following Utrecht University's educational concept of continuous learning and assessment, the programme strives to offer students a personal, small-group and interaction-intensive learning environment. The courses combine lectures with small-group tutorials, assignments, group discussions and projects based on real-life cases. This is supplemented with individual tutor-student meetings and supervision of the integration projects and bachelor's theses. The panel values the student centredness of the programme, with the focus on small-group teaching and adequate supervision, feedback and support. It offers varied teaching methods including guest lectures to introduce students to different perspectives, an adequate balance of individual and group activities, and ample opportunity for peer learning. Moreover, the programme provides flexibility and freedom of choice for students in determining their study route and developing their own profile, which is appreciated by the students. It also allows them to meet the requirements for specific master's programmes. The panel is positive about the learning environment, providing good facilities and space for the development of an academic community. In addition, the panel recognizes the high level of student involvement, reinforced by the very active study association Storm.

Feasibility

The self-evaluation report shows a 76% graduation rate after four years of studying (nominal + 1 year). This is in line with the UU and national average. Based on the interview with students, in which they indicated that the programme is not too demanding, the panel is of the opinion that the programme is feasible within three years. The drop-out rate in the first year is low (9%), and most of the students who continue into the second year succeed in finishing their studies.

Guidance

In the self-evaluation report, the study guidance is mentioned as one of the strengths of the programme. The panel is very positive about the guidance and information students receive during the programme and welcomes the provision of programme-specific services and facilities. These include a Matching Day for prospective students to support their study choice process, an introduction programme for first-year students, a tutoring system to discuss students' experiences, study progress and study plans, and a student-mentoring and buddy system set up by the study association Storm. In the interviews, the important role of Storm as an integral component of the GSS programme has been stressed by the programme representatives. The study association organizes a variety of academic- and career-related events as well as social activities, and serves as the link between students, teachers and alumni.

The panel appreciates that lecturers have a personal approach and are dedicated and responsive towards students. All first-year students have a tutor who is a scientific staff member, preferably active in the first semester of the programme. The panel finds this a useful concept. For second- and third-year students, there are plenary meetings addressing the content of the upcoming year, potential master's programmes and career orientation. Study advisers are the students' first points of contact when they have individual questions and concerns. If necessary, they can refer students to the specialist services of the university. In the interview, students indicated that they appreciate the guidance offered by study advisers, tutors and student mentors and find them easily accessible. The panel also learned that Osiris offers information for course coordinators about students with special needs. The e-learning platform Blackboard is an important source of information for students. Here, general information is provided regarding entrance requirements for courses, results of course evaluations, news and updates, etc. The panel was informed that there is also a website for students enrolled in the GSS programme with information about, amongst others, the introduction period, course schedules, graduation, studying abroad, student life, rules and regulations, and news and events.

Teaching staff

The programme is taught by lecturers from the Copernicus Institute of Sustainable Development who combine teaching and research. Courses are coordinated by a tenured staff member. Additional staff members (junior lecturers and junior assistant professors, 19% of the teaching staff) are sometimes involved in teaching, as well as postdocs and PhD students. The panel is impressed with the quality of the lecturers, who are all experts in their fields, thus providing a clear link between research and teaching and ensuring that state-of-the-art knowledge is taught in the programme. Moreover, the lecturers have strong connections with the professional and societal field through their own research activities. According to the panel, the institute with its societal impact orientation provides an excellent research base and practical input for teaching in the GSS programme. Students also highly appreciate the quality and up-to-date knowledge of the teaching staff. The panel notes that teaching quality is ensured through an academic development policy that focuses on both teaching and research qualifications. The department expects temporary teaching staff to take part in the university-wide 'Start to teach' programme. All tenured staff (49%) are required to hold or obtain the University Teaching Qualification (UTQ). The panel appreciates that, in addition, several staff

members have taken the intensive Educational Leadership Programme offered by the Centre for Academic Teaching and Learning (CAT), to further improve their teaching skills. The panel is positive about the calibration among staff members; between lecturers regular meetings take place to ensure the alignment and coherence in the curriculum and to discuss teaching practices.

Regarding the high workload of teachers as mentioned in the self-evaluation report, the panel learned that the programme's management has taken several measures to improve this persistent problem, for example by hiring new staff, deploying assistants and reducing the number of feedback moments per course. According to staff, these measures have helped reduce the workload. The panel sees this as a positive development, but recommends continued attention to and evaluation of teacher workload.

Internationalization

The panel values the international orientation of the programme, given the intercultural and often global dimensions of environmental and sustainable development issues. The programme focuses on education in an international academic community of students and staff (around 30% of GSS students are international). The international classroom teaches students essential skills such as intercultural communication and cross-cultural awareness, preparing students for the international labour market in the field. Students appreciate the intercultural and international orientation of the programme, and the opportunities to go abroad (12% of the students do part of their studies, mainly in their third year, abroad at one of the exchange partners). In addition, the programme is collaborating with strategic partners to develop tailor-made internationalization opportunities for students. The panel learned that the department and the faculty are developing a global south strategy across research and education which will be implemented in all curricula. Next to this, the programme is developing online learning opportunities using the virtual classroom. The panel applauds these initiatives. In the interviews, however, the panel noted that international students generally have fewer elective options compared to Dutch students, for example with regard to finding English-language internships and the limited number of courses and (extra self-study) materials that are offered in English. Given the aim for more diversity, the panel advises the programme to make international students aware at an early stage that when they envision a future in the Netherlands it is a good idea to learn Dutch, to increase their chances in finding internships and their long-term opportunities in the Dutch labour market and to provide support for this as a programme.

The panel supports the choice and underlying argumentation for an English-taught programme. According to the panel, this aligns well with the international nature of the professional and academic field, where even Dutch companies and NGOs often operate internationally. Furthermore, the panel notes that the Faculty of Geosciences and Utrecht University explicitly support the international orientation and multi-perspectivity of the GSS programme. The university has adequate professionalization policies in place to ensure lecturers' proficiency in English; part of the UTQ programme is an English test.

Considerations

The panel considers the curriculum to be well-structured and coherent. It appreciates how the curriculum is appealing to both national and international students, and is continually updated in response to developments in the professional and academic field. The curriculum covers all ILOs and provides students with a solid, interdisciplinary foundation in Sustainability Science, with clear specialization paths in the form of tracks. The profile of these tracks has recently been strengthened with, amongst others, a fifth track on 'Sustainable & Healthy Food'. The curriculum addresses a wide variety of topics while at the same time providing flexibility for students to diversify, offering sufficient room for specialization and in-depth research. The diversity in student intake may lead to some overlap in course content, but also adds value through the difference in perspectives. In addition, the programme is looking at ways to reduce unnecessary

overlap between courses. The panel appreciates the set-up of the courses and the integration projects linked with societal actors. It concludes that the development of academic and professional skills is sufficiently addressed in all courses. To further strengthen the coherence of skills development within the curriculum and make this more explicit to students, the panel suggests developing skills learning lines.

The panel values the student-centred learning environment, with the focus on small-group, interactive teaching and the high level of student involvement. According to the panel, there is adequate supervision, feedback and support. The courses offer varied teaching methods, including guest lectures to introduce students to different perspectives, projects based on real-life cases, and ample opportunity for peer learning. Moreover, the programme provides flexibility and freedom of choice for students in determining their study route and developing their own profile.

The feasibility of the programme is in order. Students receive proper information and guidance during the programme, and sufficient extra guidance and support if needed. They appreciate the guidance offered by lecturers, study advisers and tutors and find them easily accessible. In addition, there is a student-mentoring and buddy system set up by the very active study association Storm, which serves as the link between students, teachers and graduates.

The panel is impressed with the quality and enthusiasm of the teaching staff. They are all didactically qualified and are internationally recognized experts in their field, covering the academic scope of the programme. The lecturers all combine teaching and research and have strong connections with the professional and societal field through their own research activities. Thus, the Copernicus Institute with its societal impact orientation provides an excellent research base and practical input for the programme. The alignment and cohesion of the curriculum and teaching team are ensured by regular meetings and calibration among staff members. The panel sees a positive trend with respect to teachers' perceived high workload, but recommends continued monitoring and evaluation of this workload.

The English-taught programme is internationally oriented, which is reflected in the international community of students and staff. According to the panel, the choice for an English name and language of instruction is well substantiated and in alignment with the international nature of the professional and academic field.

Conclusion

The panel concludes that the programme meets standard 2.

Standard 3. Student assessment

The programme has an adequate system of student assessment in place.

Findings

Assessment system

Assessment in the programme is aligned with the Education and Examination Regulations and Utrecht University's educational model, which includes formative feedback during each course. In a programme-specific assessment plan all assessments and courses are aligned to the ILOs of the programme. This plan includes assessment matrices for each course. It is updated every other year and discussed with the Board of Examiners and the course coordinators. ILOs are tested based on a variety of assessment methods, including written exams, research papers, written assignments, peer assessment and oral presentations or pitches. Intermediate tests and assessments are used to activate students' learning behaviour and to monitor

students' progress. Apart from the integrative courses, all courses must include at least 50% individual work to preserve the balance between individual and group assignments, which the panel endorses. The transdisciplinary consultancy project of 7,5 EC in the third year is explicitly aimed at integrating knowledge and (collaboration) skills in a real-world setting. In consultancy teams, divided into two or three subgroups, students work on research questions, which are cocreated with stakeholders (firms, NGOs and governments). After a proposal phase with a go/no go of the academic supervisor and the external party, students conduct the research with limited supervision. They report their findings in a scientific advisory report and write an individual assignment, including a reflection.

The panel considers the assessment system to be well-designed and coherent, with assessment methods that are appropriate for the courses' learning goals and sufficient attention to skills. It appreciates the assessment plan linked with the ILOs, the policy of continuous assessment and the diversity in assessment methods used. The panel observes that appropriate procedures are in place to ensure and enhance the quality of assessment. For example, the four-eyes principle is applied to the development of exams and assignments. Furthermore, the panel notices a strong culture of calibration among teachers, ensuring consistency in grading of assignments, exams and theses. Course coordinators also discuss the build-up of knowledge and skills within the tracks. The programme uses standard rubric grading forms that differentiate between the three levels (introductory, greater depth, and advanced). During the interviews, the panel learned that these rubrics have been modified over time for the different courses. While the coordinators are aware of this and the diversity in rubrics has not yet led to problems, the programme acknowledges that it would be good to look into the consistency of the rubrics.

The panel was pleased to learn that as of 2023-2024, the programme has implemented larger individual writing assignments in each of the tracks. The panel also welcomes the new procedures in group work monitoring, to improve the assessment of individual contributions to group work. Artificial intelligence (AI) is seen as an opportunity by the programme representatives; as society changes, it is necessary to prepare students for this. Although a faculty policy on AI still needs to be drafted, the panel is positive about the programme's focus on AI-related measures, including peer consultation and the appointment of an AI officer. At faculty level, guidelines will be developed for all departments. Support for teachers is also available at the UU level. The panel emphasizes that transparency on how AI is used in student writings is an essential basis for any form of responsibly dealing with AI.

The programme representatives indicated that at least two summative assessment moments are used per course, in some cases supplemented with formative assessment. With respect to the workload of teachers, the panel initially had some concerns about continuous assessment and the many different (2 to 6) assessment methods per course, but feels reassured that adequate measures have been taken in this regard to reduce teacher workload. For example, by finding efficient ways to provide feedback to students.

Further aspects of the assessment system that the panel discussed with the programme concern the limited opportunities for students to retake assessments and the variety in preparatory exams. The panel agrees with the students that the faculty's resit policy is rather strict. Essentially, only a repair of (part of) a course is possible, if the initial grade is at least a 4; otherwise, a student has to retake the course. After a repair, the highest possible grade is a 6. The panel understands that this policy is intended to limit teacher workload, but encourages the faculty to take inspiration from other faculty's policies with regard to resit possibilities. The panel also learned that preparatory exams, which allow students to practice exams, differ per course. Some courses provide material from multiple years, while others do not offer mock exams. The students indicated that they generally find the preparatory exams for natural sciences better than for social sciences. The panel sees some room for improvement, in the sense that it is recommendable to make a deliberate

choice about when to include preparatory exams and to provide this information to students in the course guides. According to the panel, overall, students are adequately informed about examinations and assessment criteria.

Final assessment

The 15 EC thesis covers all ILOs at an individual level, and includes a research proposal, final thesis, poster presentation and peer review of a fellow student's thesis. As part of the accreditation process, the panel reviewed a selection of 15 theses from the programme covering the various tracks, including the corresponding assessment forms. The rubric for the thesis specifies the assessment criteria based on the ILOs, and serves as a basis for grading. The panel concludes that the rubric is actively used. Most assessment forms are elaborately filled out, providing students with detailed feedback, and sometimes feedforward, on their thesis. However, the level of substantive feedback varies; in some cases, this was quite generic and the panel suggests more specific feedback would be helpful for the students. The panel agrees with the grades awarded to the theses and considers the grades to be generally sufficiently substantiated. In general, the theses are of good quality, well-structured and well written. The panel noted that in some cases a research question was missing and suggests that adding such a question would make the thesis better readable.

The panel considers the thesis assessment procedure to be well thought out. In the interviews with programme representatives, the panel learned that the specific grading of the theses is calculated automatically, based on subcategories in the completed assessment form and their weighting. The thesis is individually assessed by the supervisor and a second independent assessor, who also judges the presentation skills to guarantee an unbiased assessment. If necessary, a third assessor is appointed. The panel was pleased to learn that the way assessment forms are filled out is discussed regularly during calibration sessions and was the subject of extensive discussion with the Board of Examiners. In response to a request by the Board of Examiners, the assessment form has been modified and now makes explicit that if an item in the rubric has been assessed as 'unacceptable', the student has to repair the thesis.

Board of Examiners

The programme falls under the responsibility of the faculty-wide Board of Examiners. Based on the documentation and the interviews during the site visit, the panel concludes that the Board of Examiners adequately safeguards the quality of assessment in the programme. The Board of Examiners is competent and well aware of current issues and developments, such as artificial intelligence. The Board of Examiners proactively controls the quality of assessment in various ways, such as appointing examiners (holding a UTQ), approving the thesis assessment form, organizing validation meetings in which the grades of theses are discussed, and monitoring cum laude rates. They also annually discuss the binding study advices given to students, and may grant exceptions, thus giving students another year the chance to obtain 45 EC and finally a positive BSA. The Committee of Assessments, which advises the Board of Examiners, was involved in an extensive evaluation of the rubrics. This resulted in the recent improvement of assessment forms, including the rubric for assessing the BSc thesis. The committee also recently completed a proposal for an intervision (peer review) procedure regarding the alignment between courses and course assessments, which will be discussed by the Faculty Board before implementation. The panel is pleased to see that the Board of Examiners clearly contributes to the quality of assessment in the programme and is continuously investigating potential vulnerabilities in the assessment of courses.

Considerations

The panel concludes that the assessment system is transparent and well designed. Adequate procedures, such as the four-eyes principle, are in place to ensure and enhance the quality of assessment. The assessment methods used are diverse and appropriate, and include structural formative feedback. The panel

appreciates the attention for the coherency of assessment and the strong culture of calibration among teachers, as well as the efforts to reduce the workload of teachers with regard to continuous assessment, and to realign the standard rubric forms. Given subsequent course-level modifications, which the programme is well aware of, the panel suggests monitoring the ongoing consistency of the rubrics.

There is a good balance between individual and group assignments, with sufficient attention to skills. The panel endorses the implementation of the larger individual writing assignments in each of the tracks, and the improved assessment of individual contributions to group work. The panel understands the faculty's considerations for adopting a strict resit policy. Nevertheless, it encourages the faculty to look into other possibilities. In addition, the panel advises the programme to establish uniform rules for preparatory exams. To communicate these clearly to students, the panel recommends including more detailed information in the course guides.

The bachelor's thesis covers all ILOs of the programme at an individual level and is always independently assessed by two examiners. The panel considers the thesis assessment procedure to be well thought out. According to the panel, the grades awarded are sufficiently substantiated and detailed feedback is provided, although the panel noted that the level of substantive feedback varies. In some cases, the panel suggests giving more specific feedback would be helpful for the students. Also, the panel suggests that sometimes adding a research question would make the thesis better readable. There are regular calibration sessions about assessment, with subsequent adjustments if needed, such as the recent modification of the assessment forms.

According to the panel, the Board of Examiners proactively contributes to the quality of assessment in the programme. It safeguards the quality of assessment in the programme in various ways. In particular, the panel appreciates the recent evaluation of the rubrics and the elaborated proposal for a peer review process to encourage alignment between courses and course assessments.

Conclusion

The panel concludes that the programme meets standard 3.

Standard 4. Achieved learning outcomes

The programme demonstrates that the intended learning outcomes are achieved.

Findings

Theses

The thesis is regarded as the programme's final project in which students demonstrate that they achieved the programme's ILOs at an individual level. In preparation of the site visit, the panel examined a selection of 15 theses. In the selection, a proper distribution across grades and tracks was ensured. In the opinion of the panel, the level of the examined theses is appropriate for an academic bachelor's programme. The theses demonstrate the achievement of the ILOs. In general, the theses are of good quality. The panel is impressed by the programme's high cum laude figures.

Alumni

The panel appreciates how students are stimulated through numerous activities to become more acquainted with the future labour market. These include course assignments based on real-life cases, guest lectures and excursions, scientific staff members as tutors for second- and third-year students, and a

company fair organized by study association Storm. Career orientation is further supported by Geosciences Career Services and a dedicated career officer. Overall, 12% of GSS alumni entered the labour market after graduating. Of this group, 71% of the graduates currently have a job in the sustainability domain, in a large variety of sectors, fields and functions. They hold jobs in public, market-based or civil society organizations. The panel is positive about the fact that the majority of this group found professional positions that match the programme's content and level.

Most (88%) of the GSS graduates continue their studies in a master's programme, either in the Netherlands (60 programmes) or elsewhere (47+ programmes). About two out of three graduates continue in a master's programme in the Netherlands. The panel concludes that graduates can enrol in many master's programmes without difficulty. Furthermore, students receive adequate information about potentially required pre-master's programmes beforehand.

As they indicated during the site visit and in a recent alumni survey, alumni developed valuable knowledge and skills during the programme, such as interdisciplinary working and teamwork, and feel well prepared for their careers. Based on the documentation and the interviews during the site visit, the panel concludes that alumni are generally content about the programme and often get relevant positions after graduation.

Considerations

Based on the examination of a selection of 15 theses from the programme, the panel concludes that the level of the theses is appropriate for an academic bachelor's programme. The theses demonstrate the achievement of the ILOs. The documentation and interviews show that alumni are generally content with the programme and are well prepared to perform successfully in a wide variety of master's programmes in both the Netherlands and abroad, and the professional field.

Conclusion

The panel concludes that the programme meets standard 4.

General conclusion

The panel's assessment of the bachelor's programme Global Sustainability Science is positive.

Development points

1. Develop skills learning lines to strengthen and highlight the existing attention to skills in all courses, and to contribute to the coherence of skills development, while at the same time making this more explicit to students.
2. Continue to monitor and evaluate the workload of teachers.
3. Establish uniform rules for preparatory exams, and provide more detailed information about this for students in course guides.

Appendix 1. Intended learning outcomes

General intended learning outcomes

Graduates with a BSc degree in Global Sustainability Science:

- can acquire, interpret and conceptualise knowledge
- can analyse, organise and synthesise information
- are capable of logical reasoning, argumentation, and analytical and critical thinking
- are able to apply methods and techniques scientifically that they have learned for solving problems
- are able to independently keep up with developments and new knowledge in their discipline
- are capable of placing their knowledge and understanding in a broader scientific and social context
- are able to transfer scientific information to both peers and non-peers
- have substantial understanding of research in the field
- have the necessary learning capacities for further (university) education
- have a reflective attitude towards their own performance, development and career

Domain-specific learning outcomes

Knowledge:

Graduates with a BSc degree in Global Sustainability Science have:

- a basic knowledge and understanding of the nature, scope and causes of sustainability challenges at different spatial and temporal scales and of their underlying scientific concepts
- a basic knowledge and understanding of current and innovative solution strategies for sustainability challenges at different spatial and temporal scales
- a basic knowledge and understanding of physical, chemical and biological processes in natural systems, of social and economic processes in societal systems, and of the interactions between natural and societal systems leading to sustainability challenges
- knowledge of the multidisciplinary character of sustainability challenges, of theories and methods in sustainability research, and of the possibilities and limitations of multidisciplinary research
- specific knowledge of theories and methodologies regarding one of the following subdomains of sustainability science: Water, Climate & Ecosystems, Energy & Resources, Governance & Societal Transformation, and Business & Innovation
- an understanding of the complex societal transformation processes related to sustainable development and are capable of distinguishing, interpreting and assessing the effectiveness of different relevant intervention strategies (based in the natural sciences or the social sciences).

Skills:

Graduates with a BSc degree in Global Sustainability Science are capable of scientifically:

- applying the acquired knowledge and understanding for analysing and solving sustainability challenges at different spatial and temporal scales
- formulating (simple) research questions, hypotheses, and explanations from observations, of applying models to test hypotheses, and of applying methods and techniques for sustainability research
- designing sustainability research and of making an informed choice for quantitative and/or qualitative methods
- conducting empirical research using natural scientific and/or social scientific techniques, of processing, analysing, interrelating, interpreting and modelling the collected data, and of presenting the research results in writing in a suitable form (for instance by using maps or graphs)
- exploring the relevant scientific sustainability literature and information, and of critically examining, analysing and evaluating the information

- cooperating as a sustainability specialist in multidisciplinary teams with specialists from other disciplines, and are able to confront and integrate notions and approaches from the different disciplines in these multidisciplinary teams
- producing written papers and oral presentations on sustainability science in English, using appropriate presentation techniques, and geared towards a specific audience
- reformulating a practical question or problem related to sustainability science into a clear and researchable problem statement, of operationalising associated concepts in an adequate way, of analysing a subject theoretically as well as empirically, of presenting the results in a coherent discourse that concludes with a clear and synthesising conclusion, of using the results for answering the practical question or for contributing to the clarification and if possible the resolution of the problem, of developing a position that is partly based on balancing relevant societal, scientific or ethical aspects.

Attitude:

Graduates with a BSc degree in Global Sustainability Science show:

- a scientific attitude when describing, explaining and predicting phenomena (objective, critical, fair, etc.)
- a professional working attitude
- an awareness of the impact and consequences that human activities have on sustainability systems and of the necessity for ethically responsible and sustainable management of the Earth's systems.

Appendix 2. Programme curriculum

Study programme GSS 2022 – 2023:

Underlined = obligatory major course

Regular = major elective course

WCE: Track Water, Climate and Ecosystems	GST: Track Governance & Societal Transformation
E&R: Track Energy & Resources	B&I: Track Business & Innovation

YEAR 1 (COHORT 2022 - 2023)

PERIOD 1	(A+D) <u>Sustainability Challenges, GEO1-2410</u>	(C) <u>Mathematics & Systems Analysis GSS, GEO1-2411</u>
PERIOD 2	(A) <u>Natural Processes GEO1-2412</u>	(B) <u>Foundations of Social Sciences for Sustainability, GEO1-2413</u>
PERIOD 3	(A) E&R: Science of Energy Technologies, GEO1-2203 (B) WCE: Chemistry and the Environment, GEO1-2206	(C) GST: Politics of the Earth, GEO1-2414 (D) B&I: Principles of Economics, GEO1-2255
PERIOD 4	(B) <u>Research Skills GSS, GEO1-2415</u>	(A+D) <u>Regional Integration Project, GEO1-2416</u>

YEAR 2 (COHORT 2021 - 2022)

PERIOD 1	(B) E&R: Applied Thermodynamics & Energy Conversions, GEO2-2212	(C) B&I: Organisation & Innovation, GEO2-2418 (D) GST: Policy Evaluation and Design, GEO2-2113
PERIOD 2	(D) Philosophy of Science and Ethics, GEO2-2142 (D) Environmental Communication and Behaviour GEO2-2429	(A) GST: Environmental Law, GEO2-2424 (C) WCE/E&R: Global Climate Change, GEO2-2143
PERIOD 3	(D) <u>Statistics GSS, GEO2-2428</u>	(B) B&I: Economics of Innovation, GEO2-2211
PERIOD 4	(B) Global Integration Project, GEO2-2417	(A+C) WCE: Ecohydrology, GEO2-2131 (D) Philosophy of Science and Ethics, GEO2-2142

YEAR 3 (COHORT 2020 - 2021)

PERIOD 1	(A) WCE/E&R: Land Change Science, GEO3-2419 (B) B&I: Business, Sustainability & Innovation, GEO3-2122	(C) WCE/GST: Landscape Ecology & Nature Conservation GEO3-2140 (D) E&R/GST: Sustainable Energy Supply, GEO3-2420 (D) B&I: Innovation Strategies of Firms and Entrepreneurs, GEO3-2221
PERIOD 2	(A) E&R/B&I: Sustainable Resource Use, GEO3-2421 (B) WCE: Environmental Chemistry and Health, GEO3-2119	(C) GST: Sustainable Land Use, GEO3-2121 (C) E&R/B&I: Energy Analysis, GEO3-2223 (D) WCE/GST: Integrated Water and Soil Management, GEO3-2133
PERIOD 3	(A) E&R/B&I: Life Cycle Assessment, GEO3-2124 (C) WCE/GST: Environmental Impact Assessment, GEO3-2123	(B) Consultancy Project, GEO3-2423 or Consultancy Project Aruba GEO3-2432 ¹
PERIOD 4	(A+B+C+D) Bachelor's thesis GSS, GEO3-2422	

¹ Part of Aruba Field Program: <https://students.uu.nl/en/university-college-utrecht/academics/curriculum-enrichment/field-research-aruba>

Appendix 3. Programme of the site visit

Tuesday 18 June 2024

13:00		Arrival committee
13:00	13:45	Preparations committee
13:45	14:30	Vice-dean and programme management
14:30	14:45	Break
14:45	15:15	GSS Bachelor students
15:15	15:30	Break
15:30	16:00	Environmental Sciences Master students
16:00	16:30	Energy Science Master students

Wednesday 19 June 2024

09:00		Arrival committee
09:15	09:45	Alumni (online)
09:45	10:00	Break
10:00	10:30	GSS Bachelor lecturers and study advisor
10:30	10:45	Break
10:45	11:15	Environmental Sciences Master lecturers and study advisor
11:15	11:30	Break
11:30	12:00	Energy Science Master lecturers and study advisor
12:00	13:15	Lunch break
13:15	14:00	Board of Examiners
14:00	14:30	Break
14:30	15:15	Vice-dean and programme management
15:15	16:45	Deliberations panel
16:45	17:00	Main findings presented by panel chair
17:30	18:15	Development dialogue

Appendix 4. Materials

Prior to the site visit, the panel studied 15 theses of the bachelor's programme Global Sustainability Science. Information on the theses is available from Academion upon request. The panel also studied other materials, which included:

- Self-evaluation report, including the following appendices:
 - Organisation of the programme
 - Follow up actions previous assessments
 - Domain-Specific Framework of Reference
 - Overview of the intended learning outcomes in relation to the Dublin descriptors and the domain-specific framework of reference
 - Key figures – source OSIRIS
 - Overview staff
 - Reports Consultancy Project GSS 2022-2023 (overview)
 - Bachelor's thesis topics 2022-2023 (divided by track(s))
 - Members Advisory Board of the Copernicus Institute
 - Overview of the study programme GSS 2022 – 2023
 - Course guide
 - Institutional quality assurance assessment
 - Assessment plan
 - Annual student evaluations and NSE results
 - Outflow of GSS students to Master's Programmes
 - Activities to prepare students for the labour market
 - Thesis based publications
 - Planned new curriculum to start in 2023-2024
- Staff-student ratio
- Theses and rubrics
- Consultancy Project reports
- Alumni survey (report 2021)
- Annual report Examining Board 2022-2023
- Quality assurance report Geosciences 2024
- Agenda meetings Societal advisory board Copernicus Institute of Sustainable Development