



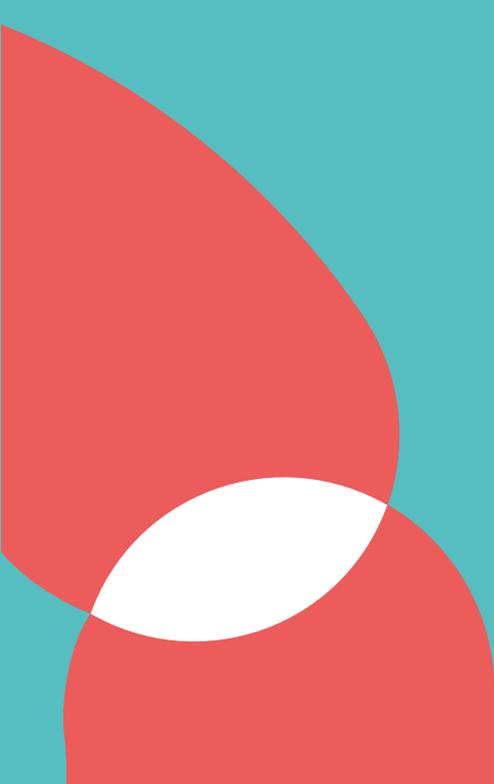
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INITIAL ACCREDITATION

WO-BACHELOR DATA SCIENCE FOR GLOBAL
CHALLENGES

Wageningen University

ADVISORY REPORT
11 NOVEMBER 2024



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1 Peer Review

The Accreditation Organisation of the Netherlands and Flanders (NVAO) assesses the quality of a new programme through a peer review process. This initial accreditation is mandatory for an institution that seeks to award a recognised degree upon the successful completion of a study programme.

The procedure for accrediting new programmes differs somewhat from that for existing programmes that have already been accredited. Initial accreditation serves as an ex ante assessment of a programme's quality. Once accredited, the new programme becomes subject to the standard review process for existing programmes.

The quality of a new programme is assessed by means of peer review. A panel of independent peers, including a student, reviews the plans during a site visit to the institution. A discussion amongst peer experts forms the basis for the panel's final judgement and advisory report. The focus is on the curriculum, the teaching and learning environment, and student assessment. The agenda for the panel visit and the documents reviewed are available from the NVAO office upon request.

The peer review outcome is guided by the standards outlined and published in the NVAO Assessment framework for the higher education accreditation system of the Netherlands (Staatscourant 2024, nr. 6405). Each standard is evaluated on a three-point scale: meets, partially meets, or does not meet the standard. Based on this evaluation, the panel will rate the programme's overall quality as positive, conditionally positive, or negative.

NVAO makes the decision on the programme's quality based on this advisory report. This accreditation decision can be positive, conditionally positive or negative. If the decision is positive, with or without conditions, the institution may proceed to offer the new programme. Graduates of the programme will then be entitled to receive a legally accredited degree.

This report presents the panel's findings, analysis and judgements resulting from the peer review. It also details the commendations and recommendations for follow-up actions. A summary report highlighting the main outcomes of the peer review is also available.

Both the full and summary reports of each peer review are published on NVAO's website www.nvaio.net. There you can also find more information about NVAO and peer reviews of new programmes.

2 New Programme

2.1 General data

Institution	Wageningen University
Programme	WO B Data Science for Global Challenges
Variants	Fulltime
Degree	Bachelor of Science
Tracks	None
Locations	Wageningen
Study load	180 EC ¹

2.2 Profile

Wageningen University (WU) aims to train students of the bachelor programme Data Science for Global Challenges to become professionals that can bridge the gap between the domains of data science and life sciences. These so-called bridge-builders will have the necessary knowledge and skills to understand and address specific needs in both fields, enabling them to create data-driven solutions that address diverse stakeholder needs. To ensure responsible practice students also learn to take ethical, legal and societal aspects into consideration. The bridge-building profile and interdisciplinary approach of the programme offer a distinctive contribution to the Dutch educational landscape. The proposed programme will be offered by the only faculty of Wageningen University: the faculty of Agricultural and Environmental Sciences.

2.3 Panel

Peer experts

- **Katherine Evans (chair)**, Associate Professor - Ethics of Cognitive Science & AI Ethics / Advisor IEEE Standards Association, Sorbonne University, Paris;
- **Drs. Bart Wezeman**, Applied statistician and manager regional and spatial statistics, CBS (Statistics Netherlands);
- **Dr. ir. Cynthia Liem**, Associate Professor, Faculty of Electrical Engineering, Mathematics and Computer Science, Delft University of Technology;
- **Prof. dr. Vera van Noort**, professor BOF Faculty of Bioscience Engineering KU Leuven;
- **Vincent van der Wolf**, (*student*), student at the Master programme Population Health Management at Leiden University.

Assisting staff

- Ikrame Faris, secretary
- Reina Louw, NVAO policy advisor and process coordinator

Site visit

Wageningen, November, 6 2024

¹ European Credits

3 Outcome

The NVAO approved panel reached a conditionally positive conclusion regarding the quality of the bachelor programme Data Science for Global Challenges offered by Wageningen University. The programme meets standard 1 of the NVAO framework and partially meets standards 2 and 3.

The bachelor programme Data Science for Global Challenges at Wageningen University trains students to integrate data science with life sciences to address global challenges in agri-food, health and environment. Its graduate profile aims to develop 'bridge-builders' who can combine expertise in these fields to create fair and sustainable solutions. Ethical, legal and societal aspects are incorporated to ensure responsible practice. The panel commends the programme's clear vision, interdisciplinary approach and alignment with labour market needs. It also establishes that the intended learning outcomes align with bachelor-level qualifications. The panel recommends to safeguard continued and sustainable involvement of the professional field, for example through an External Advisory Committee.

The panel praises the programme for its interdisciplinary approach, the quality of the teaching staff and its strong focus on integrating data science and life sciences, providing students with a comprehensive foundation to address complex challenges. The teaching staff are particularly commended for their expertise and commitment, which greatly enhance the programme's quality and appeal. However, the panel also identifies key areas for improvement in the curriculum. The integration of ethical, legal and societal aspects (ELSA) is insufficient, which the panel finds concerning. Additionally, the development of soft skills, such as communication skills, which are crucial for bridge-builders, is not explicitly addressed within the curriculum. The panel also expressed concerns on the feasibility of the programme, particularly for students without a strong background in Mathematics and Biology. The panel fears that these students will require additional retakes and face greater difficulties in passing mathematics-oriented courses, potentially leading to longer study durations. To address these issues, the panel sets two conditions. First, the programme must explicitly integrate ethical, legal, and societal aspects (ELSA), as well as soft skills such as communication, throughout the curriculum. Second, it must develop and implement a strategy to address deficiencies in Mathematics and/or Biology to ensure equal opportunities for all students. The learning objectives must be achievable for all admitted students within the standard study duration and with a reasonable study effort.

While the overall assessment framework of Wageningen University is solid, the panel found that its application to the bachelor programme is lacking in some areas. The university's assessment policy is clear and aligns with key principles like constructive alignment, but the programme has not yet tailored its rubrics and assessment methods to address aspects such as interdisciplinary learning, ELSA and bridge-building skills, including communication. As a result, the panel sets the condition to specify how these elements are assessed.

The panel is confident that the programme is ready to start, but expects the following conditions to be met within six months:

- 1 Ensure the explicit integration of ethical, legal, and societal aspects (ELSA), as well as soft skills such as communication, throughout the curriculum;
- 2 Implement a strategy to address deficiencies in Mathematics and/or Biology to ensure equal opportunities for all students. The learning objectives must be achievable for all admitted students within the standard study duration and with a reasonable study effort.
- 3 Explicate how interdisciplinary learning, ELSA and bridge-building skills, including communication, are assessed in the programme.

Standard	Judgement
1. Intended learning outcomes	Meets the standard
2. Teaching-learning environment	Partially meets the standard
3. Student assessment	Partially meets the standard
Conclusion	Conditionally positive

4 Commendations

The programme is commended for the following features of good practice.

1. Interdisciplinary approach – The programme’s clear interdisciplinary focus, combining data science with life sciences to address global challenges, is highly commendable. The integration of diverse academic fields supports the development of well-rounded professionals capable of tackling complex societal issues.
2. Graduate profile – The programme’s emphasis on developing ‘bridge-builders’ who can integrate knowledge across domains is a valuable approach for producing graduates equipped to create fair and sustainable solutions in agri-food, health and environment. This vision aligns well with current and future labour market needs.
3. Quality of teaching staff – The programme benefits from a highly qualified and dedicated teaching staff, with members drawn from various academic disciplines. Their enthusiasm and expertise are pivotal in creating an engaging and supportive learning environment that fosters student success.
4. Role study advisor – The programme offers comprehensive support through well-trained study advisors who provide essential guidance, helping students set personal goals, navigate the curriculum and achieving academic success. This holistic support is a key strength of the programme.
5. Drawing on Wageningen University’s expertise – The programme effectively leverages and utilises the university’s academic strengths, established structures like the Examining Board and the Programme Committee, and the expertise of its dedicated teaching staff to enhance the learning experience for students.

5 Recommendations

The panel recommends several follow-up actions to improve the programme further. These recommendations do not detract from the conditionally positive assessment of the programme's quality.

1. Involvement of the professional field – Safeguard continued and sustainable involvement of the professional field, to provide regular input and keep the programme aligned with labour market needs and demands.
2. Monitor workload study advisors – Monitor the workload of study advisors to ensure they can continue providing essential guidance without becoming overburdened. As the programme includes intensive support, it is crucial to maintain a manageable workload for advisors to effectively assist students with their academic and personal development.
3. Clarify programme expectations – Ensure that prospective students clearly understand the focus of the programme on global challenges in agri-food, health and environment. This should be verified during recruitment and matching activities to ensure that students are well-informed and know what they are committing to.
4. Monitor innovation in the field – keep updated on breakthroughs and changes in key techniques used in the application fields of the programme (e.g. health, agri-food, AI), including how these advancements can change the focus of students' research and career opportunities.
5. Contact with related programmes (peers) – keep in contact with related programmes that combine data science skills with domain-knowledge at bachelor level, such as the bachelor in Bioinformatics at Leiden University and the bachelor in Computational Social Science at the University of Amsterdam, to exchange experience and ideas to tackle specific challenges that come with an interdisciplinary bachelor programme.

6 Assessment

6.1 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.

Judgement

Meets the standard.

Findings, analysis and considerations

The main objective of the bachelor programme Data Sciences for Global Challenges is to train students to integrate data science knowledge and skills with an understanding of life sciences. This positions graduates to address pressing global challenges in the domains of agri-food, health and environment. Challenges include overconsumption and waste, deforestation and biodiversity loss, and pollution and contamination, all occurring against a backdrop of rapid climate change. With a longstanding tradition in agri-food, health and environmental sciences as well as data science expertise through initiatives like the Wageningen Data Competence Center, Wageningen University (WU) is well-positioned to offer this interdisciplinary programme. In doing so, WU advances its commitment to the Sustainable Development Goals.

The envisioned graduate profile is defined as the *bridge builder*—professionals who integrate expertise in data science, including AI, with a solid foundation in life sciences, effectively bridging the gap between these two fields to address complex global challenges. Graduates will develop the skills to understand and respond to the unique needs and concerns within both domains and to translate these into data-driven interventions and solutions that meet the needs and demands of diverse stakeholders. To ensure responsible practice, students are trained in the ethical, legal and societal aspects (ELSA) of data science and AI. The ELSA Lab for Sustainable Food Systems, established by WUR, plays a key role in developing fundamental knowledge and offers practical guidance in these areas.

Graduates can pursue a master's degree in several programmes, with unconditional admission to four WU master's programmes: MSc Bioinformatics, MSc Biosystems Engineering, MSc Data Science for Food & Health, and MSc Geo-information Science. Depending on their minor, students can also choose other master programmes that combine data science and life sciences, or specialise in either data science or life sciences. Alternatively, graduates may opt for a professional career.

The panel is charmed by the clear vision behind the programme and its graduate profile. It particularly finds the interdisciplinary approach and the bridge-building component strong and distinctive features, both contributing to the unique positioning of the programme within the domains of data science and life sciences. The panel also recognizes the significance of incorporating ELSA, viewing it as a prerequisite for successfully assuming the role of bridge-builder and adopting responsible, sustainable solutions.

From the discussions, the panel learned that the graduate profile was informed by thorough labour market research, carried out by NIDAP, alongside consultations with representatives from the professional field. However, the panel expressed reservations regarding the broadness of the profile, particularly in relation to recruitment strategy and the predominance of more 'hard' science programmes offered as continuing education. The management explained that, in addition to labour market insights, the LANDSCAPE report from the Engineering sector plan advocates for a broad profile, justifying a broader intake. Also, representatives from the working field with whom the panel spoke argued that the graduate profile, being more generic in nature, meets their expectations for a bachelor's programme. While there are junior 'bridge-building' available, they remarked that holding a master's degree is essential for enhancing graduates' job prospects. All interviewees anticipate that most graduates will pursue a master's degree rather than entering the labour market directly.

The panel values this input and is pleased to hear that the graduate profile aligns with (international) professional needs and demands. It advises the programme to establish ongoing, systematic and sustainable engagement with the professional field, such as through the proposed External Advisory

Committee. The panel noted that involvement from professional representatives in the initial development of the programme appeared limited, and recommend ongoing engagement to ensure that the programme remains aligned to evolving needs within the sector. It also recommends including public sector stakeholders on this committee to ensure broad representation across all fields.

The profile of the programme is translated into thirteen intended learning outcomes (ILOs), divided into five categories: (1) Data Science, (2) Agri-food, Health and Environment, (3) Integration, (4) Research and Design and (5) Personal Development. The learning outcomes are established at an introductory-intermediate level, in alignment with the Dublin descriptors for first cycle programs (level 6 of the European Qualifications Framework), corresponding to a bachelor's degree. In addition, two international standards on data science education were consulted: the EDISON Data Science Framework and the Computing Competences for Undergraduate Data Science Curricula. A matrix illustrates how each course relates to the ILOs of the programme. The panel establishes that the intended learning outcomes are in line with Dublin descriptors at bachelor level and fit the intended graduate profile.

The panel is highly appreciative of the efforts of Wageningen University to develop a programme that addresses an important scientific and societal need. The desire for bridge-builders is echoed by labour market demands, and the panel recognises the added value of professionals who can operate at the intersection of different disciplinary approaches to contribute to sustainable solutions for global challenges. The panel also determines that a well-balanced set of intended learning outcomes will help to achieve the envisioned graduate profile. As a recommended course of action, the programme is encouraged to ensure structural involvement of the professional field, including governmental organisations. Overall, the panel concludes that this standard is met.

6.2 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.

Judgement

Partially meets the standard.

Findings, analysis and considerations

The bachelor programme Data Science for Global Challenges is a full-time programme of 180 EC, offering both a Dutch and English track, without any specialisations. The curriculum combines existing courses from other WU programmes with new courses specifically designed for this programme. Its design aims to cultivate the graduate profile of a bridge-builder. The programme is built on two core educational principles: *interdisciplinary learning in a four-stage model* and *personal development*. The four stages of interdisciplinary learning include (1) disciplinary grounding, (2) perspective taking, (3) finding common ground and (4) integrating perspectives. Personal development involves shaping a personal identity. Different course components support this process, with the personal motivation assessment in the second year being a key element.

To achieve the intended learning outcomes, this four-stage model is translated to the curriculum through four learning trajectories: (1) Mathematics and Statistics, (2) Computer Science & Artificial Intelligence, (3) Life Sciences and (4) Data Science integration. The first three learning trajectories focus on disciplinary grounding and recur in both the first and second year of the programme. Students gain knowledge and skills needed for 'both sides of the bridge', by learning about key concepts in computer science, mathematics and statistics and life sciences domains. Courses include *Programming in Python (6 EC)*, *Mathematics (3 EC)*, *Statistics (3 EC)* and *Cell Biology (6 EC)*. Building on this foundation, the curriculum in the second year progresses to more advanced data science courses and broadening knowledge in life sciences, for example in courses such as *Artificial Intelligence (6 EC)* and *Introduction to Bioinformatics (6 EC)*. The learning trajectory Data Science integration is interwoven throughout the curriculum, comprising (components) of various courses, starting in the first course of the first year with *Data Science for Global Challenges 1*. This trajectory integrates data science with the domains of agri-food, health, and the environment to tackle global challenges. Students will develop the necessary knowledge, skills, and

attitudes through interdisciplinary case studies and collaborative group work. In this learning trajectory attention is given to ethics and the broader societal implications of data science.

The third year can be tailored to a student's individual preferences. The elective space, consisting of 36 EC, offers students the opportunity to broaden or deepen their focus by pursuing a minor, selecting electives, or participating in an international exchange programme. Students are guided by the study advisor in choosing electives, based on their personal preferences and informed by their activities in the personal motivation assessment conducted in the second year. The third year concludes with the *Bachelor Thesis* (24 EC). The thesis also marks the culmination of the learning trajectory Data Science integration.

The panel acknowledges the efforts of the programme in designing a curriculum that facilitates the development of the bridge-builder profile. The curriculum is clearly intended to familiarise students with both data science and life sciences, while also developing the necessary skills to function effectively as bridge-builders. Nonetheless, the panel identified two flaws in the translation of the programme's objectives into the curriculum during the site-visit: (1) the ethical, legal and societal aspects and (2) the soft skills needed to operate effectively as bridge-builders, are insufficiently integrated or made explicit in the programme. With the exception of the course *Responsible Data Science* (6 EC), the focus on ELSA seems negligible. This also applies to the attention for soft skills, in particular communication skills. Although the teaching staff argued that ELSA-elements are covered in other courses, they commented that this may vary by lecturer implying a degree of inconsistency. To avoid it becoming arbitrary, the programme should ensure consistent integration throughout the curriculum, rather than leaving coverage to the discretion of individual lecturers. The need for this integration is particularly acute given (a) the high-risk nature of many of the use cases the students will encounter, and (b) the potential for data science or AI-based solutions in these domains to generate significant negative environmental impacts. Regarding soft skills, the programme shared a similar argument, stating that these are integrated across several courses, most notably within the Data Science Integration learning trajectory. However, interviewees also conveyed the impression that communication skills develop organically over time through interactions among students. Given the panel's view that communication skills are essential for fulfilling the role of bridge-builders, a more targeted approach is required—one that does not rely solely on students, but includes active intervention from instructors. The panel will therefore set the explicit integration of ELSA and soft skills, including communication, in the curriculum as a condition.

The broad profile of the programme allows for a wide range of students to be admitted: those with a Dutch VWO diploma in Nature & Health (N&G), Nature & Technology (N&T) or Economics & Society (E&M) profiles, as well as those with a Culture & Society (C&M) profile with Mathematics A or B. International students with equivalent backgrounds are also eligible to apply. To address potential gaps in Mathematics A or B, refresher courses in Mathematics 1 and Statistics 1 are offered at the start of the first year. Although the panel endorses the broad spectrum of the programme, it raised serious concerns about its feasibility for students who are not beta-oriented, questioning whether the curriculum can bring all students to the same level. The entrance requirements for Mathematics and Biology appear insufficient compared to the actual demands of the programme. As acknowledged by the programme management, students without the appropriate background would likely encounter more difficulties and need to invest extra effort, which could create unrealistic expectations about their potential for success. Additionally, the programme places considerable responsibility on student autonomy, particularly in choosing the right electives. For international students, the necessity of additional language courses to work in the Dutch labour market adds another layer of complexity. While the programme acknowledges that non-beta students may face additional challenges, it does not consider these unmanageable, citing experiences from other programmes with general admission requirements. Nonetheless, the panel fears that students may become overburdened. It also believes that the responsibility for ensuring feasibility for all students rests with the programme itself. The panel has therefore set the condition to develop and implement a strategy to address deficiencies in Mathematics and/or Biology to ensure equal opportunities for all students. The learning objectives must be achievable for all admitted students within the standard study duration and with a reasonable study effort.

The programme is offered bilingually in English and Dutch, combining the benefits of internationalisation with the need to maintain accessibility to higher education, while also taking into account labour market

demands and maintaining educational quality. Bilingual education results in two tracks being offered: a Dutch track and an English track, both with the same learning outcomes. The Dutch track includes at least two-thirds of courses taught in Dutch (including exams), while the English track is fully taught in English. Since up to one-third of the Dutch track can be in English, students from both tracks will share several courses, fostering an international classroom. The panel supports the considerations of the management. Initially, there were concerns about the logistical implications of offering dual tracks, but during the site visit, the panel was reassured that this would not present any significant challenges.

The programme decided to change its name from *Data Science for Agri-food, Health and Environment* into *Data Science for Global Challenges*. During discussions, it was explained that the name change was mainly driven by marketing considerations. The programme collected feedback from (prospective) students on the name and the response was largely positive. Additionally, the programme expects that students applying to WU will be familiar with the university's profile and context, and therefore does not anticipate any misconceptions about the programme's content. The panel understands this reasoning but advises the programme to remain vigilant on this matter.

Given that the programme aims to apply data science to emerging global challenges, and given its aim to create bridge builder profiles capable of interacting in both the public and private sector across a variety of (international) contexts, the use of an English programme title is justified. Moreover, the English title affords a higher visibility to international applicants, thereby increasing communication and 'bridge building' skills for all future students.

The programme is developed and delivered by a diverse and skilled team of 54 lecturers from 13 chair groups at Wageningen University. The staff possesses strong academic credentials and serve as role models for bridge-building in their own work. Teachers receive systematic training in teaching and assessment through the University Teaching Qualification (UTQ). The panel was impressed by the expertise and the enthusiasm of the teaching staff, who seem very invested in making this new programme work. Drawing on their experience in comparable interdisciplinary programmes offered by WU, the panel is confident that the teaching staff possesses the didactical skills to deal with the challenges of interdisciplinary teaching. The panel was informed that several meetings were held in the early stages and encourages the continuation of these sessions to ensure further team alignment.

The programme offers the necessary support and study guidance for students, with the study advisor playing a particularly important role. Study advisors provide essential support throughout the programme by helping students define personal goals, for example in the personal motivation assessment course, make informed decisions about their studies and create realistic study plans. They offer guidance on filling the free elective space and track student progress, intervening when needed to address delays or personal challenges. Additionally, students can draw on university-wide facilities, such as the career service, student support services and training services. While the intensive guidance provided is appreciated, the panel advises the programme management to be mindful of the potential strain on study advisors' workload and to ensure it remains manageable.

In sum, the panel finds that the programme offers a suitable teaching-learning environment. Key strengths include the quality of the teaching staff and the didactical principles of interdisciplinary teaching, which contribute to achieving the bridge-building profile. Nonetheless, two flaws need to be addressed, leading to the following conditions: (1) ensure the explicit integration of ethical, legal, and societal aspects (ELSA), as well as soft skills such as communication, throughout the curriculum and (2) develop and implement a strategy to address deficiencies in Mathematics and/or Biology to ensure equal opportunities for all students. The learning objectives must be achievable for all admitted students within the standard study duration and with a reasonable study effort. Taken into account these considerations, the panel judges this standard as partially met.

6.3 Standard 3: Student assessment

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

Judgement

Partially meets the standard.

Findings, analysis and considerations

The system of assessment for the bachelor programme Data Science for Global Challenges is guided by the institutional assessment policy. This policy outlines the university's vision on assessment, the assessment practice and the actors and processes involved in the quality assurance of assessments. A key principle of the assessment policy is constructive alignment, meaning that assessment methods and levels are designed to align with the course learning outcomes, the phase in the study programme and the teaching methods and learning activities. The relationship between the assessment methods of individual courses and the intended learning outcomes are visualised in a matrix.

The programme combines various methods to test both basic and advanced learning outcomes, alternating between summative and formative assessments. Closed-book exams and assignments are used to test basic learning outcomes, while advanced skills are evaluated through project reports, oral exams, presentations and essays. Assessments are conducted at either the individual or group level, depending on the course's learning outcomes and activities. For example, in the course *Natural Language Processing*, assessment includes an individual mid-term written exam and a group assignment. Under WUR's new assessment policy, lecturers are encouraged to place greater emphasis on formative assessments. These assessments deliver key moments of feed-up, feedback, and feedforward, helping students assess and understand their progress throughout courses and the entire curriculum.

The bachelor thesis is overseen by two course coordinators, who both have an academic background and good understanding of the bridge builder profile. These coordinators assist students in finding a thesis supervisor and topic that fits their personal interest and guarantees both domain and data science aspects, following an approval process prior to starting. For thesis projects, students will have two supervisors to cover both domain-specific and data science expertise.

The panel considers the assessment policy of Wageningen University sound and clear. This includes its policies on accommodating students with disabilities and AI, both of which were reviewed prior to the site visit. The panel also finds the blend of summative and formative assessments well-suited to the programme's objectives. However, it noted that the translation of university-wide policy specifically to this programme is lacking. Much of the shared information, including rubrics, remains generic and lacks specific tailoring to this programme. It is unclear how interdisciplinarity, ELSA and specific bridge-building competencies, such as communication skills, are assessed. While the panel acknowledges the expertise drawn from similar programmes, it believes these aspects should have been more explicitly detailed. The management explained that, at the time of submitting the application, only general thesis rubrics were available for bachelor programmes. These will be refined for each programme in the near future. The panel understands this, but sets the condition to explicate how interdisciplinary learning, ELSA and communication skills are assessed within the programme.

The Examining Board (EB) Technology and Nutrition is responsible for the bachelor programme in Data Science for Global Challenges. The EB upholds examination standards by ensuring transparency, validity and reliability. Transparency is secured through a matrix showing the relationship between learning outcomes and assessment instruments per course, detailed course descriptions, example assessments and a standardised assessment form and rubric for the thesis. Validity is achieved by peer reviews of examinations prior to the assessment, random checks conducted by the EB during chair group visits, and consistent use of aligned plans and strategies. Finally, reliability is guaranteed by providing accommodations for students with disabilities, implementing plagiarism detection software, offering guidance on using generative AI in education and assessment and applying clear assessment criteria for graded assignments. The panel has confidence in the expertise of the Examination Board, particularly given their experience with other interdisciplinary programmes. It also acknowledges that the Board fulfills its tasks in line with its statutory duties and upholds examination standards. However, the panel would like to see confirmed that these standards are equally upheld for the assessment of interdisciplinary learning, ELSA and communication skills.

The panel concludes that Wageningen University has a clear vision on assessment, which is translated properly in two several policies. However, the application of this policy to the Data Science for Global Challenges programme was found lacking, particularly in terms of specific examples of how interdisciplinary learning, ELSA and communication skills are assessed, as well as the lack of tailored rubrics for the programme. The panel therefore sets the condition to explicate how interdisciplinary learning, ELSA and bridge-building skills, including communication, are assessed in the programme. This should include details on the thesis assessment form and rubrics. The panel considers this standard partially met, contingent upon the fulfilling of this condition.

6.4 Degree

The panel advises awarding the following degree to the new programme: Bachelor of Science.

Abbreviations

EB	Examining Board
EC	European Credit
ELSA	Ethical, Legal and Societal Aspects
ILO	Intended Learning Outcome
MSc	Master of Science
NLQF	Dutch Qualification Framework
NVAO	Accreditation Organisation of the Netherlands and Flanders
UTQ	University Teaching Qualification
WU	Wageningen University
WUR	Wageningen University & Research

This advisory report was written at the request of NVAO and is the outcome of the peer review of the new programme
Wo-bachelor Data Science for Global Challenges
Wageningen University & Research

Application no: AV-2685

Colophon
Initial Accreditation Report
by NVAO NEDERLAND
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