NVAO • THE NETHERLANDS

INITIAL ACCREDITATION

WO-MASTER

DATA SCIENCE FOR FOOD AND HEALTH

Wageningen University

SUMMARY REPORT
24 JANUARY 2022

1 Peer review

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 the advisory report. The focus is on the curriculum, the teaching and learning environment, and student assessment.

The Accreditation Organisation of the Netherlands and Flanders (NVAO) takes a formal decision on the quality of the new programme based on the outcome of the peer review. This decision can be positive, conditionally positive or negative. Following a positive NVAO decision with or without conditions the institution can proceed to offer the new programme. Upon completion of the programme graduates are entitled to receive a legally accredited degree.

This summary report contains the main outcomes of the peer review. A full report with more details including the panel's findings and analysis is also available. NVAO bases an accreditation decision on the full report.

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

Because of COVID-19 temporary measures apply for this peer review.

2 Panel

Peer experts
- Prof. dr. Willem-Jan van den Heuvel (chair), Full Professor in Information Systems and Managing Director of the European Research Institute of Services Science (ERISS);
- Dr. Edwin Harris, Senior Lecturer in Statistics at Harper Adams University Department of Agriculture & Environment (United Kingdom);
- Dr. Monique van der Voet, Team Leader Life Science Data at Danone Nutricia Research;
- Marijn Nijssen (student), Master in Science, Business and Innovation, Free University of Amsterdam and Master in Health Care Management, Erasmus University Rotterdam.

Assisting staff
- Ikrame Faris MSc, secretary
- Reina Louw MA, NVAO policy advisor and process coordinator

Site visit (online)
24 January 2022

3   Outcome

The NVAO approved panel reaches a positive conclusion regarding the quality of the Master Data Science for Food and Health offered by Wageningen University.

The master programme in Data Science for Food and Health has established a challenging and interesting profile that will enable graduates to become *integrators* who can bridge the gap between the domains of data science and food and health. There is a high demand for specialists who are able to operate at the interface of these different disciplines. The intended learning outcomes are up-to-date and well aligned with (international) professional needs, demands and standards. Various stakeholders, notably representatives of the professional field, were involved in the process of developing the programme. The panel advises the programme to be attentive of the limited career opportunities in academia and to make domain-specific standards more explicit at the programme-level. It further recommends to safeguard continued and sustainable involvement of the professional field, for example by installing an Advisory Board.

Strong elements of the teaching-learning environment include the quality of the teaching staff, the didactic concept of *boundary crossing* and the design and content of the curriculum. The flexibility provided in the form of a personalized programme is also evaluated positively. The study guidance is appropriate for a master's degree and the programme offers state-of-the-art facilities that students can make use of during their studies. The panel recommends the programme to specify the entry requirements to increase transparency and facilitate the admission procedure. It also asks to be mindful of the increasing workload for the study advisor as a result of intensified individual student guidance and to invest further in community-building.

The programme has a sound and transparent system of student assessment in place, in which the Board of Examiners plays an important role in terms of assuring the quality of (final) examinations. The assessment policy of Wageningen University describes various measures for enhancing the reliability and validity of examinations. The panel advises to extend the forms of testing with portfolio-based assessments to also reflect the practical orientation of the programme.

Wageningen University proposes that the programme has a duration of two years (120 EC). The programme's management arguments concern the breadth and complexity of the programme as well as the content of the curriculum, which reflect the requirements of the professional field and the interdisciplinarity of the programme. The panel agrees that the qualifications the graduates should have in order for them to be competitive in the international academic job market, cannot be achieved in a programme of less than two years. The panel advises to grant the programme the right to offer a two-year master's programme (120 EC).

4   Commendations

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

1. Expertise of teaching staff – The teaching staff is characterized by professionalism, enthusiasm and dedication. The staff members bring in a wide array of expertise from various disciplines. Their vast experience instils confidence in their ability to implement the programme.

2. Didactic approach – Given the (interdisciplinary) character of the programme, the didactic concept of boundary crossing is considered highly appropriate and suitable.

3. Involvement professional field – Representatives of the professional field were involved in designing the new programme, both in terms of its goals, ambitions and content. Their involvement contributed to the refinement of the graduate profile.

4. Personalized programme – The flexibility provided within the programme gives students the opportunity to define and tailor the curriculum according to their interests and personal ambitions.

5. Societal and scientific need – The programme addresses an important societal and scientific need in the fields of data science and food and health. The panel compliments the programme´s integrated approach and considers it timely and much needed.

6. Available facilities – The programme offers state-of-the-art facilities that students can utilize at various moments during their study.

5   Recommendations

For further improvement to the programme, the panel recommends a number of follow-up actions.

1. Career opportunities – Inform students of the limited career opportunities within the academic world to manage expectations.

2. Domain-specific standards – Incorporate domain-specific standards at the programme-level, in addition to individual courses.

3. Involvement of the professional field – Safeguard continued and sustainable involvement of the professional field, for example by installing an Advisory Board.

4. Entry requirements – Specify the entry requirements to increase transparency and to facilitate the admission procedure.

5. Workload study advisor – Remain attentive to a possible increase in the workload of the study advisor.

6. Community-building – Keep investing in community-building activities for students of the programme.

7. Project-based assessment – Include project-based assessment to the testing forms to reflect the practical orientation of the programme.

6   What comes next?

NVAO grants initial accreditation to a new programme on the basis of a panel's full report. The decision is valid for a maximum of six years. For conditional accreditation other regulations apply. Upon accreditation the new programme will follow the NVAO review procedures for existing programmes. NVAO publishes the accreditation decision together with the full report and this summary report. [1]

Each institution has a system of quality assurance in place ensuring continuous follow-up actions and periodic peer-review activities. Peer reviews help the institution to improve the quality of its programmes. The progress made since the last review is therefore taken into consideration when preparing for the next review. The follow-up activities are also part of the following peer-review report. For more information, visit the institution's website. [2]

7   Summary in Dutch

Het panel oordeelt positief over de kwaliteit van wo-master Data Science for Food and Health van Wageningen Universiteit. Dit is de uitkomst van de kwaliteitstoets uitgevoerd door een panel van peers op verzoek van de Nederlands-Vlaamse Accreditatieorganisatie (NVAO). Voor deze beoordeling heeft het panel gesprekken gevoerd met de opleiding op 24 januari 2022.

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[1] https://www.nvao.net/nl/besluiten
[2] https://www.wur.nl/en.htm

De masteropleiding Data Science for Food and Health heeft een uitdagend en interessant profiel uitgewerkt dat afgestudeerden in staat stelt om als *integrators* te opereren en een brug te slaan tussen de domeinen van data science en voeding en gezondheid. Er is een grote vraag vanuit de arbeidsmarkt naar specialisten die kunnen opereren op het snijvlak van deze disciplines. De beoogde leerresultaten zijn goed afgestemd op (internationale) standaarden en de eisen en behoeften van het beroepenveld. Bij de ontwikkeling van de opleiding waren diverse stakeholders betrokken, waaronder vertegenwoordigers uit het werkveld. Het panel adviseert om aandacht te hebben voor de beperkte carrièreperspectieven in de academische wereld en om domein-specifieke standaarden op programmaniveau te expliciteren. Daarnaast wordt aanbevolen om de betrokkenheid van het werkveld te waarborgen in het programma, bijvoorbeeld door een Adviesraad in te stellen.

Sterke elementen van de onderwijsleeromgeving betreffen de kwaliteit van het onderwijspersoneel, het didactische concept van *boundary crossing* en de opzet en inhoud van het curriculum. De flexibiliteit binnen het programma, aangeboden in de vorm van een gepersonaliseerd traject, werd ook positief geëvalueerd. De studiebegeleiding is passend voor een masteropleiding en het programma beschikt over uitstekende faciliteiten waar studenten gebruik van kunnen maken. Het panel adviseert het programma om de toelatingseisen te specificeren om transparantie te vergroten en de toelatingsprocedure te vergemakkelijken. Daarnaast wordt geadviseerd om alert te zijn op de toenemende werkdruk voor de studieadviseur als gevolg van intensieve studiebegeleiding en om verder te investeren in community-building.

De masteropleiding kent een gedegen en transparant systeem van studentbeoordeling, waarbij de examencommissie een belangrijke rol speelt in het waarborgen van de kwaliteit van toetsing. Het toetsbeleid bevat diverse maatregelen om de betrouwbaarheid en validiteit van toetsing te garanderen. De examencommissie is verzocht om de toetsvormen uit te breiden met portfolio-based toetsing om ook de praktische oriëntatie van het programma te reflecteren.

De Universiteit van Wageingen stelt voor dat de opleiding een studieduur van twee jaar heeft (120 EC). Het panel adviseert om de opleiding het recht te geven om een tweejarig masterprogramma aan te bieden, rekening houdend met de breedte en complexiteit van het curriculum.

Meer informatie over de NVAO-werkwijze en de toetsing van nieuwe opleidingen is te vinden op www.nvao.net. Voor informatie over de Wageningen University verwijzen we naar de website van de instelling. [3]

Als gevolg van de beperkende omstandigheden door COVID-19 geldt voor deze kwaliteitstoets een tijdelijke procedure.

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[3] https://www.wur.nl/en.htm

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