



M Aquaculture and Marine Resource Management  
Wageningen University

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# Contents

- Summary ..... 4
  - Score table ..... 5
- Introduction..... 6
  - Procedure..... 6
  - Panel ..... 7
  - Information on the programmes..... 8
- Description of the assessment..... 9
  - Organization ..... 9
  - Previous accreditation’s panel’s recommendations..... 9
  - Standard 1. Intended learning outcomes ..... 9
  - Standard 2. Teaching-learning environment..... 12
  - Standard 3. Student assessment ..... 17
  - Standard 4. Achieved learning outcomes ..... 20
  - General conclusion ..... 20
  - Development points ..... 21
- Appendix 1. Intended learning outcomes ..... 22
- Appendix 2. Programme curriculum..... 23
- Appendix 3. Programme of the site visit..... 25
- Appendix 4. Materials..... 27

## Summary

### Standard 1. Intended learning outcomes

The master's programme Aquaculture and Marine Resource Management (MAM) of Wageningen University (WU) aims to educate students to become academic professionals that contribute to the sustainable use, conservation, and restoration of marine and aquatic ecosystems and resources. Students develop integrative knowledge and skills in the fields of aquaculture, marine ecology, marine resource management, and marine governance. The panel appreciates the programme's clear profile and vision, especially the strong focus on interdisciplinarity. The integration of ecological, technological, and socio-economic perspectives is highly relevant for the fields of aquaculture, marine resource management, marine ecology, and marine governance. Another positive aspect of MAM is that it focusses on integration on different levels while also allowing for specialization. Since most students have a bachelor background in natural sciences, the emphasis on socio-economic perspectives is limited, compared to other perspectives. The panel agrees with the programme's current approach to addressing socio-economic perspectives, and expects that these perspectives will be further strengthened with the anticipated additional inflow from the new bachelor's programme Marine Sciences (BMS).

The panel considers the intended learning outcomes (ILOs) to be well described and aligned with the academic master's level as described in the Dublin descriptors. The interdisciplinary and integrative nature of MAM is clearly reflected in the ILOs. The panel is also positive about the three specializations: 'Aquaculture' (A), 'Marine Resources and Ecology' (B), and 'Marine Governance' (C). Although specialization C is small at the moment, it is highly relevant in the eyes of the panel, and is expected to grow in the coming years. The double degree track, which is connected to the joint degree Erasmus Mundus programme 'International Master of Science in Health Management in Aquaculture' (AquaH), is relevant and well designed. Cooperation and alignment with the international AquaH consortium is adequate. According to the panel, the programme is well aligned with the needs and expectations of the professional field. The professional field committee plays a key role in this process. While the panel commends MAM for its strong relationships in the field of aquaculture, it advises the programme to intensify connections with the professional fields of ecology and governance, in order to better support students from specialization B and C in navigating career options.

### Standard 2. Teaching-learning environment

According to the panel, the curriculum is clear and well structured, for the regular specializations as well as the double degree track. A positive aspect is that the curriculum provides students with a broad basis integrating various perspectives, while also allowing for specialization. Another valuable element is the combination of science and its application, as is reflected in e.g. the Academic Master Cluster. Students have a lot of freedom to tailor the programme to their interests, through their choice of electives and specialization, the internship, and the thesis topic. There is a good matching system in place to support students in choosing their thesis topic. The panel advises the programme to explore creative ways to increase the amount of fieldwork in the curriculum.

MAM is taught in English, which, according to the panel, flows logically from the international nature of the academic and professional field. The teaching methods used in the programme are diverse and appropriate. There is also a good balance between individual and group work, and a good system for dealing with freeriding. MAM is characterized by a strong learning atmosphere and a rich, international learning environment. The 'Aquatic Research Facility' of Carus is a valuable add-on of the programme. The admission criteria are clear and appropriate. Students in specialization C who do not have sufficient background in social/economic sciences, can take various courses to ensure that their knowledge is up to standard. The panel believes that the programme is feasible, and is happy to see that the programme

actively monitors the study progression of students. The panel advises to enhance communication to students about how to prevent study delay when taking the research variant of the Academic Master Cluster and writing a thesis at the chair group 'Marine Animal Ecology'.

According to the panel, the facilities for students with a disability are appropriate and sufficient. The panel is very positive about the programme's dedicated study advisors. They are well informed of the curriculum and have a strongly personal, student-centred and proactive attitude. There is a good system of guidance in place. Students also receive valuable guidance and support from the teachers, who are committed and student-centred. The teaching staff is highly qualified in all relevant fields and disciplines. The teachers' didactic qualifications are in order and teachers have sufficient proficiency in English. The teachers are very dedicated and enthusiastic. Although the teachers are connected to different chair groups, they truly work as a team, ensuring good communication and alignment across courses.

### Standard 3. Student assessment

The panel considers the assessment in the programme to be well designed, allowing students to achieve the final exit level for all ILOs. There is a fine diversity of assessment methods and a good balance of individual and group assessments. Assessment could be further improved by paying more attention to the assessment of interdisciplinarity in the second year. The assessment procedure for the thesis is well structured. Each thesis is assessed by two assessors, based on an elaborate form, including written feedback. The written feedback could be further improved by linking it more explicitly to the criteria. The specific requirements for the thesis differ per chair group. Even though students are well informed about the requirements and do not encounter problems due to these differences, the panel does encourage the programme to calibrate interpretations of the thesis assessment criteria across chair groups, in order to try to align the requirements where possible and see if a more uniform approach is possible.

The panel considers the Examining Board of Life Sciences (EBLS) to be independent, competent and in control. It is proactive in safeguarding the quality of assessment and the exit level, amongst others by performing chair group visits, thesis reviews, and reflection on the constructive alignment at programme level. The panel advises EBLS to perform reviews of the internship assessments, similar to the thesis reviews.

### Standard 4. Achieved learning outcomes

Based on the review of a sample of 15 theses from the programme, the panel concludes that the level demonstrated in the theses is appropriate for an academic master's programme. The documentation and the interviews indicate that graduates of MAM are well prepared for and prove to be successful in the professional field.

### Score table

The panel assesses the programmes as follows:

#### *Master's programme Aquaculture and Marine Resource Management*

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

Prof. dr. Jacqueline van Muijlwijk, panel chair  
8 April 2025

Anne-Lise Kamphuis MSc, panel secretary

# Introduction

## Procedure

### Assessment

On 28 January 2025, the master's programme Aquaculture and Marine Resource Management of Wageningen University was assessed by an independent peer review panel as part of the cluster assessment WO Life Sciences and Natural Resources 3. The assessment cluster consisted of ten programmes, offered by Wageningen University. The assessment followed the procedure and standards of the NVAO Assessment Framework for the Higher Education Accreditation System of the Netherlands (September 2024).

Quality assurance agency Academion coordinated the assessment upon request of Wageningen University. Jessica van Rossum acted as coordinator and panel secretary. Anne-Lise Kamphuis, Rik Ligthart and Sarah Boer also acted as panel secretaries in the cluster assessment. They have been certified and registered by the NVAO. Anne-Lise Kamphuis acted as panel secretary for the site visit in which the master's programme Aquaculture and Marine Resource Management was assessed.

### Preparation

Academion composed the peer review panel in cooperation with the institution and taking into account the expertise and independence of the members, as well as consistency within the cluster. On 6 September 2024, the NVAO approved the composition of the panel. The coordinator instructed the panel chair on her 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. They 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 secretary with a list of graduates of the academic years 2022-2023 and 2023-2024. In consultation with the coordinator, the panel chair selected 15 theses of the master's programme Aquaculture and Marine Resource Management. From the specialization Aquaculture 5 theses were selected, from the specialization Marine Resources and Ecology 5 theses were selected, and from the specialization Marine Governance 3 theses were selected. From the double degree Health Management in Aquaculture 2 theses were selected. The diversity of final grades was taken into account. 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 documentation (see appendix 4).

The panel members studied the information and sent their findings to the panel secretary. She collected the panel's questions and remarks in a document and shared this with the panel members. In a preparatory meeting, the panel discussed the initial findings on the self-evaluation report, the documentation, 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 visit and report.

### 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 its preliminary findings.

## Report

The panel 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 Wageningen University to check it 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 Wageningen University.

## Panel

The following panel members were involved in the cluster assessment:

- Prof. dr. J.E. (Jacqueline) van Muijlwijk-Koezen, Chief Education Officer and professor in Innovations in Human Health and Life Sciences at the Vrije Universiteit Amsterdam (chair);
- Ir. M.L. (Margot) Kok, Director of Education at the Faculty of Science at Utrecht University;
- Dr. A.A.J. (Annik) Van Keer, policy officer for Education at Utrecht University;
- Dr. Ir. L.G.J. (Luc) Boerboom, associate professor at the Faculty of Geo-Information Science and Earth Observation at the Universiteit Twente;
- Dr. G.M. (Garrett) Broad PhD, associate professor in Communication Studies at Rowan University (United States of America);
- Prof. V.B. (Vilis) Brukas, professor in Forest Planning at the Swedish University of Agricultural Sciences (Sweden);
- Prof. dr. M. (Marleen) De Troch, associate professor in Marine Ecology at Ghent University (Belgium);
- Prof. dr. M.P. (Michael) Gilek, professor in Environmental Science at Södertörn University (Sweden);
- Prof. dr. Ir. B.J.J.M. (Bart) van der Hurk, Scientific Director at Deltares and professor in Climate Interactions with the Socio-Ecological System at the Vrije Universiteit Amsterdam;
- Prof. dr. P.L. (Pierre) Ibisch, professor in Socio-ecology of Forest Ecosystems at the Hochschule für nachhaltige Entwicklung Eberswalde (Germany);
- Dr. T.K. (Torsten) Krause, associate professor at the Lund University Centre for Sustainability Studies of Lund University (Sweden);
- Em. prof. dr. B.A. (Bruce) Lankford, professor emeritus in Water and Irrigation Policy at the University of East Anglia (United Kingdom);
- Prof. dr. T. (Tatiana) Loboda, professor at the Department of Geographical Sciences of the University of Maryland (United States of America);
- Prof. dr. ing. S. (Steffen) Nijhuis, professor in Landscape-based Urbanism at the Delft University of Technology, Department of Urbanism, Section Landscape Architecture (referee panel member);
- Dr. M.A.F. (Mirjam) Ros-Tonen, researcher and former associate professor at the Faculty of Social and Behavioural Sciences of the University of Amsterdam;
- Prof. dr. S.T. (Sabine) Timpf, professor in Geoinformatics at the University of Augsburg (Germany);
- Prof. dr. V.B. (Veerle) Van Eetvelde, professor in Landscape research at Ghent University (Belgium);
- Prof. C.W. (Christian) Werthmann, professor in Landscape Architecture and Design at Leibniz University Hannover (Germany);
- J.A. (Job) Tuinder BSc, master's student Earth Sciences at the University of Amsterdam (student member);
- F. (Finn) van der Straaten BSc, master's student International Development Studies at the University of Amsterdam (student member).

The panel assessing the master's programme Aquaculture and Marine Resource Management at Wageningen University consisted of the following members:

- Prof. dr. J.E. (Jacqueline) van Muijlwijk-Koezen, Chief Education Officer and professor in Innovations in Human Health and Life Sciences at the Vrije Universiteit Amsterdam (chair);
- Dr. A.A.J. (Annik) Van Keer, policy officer for Education at Utrecht University;
- Prof. dr. M. (Marleen) De Troch, associate professor in Marine Ecology at Ghent University (Belgium);
- Prof. dr. M.P. (Michael) Gilek, professor in Environmental Science at Södertörn University (Sweden);
- J.A. (Job) Tuinder BSc, master's student Earth Sciences at the University of Amsterdam (student member).

## Information on the programmes

Name of the institution:	Wageningen University
Status of the institution:	Publicly funded institution
Result institutional quality assurance assessment:	Positive
Programme name:	M Aquaculture and Marine Resource Management
CROHO number:	60804
Level:	Master
Orientation:	Academic
Number of credits:	120 EC
Specializations or tracks:	Aquaculture Marine Resources and Ecology Marine Governance
Double degree	Health Management in Aquaculture
Location:	Wageningen
Mode(s) of study:	Fulltime
Language of instruction:	English
Submission date NVAO:	1 May 2025

## Description of the assessment

### Organization

Wageningen University (WU) consists of one faculty with five science groups, also known as departments. These science groups are Agrotechnology and Food Sciences, Animal Sciences, Environmental Sciences, Plant Sciences, and Social Sciences. The science groups deliver education through chair groups. The science groups are responsible for the management of the activities of the chair groups and the research institutes of Wageningen Research (WR). Chair groups are usually clustered according to similarities under the broad field of a particular science group. A chair group is the organizational component within WU to give shape to academic teaching and research and create societal value in a specific field. There are about ninety chair groups, each of them led by a professor, that conduct research in specific domains. Despite the exclusiveness of every chair group, they all work under the thematic area of healthy food and living environment. A chair group can be involved in the education of more than one programme. The involvement of chair groups in a programme is evident in the courses and the specializations. For each educational programme, the Board of Education oversees that the programme director and the programme committee, consisting of students and teachers, develop, and update bachelor's and master's curricula and align with the chair group(s) on whether new courses and specializations are needed and/or existing courses or thesis specializations have to be enhanced.

### Previous accreditation's panel's recommendations

The previous accreditation of the master's programme Aquaculture and Marine Resource Management (MAM) took place in 2019. The panel assessed standard 1 as good, and standards 2, 3, and 4 as satisfactory. The panel gave a number of recommendations. In response to these recommendations, the programme implemented several improvements, including adding non-Dutch professionals to the professional field committee, increasing the freedom of choice in the first three courses to better align with the diverse inflow, broadening the curriculum by adding a course, a thesis track, and a double degree specialization (AquaH), organizing a workshop on group work for the teaching staff, implementing measures to decrease the workload, and the WU-wide standardization of the thesis and internship assessment. The panel examined the programme's response to the recommendations and concludes that they have been seriously acted upon by the programme. The panel is satisfied 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 and vision*

MAM aims to educate students to become academic professionals that contribute to the sustainable use, conservation, and restoration of marine and aquatic ecosystems and resources. Students develop integrative knowledge and skills in the fields of aquaculture, marine ecology, marine resource management, and marine governance. The panel is positive about the programme's clear profile and vision. It especially appreciates the programme's interdisciplinary ambitions, integrating ecological, technological, and socio-economic perspectives. According to the panel, this integration is highly relevant for this field of research and practice, given the importance of biodiversity, marine resources for food security, and the blue

economy. Marine resources and aquaculture will continue to be topics of high environmental, economic, and societal concern. Educating researchers and professionals who can analyse, manage, and develop sustainable marine use contributes to this relevant field.

From the interviews during the site visit, the panel learnt that interdisciplinarity is addressed at different levels in the programme. In some courses, it is an explicit learning goal that is taught, trained, and assessed. In other courses, different disciplines and perspectives are integrated at the content level. Besides enabling students to develop generalist, interdisciplinary skills, MAM also allows students to specialize in a specific area. The panel appreciates how MAM focusses on integration on different levels while also allowing for specialization. Initially, the panel had some questions regarding the feasibility of achieving the interdisciplinary approach required in the field of governance, given that most students have a bachelor background in natural sciences and are less familiar with socio-economic perspectives. In the interviews, the programme indicated that it recognizes this concern. The teaching staff explained that students are not trained to become social scientists or economists, but to acquire just enough knowledge from these disciplines to be able to integrate it with other perspectives in an interdisciplinary approach. The programme expects that the emphasis on socio-economic perspectives will increase with the anticipated influx from the new (interdisciplinary) bachelor's programme Marine Sciences (BMS) that started in September 2023. Additional inflow into MAM from BMS is expected from September 2026 on. The panel agrees with the programme's approach to the integration of socio-economic perspectives, and anticipates that this will be further improved with the additional influx from BMS.

#### *Specializations*

MAM offers three specializations: 'Aquaculture' (A), 'Marine Resources and Ecology' (B), and 'Marine Governance' (C). Currently, specialization C is rather small: not many students choose this specialization. In this light, the panel discussed the necessity for maintaining these three specializations during the site visit. The programme explained that it regards specialization C as highly relevant, as it is the most interdisciplinary specialization. The programme strongly believes that an interdisciplinary approach is needed to solve future problems. Because of this, it wishes to maintain and strengthen this specialization. Moreover, more inflow into specialization C is anticipated as a result of the start of BMS. The panel agrees with the programme's vision on the relevance of this specialization and supports the intention to strengthen it, especially since more students are expected to choose this specialization in the coming years.

As part of specialization A, MAM offers a double degree track. This double degree is connected to the international joint degree Erasmus Mundus programme 'International Master of Science in Health Management in Aquaculture' (AquaH). AquaH is a joint degree offered by a consortium of three universities: Ghent University (Belgium) as the lead university, Norwegian University of Science and Technology (Norway), Universitat Autònoma de Barcelona (Spain), and is accredited as a joint degree programme by NVAO Flanders. WU is the fourth partner in the curriculum. It does not participate in the joint degree, but offers students the opportunity to combine AquaH with MAM in a double degree. In AquaH, students can choose various tracks, one of which is called the 'Wageningen track'. The Wageningen track focuses on preventing disease and maintaining adequate health of cultured aquatic organisms with minimal impact on the environment. Students who take the Wageningen track, follow courses at WU (from specialization A) in the second semester and write their thesis at WU. They achieve MAM's intended learning outcomes (ILOs) by doing this. Therefore, they receive a MAM diploma from the WU as well as a diploma from the joint degree AquaH. The panel is positive about the double degree track. It agrees that AquaH students in the Wageningen track achieve MAM's ILOs and can therefore receive a MAM diploma. The documentation includes AquaH's consortium agreement. According to the panel, the cooperation and alignment between MAM and AquaH are adequate.

### *Intended learning outcomes*

The programme describes nine general ILOs (see Appendix 1). Four ILOs are related to integration of knowledge and perspectives, two ILOs concern research skills, and three ILOs relate to other skills. For each specialization, one additional ILO was formulated. The self-evaluation report includes a table in which the ILOs are linked to the Dublin descriptors. The panel considers the ILOs to be well formulated and appropriate for the academic master's level as described in the Dublin descriptors. The ILOs clearly reflect the programme's vision and focus on interdisciplinarity and the integration of different perspectives in the broad field. The panel also appreciates the attention for developing an understanding of sustainability, renewable resources, and resilience thinking, which is evident in the ILOs.

### *Professional field*

There is a professional field committee that consists of a diverse group of professionals. In response to a recommendation from the previous panel, international professionals were added to the committee in recent years. The committee meets once a year, to provide the programme with general feedback on the programme's profile, ILOs, and curriculum in the context of developments in the professional field. The panel sees that the programme is well aligned with the needs and expectations of the professional field, amongst others by means of the professional field committee. The panel encourages the programme to ensure that the professional field's different segments are represented in the committee, as the field is quite broad. According to the panel, the programme's connection with the field of aquaculture is quite strong, through the professional field committee as well as through other contacts. As a result, the programme enables students from specialization A to become familiar with the professional field during their studies. The connection with the fields of ecology and governance, however, could be improved. It is challenging to build a strong connection with these fields, especially the field of governance, as the professional context here is much more complex. Alumni from specialization B and C mentioned that they would have appreciated more opportunities to connect with the professional field during the programme. Therefore, panel advises the programme to intensify connections with the fields of ecology and governance, in the professional field committee as well as in other contacts, in order to better support students in navigating career options.

### Considerations

The panel appreciates the programme's clear profile and vision, especially the strong focus on interdisciplinarity. The integration of ecological, technological, and socio-economic perspectives is highly relevant for the fields of aquaculture, marine resource management, marine ecology, and marine governance. Another positive aspect of MAM is that it focusses on integration on different levels while also allowing for specialization. Since most students have a bachelor background in natural sciences, the emphasis on socio-economic perspectives is limited, compared to other perspectives. The panel agrees with the programme's current approach to addressing socio-economic perspectives, and expects that these perspectives will be further strengthened with the anticipated new inflow from BMS.

The panel considers the ILOs to be well described and aligned with the academic master's level as described in the Dublin descriptors. The interdisciplinary and integrative nature of MAM is clearly reflected in the ILOs. The panel is also positive about the three specializations. Although specialization C is small at the moment, it is highly relevant in the eyes of the panel, and is expected to grow in the coming years. The double degree track is relevant and well designed. Cooperation and alignment with the international AquaH consortium is adequate. According to the panel, the programme is well aligned with the needs and expectations of the professional field. The professional field committee plays a key role in this process. While the panel commends MAM for its strong relationships in the field of aquaculture, it advises the programme to intensify

connections with the professional fields of ecology and governance, in order to better support students from specialization B and C in navigating career options.

### Conclusion

The panel concludes that the master's programme Aquaculture and Marine Resource Management 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*

MAM consists of 120 EC and is offered as a two-year, fulltime programme (see Appendix 2 for a curriculum overview). In the first year, students follow eight 6 EC courses and the 12 EC 'Academic Master Cluster'. There are two compulsory 6 EC courses in the first year: 'Advanced Statistics', which is shared across all three specializations, and 'Aquaculture Production Systems' (for specialization A) or 'Marine Resources Management' (for specializations B and C). Besides these compulsory courses, all students choose two out of the three following courses: 'Life History of Aquatic Organisms', 'Marine Systems', and 'Trends in Aquaculture'. On top of this, there is room for 24 EC of (restricted) elective courses in the first year. The Academic Master Cluster (12 EC), which most students take in the last period of year 1, is a compulsory curriculum component for all WU master's programmes. In this course, students collaborate in multidisciplinary teams to work on a project. Students can choose between different types of projects: a transdisciplinary academic consultancy project for an external commissioner, and entrepreneurial academic consultancy project, or a research project (which involves writing a grant proposal). Students are grouped according to their topics of interest.

The second year of the curriculum consists of an internship or research practice (24 EC) and the thesis (36 EC). Each specialization offers several thesis tracks, consisting of one preparatory course (which is usually completed in year 1) and the thesis project. Each thesis track is connected to a chair group. In the thesis, students perform an entire research project individually. During the thesis project, students are supervised by a supervisor from the chair group. Students also participate in a 'thesis ring': weekly meetings with other students in the thesis track. In the thesis ring, a variety of topics is discussed (such as writing style) and students give peer feedback on each other's thesis (project). In the internship, students perform a project at an external institution in the professional field. During the internship, students are supervised by a WU supervisor (for progress and evaluation) and a host supervisor (for daily supervision at the host organization). Instead of an external internship, students can do a research practice, which is a research project performed within WU.

According to the panel, the curriculum is clear and well structured. The interview with students made clear that the curriculum aligns well with their prior knowledge. The panel appreciates how the curriculum provides students with a broad basis integrating various perspectives, while also allowing for specialization. Another valuable element is the Academic Master Cluster, which allows students to develop various skills and to apply their knowledge and skills in a real-life (professional or research) context. In general, the combination of science and its application is a strong aspect of the programme. The curriculum offers

students a lot of flexibility and room to tailor the programme to their own background and interests. Students very much appreciate this flexibility and the wide range of available electives, as is evident from the documentation as well as the interview. The downside of the high degree of freedom may be a lack of focus. However, the panel has learnt from the interviews that the programme is well aware of this dilemma and handles it effectively.

The curriculum of the double degree track also consists of 120 EC and is offered as a two-year, fulltime programme (see Appendix 2 for a curriculum overview). Students in this track follow their first semester at Ghent University, where they take seven courses (30 EC in total) on aquaculture related topics and statistics. The second semester is spent at WU and includes the 'Thesis preparation course', 'Frontiers in Animal Health', 'Nutrition and Health in Aquaculture' and the Academic Master Cluster (30 EC in total). In the third semester, students do an internship (24 EC), usually in another country, and take the 6 EC course 'Aquahealth Club'. In the fourth semester, they return to WU to write their thesis (30 EC). The panel is positive about the curriculum of the double degree track, and concludes that it covers MAM's ILOs. The interview with students made clear that the curriculum is well aligned across the different universities. There are no major knowledge gaps and the transitions between universities run smoothly.

In the MAM programme, the chair groups are responsible for supervising the thesis projects on topics associated with them. Students can choose a thesis topic based on their interests. Each chair group related to MAM offers a range of thesis topics that students can choose from. Students can reach out to chair groups to get information on this. Also, a thesis market is organized in September/October to help students orientate and navigate the options. Students can also initiate their own thesis topic. This means they need to find a chair group willing to supervise it. Since chair groups have limited resources to supervise, it is sometimes not possible for students to write a thesis on the topic of their first choice. Initially, the panel was worried that this may lead to study delay due to waiting lists. However, from the interviews, the panel learnt that there is a matching system that ensures timely placement, provided that students start preparing in time (a few months before the start of the thesis project). If a student's topic of first choice is not possible, the student is guided and supported in finding an alternative topic. Another option is to do the internship first and the thesis afterwards. In this process, the study advisors play a vital role (see the paragraph on guidance below).

In the student section of the self-evaluation report, students indicated that they would appreciate more fieldwork in the programme. This was echoed in the interview with students. Fieldwork not only allows students to develop skills but also helps students gain insight into different career tracks and professional environments. The programme management and teaching staff explained that they cherish fieldwork and would like to maintain and increase it. However, they are faced with financial challenges, which means they are limited in their options to increase fieldwork. The panel understands and recognizes the current challenges and constraints. However, it does advise the programme to explore creative ways to increase fieldwork in the curriculum. Some ideas include integrating practice oriented projects and combining fieldwork across courses. Also, the panel wants to stress the importance of addressing concerns about fieldwork expressed by students and to motivate why choices are made.

#### *Learning environment*

The didactic approach in the programme is based on the university's vision on education. This vision emphasizes a focus on high-quality scientific knowledge, a rich learning environment combining knowledge, skills, and attitude, and room for flexible and personalized learning paths. Teaching methods used in the programme include lectures, tutorials, practicals, lab work, and fieldwork. Students also work on group assignments and projects. The previous panel had some concerns about the amount of group work in the

programme. In response to this, the programme critically reflected on the amount of group work and made an effort to limit it to courses in which it has added value for the learning outcomes. Also, a workshop on group work was organized for the teaching staff. The panel is positive about the wide variety of teaching methods applied, which fit well with the learning outcomes. Based on the documentation and interviews during the site visit, the panel concludes that the balance between individual and group work has improved. Also, there is a good system in place for dealing with freeriding, including the use of peer evaluation. The panel encourages the programme to further develop this. A suggestion to further improve would be to provide students with more explicit instructions and training regarding group work.

According to the panel, the programme is characterized by a strong learning atmosphere in which discussions and critical reflection among students and teachers are stimulated throughout the programme. Also, the programme offers an international environment, partly because of the participation of students enrolled in AquaH, in which students have the opportunity to work with students from other countries. The international classroom is very much valued by students. The panel sees that it greatly enriches the learning environment.

The programme has access to the 'Aquatic Research Facility' of Carus, located on the campus. These facilities include experimental aquaria and basins for a wide variety of research in the aquatic environment. The panel considers these facilities to be a valuable add-on of the programme.

#### *Language of instruction*

MAM has an English name and is taught in English. This is in line with the university-wide policy for its master's programmes. The international classroom is one of the basic educational principles at the university, allowing students to develop their skills with regard to international collaboration and dealing with diversity of cultures and perspectives. The panel agrees with MAM's argumentation for an English-taught programme and an English name. The panel considers the international classroom to be a very valuable feature of the programme. Also, the programme's international orientation flows logically from the international nature of the academic and professional field, where the vast majority of the discourse is in English. Therefore, an English-taught programme allows students to be prepared for this international field.

#### *Admission*

The admission criteria are laid down in the Education and Examination Regulations (EER). Applications are decided on by an Admission Board. The admission requirements of MAM include a bachelor's degree in a relevant discipline (as stipulated in the EER) and sufficient proficiency in English. MAM requires prior knowledge in biology, statistics and mathematics, and at least two of the following topics: aquaculture, chemistry, marine governance and policy, and natural resources management. For students who are not directly admissible, the programme offers a premaster's programme that can be customized to individual students, to target their specific deficiencies. The panel considers the admission criteria to be clear and appropriate for the programme.

Initially, the panel had some concerns about the feasibility of specialization C, given the fact that the admission requirements do not include a background in social and/or economic sciences. In the interviews, the programme explained that students in specialization C are required to follow several courses (in their (restricted) elective space) to repair deficiencies if they have no experience with social scientific research methods. Besides this, students have the possibility to follow fundamental courses from bachelor's programmes in the socio-economic field as part of their elective space, to brush up their knowledge in these fields. The panel considers this to be sufficient to enable students to achieve the ILOs for specialization C. This is further secured by the intensive, personal guidance available for students to help them choose

(restricted) electives. Moreover, the new expected influx from BMS will diminish knowledge gaps with regard to specialization C.

### *Feasibility*

The documentation shows that there is reasonable study delay in the programme. Over the past few years, between 15-33% of the students graduated within two years. About two-thirds graduated within three years. In the self-evaluation report and the interviews, the programme indicated that, besides personal circumstances, part of the delay is caused by the high number of students following two master's programmes and/or taking extra courses. The panel believes that the programme is feasible within two years: students should normally be able to finish the programme within two years. The majority of the existing study delay appears to result from deliberate choices of students who want to take extra courses or follow two master's programmes, as is evident from the interviews. The panel is happy to see that the programme actively monitors the study progression of students and discusses related dilemmas, such as the question whether students should continue to be allowed to compose a programme of more than 120 EC. One issue that could still be improved, concerns the communication regarding the planning of the thesis for specific groups of students. The panel learnt that students who wish to take the research variant of the Academic Master Cluster and write their thesis at the chair group 'Marine Animal Ecology' may experience a study delay of a few months. This delay is due to the scheduling of the Academic Master Cluster (research variant) and the thesis preparation course for this chair group. The programme assured the panel that these students could still graduate in time if they began their thesis projects earlier and that study advisors would inform them of this requirement. However, the panel notes that this information is apparently not clear to all students. Therefore, it recommends that the programme enhance communication to students about this issue.

### *Guidance*

Information about the programme and courses can be found in the online Study Handbook, the course guides, and on the online learning platform Brightspace. Student guidance is organized according to the university's 'Study Advice Service Level Commitment'. This policy stipulates the role, responsibilities and tasks of study advisors for various student groups. MAM has two study advisors. They guide and support students in designing and planning their own study programme, including the selection of a specialization, electives, a thesis track, and an internship. They are also available for students who struggle with their study progress due to personal issues. The study advisors organize an online information meeting before the start of the programme (in June) and provide students with an information document ('Getting started'). During the summer, the study advisors are available for online appointments when needed. In September, they give another presentation and have an individual intake meeting with each student. They remain available throughout the rest of the programme. The study advisors actively monitor the students' progress and contact students when needed. The panel wants to stress the importance of maintaining this level of guidance in the case of increasing student numbers.

The panel concludes that the information provision and guidance are in order. The panel is very positive about the programme's dedicated study advisors. Their guidance is very important in light of the high degree of freedom and flexibility in the curriculum. The panel sees that the study advisors are well informed of the curriculum and have a strongly personal, student-centred and proactive attitude. There is an excellent system of guidance in place, making sure that all students have equal access to the study advisors. Besides this, there is a lot of informal contact. Apart from the guidance from the study advisors, the teachers also help and support students in the process of choosing their specialization and thesis track. In the interview, students explained that there is a lot of personal interaction between students and teachers, which is highly

valued by the students. Students and alumni also mentioned that teachers advise(d) them on future career paths. The panel is impressed with the commitment and student-centred attitude of the teachers.

The facilities for students with disabilities are laid down in the university's policy regarding studying with a disability. Students can appeal to the student dean to request modifications in education and/or exams. In most cases, a statement from the student psychologist or student doctor is required. The student dean sends the request to the Examining Board. The panel considers the facilities for students with a disability to be appropriate and sufficient.

#### *Teaching staff*

MAM is taught by a team of over 40 teachers. The teaching staff represents a variety of chair groups, which illustrates the multidisciplinary nature of the programme. The panel considers the teaching staff to be highly qualified in all relevant fields. The teachers have a high level of teaching and (international) research expertise and experience. The documentation and the interviews show that students are content with the teachers and appreciate their commitment and enthusiasm. According to the panel, the teacher team is very engaged and dedicated, giving students a lot of individual attention. Also, there is good communication and alignment within the team. Although the teachers are associated with different chair groups, they truly work as a team. There are short and direct lines of communication, partly due the fact that teachers from different chair groups teach in each other's courses and collaborate in research. Besides this, a staff conference is organized each year, to align courses across the curriculum. The personal approach and short communication lines benefit from the small-scale nature of the programme. The panel encourages the programme to prepare to maintain this positive learning atmosphere with the expected increase in student numbers.

Nearly all teachers hold a University Teaching Qualification (UTQ) or are in training to obtain one. No registration of English proficiency was available in the documentation. However, the student chapter showed that students are satisfied with the level of English demonstrated by the teachers. Also, based on the interviews, the panel has no reason to suspect any problems in this area. Nevertheless, the panel thinks that English proficiency registration should be improved. The university's language policy requires teachers to take English tests and/or training programmes, but a complete registration of this is missing. The panel underlines the importance of a complete registration system for English proficiency.

With the expected growth in student numbers, investments in staff are crucial for the continuity of the programme. The panel was happy to learn that WU is committed to maintain its investments in teaching staff, despite the budget cuts universities are dealing with. This will ensure that sufficient teaching staff remains available.

#### *Considerations*

According to the panel, the curriculum is clear and well structured, for the regular specializations as well as the double degree track. A positive aspect is that the curriculum provides students with a broad basis integrating various perspectives, while also allowing for specialization. Another valuable element is the combination of science and its application, as is reflected in e.g. the Academic Master Cluster. Students have a lot of freedom to tailor the programme to their interests, through their choice of electives and specialization, the internship, and the thesis topic. There is a good matching system in place to support students in choosing their thesis topic. The panel advises the programme to explore creative ways to increase the amount of fieldwork in the curriculum.

MAM is taught in English, which, according to the panel, flows logically from the international nature of the academic and professional field. The teaching methods used in the programme are diverse and appropriate. There is also a good balance between individual and group work, and a good system for dealing with freeriding. MAM is characterized by a strong learning atmosphere and a rich, international learning environment. The 'Aquatic Research Facility' of Carus is a valuable add-on of the programme.

The admission criteria are clear and appropriate. Students in specialization C who do not have sufficient background in social/economic sciences, can take various courses to ensure that their knowledge is up to standard. The panel believes that the programme is feasible, and is happy to see that the programme actively monitors the study progression of students. The panel advises to enhance communication to students about how to prevent study delay when taking the research variant of the Academic Master Cluster and writing a thesis at the chair group 'Marine Animal Ecology'.

According to the panel, the facilities for students with a disability are appropriate and sufficient. The panel is very positive about the programme's dedicated study advisors. They are well informed of the curriculum and have a strongly personal, student-centred and proactive attitude. There is a good system of guidance in place. Students also receive valuable guidance and support from the teachers, who are committed and student-centred. The teaching staff is highly qualified in all relevant fields and disciplines. The teachers' didactic qualifications are in order and teachers have sufficient proficiency in English. The teachers are very dedicated and enthusiastic. Although the teachers are connected to different chair groups, they truly work as a team, ensuring good communication and alignment across courses.

### Conclusion

The panel concludes that the master's programme Aquaculture and Marine Resource Management meets standard 2.

### Standard 3. Student assessment

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

### Findings

#### *Assessment system*

Assessment in the programmes is based on the university's education assessment policy, which describes how assessment should be designed and structured in each programme. It also describes the roles and responsibilities of various actors and the assessment quality assurance cycle. The vision for assessment described in this policy emphasizes constructive alignment, which is visualized in the programme's assessment matrix. This matrix demonstrates how the programme's ILOs relate to the courses, and where and how each ILO is assessed. The self-evaluation report includes the assessment matrix for MAM, which shows that each ILO is assessed in multiple courses, allowing students to achieve the final exit level in all areas.

The panel considers the assessment in MAM to be well designed. A wide variety of appropriate assessment methods is applied, including written exams, individual and group assignments, papers, essays, presentations, and participation. A positive point is the use of summative as well as formative assessment (such as quizzes). Assessment is also transparent and clearly communicated to students. According to the panel, assessment is well aligned on programme level. The panel appreciates the fact that the Examining

Board and the Programme Director meet once a year to check and reflect on the constructive alignment of assessment throughout the curriculum.

The panel sees room for improvement with regard to the assessment of interdisciplinarity in the second year of the programme. While this aspect is clearly included in the assessment in the first year, it could be further strengthened in the second year. The second year focuses on the student's specialization, which may decrease the emphasis on interdisciplinary aspects. The panel recommends the programme to further explore possibilities to address interdisciplinarity more explicitly in the second year. The programme might consider possibilities such as having students reflect on their thesis topic from a wider range of perspectives, or organizing an integrated course or event (such as a conference) with the entire cohort. In this way, the programme may promote interdisciplinarity even more. Besides this, it may also enhance cohesion in the student cohort in the second year.

In the interviews, the panel was informed of how the programme deals with generative artificial intelligence (AI). The programme explained that students are stimulated to use it responsibly when appropriate, which means that they have to be transparent about what they have done and how this affected their work. At the moment of the site visit, a new university-wide policy on AI was being developed. Also, there is training on AI available for students and staff, and a new paragraph about the use of AI was added to the thesis regulations. The panel sees that the programme is well aware of AI related issues and is proactive in handling these. The panel thinks that this may be further improved by actively instructing students about how to use AI as a tool. This could be integrated in the curriculum. This will allow students to develop the skills to critically interpret and weigh data and sources.

#### *Thesis assessment*

The thesis is the final student project in which students demonstrate that they have achieved the ILOs. Assessment of the thesis is based on a written report, an oral presentation, and a defence. There is a go/no go moment about two months into the thesis project. The thesis is assessed by two assessors: the supervisor and a second assessor. They independently assess the thesis, based on a university-wide thesis assessment form. The thesis assessment form contains several criteria/categories that need to be scored. Based on the scores and weighting of the separate criteria, the overall grade is calculated.

According to the panel, the thesis assessment procedure is well set up. This also applies to the double degree. The panel is pleased to see that the four eyes principle is applied. The panel is also positive about the thesis assessment form, which combines quantitative assessment (scores) and written feedback. As part of the preparation for the site visit, the panel reviewed a sample of 15 theses from the programme, including the filled-in assessment forms. The panel agrees with the grades awarded to the theses included in the sample. It is generally very positive about the assessment process demonstrated in the forms. The procedure is transparent and scores are substantiated with written feedback. The panel does think that the written feedback could be further improved, in that it could be more explicitly linked to the criteria (with regard to the words used). In the interviews, the panel learnt that the Examining Board also pointed this out, and that the programme is already in the process of improving this. The panel underlines the relevance of this process. Another suggestion the panel wants to bring forth, is to explicitly include in the criteria that methodology and data analysis/statistics should align with the standards in the field of the thesis topic.

From reviewing the sample of theses, the panel noticed that there are differences between theses in terms of writing style, format, length, and level of depth. The interviews made clear that requirements on these aspects differ per chair group. The students indicated that they are well aware of the requirements of the chair group, which ensures a smooth process for students. However, it may be worth calibrating

interpretations of the thesis assessment criteria across chair groups, in order to try and align the requirements where possible and see if a more uniform approach is possible.

In several interviews, the topic of the internship (or research practice) was discussed. The internship is a large component of the second year. Most students do their internship after the thesis project. This raises questions about the learning goals of the internship, given the fact that the thesis is seen as the final project of the programme. According to the panel, there are good reasons to consider including the internship in the 'final project', along with the thesis. The panel learnt that there is an ongoing university-wide discussion about this topic. At the moment, the policy is not to include the internship in the final project. The panel encourages the programme to further reflect on this issue and continue discussions about it.

#### *Examining Board*

MAM falls under the responsibility of the Examining Board of Life Sciences (EBLS). EBLS is responsible for all programmes in the cluster Life Sciences. Besides appointing examiners and handling requests and complaints, EBLS performs several activities to safeguard the quality of assessment in the programmes. Two important activities in this respect are the evaluation of course assessment strategies during chair group visits and the review of samples of theses. Each chair group is visited at least once every five years. Prior to a chair group visit, all courses hosted by the chair group are evaluated by EBLS. The results of these evaluations are then discussed with the chair group during the visit. EBLS also performs thesis reviews. The documentation includes the report of a MAM thesis review performed in 2023. As mentioned earlier, EBLS also advises the programme on the constructive alignment and the assessment matrix each year. Also, EBLS joins the Programme Committee meeting each year, to discuss its advice on the programme. In the past years, EBLS realized large improvements in its structure, procedures, collaboration with assessment experts, and professionalization of its members, thanks to investments in extra (support) staff.

The panel is very positive about EBLS and considers it to be independent, competent, and in control. The panel is pleased to see that EBLS is proactive with regard to AI policies. It is clear that valuable discussions take place about how AI may be used by students in an ethical and responsible way. These discussions are aligned with the university-wide developments in this area. EBLS is proactive with regard to safeguarding the assessment quality in the programme. The report on the MAM thesis review shows that EBLS works thoroughly and accurately. Since the internship is a large component of the curriculum, the panel thinks it would be helpful if EBLS also performed reviews of the internship assessments. In the interview, EBLS explained that it pays a lot of attention to internships assessment, as this is quite challenging, given the great differences between internships. This topic is included in the chair group visits, but EBLS would like to look into it more thoroughly, by means of a review similar to the thesis review. However, due to limited capacity, EBLS has not been able to perform such a review so far. The panel agrees with EBLS and advises the programme/university to enable EBLS to perform reviews on internship assessment.

#### *Considerations*

The panel considers the assessment in the programme to be well designed, allowing students to achieve the final exit level for all ILOs. There is a wide diversity of assessment methods and a good balance of individual and group assessments. Assessment could be further improved by paying more attention to the assessment of interdisciplinarity in the second year. The assessment procedure for the thesis is well structured. Each thesis is assessed by two assessors, based on an elaborate form, including written feedback. The written feedback could be further improved by linking it more explicitly to the criteria. The specific requirements for the thesis differ per chair group. Even though students are well informed about the requirements and do not encounter problems due to these differences, the panel does encourage the programme to calibrate interpretations of the thesis assessment criteria across chair groups, in order to try to align the requirements

where possible and see if a more uniform approach is possible. The panel considers EBLS to be independent, competent and in control. It is proactive in safeguarding the quality of assessment and the exit level, amongst others by performing chair group visits, thesis reviews, and reflection on the constructive alignment at programme level. The panel advises EBLS to perform reviews of the internship assessments, similar to the thesis reviews.

#### Conclusion

The panel concludes that the master's programme Aquaculture and Marine Resource Management meets standard 3.

#### Standard 4. Achieved learning outcomes

The programme demonstrates that the intended learning outcomes are achieved.

#### Findings

##### *Theses*

As mentioned earlier, the thesis is regarded as the final student project, demonstrating the achieved level of students. The panel reviewed a sample of 15 theses from the programme. The panel concludes that the theses are of good quality, reflecting a level that is appropriate for an academic master's programme. The theses represent a wide diversity of topics, which reflects the programme's broad character.

##### *Alumni*

It is evident from the documentation and interviews that graduates of MAM have good employment opportunities. Quite a few MAM alumni have a job even before graduation. According to the panel, MAM graduates benefit from the positive reputation of the programme and university. Alumni enter a diverse range of employment sectors, including education & research, trade and industry, consultancy, and associations. In the interview, alumni indicated that they were well prepared for the labour market. They especially appreciate that the programme not only pays attention to academic careers, but also to professional careers. The interview also made clear that graduates benefit from the networks of teachers, who are willing to provide personal guidance and advice with regard to finding a first job.

#### Considerations

Based on the review of a sample of 15 theses from the programme, the panel concludes that the level demonstrated in the theses is appropriate for an academic master's programme. The documentation and the interviews indicate that graduates of MAM are well prepared for and prove to be successful in the professional field.

#### Conclusion

The panel concludes that the master's programme Aquaculture and Marine Resource meets standard 4.

#### General conclusion

The panel's assessment of master's programme Aquaculture and Marine Resource Management is positive.

## Development points

1. Intensify connections with the professional fields of ecology and governance, in order to better support students from specialization B and C in navigating career options.
2. Explore creative ways to increase fieldwork in the curriculum.
3. Enhance communication to students about how to prevent study delay when taking the research variant of the Academic Master Cluster and writing a thesis at the chair group 'Marine Animal Ecology'.
4. The panel recommends EBLS to perform reviews on internship assessment, similar to the thesis reviews.

# Appendix 1. Intended learning outcomes

## Appendix 1: Intended learning outcomes MAM in relation to Dublin descriptors

	Dublin descriptors				
	Have knowledge and understanding	Apply knowledge and understanding	Making judgements	Communication	Learning skills
<b>After successful completion of this MSc programme graduates are expected to be able to:</b>					
<b>Related to integration</b>					
1	Integrate knowledge of technological, physiological, ecological, economic and social aspects of the use of aquatic organisms and marine ecosystems				
2	Analyse critically the social and ecological dynamics of the utilisation of marine resources, and the conservation and restoration of marine ecosystems				
3	Compare different stakeholder views on socio-ecological aspects of marine ecosystems and aquatic production systems				
4	Assess the ethical and societal consequences of production of aquatic organisms and use of marine ecosystems, define dilemmas and design possible solutions				
<b>Research related:</b>					
5	Design a research plan in which the problem definition, hypothesis, research objectives and research questions are described in relation to relevant literature				
6	Apply appropriate research methods and techniques, including gathering new information and integrating this in existing theories in order to test scientific hypotheses by gathering new information and by integrating this in existing theories				
<b>Other skills related:</b>					
7	Co-operate in an interdisciplinary and international team to perform project-based work				
8	Communicate clearly (verbally and in writing) about the results of project and research work with specialists and non-specialists, considering the nature of the target group				
9	Reflect upon personal knowledge, skills, attitudes and functioning, both individually and in discussions with others and design and plan their own study path				
<b>For specialization Aquaculture:</b>					
4a	Design ecologically, economically, and socially sustainable production of fish and other marine organisms in a global perspective				
<b>For specialization Marine Resources and Ecology:</b>					
4b	Evaluate biodiversity, environmental quality and sustainability of marine ecosystems for the design of management of the marine environment				
<b>For specialization Marine Governance</b>					
4c	Evaluate existing socio-economic arrangements in order to design strategies for the governance and management of sustainable marine ecosystems and aquatic resources				

# Appendix 2. Programme curriculum

	Period 1 12 ECTS	Period 2 12 ECTS	Period 3 6 ECTS	Period 4 6 ECTS	Period 5 12 ECTS	Period 6 12 ECTS
<b>Year 1 - Specialisation A- Aquaculture</b>						
Morning	Life History of Aquatic Organisms*)	Aquaculture Production Systems	Electives or thesis preparation course	Electives or thesis preparation course	Advanced Statistics#)	Academic Master Cluster **)
Afternoon	Marine Systems*)	Trends in Aquaculture*)		Electives or thesis preparation course	Electives or thesis preparation course	
<b>Year 1 - Specialisation B - Marine Resources and Ecology</b>						
Morning	Life History of Aquatic Organisms*)	Advanced Statistics#)	Marine Resources Management	Electives or thesis preparation course	Electives or thesis preparation course	Academic Master Cluster **)
Afternoon	Marine Systems*)	Trends in Aquaculture*)		Electives or thesis preparation course	Electives or thesis preparation course	
<b>Year 1 - Specialisation C - Marine Governance</b>						
Morning	Life History of Aquatic Organisms*)	Env. Policy: Analysis and Evaluation / Env. Economics for Env. Sciences / Research Methodology in Environmental Science	Marine Resources Management	Electives or thesis preparation course	Advanced Statistics#)	Academic Master Cluster **)
Afternoon	Marine Systems*)	Trends in Aquaculture*)		Electives or thesis preparation course	Electives or thesis preparation course	
<b>Year 2</b>						
Morning	Major Thesis (36 EC)					Internship or Research Practice Thesis (24 EC)
Afternoon						

\*) Choose two out of these three courses

#) Advanced Statistics can be followed in period 1.AE/ 2AF/ 3WD/ 5MO/ 6 MO

\*\*) The Academic Master Cluster is offered every period. Therefore, students who select a thesis preparing or elective course in period 6 can also follow this in another period.

Compulsory for specialisation

Compulsory for specialisation

Choose if your study advisor deems it necessary

Compulsory for specialisation

Figure 2.1. Schematic overview of the building blocks of the MAM curriculum (Year 1 and 2)

	Period 1	Period 2	Period	Period 4	Period 5	Period 6
Morning	Schematic overview Aquah (year 1)					
Afternoon	<b>Ghent University</b> Principles of Marine Fish Larviculture Fish and Shellfish Immunology Applied Statistics Diseases in Aquaculture Viral Disease Management Aquaculture Genetics Aquatic Microbial Community Management			<b>Wageningen University</b> Thesis preparation course	<b>Wageningen University</b> Frontiers in Animal Health  <b>Wageningen University</b> Nutrition and Health in Aquaculture	<b>Wageningen University</b> Academic Master Cluster

 Compulsory for specialisation

Figure 2.3: Schematic overview of the building blocks of Aquah (year 1)

## Appendix 3. Programme of the site visit

### Tuesday 28 January 2025

08.45-09.00	Welcome	
09.00-09.45	Interview programme management	<ul style="list-style-type: none"> <li>• Dean of Education WU</li> <li>• Representative Board of Education</li> <li>• Chair Programme Committee (PC)</li> <li>• Student, master specialization A, member Daily Board PC</li> <li>• Programme Director</li> </ul>
09.45-10.15	Internal panel session	
10.15-11.00	Interview MSc students and alumni	<ul style="list-style-type: none"> <li>• Student and PC member, year 2, specialization A</li> <li>• Student and PC member, year 2, specialization B</li> <li>• Student, year 2, specialization AquaH (double degree)</li> <li>• Student, year 1, specialization B</li> <li>• Student, year 2, specialization B</li> <li>• Alumnus, specialization A, will start a PhD</li> <li>• Alumnus, specialization B, researcher aquatic management at INBO</li> <li>• Alumnus, specialization A, business development manager at Nukamel</li> <li>• Alumnus, specialization B</li> </ul>
11.00-11.15	Break	
11.15-12.00	Interview MSc teaching staff	<ul style="list-style-type: none"> <li>• Lecturer Aquatic Ecology and Water Quality Management, PC member</li> <li>• Lecturer Aquaculture and Fisheries, PC member</li> <li>• Lecturer Environmental Policy, PC member</li> <li>• Lecturer Aquaculture and Fisheries</li> <li>• Lecturer Marine Animal Ecology, PC member</li> <li>• Lecturer Aquaculture and Fisheries</li> <li>• Lecturer Environmental Economics and Natural Resources</li> <li>• Lecturer Aquatic Ecology and Water Quality Management</li> </ul>
12.00-13.00	Lunch	
13.00-13.45	Examining Board + Study Advisors	<ul style="list-style-type: none"> <li>• Chair Examining Board</li> <li>• Secretary Examining Board</li> <li>• (Second) secretary Examining Board</li> <li>• External member Examining Board</li> <li>• Study advisor</li> <li>• Study advisor</li> </ul>
13.45-14.00	Break	
14.00-15.00	Thematic Session	<ul style="list-style-type: none"> <li>• Lecturer Aquatic Ecology and Water Quality Management, PC member</li> </ul>

		<ul style="list-style-type: none"> <li>• Lecturer Aquaculture and Fisheries, PC member</li> <li>• Lecturer Environmental Policy, PC member</li> <li>• Advisor Teaching and Learning Centre</li> <li>• Chair PC</li> <li>• Student, master specialization A, member Daily Board PC</li> <li>• Student and PC member, year 2, specialization A</li> <li>• Student and PC member, year 2, specialization B</li> <li>• Student bachelor Marine Sciences, year 2</li> <li>• Programme Director</li> </ul>
15.00-15.45	Internal panel session	
15.45-16.30	Concluding session programme management	<ul style="list-style-type: none"> <li>• Dean of Education WU</li> <li>• Representative Board of Education</li> <li>• Chair Programme Committee (PC)</li> <li>• Student, master specialization A, member Daily Board PC</li> <li>• Programme Director</li> </ul>
16.30-17.15	Concluding panel session	
17-15-17.45	Oral feedback panel	

## Appendix 4. Materials

Prior to the site visit, the panel studied 15 theses of the master's programme Aquaculture and Marine Resource Management. Information on the theses is available from Academion upon request.

The panel also studied other materials, which included:

- Self-evaluation report, including the appendices:
  - Intended learning outcomes in relation to Dublin descriptors
  - Overview courses per specialization
  - Overview teaching staff including UTQ qualifications
  - Assessment programme overview
  - Student Reflection MAM
- AquaH Consortium Agreement
- Proof of accreditation AquaH
- Report alumni survey 2023
- Report NSE 2024
- General information WU
  - Governance structure and the organization of WU Degree Programmes
  - WU Vision for Education 2017
  - Education and Examination Regulations WU 2024-2025 (general part)
  - Framework for education WU 2024-2025
  - Assessment policy WUR 2023
  - Study Advice Service level commitment
  - UTQ Policy and registration Sep 2024
- Course materials from 4 selected courses
- Examining Board
  - Annual reports from 2020-2023
  - MAM thesis review report EBLs 2023
- Programme Committee: annual reports from 2021-2024
- Internship and Research Practice
  - Internship Course Guide
  - Research Practice Course Guide
  - Regulations Internship
  - Regulations Research Practice
  - Selection of 8 internship / research practice reports