

Besluit **Besluit strekkende tot het verlenen van accreditatie aan de opleiding wo-master Environmental Sciences van Wageningen University**

	Gegevens	
datum	31 juli 2014	Naam instelling : Wageningen University
onderwerp	Besluit accreditatie wo-master Environmental Sciences van Wageningen University (002340)	Naam opleiding : wo-master Environmental Sciences (120 ECTS)
uw kenmerk		Datum aanvraag : 14 december 2013
ons kenmerk	NVAO/20142344/SL	Variant opleiding : voltijd
bijlagen	3	Afstudeerrichtingen : Air Quality and Atmospheric Chemistry Aquatic Ecology and Water Quality Management Environmental Economics and Natural Resources Environmental Policy Environmental Systems Analysis Environmental Technology Integrated Water Management Soil Biology and Biological Soil Quality Soil Chemistry and Chemical Soil Quality Toxicology
		Locatie opleiding : Wageningen
		Datum goedkeuren panel : 7 mei 2013
		Datum locatiebezoeken : 22 en 23 mei 2014
		Datum visitatierapport : 7 oktober 2013

Instellingstoets kwaliteitszorg : ja, positief besluit van 2 juli 2012

Beoordelingskader

Beoordelingskader voor de beperkte opleidingsbeoordeling van de NVAO (Stcrt. 2010, nr 21523).

Bevindingen

De NVAO stelt vast dat in het visitatierapport deugdelijk en kenbaar is gemotiveerd op welke gronden het panel de kwaliteit van de opleiding voldoende heeft bevonden.

Samenvatting bevindingen en overwegingen van het panel (hierna ook: the committee).

Standard 1: Intended learning outcomes

The master programme in Environmental Sciences provides insight into the socio-economic causes, the characteristics and the impact of pollution and degradation of the natural environment. By taking an interdisciplinary approach, students learn to develop analytical tools and models, environmental technologies, socio-political arrangements, and economic instruments to control and prevent environmental problems.

The unique element of the programme is the combination of natural-science, social-science and technological-science aspects in one programme. The committee assessed whether students receive an interdisciplinary programme with sufficient depth, making them experts in a specific discipline. In its opinion, there is a good balance between depth and breadth in the programme.

Although graduates successfully enter careers in environmental consultancy, research, policy development, higher education and management, the committee finds that the programme is mostly research oriented. The future working ground of the student is internationally oriented. The committee finds that there is a good match between the diversity and international character of the students' future careers and the programme.

Standard 2: Teaching-learning environment

The curriculum consists of a two-year programme with four types of building blocks: regular courses, Academic Master Cluster, academic internship and thesis. Major thesis projects can be done at ten different Chair Groups. These same Chair Groups are responsible for the academic internships. The committee studied the content of the curriculum and concludes that it reflects the broad field of Environmental Sciences. It applauds the amount of free choice. However, the committee wonders if the large number of tracks should be retained. The committee suggests to compress the number of specialisations in case of small intake. Wageningen University aims to offer programmes with an interdisciplinary approach. This was evident at the course level, but not at the programme level. The committee had difficulty identifying this educational philosophy as a specific didactical concept. It advises formulating an overarching didactical concept on the programme level. The programme offers teaching methods that can be clustered into lectures, tutorials, practical training, group work, individual papers, and field trips. Group work plays an important role in the programme. The committee is impressed by the variety of teaching methods. However, it warns about an excess of group work. Although it recognises the importance of group work, in its opinion this partly influences the depth of the courses. All of the professors involved in the programmes (chair holders, personal, associate, assistant and special professors) have a PhD degree and are involved in the current research activities of the departments. In addition, designated researchers and lecturers are involved in the programmes. The committee recognises the staff's scientific quality, national and international academic reputation and teaching experience. However, it noted that the number of staff members who have obtained a basic educational qualification (BKO) is quite low (24%). The committee advises staff members to obtain their BKO as soon as possible. According to the students, the study load is not that demanding. The committee suggests increasing the workload by deepening the courses.

Study advisers support students to make well-considered choices within their individual programmes, and they track and stimulate study progress. The master programme in Environmental Sciences has four study advisers. Students meet with their study adviser

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Standard 3: Assessment and achieved learning outcomes

The most common forms of assessment are written examinations with open questions, assessments of individual papers, group papers or other submitted assignments, and assessments of performance during practical training. Most courses include more than one assessment to cover all learning outcomes.

The committee established that the exams were very objective and traceable assessments and at the appropriate level. They related well to the learning objectives of the courses they assessed. The thesis is considered to be the core element of the master programme. The committee assessed ten theses from the master programme in Environmental Sciences. On average, the theses were of good quality. According to the committee there was a large level of ambition expressed in the theses. However, it noted that a proper problem definition was missing in a significant number of the theses it studied. It believes that students need more instructions or guidance on this part of the research project.

The Board of Examiners consists of seven persons and covers five bachelor programmes and eleven master programmes. In the committee's view this workload is too high, due to the number of programmes and the number of electives in the programmes.

General conclusion

The committee concludes that the objectives and intended learning outcomes of the master programme in Environmental Sciences meet the standards required for an academic programme. It is of the opinion that the content and structure of the curriculum, the available staff, and the facilities constitute a coherent, attractive teaching-learning environment for the students. The programme has an adequate assessment system and demonstrates that the intended learning outcomes are achieved. The quality of the theses is good.

Aanbevelingen

De NVAO onderschrijft de aanbevelingen van het panel, in het bijzonder de aanbevelingen gericht op het verhogen van het percentage van de docenten in het bezit van een Basiskwalificatie Onderwijs (BKO) en op kwaliteitsverbetering van probleemstellingen in theses.

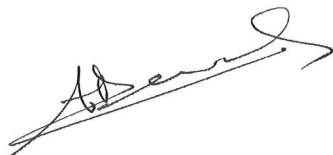
Ingevolge het bepaalde in artikel 5a.10, derde lid, van de WHW heeft de NVAO het college van bestuur van de Wageningen University te Wageningen in de gelegenheid gesteld zijn zienswijze op het voornemen tot besluit van 10 juni 2014 naar voren te brengen. Van deze gelegenheid is geen gebruik gemaakt.

De NVAO besluit accreditatie te verlenen aan de wo-master Environmental Sciences (120 ECTS; variant: voltijd; locatie: Wageningen) van de Wageningen University te Wageningen. De opleiding kent de volgende afstudeerrichtingen: Air Quality and Atmospheric Chemistry; Aquatic Ecology and Water Quality Management; Environmental Economics and Natural Resources; Environmental Policy; Environmental Systems Analysis; Environmental Technology; Integrated Water Management; Soil Biology and Biological Soil Quality; Soil Chemistry and Chemical Soil Quality; Toxicology. De NVAO beoordeelt de kwaliteit van de opleiding als voldoende.

Dit besluit treedt in werking op 31 juli 2014 en is van kracht tot en met 30 juli 2020.

Den Haag, 31 juli 2014

De NVAO
Voor deze:

A handwritten signature in black ink, appearing to read 'Ann Demeulemeester', written over a horizontal line.

Ann Demeulemeester
(vicevoorzitter)

Tegen dit besluit kan op grond van het bepaalde in de Algemene wet bestuursrecht door een belanghebbende bezwaar worden gemaakt bij de NVAO. De termijn voor het indienen van bezwaar bedraagt zes weken.

Standaard	Omschrijving	Score
1. Beoogde eindkwalificaties	De beoogde eindkwalificaties van de opleiding zijn wat betreft inhoud, niveau en oriëntatie geconcretiseerd en voldoen aan internationale eisen	Voldoende
2. Onderwijsleeromgeving	Het programma, het personeel en de opleidingsspecifieke voorzieningen maken het voor de instromende studenten mogelijk de beoogde eindkwalificaties te realiseren	Voldoende
3. Toetsing en gerealiseerde eindkwalificaties	De opleiding beschikt over een adequaat systeem van toetsing en toont aan dat de beoogde eindkwalificaties worden gerealiseerd	Voldoende
Eindoordeel		Voldoende

De standaarden krijgen het oordeel onvoldoende, voldoende, goed of excellent.
Het eindoordeel over de opleiding als geheel wordt op dezelfde schaal gegeven.

Tabel 1: Rendement.

Cohort	2009	2010	2011
Rendement	90%	74%	88%

Tabel 2: Docentkwaliteit.

Graad	Ma	PhD	BKO
Percentage	7%	93%	24%

Tabel 3: Student-docentratio.

Ratio	15.5
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Tabel 4: Contacturen.

Studiejaar	1	2
Contacturen	15,6	1,0

- Prof. W.A. Hafkamp, Chair, Professor in Environmental Economics, Erasmus University Rotterdam;
- Prof. I. Janssens, Research Professor at the University of Antwerp, affiliated to the research group of Plant and Vegetation Ecology;
- Prof. A. Jamison, Professor in Technology, Environment and Society, Aalborg University, Denmark;
- Prof J. Monstadt, Professor in Spatial and Infrastructure Planning, Darmstadt University of Technology, Germany;
- L.H.A. van der Sanden, Master Student in Social and Political Sciences of the Environment, Radboud University Nijmegen.

Het panel werd ondersteund door dr. A. Venemans, secretaris (gecertificeerd).