

## **Besluit** Besluit strekkende tot het verlenen van accreditatie aan de opleiding wo-bachelor Milieuwetenschappen van Wageningen University

### **Gegevens**

<b>datum</b>	Naam instelling	:	Wageningen University
31 juli 2014	Naam opleiding	:	wo-bachelor Milieuwetenschappen (180 ECTS)
<b>onderwerp</b>	Datum aanvraag	:	14 december 2013
Besluit accreditatie wo-bachelor	Variant opleiding	:	voltijd
Milieuwetenschappen van	Afstudeerrichtingen	:	Environmental Policy and Economics
Wageningen University			Environmental Quality and Systems Analysis
(002339)			Environmental Technology
<b>uw kenmerk</b>	Locatie opleiding	:	Wageningen
CvB13/30590	Datum goedkeuren		
<b>ons kenmerk</b>	panel	:	7 mei 2013
NVAO/ 20142677/SL	Datum locatiebezoeken	:	22 en 23 mei 2014
<b>bijlagen</b>	Datum visitatierapport	:	7 oktober 2013
3			

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.

### **Advies van het visitatiepanel**

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

### **Standard 1: Intended learning outcomes**

The domain of Environmental Sciences and initiatives towards establishing international benchmarks are described in the Dutch-Flemish referential framework for academic environmental education. The committee confirms that the framework is a solid basis for programmes in this discipline. It concluded that the learning outcomes of the framework were really well articulated.

The bachelor programme aims at developing an interdisciplinary attitude in its students that is conducive to an integrated approach of environmental and sustainability issues, i.e.,

Pagina 2 van 7 problems caused by the interaction of human systems and Earth systems. It also aims at educating bachelor students who – proceeding from an interdisciplinary approach – are able to develop technology, socio-political arrangements or economic instruments to control or avoid environmental problems. The committee finds that there is a clear description of the objectives. It appreciates that the programme approaches the field of environmental sciences from a very broad perspective. However, the learning outcomes of the programme could have been formulated better.

As there are no employment opportunities for graduates of the bachelor programme within the domain, the programme focuses on preparing students for an academic master programme. The committee finds that the programme equips students well to participate successfully in postgraduate training programmes.

### **Standard 2: Teaching-learning environment**

The three-year bachelor programme in Environmental Sciences consists of general foundation courses, domain-related courses, integrating domain-related courses, international study visits, major-specific courses, thesis and free choice. It is well-structured, interdisciplinary and quite broad. A criticism by the committee regarding the curriculum is the lack of sufficient skills training. All learning skills are integrated in the domain-specific courses. The committee recommends teaching different skills more explicitly. Although the programme has several courses that focus on the integration of different disciplines, the committee finds that the coherence between courses could be improved.

Wageningen University aims to offer programmes with an interdisciplinary approach. This was evident at the course level, but not as much at the programme level. However, the committee had difficulty identifying this educational philosophy as a specific didactical concept. It advises formulating an overarching 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. The committee is impressed by the variety of teaching methods.

All 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 has noted that the number of staff members who have obtained a basic educational qualification is quite low. Of the lecturers in the Faculty, only 24% have a formal University Teacher Qualification (Dutch: Basiskwalificatie Onderwijs, BKO). The committee advises staff members to obtain their BKO as soon as possible.

Study advisers support students to make well-considered choices within their individual programmes, and they track and stimulate study progress. The bachelor programme has three study advisers. Students meet with their study adviser several times a year. The committee highly appreciates the support and guidance the student advisers offer to their students.

However, it also established that their workload is high. As their position is crucial, the committee advises reducing their workload.

### **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

Pagina 3 van 7 assessment to cover all learning outcomes.

The committee established that the exams were very objective assessments and at the appropriate level. They related well to the learning objectives of the courses they assessed. The bachelor programme concludes with a bachelor thesis. To grade the theses, an assessment form accompanied by a rubric is used. The committee appreciates the assessment system. It studied the thesis assessment forms and concluded that the written evaluation provided on the assessment form was very brief. It recommends completing the forms in a uniform and thorough way.

The committee assessed ten theses. It agreed that the quality of the vast majority of the theses was adequate and acceptable. It came across theses that did not contain a clear research question or an inappropriate method description. It recommends solving this by assessing the research proposal as well.

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. It would prefer to reduce the number of programmes served by one Board of Examiners to maintain quality with an acceptable workload.

#### **General conclusion**

The committee concludes that the objectives and intended learning outcomes of the bachelor programme 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.

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

#### **Besluit**

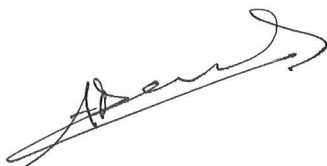
Ingevolge het bepaalde in artikel 5a.10, derde lid, van de WHW heeft de NVAO het college van bestuur van de Wageningen University te Wageningen in de gelegenheid gesteld zijn zienswijze op het voornemen tot besluit van 10 juni 2014 naar voren te brengen. Van deze gelegenheid is geen gebruik gemaakt.

De NVAO besluit accreditatie te verlenen aan de wo-bachelor Milieuwetenschappen (180 ECTS; variant: voltijd; locatie: Wageningen) van Wageningen University te Wageningen. De opleiding kent de volgende afstudeerrichtingen: Environmental Policy and Economics; Environmental Quality and Systems Analysis; Environmental Technology. 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:



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.

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

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

**Tabel 1: Uitval na 1, 2, en 3 jaar.**

Cohort	2006	2007	2008	2009	2010	2011
Uitval na 1jr	15%	33%	16%	12%	5%	6%
Uitval na 2jr	15%	33%	16%	12%	5%	
Uitval na 3jr	15%	33%	20%	12%		

**Tabel 2: Rendement (vwo-instroom).**

Cohort	2006	2007	2008	2009
Rendement na 3 jaar	36%	38%	19%	23%
Rendement na 4 jaar	64%	75%	62%	
Rendement na 5 jaar	82%	88%		
Rendement na 6 <sup>(+)</sup> jaar	91%			

**Tabel 3: Rendement (totale instroom).**

Cohort	2006	2007	2008	2009
Rendement na 3 jaar	36%	44%	19%	22%
Rendement na 4 jaar	64%	78%	62%	
Rendement na 5 jaar	82%	89%		
Rendement na 6 <sup>(+)</sup> jaar	91%			

**Tabel 4: Docentkwaliteit.**

Graad	Ma	PhD	BKO
Percentage	0%	100%	24%

**Tabel 5: Student-docentratio.**

Ratio	12.0
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**Tabel 6: Contacturen.**

Studiejaar	1	2	3
Contacturen	17.4	16.7	14.5

- 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).