

## Besluit

### Besluit strekkende tot het verlenen van accreditatie aan de opleiding wo-master Biologische Wetenschappen van de Universiteit Utrecht

#### Gegevens

Naam instelling	:	Universiteit Utrecht	
datum	Naam opleiding	:	wo-master Biologische Wetenschappen (120 EC)
31 augustus 2016	Datum aanvraag	:	1 juni 2016
onderwerp	Variant opleiding	:	voltijd
Besluit	Afstudeerrichtingen	:	Environmental Biology, Plant Biology, Fungal Biology, Ecology & Natural Resource Management, Biomarine Sciences & Palaeoecology, Behavioural Ecology, Molecular & Cellular Life Sciences
accreditatie wo-master	Locatie opleiding	:	Utrecht
Biologische Wetenschappen	Datum goedkeuren panel	:	21 september 2015
van de Universiteit Utrecht	Datum locatiebezoeken	:	12 en 13 januari 2016
(004959)	Datum visitatierapport	:	16 maart 2016
uw kenmerk	Instellingstoets kwaliteitszorg :	ja, positief besluit van 12 juli 2012	
-			
ons kenmerk			
NVAO/20161825/LL			
bijlage			

#### Beoordelingskader

Beoordelingskader voor de beperkte opleidingsbeoordeling van de NVAO (Stort. 2014, nr 36791).

#### Bevindingen

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

#### Advies van het visitatiepanel

Samenvatting bevindingen en overwegingen van het panel.

The master's programme Environmental Biology at Utrecht University aims to prepare students for conducting molecular and/or ecological research on plants, plant communities, micro-organisms, animals and/or (marine) ecosystems. It does so integrating different levels of biological organisation, from genes to ecosystems. According to the critical reflection, students are trained in performing fundamental research on topics with high societal and economic relevance, requiring them to deal with complex problems that need to be addressed in a multidisciplinary setting. It offers five complementary specialization tracks: Plant Biology, Fungal Biology, Ecology & Natural Resource Management, Biomarine Sciences & Palaeoecology, and Behavioural Ecology. Within the Graduate School of Life Sciences (GS-LS), students can opt to combine a specialization with a Science

#### Inlichtingen

René Hageman  
+31 (0)70 312 23 54  
r.hageman@nvaо.net

Parkstraat 28 | 2514 JK | Postbus 85498 | 2508 CD Den Haag  
P.O. Box 85498 | 2508 CD The Hague | The Netherlands  
T +31 (0)70 312 2300 | F +31 (0)70 312 2301  
info@nvaо.net | www.nvaо.net

Pagina 2 van 5 Communication & Education or Management profile. For those students, three additional learning outcomes apply.

The panel has established that the programme's intended learning outcomes are in line with (inter)national requirements. The programme shows a broad profile within the field of the life sciences with attention to societal and economic relevance. The panel suggests to translate the programme's interdisciplinary ambitions into a separate learning outcome, and more generally encourages the programme to more strongly express its (future) profile through its learning outcomes.

The programme Environmental Biology is a full-time, English-taught master's programme consisting of 120 EC. All students follow the mandatory GS-LS starting course 'Introducing Life Sciences' and need to attend at least ten seminars organised by the GS-LS or other institutes. Also, all students have to complete a major research project. For students taking a 'research profile', the remainder of the curriculum is filled by a writing assignment, theoretical courses, the minor research project, and/or electives.

Students who opt for a Science Communication & Education profile take three profile specific courses and an internship instead of a minor research project. Students with a Management profile take core science and business management related courses instead of a minor research project.

The panel considers that the programme offers students a broad palette with five tracks of decent to good quality in its research profile, plus two well-developed society-oriented profiles. The panel is positive about the general setup of the curriculum, which emphasises research training and includes a number of theoretical courses. The minor research project may be used as further preparation for an academic career, but also allows students to apply their scientific knowledge outside academia. The panel has studied some solid and even excellent courses but encourages the programme to offer biology students extra core courses addressing themes in New Biology.

Graduation rates are acceptable, but leave room for improvement. The programme identifies delays in the research projects as the main cause and has already taken action to better monitor student progress. The panel encourages the programme to detect signals of delay as early as possible and emphasises the primary responsibility of project examiners in this respect.

The programme is executed by a teaching staff with a very good to excellent research reputation. The panel appreciates the attention to and options for teaching professionalisation at Utrecht University. The programme's staff-student ratio is quite favourable, although the teaching burden is not spread evenly over the research groups. The panel concludes that the programme has access to high quality facilities.

The programme's assessment system functions well and is subject to continuous improvement thanks to the efforts of the teaching staff in general and a proactive Board of Examiners and its Assessment Panel in particular. Test matrices have been developed encompassing each curriculum component, and rubrics and assessment forms are in place for the research projects and writing assignment. The panel compliments the programme for its rubrics, which provide students with accurate expectations of their assessment, and staff with a flexible assessment tool.

Pagina 3 van 5 Based on the quality of their research project reports and their performance after graduation, the panel concludes that graduates have demonstrated a good overall level of achieved learning outcomes. All reports were adequately graded. The panel compliments the programme on the fact that a number of research projects have led to publications in peer reviewed journals. The panel is confident that intake selection and interim assessments will further raise the bar; still, small research groups may do with more shoulders to share the burden. The panel concludes that master graduates are well appreciated on the job market, both within and outside academia.

The panel assesses the standards from the *Assessment framework for limited programme assessments* in the following way:

Standard 1:	Intended learning outcomes	satisfactory
Standard 2:	Teaching-learning environment	good
Standard 3:	Assessment	good
Standard 4:	Achieved learning outcomes	good
General conclusion		good

#### Besluit

Ingevolge het bepaalde in artikel 5a.10, derde lid, van de WWH heeft de NVAO het college van bestuur van de Universiteit Utrecht te Utrechtin de gelegenheid gesteld zijn zienswijze op het voornenen tot besluit van 27 juni 2016 naar voren te brengen. Van deze gelegenheid heeft het college van bestuur geen gebruik gemaakt.

De NVAO besluit accreditatie te verlenen aan de wo-master Biologische Wetenschappen (120 EC; variant: voltijd; locatie: Utrecht) van de Universiteit Utrecht te Utrecht. De opleiding kent de volgende afstudeerrichtingen: Environmental Biology, Plant Biology, Fungal Biology, Ecology & Natural Resource Management, Biomarine Sciences & Paleoecology, Behavioural Ecology en Molecular & Cellular Life Sciences.  
De NVAO beoordeelt de kwaliteit van de opleiding als goed.

Dit besluit treedt in werking op 31 augustus 2016 en is van kracht tot en 30 augustus 2022.

Den Haag, 31 augustus 2016

De NVAO  
Voor deze:

Dr. A.H. Fierman  
(voorzitter)

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.

Pagina 4 van 5 **Bijlage 1: Schematisch overzicht oordelen panel**

Onderwerp	Standaard	Beoordeling door het panel
<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>Goed</b>
<b>3. Toetsing</b>	De opleiding beschikt over een adequaat systeem van toetsing.	<b>Goed</b>
<b>4. Gerealiseerde eindkwalificaties</b>	De opleiding toont aan dat de beoogde eindkwalificaties worden gerealiseerd.	<b>Goed</b>
<b>Eindoordeel</b>		<b>Goed</b>

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

Pagina 5 van 5 **Bijlage 2: panelsamenstelling**

- Prof. dr. Jan Kijne, (voorzitter) emeritus hoogleraar Bioscience, Universiteit Leiden;
- Prof. dr. Ton Bisseling, (lid) hoogleraar Moleculaire Biologie, Wageningen University;
- Prof. dr. Herman Verhoef, (lid) emeritus hoogleraar Bodemecologie, Vrije Universiteit Amsterdam;
- Prof. dr. Joost Teixeira de Mattos, (lid) hoogleraar Kwantitatieve Microbiële Fysiologie, Universiteit van Amsterdam;
- Jeffrey Veroeff BSc, (student-lid) masterstudent Biologie en Dierwetenschappen, Wageningen University.

Het panel werd ondersteund door dr. Kees-Jan van Klaveren, secretaris (gecertificeerd).