

## Besluit

### Besluit strekkende tot het verlenen van accreditatie aan de opleiding wo-master Science and Innovation van de Universiteit Utrecht

#### Gegevens

datum	Naam instelling	:	Universiteit Utrecht
16 september 2013	Naam opleiding	:	wo-master
onderwerp		:	Science and Innovation (120 ECTS)
Definitief besluit	Datum aanvraag	:	21 december 2012
accreditatie wo-master	Variant opleiding	:	volijd
Science and Innovation	Locatie opleiding	:	Utrecht
Management van de Universiteit	Datum goedkeuren	:	
Utrecht	panel	:	24 april 2012
(001280)	Datum locatiebezoeken	:	7 en 8 juni 2012
uw kenmerk	Datum visitatierapport	:	16 november 2012
O&O 12.21462	Instellingstoets kwaliteitszorg	:	ja, positief besluit van 12 juli 2012
ons kenmerk		:	
NVAO/20132814/ND		:	

#### bijlagen

#### Aanvullende informatie

- De NVAO heeft bij e-mail van 6 juni 2013 de instelling een aanvulling gevraagd op de aangeleverde kwantitatieve gegevens.

#### Beoordelingskader

Beoordelingskader voor de beperkte opleidingsbeoordeling van de NVAO (Stort. 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 goed heeft bevonden. Het visitatierapport geeft de bevindingen en overwegingen weer van het panel over de opleidingen bachelor Natuurwetenschap en Innovatiemanagement en master Science and Innovation Management van de Universiteit Utrecht. Het panel heeft beide opleidingen gezamenlijk beoordeeld

#### Inlichtingen

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This report reflects the assessment committee's findings and considerations on the bachelor's programme Natuurwetenschap en Innovatiemanagement and the master's programme Science and Innovation Management of Utrecht University. The evaluation is based on information provided in the self-evaluation reports, the selected theses, additional documentation provided during the site visit, and interviews conducted with staff, students and graduates of the programme. The committee found positive aspects as well as aspects that could be improved. Taking these aspects into consideration, the committee concluded that the programmes fulfil the requirements set by the NVAO for accreditation.

**Standard 1: Intended learning outcomes**

Science and Innovation Management is concerned with an interdisciplinary understanding of societal problems and innovation processes. Students need to understand science and technology development as well as the way society influences the direction, success and impact of new knowledge and technology.

The committee feels that the mission of the master's programme is better articulated than is the case with the bachelor's programme. Graduates should be able to analyse the complex dynamics of emerging technology, to identify strategies for improvement and thereby contribute to solving societal problems. Students are trained to analyse innovation issues that emerge when new technologies are developed, to solve societal problems. The committee established that the intended learning outcomes correspond to internationally accepted descriptions of what an Innovation Studies programme should look like. The requirements derived from the domain-specific reference framework are very well translated into a set of qualifications that cover the Dublin descriptors and produce a profile which is both state of the art scientifically and professionally relevant. Compared with other master's programmes, the focus of SIM is unique and ambitious. The initiatives taken by the programme management to develop a programme with a professional orientation, and to critically review the current programme illustrate the dedicated and self-conscious outlook in the department.

**Standard 2: Teaching-learning environment**

The master's programme has a workload of 120 EC. In the first year students take seven compulsory courses that make up the general part of the programme. They comprise theoretical, methodological and practical knowledge and skills. The programme teaches a 'canon' of Innovation Studies theories: classic readings on technological change from economic, management and social science perspectives. Students learn to compare, judge and carefully select theories for a particular research question and to combine and improve theories. The second year focuses increasingly on independently analysing and influencing innovation processes in a chosen area. Students write a thesis (45 EC), which may be combined with an internship.

The committee greatly appreciates the design, implementation and organisation of the teaching-learning environment. It concludes that the programme demonstrates a good balance between theoretical, methodological and practical training and research. The programme has made a clear choice for educating multidisciplinary innovation specialists who have a broad theoretical knowledge basis and the analytical and methodological skills to reflect on the various options and approaches they have when confronted with a problem

Pagina 3 van 7 of innovation. Students really learn what is required in order to become a professional researcher. The committee could confirm that the compulsory courses have a good level, which should enable students to achieve the intended learning outcomes. The design of the curriculum is clear and cohesive, the working methods meet the objectives of the programme components, the staff is scientifically and didactically qualified and creates a dedicated intellectual community together with the students.

The committee established that the programme has taken significant measures to improve its quality and feasibility, e.g. stricter admission rules and time management and the flexible way in which the internship can be combined with the master thesis research. The committee recommends considering how internships can be promoted and facilitated even more. The overall picture of the teaching-learning environment suggests it exceeds the quality of the bachelor's. The committee feels the curriculum, staff and facilities constitute a coherent teaching-learning environment which exceeds the generic quality.

### **Standard 3: Assessment and achieved learning outcomes**

The committee concludes that both programmes use a reasonable mix of assessments that match the intended learning outcomes. Various instruments are used to guarantee the quality of the examinations. The committee noted that the assessment procedures have recently been streamlined and urges the programme to apply its assessment policies strictly.

The intended learning outcomes of the master's programme are achieved. The level of the theses is good and exceeds the generic quality. Both staff and students show contagious enthusiasm about the research projects. Students get sufficient supervision. The committee supports the recommendation made by alumni to upgrade the thesis presentation to a defence ceremony. It also thinks the second reader should be present at this ceremony. The positive conclusions about the achieved learning outcomes are confirmed by the presented evidence that graduates easily find work within the professional field and that they perform to everyone's satisfaction.

Ingevolge het bepaalde in artikel 5a.10, derde lid, van de WHW heeft de NVAO het college van bestuur van de Universiteit Utrecht te Utrecht in de gelegenheid gesteld zijn zienswijze op het voornemen tot besluit van 15 juli 2013 naar voren te brengen. Bij e-mail van 28 augustus 2013 heeft het college van bestuur ingestemd met het voornemen tot besluit en zijn de kwantitatieve gegevens aangevuld.

Op grond van het voorgaande besluit de NVAO accreditatie te verlenen aan de wo-master Science and Innovation (120 ECTS; variant: voltijd; locatie: Utrecht) van de Universiteit Utrecht te Utrecht. De NVAO beoordeelt de kwaliteit van de opleiding als goed

Dit besluit treedt in werking op 1 januari 2014 en is van kracht tot en met 31 december 2019.

Den Haag, 16 september 2013

De NVAO

Voor deze:



Lucien Bollaert  
(bestuurder)

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 5 van 7 **Bijlage 1: Schematisch overzicht oordelen panel**

Onderwerp	Standaard	Beoordeling door het panel <i>Voltijd</i>
<b>1. Beoogde eindkwalificaties</b>	De beoogde eindkwalificaties van de opleiding zijn wat betreft inhoud, niveau en oriëntatie geconcretiseerd en voldoen aan internationale eisen	G
<b>2. Onderwijsleeromgeving</b>	Het programma, het personeel en de opleidingsspecifieke voorzieningen maken het voor de instromende studenten mogelijk de beoogde eindkwalificaties te realiseren	G
<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	G
<b>Eendoordeel</b>		G

De standaarden krijgen het oordeel onvoldoende (O), voldoende (V), goed (G) of excellent (E). Het eendoordeel over de opleiding als geheel wordt op dezelfde schaal gegeven.

**Tabel 1: Rendement.**

Jaar	Geslaagd absoluut	Na <1 jaar	Na <2 jaar	Na <3 jaar	Na <4 jaar	Na <5 jaar	Na 5=< jaar
2009-2010	35	0%	23%	71%	89%	97%	100%
2010-2011	21	0%	33%	76%	90%	95%	100%
2011-2012	49	0%	4%	90%	96%	96%	100%

**Tabel 2: Docentkwaliteit.**

Graad	MA	PhD	BKO
Percentage	100%	93,3%	93.3%

**Tabel 3: Student-docentratio.**

Ratio	2009-2010 1 : 37.7
	2010-2011 1 : 29.4

**Tabel 4: Contacturen.**

Studiejaar	1	2
Contacturen	196	230

- Prof. Paul Wouters (chair), director of the Centre for Science and Technology Studies (CWTS) and professor of Scientometrics, Leiden University;
- Prof. John Grin, professor of Policy Science, especially System Innovation, University of Amsterdam;
- Prof. Volker Hoffmann, associate professor of Sustainability and Technology, ETH Zurich (Swiss Federal Institute of Technology), Switzerland;
- Prof. Cees Leeuwis, professor of Communication and Innovation Studies, Wageningen University;
- Ms. Aniek Berendsen, BSc, master student of System Engineering, Policy Analysis & Management, Delft University of Technology.

Het panel werd ondersteund door Daan de Lange MA, secretaris (gecertificeerd).