

Besluit

Besluit strekkende tot het verlenen van accreditatie aan de opleiding wo-master Astronomy van de Universiteit Leiden

Gegevens

datum	Naam instelling	:	Universiteit Leiden
28 november 2014	Naam opleiding	:	wo-master
Onderwerp			Astronomy (120 ECTS)
Besluit	Datum aanvraag	:	3 juni 2014
accreditatie wo-master	Variant opleiding	:	volijd
Astronomy van de	Locatie opleiding	:	Leiden
Universiteit Leiden	Datum goedkeuren		
(003091)	panel	:	2 december 2013
uw kenmerk	Datum locatiebezoeken	:	5 en 6 december 2013
2014/22161	Datum visitatierapport	:	21 mei 2014
ons kenmerk			
NVAO/20144132/AH	Instellingstoets kwaliteitszorg	:	ja, positief besluit van 2 juli 2013

bijlagen

3

Beoordelingskader

Beoordelingskader voor de beperkte opleidingsbeoordeling van de NVAO (Stcr. 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. Het panel heeft de bacheloropleiding Sterrenkunde en de masteropleiding Astronomy gezamenlijk beoordeeld, maar heeft zijn bevindingen in separate rapporten vastgelegd.

Advies van het visitatieteam

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

The master's programme Astronomy is offered by the 'Sterrewacht Leiden ('Leiden Observatory'), which is part of the Faculty of Science of Leiden University.

Standard 1: Intended learning outcomes

The programme operates within the university concept of 'studying in a research environment'. The master's programme Astronomy offers three disciplinary research tracks: Research in Astronomy, Cosmology, Astronomy and Instrumentation. Furthermore, it offers

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Pagina 2 van 7 three combined specializations: Science Based Business, Science Communication & Society and Education.

The committee recognizes the profile of a proud institute which is strongly focused on research. The 'Sterrewacht' has an excellent international reputation. The committee is very positive about this profile.

The committee established that the intended learning outcomes are in line with the domain specific requirements. They are also linked adequately with the Dublin descriptors. The learning outcomes indicate sufficiently that the programme is aiming at a master's degree level.

However, the committee considers the learning outcomes as being described too generally. It advises to specify the learning outcomes of the programme.

Standard 2: Teaching-learning environment

The master's programme is an English taught two-year programme of 120 EC. Each specialization has its own specific mix of core courses, electives and (research) projects. Each student writes a thesis based on a 30 or 36 EC final research project.

The committee is positive about the thorough and clearly research based profile of the curriculum. It appreciates the direct link the students have with the research groups of the institute. The combined specializations however attract very few students. The committee states that these should be better promoted or integrated with the other specializations in order to attract more students.

The committee found no information on the intended learning outcomes of individual courses and advises management to add this information. Notwithstanding these remarks, the committee is confident that the curriculum in general relates adequately to the intended learning outcomes of the programme and the Dublin descriptors, based on the course descriptions and course materials.

After discussions with students and alumni, the committee concludes that the programme informs them correctly about the intensive study programme. The committee compliments management with the average study duration. The committee is impressed by the commitment, expertise and academic qualities of the staff.

There is an open and direct communication between the education committee and the Director of Teaching. The committee concludes that the education committee plays a good and efficient role in the programme. It advises to organize the education committee in such a way that it also holds meetings without the teaching director, in order to enhance its independence.

Standard 3: Assessment and achieved learning outcomes

The programme makes use of a variety of tests: written exams, oral exams, presentations, short essays, the internship report and the master thesis. In order to assure the quality of the assessments, the Board of Examiners (BoE) assigns the examiners for each course. The BoE verifies that each exam is checked on clarity, length, level and coverage of the course material by a second reader. With regard to the final research project, the BoE also implemented a number of measures to ensure the validity and transparency of each assessment.

Pagina 3 van 7 The committee concludes that the testing and assessment system is working adequately, but that the BoE should have made more efforts in controlling it. It established that the BoE did not control the quality of tests and assessments within the SBB and SCS specializations. The committee is reassured by the quick repairs the Faculty made by installing a mandated Board of Examiners, but urges the programme to pay more attention to the controls of testing and assessment quality.

The committee studied 15 theses written in the past three academic years. It concludes that those theses reflect scientific research at master level and sound academic work. The committee agrees with the grades given, but urges management to make sure all assessment forms are filled in completely. It also concluded that the internship reports of the SBB specialization show that students obtain the SBB-specific learning outcomes. It is less convinced of the academic level of the internship reports and concludes that some of the grades given were higher than expected.

The committee would like to emphasize that the achieved learning outcomes as reflected by the master theses leave no doubt about the quality of the programme. Although the BoE did not control the tests and assessments of all specializations within the programme during the site visit, this omission has now been repaired. The extra check it performed on the SBB internship reports has proven for the committee that the SBB-specific learning outcomes are also obtained. Based on those considerations, the committee concludes that the programme meets all requirements for Standard 3.

The committee 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:	satisfactory
Standard 3 Assessment and achieved learning outcomes:	satisfactory
General conclusion	satisfactory

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Ingevolge het bepaalde in artikel 5a.10, derde lid, van de WHW heeft de NVAO het college van bestuur van de Universiteit Leiden te Leiden in de gelegenheid gesteld zijn zienswijze op het voornemen tot besluit van 3 november 2014 naar voren te brengen. Per e-mail van 24 november 2014 heeft de instelling laten weten geen opmerkingen te hebben.

De NVAO besluit accreditatie te verlenen aan de wo-master Astronomy (120 ECTS; variant: voltijd; locatie: Leiden) van de Universiteit Leiden te Leiden. De NVAO beoordeelt de kwaliteit van de opleiding als voldoende.

Dit besluit treedt in werking op 28 november 2014 en is van kracht tot en met 27 november 2020.

Den Haag, 28 november 2014

De NVAO

Voor deze:



Dr. A.H. Flierman
(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 5 van 7 **Bijlage 1: Schematisch overzicht oordelen panel**

Onderwerp	Standaard	Beoordeling door het panel voltijd
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
Eendoordeel		Voldoende

De standaarden krijgen het oordeel onvoldoende, voldoende, goed of excellent.

Het eendoordeel over de opleiding als geheel wordt op dezelfde schaal gegeven.

Tabel 1: Rendement

Cohort	2005	2006	2007	2008	2009	2010
Rendement	90%	100%	67%	100%	76%	77%

Tabel 2: Docentkwaliteit

Graad	Ma	PhD	BKO
Percentage	100%	100%	87%

Tabel 3: Student-docentratio

Ratio	10 : 1
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Tabel 4: Contacturen

Studiejaar	1	2
Contacturen	12	13

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- prof.dr. Daan Lenstra, emeritus hoogleraar Elektrotechniek aan de Technische Universiteit Delft (voorzitter);
- prof.dr. Wim de Boer, Professor of Physics, Karlsruhe Institute of Technology, Duitsland;
- prof.dr. Elias Brinks, Full Professor aan de University of Hertfordshire, Groot-Brittannië;
- prof.dr. Martin Goedhart, hoogleraar didactiek van de Wiskunde en Natuurwetenschappen en opleidingsdirecteur master Educatie en Communicatie in de Wiskunde en Natuurwetenschappen, Rijksuniversiteit Groningen;
- dr. Jan Hoogenraad, eigenaar Spoorgloren voor verandermanagement en kwantitatieve dienstverlening voor het openbaar vervoer;
- Sander Breur MSc (student-lid), promovendus op het Nikhef, Universiteit van Amsterdam.

Het panel werd ondersteund door drs Astrid van Vliet, secretaris (gecertificeerd).