

Besluit

Besluit strekkende tot het verlenen van accreditatie (na herstel) aan de opleiding womaster Energy and Environmental Sciences van de Rijksuniversiteit Groningen

datum

31 maart 2016

onderwerp

Besluit

accreditatie wo-master **Energy and Environmental**

Sciences van de

Rijksuniversiteit Groningen

(004351)

uw kenmerk 15/15136

ons kenmerk NVAO/20160485/ND

bijlagen

Gegevens

Naam instelling

Naam opleiding

Graad opleiding

Variant opleiding

Afstudeerrichtingen

Locatie opleiding

Datum goedkeuren

Panel 1

Datum eerste locatiebezoek Datum eerste visitatierapport

Datum herstelplan

Datum herstelbesluit NVAO

Datum tweede locatiebezoek

Datum tweede visitatierapport

Datum aanvraag 2 (na herstel)

Instellingstoets kwaliteitszorg

: Rijksuniversiteit Groningen

: wo-master Energy and Environmental Sciences

(120 EC)

: Master of Science

: voltijd

: System Studies

Experimental Studies

: Groningen

: 3 juni 2014

: 5 en 6 september 2013

: 13 december 2013

: 7 april 2014

: 31 juli 2014

: n.v.t.

: 5 november 2015

: 1 december 2015

: ja, positief besluit van 28 juli 2014

Beoordelingskaders

- Artikel 5a. 12a. van de Wet op het hoger onderwijs en wetenschappelijk onderzoek (Stb. 2010, 293);
- Accreditatiebesluit WHW (Stb. 2011, 536);
- 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 na herstel voldoende heeft bevonden.

Pagina 2 van 7 Advies van het visitatiepanel (eerste beoordeling)

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

In its assessment, the committee observed positive aspects, along with many issues that could and should be improved. It realizes that the programme has thoroughly redesigned the curriculum and that the situation regarding a number of its concerns is already being strongly remediated. Since the new setup of the curriculum was only introduced in September 2013, the committee was not able to judge whether these improvements will solve the noted concerns. Therefore, the University of Groningen provided the committee with a document describing the way it is addressing these concerns in order to convince the committee that it is indeed working on improvements.

Standard 1: Intended learning outcomes

The EES master's programme is a two-year, international, English-taught programme embedded in the Faculty of Mathematics and Natural Sciences. The committee noted that the programme has a clear profile that is firmly rooted within the natural sciences. The programme aims to prepare graduates for a professional career or an academic career. The committee noted that these objectives are worthy and advises the programme to keep paying attention to balancing these broad academic and professional goals in one programme at the same time.

The committee verified that the intended learning outcomes conform to the demands for an academic master's level. In its opinion the learning outcomes of the Experimental Studies on Energy and Climate specialization are clearly articulated, while those of the System Studies on Energy and Environment are satisfactory, but generic. It realises that it is difficult to formulate specific and testable learning outcomes for such a broad specialization.

Standard 2: Teaching-learning environment

The programme has two specializations: 1) System Studies on Energy and Environment (embedded in the IVEM research group); and 2) Experimental Studies of Energy and Climate (embedded in the CIO research group). The first year of the programme consists of three types of modules: compulsory general modules (25 EC) for all EES students, specialization specific compulsory modules (10-15 EC) and optional modules (20-25 EC). In the second year of the programme, the students conduct two research projects: the training thesis (30 EC) and the master thesis (30 EC).

The committee is not convinced that all intended learning outcomes are met in the programme. It misses a course that addresses the theories and research matters of social sciences and a methodology course that serves as a foundation for scientific research in the broad scope of the programme. The committee gained the impression the programme has a strong focus on academic research, but provides too little practical training of skills and competences required in the professional field. Judging by the lecture notes, books and PowerPoints used, the committee feels that the content of some courses of the System Studies on Energy and Environment specialization, is too weak and does not meet the required academic level.

The committee noted that the didactic concept is in line with the learning outcomes of the modules and is by and large supported by the working methods. However, it is of the opinion that the interaction between research and education could and should be strengthened.

Pagina 3 van 7 The committee noted that the programme is taught by a highly motivated staff that participates in highly appreciated research groups. However, it is concerned about the fact that none of the lecturers has obtained a basic teaching qualification (BKO). The committee advises staff members to obtain their basic teaching qualification as soon as possible. Another of the committee's concern is that the programme was forced to operate understaffed. The committee gained the impression that due to a high teaching load, the lecturers could not always provide sufficient supervision to the students during their master thesis.

The committee established that the programme had a dangerously low intake during the years 2007 - 2010. More recently, the number of students entering the programme has increased. Due to several promising developments, the programme management expects a further increase in student numbers up to 40 - 50 students. At the time of the site visit, it could not be confirmed whether this expectation will be realised.

The committee realizes that the programme has thoroughly redesigned the curriculum and that the situation regarding a number of its concerns has already been strongly remediated. However, since the new curriculum has only just been implemented, the committee was not able to judge whether these improvements will solve the established concerns sufficiently. Moreover, the committee gained the impression that the programme did not yet effectively address all the concerns.

Standard 3: Assessment and achieved learning outcomes

The committee noted that the Board of Examiners is aware of their new tasks and recently started implementing the faculty testing and assessment policy. It appreciates the recent initiatives taken by the Board, like obtaining a course unit assessment overview and revising the guidelines and assessment protocol regarding the research projects.

The committee established that the written exams and assignments related well to the content of the courses they assessed. Regarding the assessments of the theses, it is of the opinion that the feedback provided by staff members is sometimes too limited. It gained the impression that this is a consequence of the supervisors being overloaded with work. It advises the programme to ensure that the revision of the assessment protocol for the master thesis incorporates a proper justification of the grades given.

The committee read and assessed a selection of fifteen theses and established that some were of very high quality. However, it also noted that a couple of theses had some flaws ranging from limited referencing to a weak description of the concepts, theories and research methodology. Overall, the committee would have graded eleven theses somewhat lower than the grade given by the supervisor. Nevertheless, none of the theses was considered to be unsatisfactory.

The committee thinks it is laudable that students have the opportunity to conduct their research for their master thesis at an external location. However, it noted that several students struggle with the different expectations from the professional field on the one hand and the academic field on the other. It advises making this distinction more explicit to both students and the hosting organizations.

The committee appreciates that most graduates find a job immediately after their graduation and always in a relevant field.

Pagina 4 van 7 Conclusion

The committee concludes that the Faculty Board and the programme management have diligently taken up the process of improving the programme after the site visit. However, the committee finds that the introduction and effectiveness of these improvements cannot be assessed at this moment. It has the opinion that there should be a check to make sure that the new curriculum and the other intended improvements have successfully dealt with the concerns of the committee. The constructive reaction of the Faculty Board and the programme management, the implementation of the new curriculum and the other intended measures of improvement create confidence that the programme can be improved in a reasonable time-span.

Advies van het visitatiepanel (tweede beoordeling: gerealiseerd herstel) Samenvatting bevindingen en overwegingen van het panel.

Based on findings of the panel in 2013 and its suggestions for improvement, the master's programme Energy and Environmental Sciences (EES) implemented a number of improvements. In addition to outlining the intended learning outcomes (Standard 1) and introducing new procedures concerning the assessment of thesis work (Standard 3) a number of changes were introduced in order to repair the criticism by the panel on Standard 2.

The quantity and quality of staff was significantly increased by the hiring of a new full professor and three assistant professors. Also, most teachers now hold a university teaching qualification (UTQ). Improvements were made on the content of courses, materials used and a new course on statistics was introduced in order to strengthen the curriculum. The panel was pleased to notice that an active and functional system is in place to remediate problems.

The relation between research and education has been improved. This was partly the result of the hiring of new staff, and in addition the programme introduced measures that allow for a closer connection between research and education. Students now seem to be more part of the academic community, specifically during the research projects. The number of students enrolling lags behind the ambition, but is adequate to run a programme like EES.

Finally, a number of measures were taken to improve supervision of students during research projects and the writing of the thesis. The panel is confident that this will lead to improved supervision and less study delays.

The panel is fully confident that the programme has implemented all proposed changes adequately, at some points even beyond adequate. For that reason, the panel assesses the programme as 'satisfactory'.

Pagina 5 van 7 Besluit

Ingevolge het bepaalde in artikel 5a.10, derde lid, van de WHW heeft de NVAO het college van bestuur van de Rijksuniversiteit Groningen te Groningen in de gelegenheid gesteld zijn zienswijze op het voornemen tot besluit van 29 februari 2016 naar voren te brengen. Van deze gelegenheid is geen gebruik gemaakt.

De NVAO besluit accreditatie te verlenen aan de wo-master Energy and Environmental Sciences (120 EC; variant: voltijd; locatie: Groningen) van de Rijksuniversiteit Groningen te Groningen. De opleiding kent de volgende afstudeerrichtingen: System Studies; Experimental Studies. 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 maart 2016

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 6 van 7 Bijlage 1: Schematisch overzicht oordelen panel

Uit besluit van 31 juli 2014

Onderwerp	Standaard	Beoordeling door het panel
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	Onvoldoende
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		Onvoldoende

Beoordeling na herstel

Standaard	Standaard	Beoordeling door het panel
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
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.

Pagina 7 van 7 Bijlage 2: panelsamenstellingen

Panel eerste beoordeling en beoordeling herstelplan

- Prof. W.A. Hafkamp, chair, professor in Environmental Sciences, Erasmus University Rotterdam;
- Prof. I. Janssens, research professor at the University of Antwerp, research group of Plant and Vegetation Ecology;
- Prof. A. Jamison, professor in Technology, Environment and Society, Aalborg University, Denmark;
- Dr. M.P.J. Pulles, senior project manager, TNO;
- L.H.A. van der Sanden, master student in Social and Political Sciences of the Environment, Radboud University Nijmegen.

Het panel werd ondersteund door drs. E. Poort, secretaris (gecertificeerd).

Panel tweede beoordeling: gerealiseerd herstel

- Prof. W.A. Hafkamp, chair, professor in Environmental Sciences, Erasmus University
- Rotterdam:
- Prof. I. Janssens, research professor at the University of Antwerp, research group of Plant and Vegetation Ecology;
- Dr. M.P.J. Pulles, retired senior project manager and scientist at TNO;
- Mrs. L.H.A. van der Sanden MSc, graduated student of Social and Political Sciences of the Environment, Radboud University Nijmegen (student member).

Het panel werd ondersteund door dr. M.J.V. Van Bogaert, secretaris (gecertificeerd).