

Besluit

Besluit strekkende tot een oordeel positief onder voorwaarde van een aanvraag toets nieuwe opleiding van de wo-master Metropolitan Analysis, Design and Engineering (joint degree) van Wageningen University en de Technische Universiteit Delft alsmede strekkende tot een positief advies wat betreft de cursusduur (120 EC)

Gegevens

datum	Instelling	: Wageningen University en Technische Universiteit Delft
31 juli 2017		
onderwerp	Opleiding	: wo-master Metropolitan Analysis, Design and Engineering (leidend tot joint degree)
Besluit		
TNO wo-ma	Variant	: voltijd
Metropolitan Analysis, Design and Engineering van Wageningen University en Technische Universiteit Delft (005220)	Locaties	: Amsterdam, Delft en Wageningen
	Studieomvang (EC)	: 120
	Datum macrodoelmatigheidsbesluit	: 13 juli 2016
	Datum aanvraag	: 15 november 2016
uw kenmerk	Datum locatiebezoek	: 13 juni 2017
16/04004	Datum paneladvies	: 14 juli 2017
ons kenmerk	Instellingstoets kwaliteitszorg	: ja, positief besluit van 2 juli 2012 (Wageningen University) en 21 november 2011 (Technische Universiteit Delft)
NVAO/20172025/LL		
bijlagen		
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Beoordelingskaders

- Beoordelingskader voor de beperkte toets nieuwe opleiding van de NVAO (Stcrt. 2014, nr 36791);
- Artikel 5a.11, vierde lid, van de Wet op het hoger onderwijs en wetenschappelijk onderzoek (WHW) (Stb. 2010, 293);
- Artikel 1 van het Accreditatiebesluit WHW (Stb. 2011, 536);
- Protocol voor Nederlandse aanvragen Toets Nieuwe Opleiding leidend tot een Joint degree (NVAO, 7 juni 2010; versie februari 2011);
- Protocol verlengde cursusduur (NVAO, 8 oktober 2003).

Inlichtingen

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Pagina 2 van 7 **Bevindingen**

De NVAO stelt vast dat in het paneladvies deugdelijk en kenbaar is gemotiveerd op welke gronden het panel de kwaliteit van de opleiding positief onder voorwaarde heeft bevonden en heeft geadviseerd tot een cursusduur van 120 EC.

Advies panel

Samenvatting bevindingen en overwegingen van het panel.

The Master in Metropolitan Analysis, Design and Engineering (MADE) addresses important developments in dealing with the complex questions regarding contemporary urban environments. The intended learning outcomes are clearly formulated and in line with the ambitions of MADE and the needs of stakeholders. They reflect both an academic character and a practical, society oriented perspective with an emphasis on students functioning independently at an academic level in dealing with complex issues in the metropolitan domain. The learning outcomes comply with international standards for a scientific degree programme and with the reference framework. This is underlined by the discussions that the panel had with teaching staff and stakeholders. MADE presents itself as an unique programme because of its integrated and versatile character. The panel sees this reflected in the learning outcomes.

The programme meets Standard 1 ('intended learning outcomes').

The programme focuses on Amsterdam as an example, which helps to connect its academic content to 'real life' situations. At the same time, the staff is aware that it is necessary to take measures to broaden the horizon of students to the context of other metropolises. The panel shares this opinion and encourages the programme in doing so.

The curriculum consists of an academic core in the first year and integration of this core in the context of analysis, design and engineering in the second year. The academic core of the curriculum comprises three integrated core courses (30 EC), four supporting courses (12 EC) and selected electives in the form of differentiation packages (18 EC). The electives offered are courses already running in either TU Delft or WUR. They provide specific knowledge for MADE.

The second year is characterised by a more integrated approach. Students work on three graduation projects: urban challenges that students address in projects within the Amsterdam Living Lab (24 EC), the thesis (30 EC) and the professional profile (6 EC). In the professional profile portfolio, students bring together the results of their work in the Amsterdam Living Lab and their thesis and also include reflection. They reflect in the professional portfolio on the interrelation of research, design and engineering, and the contribution of their project to society as well as to science. This reflection is oriented towards their career perspectives including their choice between an entrepreneurial or a research oriented professional profile or heading for a position in a firm or (non)governmental organisation.

According to the panel the design of the curriculum for this experimental trajectory is sound and in line with the intended learning outcomes, although it also noticed some 'loose ends'. Firstly, the extent of flexibility in the programme provided through electives is not fully clear to the panel. This has to do with some inconsistencies between the information found in the documentation and provided by the teaching staff on the one hand indicating more flexibility than the formal rules as laid down in the Education and Examination Regulations on the other hand.

Pagina 3 van 7 Secondly, although the living lab approach plays a pivotal role in the whole concept throughout the programme, it is unfortunately the least developed part of the programme in terms of partnerships, roles of staff and stakeholders, supporting students and methods to be used. Having met students working in the integrated course 'Metropolitan Solutions', however, the panel got a first impression of what the living lab approach might look like. During the site visit it became clear to the panel that the objective of the teaching staff is to develop a proven 'AMS method' within 5 years, an ambition which the panel appreciates. Furthermore the approach that addresses real life urban problems within an experimental context, such as a living lab, is considered to be challenging, but certainly also very valuable and innovative.

Finally, in line with the experimental character and the specific design of the programme, 'learning by doing' appears to be very important. However, the translation of this perspective into the actual educational concept and teaching methods is not yet well developed. The panel also expects that this requires not only to a certain degree innovative ways of teaching and coaching, but also a fair amount of intensive tutoring of the students. This in turn possibly also requires extra training of the staff, especially since the programme has not demonstrated a substantial practical background and experience of the staff who are generally academics rather than practitioners (with some exceptions). Although the cooperation with stakeholders is repeatedly mentioned as important, the panel has not come across arrangements guaranteeing the active participation of the stakeholders in the programme. The panel recommends to ground and formalise the relationships with stakeholders in the programme itself. Thus they do not only act as commissioners of the living lab projects, but also have influence on the development of the programme and participate in the teaching and coaching of students. The stakeholders themselves are willing to do this as they see benefits for themselves too. The panel has studied the CVs of the proposed staff of WUR and TU Delft and concludes their academic background fits the profile of the programme.

It became clear to the panel that the teaching methods regarding the living lab approach need some further development as students need to be prepared for the final living lab course. The programme management and staff agreed and also see that the methods proposed are feasible for about fifteen till twenty students, but probably will not be sufficient with growing student numbers. This is even more so as the panel expects that the programme concept requires intensive tutoring and coaching of the students. The panel recommends to mobilise (more) educational support in further developing and implementing the programme. The panel concludes that the programme partially meets Standard 2 ('teaching-learning environment').

A variety of assessment forms will be used throughout the programme. The assessments of most courses are rather well described. The panel appreciates that not only learning outcomes but also learning processes will be assessed. Also, when there are group assessments, these will always include an individual component. The panel has confidence in the design and quality of the final assessment and its alignment with the intended learning outcomes as presented in the documentation and illustrated during the site visit. The Examining Board will be monitoring the validity of assessments regularly and checks the reliability through reviews of assessed work, especially the final theses. Transparency of testing and assessments is guaranteed via the course guides in which assessment strategies and rubrics will be included systematically. The panel noticed awareness among

Pagina 4 van 7 staff regarding the importance of validity, reliability and transparency of testing and assessments. The Examining Board formally includes an external member because one member is from a faculty not involved with MADE. The panel suggested to include a member who is not from either one of the involved universities, for example an outstanding practitioner in the field of urban development, in order to comply more with international practices and to create an uneven number of members in the Examining Board. This suggestion was welcomed by the programme management. The panel concludes that standard 3 ('assessment') is met.

The panel has ascertained that Wageningen University and Research and Delft University of Technology guarantee for students to complete the programme and that the financial provisions are sufficient. The panel is, therefore, convinced of the viability of the programme. The programme meets Standard 4.

The design and character of the programme and the consequently pivotal role of the Amsterdam Living Lab justify the extended duration of the programme. The two years of training are essential in order to make the intended learning outcomes achievable.

The universities involved with this joint degree not only turned out to be (formally) responsible for the programme but obviously also feel a shared responsibility for realising it. They cooperate intensively in committees as well as in delivering courses.

Given these considerations, the panel advises NVAO to take a conditionally positive decision regarding the quality of the proposed programme Two-year joint MSc programme Metropolitan Analysis, Design & Engineering at Wageningen University and Research and Delft University of Technology. The panel advises as a condition that the programme further elaborates and develops the teaching methods of the programme more clearly in relation to the innovative character of its profile, particularly the living lab approach as a pivotal didactic concept for the integrative courses in the first year and the living lab course in the second year. The panel deems this to be feasible within the set period of two years.

Advies van het panel

Het panel adviseert de NVAO om positief onder voorwaarde te besluiten ten aanzien van de kwaliteit van de nieuwe opleiding wo-master Metropolitan Analysis, Design and Engineering van de Wageningen University en Technische Universiteit Delft.

De voorwaarde betreft dat de opleiding zorgdraagt voor de uitwerking en ontwikkeling van de onderwijsmethoden – in het bijzonder in het integratieve vak Living Lab – op heldere wijze in relatie tot haar innovatieve karakter.

Ingevolge het bepaalde in artikel 5a.10, derde lid, in verbinding met artikel 5a.11, achtste lid, van de WHW heeft de NVAO de colleges van bestuur van de Wageningen University en Technische Universiteit Delft in de gelegenheid gesteld zijn zienswijze op het voornemen tot besluit van 14 juli 2017 naar voren te brengen. Bij e-mail van 27 juli 2017 hebben de instellingen laten weten geen opmerkingen te hebben.

De NVAO besluit de aanvraag beperkte Toets nieuwe opleiding van de opleiding wo-master Metropolitan Analysis, Design and Engineering (joint degree) (120 EC; variant: voltijd; locaties: Amsterdam, Delft en Wageningen) van Wageningen University en Technische Universiteit Delft te Wageningen als positief onder voorwaarde te beoordelen. De voorwaarde is dat de opleiding zorgdraagt voor de uitwerking en ontwikkeling van de onderwijsmethoden – in het bijzonder in het integratieve vak Living Lab – op heldere wijze in relatie tot haar innovatieve karakter.

De termijn waarbinnen aan deze voorwaarde moet zijn voldaan, bepaalt de NVAO op 24 maanden.

Uiterlijk zes maanden voor afloop van de termijn van de voorwaarde, leveren de instellingen documentatie aan de NVAO waarin zij aangeeft hoe aan de voorwaarde is voldaan.

Advies

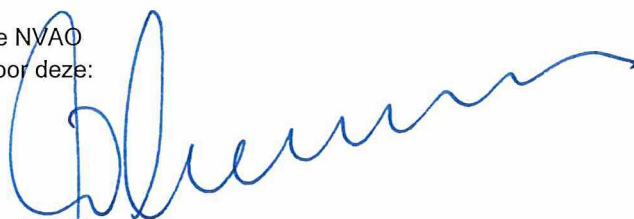
De NVAO adviseert overeenkomstig het advies van het panel positief over de verlengde cursusduur (120 EC).

Graad (joint degree):	Master of Science
Advies Croho-onderdeel:	techniek
Visitatiegroep :	nader te bepalen ¹ .

Van kracht tot en met 30 juli 2019.

Den Haag, 31 juli 2017

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.

¹ De opleiding dient ten minste twee jaar voor de vervaldatum gebruik te maken van de zogenoemde aprilronde om zelf zorg te dragen voor een indeling in een visitatiegroep. Daarna neemt de NVAO het besluit over de indeling in een visitatiegroep.

Onderwerp	Standaarden	Oordeel
1 Beoogde eindkwalificaties	De beoogde eindkwalificaties van de opleiding zijn wat betreft inhoud, niveau en oriëntatie geconcretiseerd en voldoen aan internationale eisen	Voldoet
2 Onderwijsleeromgeving	Het programma, het personeel en de opleidingsspecifieke voorzieningen maken het voor de instromende studenten mogelijk de beoogde eindkwalificaties te realiseren	Voldoet ten dele
3 Toetsing	De opleiding beschikt over een adequaat systeem van toetsing	Voldoet
4 Afstudeergarantie en financiële voorzieningen	De instelling geeft aan studenten de garantie dat het programma volledig kan worden doorlopen en stelt toereikende financiële voorzieningen beschikbaar	Voldoet
Algemene conclusie		Positief onder voorwaarde

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- Voorzitter: Prof. dr. Valerie Frissen, hoogleraar ICT & Social Change aan de Erasmus Universiteit Rotterdam, director van SIDN fonds en lid van de Adviesraad voor Wetenschap, Technologie en Innovatie;
- Lid: Prof. ir. Wim van den Bergh, Professor of Housing and Design, RWTH Aachen University.
- Lid: Adam Dennett PhD, deputy director The Bartlett Centre for Advanced Spatial Analysis (CASA), University College London.
- Lid: Lennert Middelkoop MPA, directeur stedelijke ontwikkeling en economie, gemeente Utrecht.
- Student-lid: Diana van Wanrooij LLB, student Rechtsgeleerdheid, Tilburg University, lid van NVAO-pool van getrainde student-leden.

Het panel is ondersteund door Tim Lamers MSc (zelfstandig adviseur) als procescoördinator, en door drs. Johanneke Braaksma (onderwijskundig adviseur OAKnet) als secretaris (gecertificeerd).