

Besluit

Besluit strekkende tot een positieve beoordeling van een aanvraag toets nieuwe opleiding van de opleiding wo-master Systems Biology van de Universiteit Maastricht

	Gegevens	
datum	Instelling	: Universiteit Maastricht
31 juli 2015	Opleiding	: wo-master Systems Biology
onderwerp	Variant	: voltijd
Definitief besluit	Locatie	: Maastricht
Toets nieuwe opleiding	Studieomvang (EC)	: 120
wo-master Systems Biology	Datum macrodoelmatigheidsbesluit	: 12 december 2014
Universiteit Maastricht	Datum aanvraag	: 26 januari 2015
(003697)		
uw kenmerk	Datum locatiebezoeken	: 18 en 19 mei 2015
2015.10.0178 NG	Datum paneladvies	: 15 juni 2015
ons kenmerk	Instellingstoets kwaliteitszorg	: ja, positief besluit van 16 mei 2013
NVAO/20152091/ND		

bijlage

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Beoordelingskaders

Beoordelingskader voor de beperkte toets nieuwe opleiding van de NVAO (2014, Nr. 36791). Protocol cursusduur masters, NVAO 8 oktober 2003.

Bevindingen

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

Advies panel

Samenvatting bevindingen en overwegingen van het panel.

Maastricht University seeks accreditation for a new MSc programme in Systems Biology. The programme is offered jointly by the Faculty of Health, Medicine & Life Sciences, the Faculty of Psychology and Neurosciences and the Faculty of Humanities & Sciences of Maastricht University on the premises of the Health Campus in Maastricht, the Netherlands.

Standard 1. Intended learning outcomes

The MSc programme in Systems Biology aims to deliver graduates who are equipped with the analytical tools and innovative research methods from different disciplines (especially biology and mathematics) integrated in a single concept (systems biology), generating novel insights and testable concepts in biology, medicine, epidemiology, biotechnology, ecology and

Pagina 2 van 6 translational research. They will be able to develop new tools and novel approaches from either discipline, taking systems biology a step further. The objectives and rationale for this new MSc programme at Maastricht University are fully in tune with the systems approaches that are becoming increasingly important in the efforts to understand biology and medicine at all levels.

In the application file the intended learning outcomes have been explicitly linked to the Dublin descriptors for a master programme. In addition, the academic orientation of the programme is explained by references to the research-based learning approach, the academic skills training and the links with staff and research groups based at Maastricht University and the University of Liège. The International perspective is strong. The panel recommends establishment of an external advisory board, including representatives from industry.

The panel assesses standard 1 'Intended learning outcomes' as satisfactory. *

Standard 2. Teaching-learning environment

The contents of the programme are well-considered: the staff have developed an innovative set of courses that will enable the students from life sciences and mathematics to communicate effectively and to work together in a systems approach. The role of the elective courses has been clarified during the visit and is appropriate. The list of potential internships is extensive. The examination board will closely review the internal project proposals for an adequate balance in terms of computational and biological aspects. The interaction with the University of Liège satisfies the broadening of the course as proposed by CDHO (Commissie Doelmatigheid Hoger Onderwijs, Committee on Macro-efficiency in Higher Education).

The learning environment is strong, through the integration of Problem-Based Learning (PBL), lectures, practical training and through the (international) research context of the universities of Maastricht, Liège and the wider Euregion (Aachen, Hasselt). Internationalisation comes naturally to a programme at Maastricht University. Study guidance is available, but should be extended by adding an independent mentor or a second supervisor during the thesis work. The co-supervision of thesis projects is a strong point and will contribute to the multidisciplinary nature of the programme. The admission policies are robust and appropriate for the students the programme wishes to attract. The panel advises conducting a mid-term review after the first two batches of students have graduated.

The staff is a coherent group, the programme management and teachers are capable, energetic and enthusiastic. Staff from the University of Liège contribute in a significant way and are represented on the programme committee, which is an adequate response to the CDHO advice. Involvement of Liège staff will be further extended in the near future via a memorandum of understanding specific to this programme.

The facilities are excellent. The classrooms, computer facilities and labs in the Maastricht Center of Systems Biology (MaCSBio) are all close together and ensure that the teaching is well integrated with the staff's research activities.

The panel concludes that the curriculum, staff and programme-specific facilities constitute a coherent, attractive and innovative teaching-learning environment for the students. This enables the students to achieve the intended learning outcomes.

The panel assesses standard 2 'Teaching-learning environment' as satisfactory.

Having studied the submitted materials and further documentation provided in the meetings during the visit, the panel is very satisfied with the assessments provided. They apply a good combination of methods, show an outstanding balance and are appropriate for the level and contents of the programme.

The examination board were enthusiastic in reflecting about the programme and advising the programme committee. The members bring strong expertise and experience that the new programme will benefit from. The panel suggests reconsidering the position of the current external member after the start of the programme. His expertise and contribution are very valuable, but it is difficult to be a truly external member since all teaching at Maastricht University is so closely integrated.

The panel assesses standard 3 'Assessment' as satisfactory.

Standard 4. Graduation guarantee and financial provisions

The panel has ascertained from the application file and the interviews during the site visit that Maastricht University and the province of Limburg have significantly invested in the Systems Biology master programme and that Maastricht University will guarantee sufficient financial provisions in the case of start-up losses. The panel is, therefore, convinced of the viability of the programme.

The panel assesses standard 4 'Graduation guarantee and financial provisions' as satisfactory.

Given these considerations, the panel advises NVAO to take a positive decision regarding the quality of the new master programme Systems Biology offered by Maastricht University.

Maastricht University proposes that the master programme Systems Biology has a duration of two years (120 EC). The programme management's arguments regard the international requirements of the programme, based on a comparison of similar programmes internationally, and the level of complexity of the programme. The multidisciplinary domain requires knowledge and hands-on expertise in the very divergent disciplines of mathematics and the life-sciences. The panel is convinced that the qualifications the graduates should have in order for them to be competitive in the international academic job market, cannot be achieved in a programme of less than two years. The panel, therefore, advises to grant the programme the right to offer a two-year master's programme (120 EC).

The panel confirms the allocation of sector as suggested by the applicant: Nature.

De NVAO onderschrijft de aanbevelingen van het panel.

Besluit

Ingevolge het bepaalde in artikel 5a.10, derde lid, in verbinding met artikel 5a.11, zesde lid, van de WHW heeft de NVAO het college van bestuur van de Universiteit Maastricht te Maastricht in de gelegenheid gesteld zijn zienswijze op het voornemen tot besluit d.d. 22 juni 2015 naar voren te brengen. Bij e-mail van 24 juni 2015 heeft dr. J.Dijkstra, senior Policy Officer, namens het bestuur ingestemd met het voornemen tot besluit.

De NVAO besluit de aanvraag Toets nieuwe opleiding wo-master Systems Biology (120 EC; variant: voltijd; locatie: Maastricht) van de Universiteit Maastricht te Maastricht positief te beoordelen.

Graad: Master of Science

Advies Croho-onderdeel: natuur.

Advies cursusduur: 120 EC

Visitatiegroep: nader te bepalen¹.

Van kracht tot en met 30 juli 2021

Den Haag, 31 juli 2015

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.	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	De opleiding beschikt over een adequaat systeem van toetsing.	Voldoende
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.	Voldoende
Algemene conclusie		Positief

1. Prof. dr. Han de Winde, Professor of Industrial Biotechnology and Vice-Dean at the Faculty of Science, Leiden University (*voorzitter*);
2. Prof. dr. Isabel Sá-Correia, Professor of Biological Sciences, Department of Bioengineering, Instituto Superior Técnico (IST), Universidade de Lisboa, Lisbon, Portugal;
3. Prof. dr. Steven Russell, Professor in Genome Biology, Department of Genetics & Cambridge Systems Biology Centre, University of Cambridge, UK;
4. Renée Verhoeven MSc, PhD student Department of Surgery, Liver Transplantation, Erasmus Medical Center Rotterdam (*student-lid*).

Het panel is bijgestaan door dr. Marianne van der Weiden, secretaris (gecertificeerd) en Michèle Wera MA, beleidsmedewerker NVAO en procescoördinator.