

## Besluit

**Besluit strekkende tot een oordeel positief van een aanvraag toets nieuwe opleiding van de wo-master Business Intelligence and Smart Services van de Universiteit Maastricht**

### Gegevens

datum	Instelling	: Universiteit Maastricht
25 april 2017	Opleiding	: wo-master Business Intelligence and Smart Services
onderwerp	Variant	: voltijd
Besluit TNO	Afstudeerrichtingen	: Service Design, Business Intelligence Systems, Business Analytics
wo-master Business Intelligence and Smart Services van de Universiteit Maastricht (005077)	Locatie	: Maastricht
uw kenmerk 2016.10.1562.NG	Studieomvang (EC)	: 60
ons kenmerk NVAO/20170972/LL	Datum macrodoelmatigheidsbesluit	: 21 april 2016
	Datum aanvraag	: 9 september 2016
	Datum locatiebezoek	: 8 maart 2017
	Datum paneladvies	: 24 maart 2017
	Instellingsstoets kwaliteitszorg	: ja, positief besluit van 16 mei 2013

### bijlage

### Beoordelingskader

Beoordelingskader voor de beperkte toets nieuwe opleiding van de NVAO (Stcrt. 2014, nr 36791).

### 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 heeft bevonden.

### Advies panel

Samenvatting bevindingen en overwegingen van het panel.

The master's programme Business Intelligence and Smart Services (MSc BISS) is a one-year (60 EC) interdisciplinary programme aimed at training a new type of knowledge worker, who is able to analyse big data, make business decisions in data-rich environments and design data-driven smart services. The programme objectives combine different fields of expertise within Maastricht University's (UM) School of Business and Economics (SBE): information management, quantitative economics, and service design.

Pagina 2 van 6 The panel considers the MSc BISS to be well-developed, relevant and distinctive from related programmes due to the central position of Service Design. The programme has a practical focus, with a direct connection to the industry, while maintaining an academic master's level that is clearly visible in the programme objectives and related assessment methods. The panel is pleased that the topics 'ethics' and 'privacy' are explicitly mentioned in the learning outcomes, and encourages the programme to additionally include legal aspects. Considering that these topics are part of multiple courses, the panel asks special attention for their assessment. The panel applauds the formation of an Advisory Board with external members, and considers this to be a good way to promote the programme, as well as essential to provide the students access to real world data and to match the needs of the corporate world with the learning outcomes of the programme on a regular basis.

According to the panel, the curriculum offers an adequate mix of broad and specialist knowledge, with three specialisations to choose from: Service Design, Business Intelligence Systems, and Business Analytics. Throughout the programme, students from the three specialisations cooperate. Students work on the intended learning outcomes in courses, projects and workshops that incorporate UM's didactic concepts of 'international classroom' and 'problem-based learning'. The innovative teaching modes are considered to be fitting and the panel appreciates that they build on UM's previous experiences from related programmes.

In two semester-long Smart Service Innovation Projects (SSIP) that run parallel to courses, students are grouped in multidisciplinary teams and work on semi-structured real-life cases (research projects) that are prepared in collaboration with companies. The teams are supported by company representatives and a team coach, while a UM project supervisor monitors the team's progress. The panel considers these projects to be a real asset to the programme and establishes that all those involved are aware of the possible bottlenecks surrounding the availability of real data and projects. The programme takes measures to limit related risks as much as possible. In this light the panel recommends that the programme also takes sufficient measures to avoid potential study delays due to availability of data processing resources and continues to invest in relation management with industrial partners, since they play a vital role in the success of the projects.

Most of the MSc BISS curriculum is followed at SBE's urban campus in Maastricht. In addition, SBE's Service Science Factory offers facilities designed for service innovation projects and students may use the facilities of the BISS Institute in Heerlen to work on the SSIPs. They are expected to meet in Heerlen at least four times per SSIP for 'milestone meetings' (e.g. kick-off and presentations). All stakeholders whom the panel met with, including the students, were very enthusiastic about the vibrant atmosphere at the BISS Institute and the panel is of the opinion that the programme clearly benefits from the long-term contacts with industrial partners via this institute.

The programme is very much aware of the challenges related to dealing with the envisaged diverse student population and the panel considers the amount of guidance and feedback students receive a strength. The panel expects that the programme will be able to adequately address the needs of individual students and, whenever necessary, to additionally support them in the development of their knowledge and skills. It encountered sufficient guarantees to ensure that students are able to obtain their degree and appreciates the personal Study Coaching Trajectory that supports students in their personal development.

Pagina 3 van 6 The panel is contended to have met with qualified and highly motivated staff and it is satisfied with the opportunities for professional and didactical development already in place for the staff – in particular the advanced training on coaching. The teaching staff is aware of the considerable time investment required. Still, the panel strongly recommends to carefully monitor the staff's workload and to generate additional resources if necessary.

The panel appreciates the programme's appropriate assessment system with various assessment methods that are in line with the programme objectives and curriculum. Students are always assessed by UM examiners; industrial supervisors only have an advisory role, when appropriate, and the panel deems this fitting. During the programme, attention is paid to critical self-reflection and to dealing with feedback. Assessment is supported by SBE's assessment policies and structures. The Board of Examiners and Assessment Committee are considered to be well-prepared for their tasks and able to safeguard the quality of examinations. Additionally, the quality of MSc education within SBE is continuously monitored by the Programme Committee.

The panel comes to the conclusion that the programme meets all assessment standards. Given these considerations, the panel advises NVAO to take a positive decision regarding the quality of the proposed programme wo-master Business Intelligence and Smart Services at Maastricht University.

#### **Aanbevelingen**

De NVAO onderschrijft de aanbevelingen van het panel.

Ingevolge het bepaalde in artikel 5a.10, derde lid, in verbinding met artikel 5a.11, achtste 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 van 3 april 2017 naar voren te brengen. Bij e-mail van 10 april 2017 heeft het college van bestuur ingestemd met het voornemen tot besluit.

De NVAO besluit de aanvraag Toets nieuwe opleiding wo-master Business Intelligence and Smart Services (60 EC; variant: voltijd; locatie: Maastricht) van de Universiteit Maastricht te Maastricht als positief te beoordelen.

Graad: Master of Science

Advies Croho-onderdeel: economie


Visitatiegroep: nader te bepalen.

Van kracht tot en met 27 april 2023.

Den Haag, 28 april 2017

De NVAO  
Voor deze:

  
Dr. Marc Luwel  
Bestuurder

  
R.P. Zevenbergen  
(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.

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

Chair:

– Prof. W. (Wim) Van Petegem, Policy coordinator Learning Technologies and Expert Multicampus & Engineering Education at the Faculty of Engineering Technology, KU Leuven.

Panel members:

– Prof. S. (Sander) Klous, Professor in Big Data Ecosystems for Business and Society at the University of Amsterdam, and partner in charge of Data & Analytics at KPMG Advisory in the Netherlands;

– A. (Arjan) van Dijk MMC RI, managing director Solution Management, Cegeka-DSA & Ambassador of the KNVI

Student member:

– L. (Lennart) van Doremalen BSc, student Research Master Experimental Physics, Utrecht University.

On behalf of the NVAO, Liza Kozłowska and Anne Martens, NVAO policy advisors, were responsible for the process coordination and the drafting of the experts' report.