

## Besluit

**Besluit strekkende tot een oordeel positief van een aanvraag toets nieuwe opleiding van de wo-bachelor Data Science (joint degree) van de Technische Universiteit Eindhoven en Universiteit Tilburg**

	<b>Gegevens</b>
31 maart 2016	Instellingen
onderwerp	
Besluit	Opleiding
Toets nieuwe opleiding	Graad opleiding
wo-bachelor	Datum macrodoelmatigheidsbesluit
Data Science van de	Datum aanvraag
TU Eindhoven	
Universiteit Tilburg	Datum locatiebezoek(en)
(004317)	Datum paneladvies
uw kenmerk	Instellingstoets kwaliteitszorg
-	
ons kenmerk	
NVAO/20160693/ND	positief besluit van 6 mei 2014
bijlage	Universiteit van Tilburg
2	Positief besluit van 3 april 2013

### Beoordelingskaders

- Beoordelingskader voor de beperkte toets nieuwe opleiding van de NVAO (Stcrt. 2014, nr 36791).
- Protocol voor Nederlandse aanvragen Toets Nieuwe Opleiding leidend tot een Joint degree (NVAO, februari 2011).

De NVAO stelt vast dat in het paneladvies deugdelijk en kenbaar is gemotiveerd op welke gronden het panel de kwaliteit van de opleiding positief bevonden.

**Advies panel**

Samenvatting van het panel.

The Accreditation Organisation of the Netherlands and Flanders (NVAO) received a request for an initial accreditation procedure, including programme documents, regarding a proposed joint degree (wo) bachelor's programme Data Science at Eindhoven University of Technology (TU/e) and Tilburg University (TiU). NVAO convened an expert panel, which studied the information available and discussed the proposed programme with representatives of both institutions and the programme during a site visit. Since the programme is meant to be a joint degree programme, the panel considered the joint degree requirements as well. The following considerations have played an important role in the panel's assessment.

The panel concludes that the intended learning outcomes meet international standards for bachelor level (as reflected in the Dublin descriptors), the academic orientation and the requirements of the disciplinary and professional field. Also, the interdisciplinary scope of the programme is reflected in the intended learning outcomes.

The benchmark statement gives a well-informed and promising answer to new developments in data science and the professional field. It fills in the needs of the data science business for graduates with this specific bachelor's profile. The programme is at the heart of the developments in the field. The professional field shows high demand for students with a bachelor's degree in data science. In addition, students are well prepared for admission in a master's programme.

The panel supports the formation of a Scientific Council to stay attuned to developments in the field. The panel recommends appointing more external representatives in this council.

A further recommendation of the panel is –beyond the scientific field– to continuously monitor the aims and goals of the programme in relation to the technological and industrial developments in the field of data science to remain in line with the business needs.

The panel acknowledges that the curriculum is systematically designed. The content of the courses, working methods, case studies, literature and lecturers are well aligned with the intended learning outcomes. Relevant subfields are addressed in the programme; the interdisciplinary character of the programme is well reflected and sustained in the courses by a collaborative effort of lecturers from both universities. The panel recommends safeguarding relevant and sufficient statistics and programming courses in the programme.

The programme is coherent and the Data Challenges courses have an integrating role in this respect. These courses give students the opportunity to implement the learned knowledge and skills and to further develop these with real world data cases. The panel is convinced that relevant scientific literature at the appropriate level will be used.

The educational concept and didactical formats suit the bachelor's programme. While the new learning methods are ambitious but not always in place yet, the panel is confident the

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The programme will be taught by competent and – as demonstrated during the site visit – enthusiastic lecturers. The panel notes that the staff is well equipped to provide the programme. The panel also concludes that lectures are well connected to the field of data science. Based on the description of the facilities and the site visit the panel concludes that the programme-specific facilities will be adequate. The site visit confirmed that the tuning of organisational and administrative processes between both universities is strenuously worked on.

The panel considers the joint degree characteristics of the programme to be adequately implemented. The two institutions cooperating in the programme participate on an equal basis in the curriculum, each of the institutions designing and offering courses, in the staff deployment, renowned researcher and lecturers of each of the institutions lecturing in the programme, and in the facilities, each of the institutions providing lecture rooms, laboratories and equipment.

With respect to the assessment system, the panel concludes that this is adequate and that the examination board will safeguard the quality of the assessments and the bachelor level of the graduates. Different assessment methods are used, related to the goals of the different courses. The panel appreciates the use of multiple assessment methods in the courses. The weighing has been made explicit and for each module assessment forms have been developed.

The panel concludes that the necessary financial provisions have been made to facilitate the start of the programme in study year 2016 – 2017. In addition, the programme ensures that students will be guaranteed the opportunity to finish their programme.

Given these considerations, the panel advises NVAO to take a positive decision regarding the quality of the proposed academic bachelor's programme Data Science of Eindhoven University of Technology (TU/e) and Tilburg University (TiU) and to grant the programme the initial accreditation. As the programme meets the joint degree requirements, the panel also advises NVAO to grant the programme the status of a joint degree programme.

The panel supports the request for the programme to be registered under "Technology" as its field of study (CROHO-onderdeel).

#### *Advies van het panel*

Het panel adviseert de NVAO om positief te besluiten ten aanzien van de kwaliteit van de nieuwe opleiding wo bachelor Data Science (joint degree) van de Technische Universiteit Eindhoven and Tilburg University.

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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 Technische Universiteit Eindhoven te Eindhoven en Universiteit Tilburg te Tilburg in de gelegenheid gesteld zijn zienswijze op het voornemen tot besluit d.d. 14 maart 2016 naar voren te brengen. Bij e-mail van 21 maart 2016 heeft het college van bestuur ingestemd met het voornemen tot besluit.

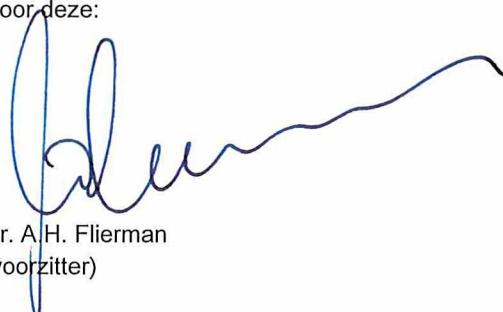
De NVAO besluit de aanvraag Toets nieuwe opleiding wo-bachelor Data Science (joint degree) (180 EC; variant: voltijd; locaties: Eindhoven, Tilburg) van de Technische Universiteit Eindhoven en Universiteit Tilburg te Eindhoven en Tilburg als positief te beoordelen.

Graad: Bachelor of Science  
Advies Croho-onderdeel: techniek  
Visitatiegroep : nader te bepalen<sup>1</sup>.

Van kracht tot en met 30 maart 2022

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.

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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.

Pagina 5 van 6 **Bijlage 1: Schematisch overzicht oordelen panel:**

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 systeem van toetsing	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>		Positief

Pagina 6 van 6 **Bijlage 2: Samenstelling panel**

- Marianne van der Steen (chair), professor of Entrepreneurship in Healthcare and founding director of the European Executive MBI Life Sciences & Health program, at the Julius Center, UMC Utrecht, The Netherlands, associate professor at the Faculty of Health, Medicine and Life Sciences, Maastricht University (MERLN).
- Wim van Petegem, professor at the Faculty of Engineering Technology at KU Leuven, Expert Multicampus & Engineering Education at the Faculty of EngineeringTechnology. Involved in research, development and implementation of multicampus engineering education, with special focus on internationalisation, innovation, entrepreneurship, development cooperation, and profiling
- Maarten van Steen, professor distributed systems at the University of Twente, scientific director of CTIT, and chair of IPN, a national platform representing all academic ICT research in The Netherlands.
- Lennart van Doremalen (student) Master student Experimental Physics, Utrecht University

Het panel werd bijgestaan door Frank Wamelink, beleidsmedewerker NVAO, procescoördinator, en Titia Busing, secretaris (trained by NVAO).