

Besluit

Besluit strekkende tot het verlenen van accreditatie aan de opleiding wo-master Management of Technology van de Technische Universiteit Delft

	Gegevens	
datum	Naam instelling	: Technische Universiteit Delft
29 september 2017	Naam opleiding	: wo-master Management of Technology (120 EC)
onderwerp	Datum aanvraag	: 26 april 2017
Besluit	Variant opleiding	: voltijd
accreditatie wo-master	Locatie opleiding	: Delft
Management of Technology	Datum goedkeuren panel	: 10 oktober 2016
Technische Universiteit Delft	Datum locatiebezoeken	: 12 en 13 december 2016
(005649)	Datum visitatierapport	: 28 maart 2017
uw kenmerk	- Instellingstoets kwaliteitszorg:	ja, positief besluit van 7 september 2017
ons kenmerk		
NVAO/20172365/ND		
bijlagen	Beoordelingskader	
2	2 Beoordelingskader voor de beperkte opleidingsbeoordeling van de NVAO (Stcrt. 2014, nr 36791).	

Bevindingen

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

Advies van het visitatiepanel

Samenvatting bevindingen en overwegingen van het panel.

Standard 1

The master's programme Management of Technology (MOT) aims to provide future leaders with opportunities to combine engineering and business knowledge in designing and implementing technology-based solutions to important commercial and social problems. Its ultimate objective is to improve the quality of technology and innovation management in the different engineering mono-disciplines in practice through the development of responsible decision-makers, professionals and leaders. The panel appreciates the ambition of the MOT programme to teach students to become comprehensive engineers, who go beyond the traditional boundaries of their fields.

Pagina 2 van 5 The general learning outcomes have been elaborated in detailed intended learning outcomes. The panel was impressed by the thorough translation of the mission and objectives of the programme into the intended learning outcomes. The intended learning outcomes are transparent and informative, and they indicate what could be expected from a master's level programme. The panel ascertained that the intended learning outcomes meet the internationally accepted standards for academic master's programmes, the Dublin Descriptors. The intended learning outcomes have been specified in concrete terms of content, level and orientation; they meet international requirements. The panel greatly appreciated that the general learning outcomes are elaborated in well-defined, detailed learning outcomes. The panel assesses standard 1, Intended learning outcomes, as good.

Standard 2

The 120 EC MOT programme has an obligatory fixed package of 60 EC of course work in the first two semesters, where a solid analytical foundation is laid. The first year focuses on acquiring basic knowledge. The compulsory courses cover the four main clusters of technology and innovation: engineering economics, organisation, commercialisation and research/reflection. In a separate course, students learn how to integrate the different themes of the programme by the end of the first year. The third semester is filled with specialisation courses and electives, and the fourth semester is dedicated to the master's thesis project.

The didactical principle is learning by doing: practical application of theory. A variety of teaching methods is used, including innovative blended learning methods, which is greatly appreciated by the panel. The panel encourages the programme to progress further in this direction.

The panel established that the content and structure of the master's programme MOT enable the students to achieve the intended learning outcomes. With the MOT programme TU Delft fulfils an obvious demand from students to broaden their engineering knowledge and expertise with management expertise and to get a better view of what is happening with technology and engineering products in companies. The programme succeeds in building an international, stimulating learning environment supported by qualified teaching staff, creating a good study environment for students.

Standard 2, the teaching-learning environment, is assessed as good.

Standard 3

The Faculty of Technology, Policy and Management described its assessment policy in the Assessment Policy 2013-2014 document. The panel studied a selection of test dossiers and master's theses and the accompanying assessment forms. Furthermore, it held a meeting with the Board of Examiners during the site visit. It verified that the programme has an adequate assessment system. The assessments are valid, transparent and reliable. The Board of Examiners is performing its legally mandated tasks adequately. The panel sees some risks in the preference of the Board of Examiners for an advisory instead of a more controlling position and recommends that it strengthen its independent position to guarantee the quality of the examinations. The panel assesses standard 3, Assessment system, as satisfactory.

The panel studied a selection of 15 master's theses to assess whether the graduates had achieved the master's graduation level. It concluded that the graduates had demonstrated that they had achieved the level that can be expected from an academic master. Furthermore, the panel concluded that master's graduates are highly appreciated in the professional field and that they easily embark on promising professional and academic careers, in which their academic profile and skills are valued. Standard 4, Achieved learning outcomes, is assessed as satisfactory.

General conclusion

the assessments of the four criteria for the master's programme Management of Technology, the panel assesses the programme as satisfactory.

Aanbevelingen

De NVAO onderschrijft de aanbevelingen van het panel.

Besluit

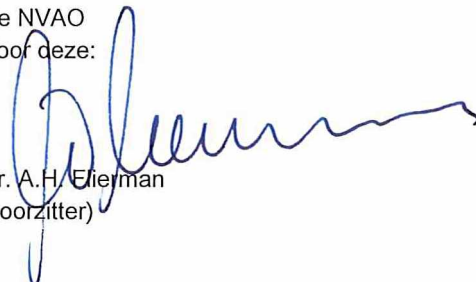
Ingevolge het bepaalde in artikel 5a.10, derde lid, van de WHW heeft de NVAO het college van bestuur van de Technische Universiteit Delft te Delft in de gelegenheid gesteld zijn zienswijze op het voornemen tot besluit van 14 augustus 2017 naar voren te brengen. Bij e-mail van 6 september 2017 heeft de instelling gereageerd maar dit heeft niet geleid tot inhoudelijke wijzigingen.

De NVAO besluit accreditatie te verlenen aan de wo-master Management of Technology (120 EC; variant: voltijd; locatie: Delft) van de Technische Universiteit Delft te Delft. De NVAO beoordeelt de kwaliteit van de opleiding als voldoende.

Dit besluit treedt in werking op 29 september 2017 en is van kracht tot en met 28 september 2023.

Den Haag, 29 september 2017

De NVAO
Voor deze:


Dr. A.H. Eijerman
(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.

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.	goed
2. Onderwijsleeromgeving	Het programma, het personeel en de opleidingsspecifieke voorzieningen maken het voor de instromende studenten mogelijk de beoogde eindkwalificaties te realiseren.	goed
3. Toetsing	De opleiding beschikt over een adequaat systeem van toetsing.	voldoende
4. Gerealiseerde eindkwalificaties	De opleiding 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.

- Prof. dr ir. Rob van der Heijden, Professor in Innovate Planning Methods, Radboud University Nijmegen [chair];
- Prof. dr. Harrie Eijkelhof, emeritus Professor of Physics Education at the Faculty of Physics and Astronomy, and former Director of the Freudenthal Institute for Science and Mathematics Education at the Faculty of Science, Utrecht University;
- Prof. dr. Arthur Petersen, Professor at the Department of Science, Technology, Engineering and Public Policy, University College London, United Kingdom;
- Prof. dr. Marcel Veenswijk, Professor in Management of Cultural Change, VU University Amsterdam;
- Prof. dr. Hens Runhaar, Special Professor of Management of Biodiversity in Agricultural Landscapes, Wageningen University and Research & Utrecht University
- Maarten van Ruitenbeek BSc, master's student in Industrial Engineering and Management, University of Groningen [student member].

Het panel is ondersteund door dr. Barbara van Balen, secretaris (gecertificeerd).