nvao
nederlands-vlaamse accreditatie organisatie

Besluit

Besluit strekkende tot het verlenen van accreditatie aan de opleiding wo-bachelor Technische Bedrijfskunde van de Rijksuniversiteit Groningen

datum
31 juli 2017
onderwerp
Besluit accreditatie wo-bachelor Technische Bedrijfskunde van de Rijksuniversiteit Groningen (005717)
uw kenmerk
17/04547
ons kenmerk
NVAO/20171779/LL
bijlagen
2

Gegevens

Naam instelling	:	Rijksuniversiteit Groningen
Naam opleiding	:	wo-bachelor Technische Bedrijfskunde (180 EC)
Datum aanvraag	:	1 mei 2017
Variant opleiding	:	voltijd
Tracks/specialisaties	:	Production Technology and Logistics Product and Process Technology
Locatie opleiding	:	Groningen
Datum goedkeuren panel	:	10 oktober 2016
Datum locatiebezoeken	:	14 en 15 november 2016
Datum visitatierapport	:	6 maart 2017
Instellingstoets kwaliteitszorg	:	ja, positief besluit van 29 juli 2014

Beoordelingskader

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. Het visitatierapport geeft de bevindingen en overwegingen weer van het panel over de wo-bacheloropleiding en de wo-masteropleiding Industrial Engineering and Management van de Rijksuniversiteit Groningen. Het panel heeft beide opleidingen gezamenlijk beoordeeld.

Advies van het visitatiepanel

Samenvatting bevindingen en overwegingen van het panel.

The panel assesses the standards from the Assessment framework for limited programme assessments in the following way:

Standard 1: Intended learning outcomes

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The bachelor's degree programme Technische bedrijfskunde aims to teach the basic or elementary principles of Industrial Engineering and Management (IEM), needed to perform a thorough problem analysis, draft an appropriate design/redesign, implement and validate technological products, processes and systems in a socio-technological business environment. 70% of the intended learning outcomes and the programme is dedicated to technology and 30% to management. The panel considers it positive that the programme has a distinctive focus on mathematical-technological subjects.

The panel established that the intended learning outcomes are of a sufficient level for a bachelor's degree programme and concluded that the intended learning outcomes meet the Dutch qualifications framework and tie in with the international perspective of the requirements set by the professional field and the discipline. They fit the Domain Specific Framework of Reference developed by the Dutch programmes for Industrial Engineering and Management and they meet the requirements of ABET, the international Accreditation Board for Engineering and Technology. The panel, however, noticed that the difference in level and orientation between the bachelor's programme and the master's programme could be articulated more. The panel suggests to formulate the intended learning outcomes in such a way that they could be used in a more operational approach to further articulate the existing differences in level, profile and orientation between the bachelor's and master's programmes.

Standard 2: Teaching-learning environment

The bachelor's curriculum has an engineering design approach with a strong focus on the technical and mathematical aspects. After a shared first year, students choose a track out of two options: Production Technology and Logistics (PTL) or Product and Process Technology (PPT). The first year of the curriculum focuses on general engineering design skills and technical and mathematical aspects of artefacts. In the second and third year, in addition to track specific courses, students follow shared core IEM course units, usually in the field of management and business design. The final step in the bachelor's degree programme is the bachelor's thesis specified as the integration project. The students are supposed to integrate all - multidisciplinary - knowledge and competences learned during their bachelor's studies in this project.

The content and structure of the programme are in line with what can be expected of the level and orientation of a bachelor's programme. It was clear to the panel that the teachers bring their current research into the programme and that a positive exchange between research and teaching can be found. The programme also pays sufficient attention to the relation with industry and societally relevant issues. The programme enables its students to meet the intended learning outcomes. The panel, however, noticed that it is a rigid programme that leaves limited room for individual choices by students, which is also impeding the programme's ambitions regarding further internationalisation. The panel advises to bring more flexibility in the programme, create room for electives and stimulate students to do part of their studying abroad.

The panel appreciates the introduction of the learning trajectories, which have, together with the intensified cooperation between teachers, contributed to the coherence of the programme. The panel is also very positive about the introduction of learning communities, organising the student-cohorts in teams of 10-15 students, tutored by teaching-assistants. The quality of the teaching staff is good and their efforts to cooperate and fine tune course units are much appreciated by the panel.

Standard 3: Assessment

The assessment panel established that the bachelor's programme Technische bedrijfskunde has a well-developed, extensive and fully implemented assessment system in place. The panel appreciates the introduction of a yearly assessment plan and the course unit assessment overviews. The Board of Examiners (BoE) has demonstrated to have complete and thorough insight in all relevant material and to guarantee the quality of the testing and examination. The assessments and tests are regularly checked by the BoE for validity and reliability. The panel was impressed by the way the BoE performs its tasks.

Standard 4: Achieved learning outcomes

The panel studied a selection of fifteen bachelor integration projects to assess whether the graduates had achieved the intended learning outcomes. The panel concluded that the bachelor graduates did indeed achieve the level that was expected. The level of the graduation projects concurs with the level that is expected from an academic bachelor programme. The panel established that the bachelor graduates are well prepared for further studies, both for the master's programme Industrial Engineering and Management as well as for adjacent fields of study.

Standard 1: Intended learning outcomes	satisfactory
Standard 2: Teaching-learning environment	satisfactory
Standard 3: Assessment	good
Standard 4: Achieved learning outcomes	satisfactory
General conclusion	satisfactory

Aanbevelingen

De NVAO onderschrijft de aanbevelingen van het panel.

Besluit

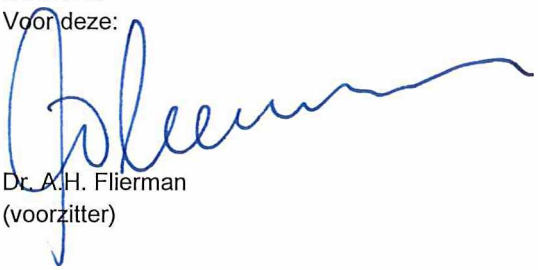
Ingevolge het bepaalde in artikel 5a.10, derde lid, van de WHW heeft de NVAO het college van bestuur van de Rijksuniversiteit Groningen te Groningen in de gelegenheid gesteld zijn zienswijze op het voornemen tot besluit van 19 juni 2017 naar voren te brengen. Bij e-mail van 3 juli 2017 heeft de instelling van deze gelegenheid gebruik gemaakt. Dit heeft geleid tot een tekstuele aanpassing.

De NVAO besluit accreditatie te verlenen aan de wo-bachelor Technische Bedrijfskunde (180 EC; variant: voltijd; locatie: Groningen) van de Rijksuniversiteit Groningen te Groningen. De opleiding kent de volgende specialisaties: Production Technology and Logistics en Product and Process Technology. De NVAO beoordeelt de kwaliteit van de opleiding als voldoende.

Dit besluit treedt in werking op 31 juli 2017 en is van kracht tot en met 30 juli 2023.

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.

 Bijlage 1: Schematisch overzicht oordelen panel

Onderwerp	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.	**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.	**Goed**
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.

 Bijlage 2: panelsamenstelling

- prof. dr. ir. R.E.C.M. (Rob) van der Heijden, (voorzitter) was Dean of the Nijmegen School of Management from 2011-2016. Since Spring 2016, he is professor in Innovate Planning Methods within the NSM;
- prof. dr. H.M.C. (Harrie) Eijkelhof, (lid) has specialised knowledge of didactics and teaching methods in science education. Until his retirement in 2014, he was Director of the Freudenthal Institute for Science and Mathematics Education at the Faculty of Science at Utrecht University (2011-2014)
- prof. dr. E. (Emmo) Meijer, (lid) he was part time professor of Eindhoven University of Technology. President of the Netherlands Academy of Technology and Innovation;
- dr. M. (Margiet) Nip, (lid) since 2012, she is responsible for the Raw Materials Procurement for Tata Steel Group;
- dr. H. (Hector) Ramirez Estay, (lid) is Associate Professor at the Department of Automatic Control of the Université de Franche-Comté and Researcher at the Department of Automatic Control and Micro-Mechatronic Systems at Franche-Comté Electronique Mécanique Thermique et Optique – Sciences et Technologies in Besançon, France;
- S. (Sofie) Vreriks BSc., (student-lid) is in her second year of her master Industrial Engineering and Management at the University of Twente.

Het panel werd ondersteund door dr. B.M. van Balen, secretaris (gecertificeerd).