

Besluit

Besluit strekkende tot het verlenen van accreditatie aan de opleiding wo-master Computer Science and Engineering van de Technische Universiteit Eindhoven

Gegevens

datum	Naam instelling	: Technische Universiteit Eindhoven
31 juli 2014	Naam opleiding	: wo-master Computer Science and Engineering (120 ECTS)
onderwerp	Datum aanvraag	: 23 december 2013
Definitief besluit	Varianten opleiding	: voltijd, deeltijd
accreditatie wo-master	Tracks	: Computer Science and Engineering
Computer Science and		Information Security Technology
Engineering van de Technische		Service Design and Engineering
Universiteit Eindhoven	Locatie opleiding	: Eindhoven
(002493)	Datum goedkeuren	
uw kenmerk	panel	: 26 augustus 2013
	Datum locatiebezoeken	: 12 en 13 september 2013
ons kenmerk	Datum visitatierapport	: 11 december 2013
NVAO/20142424/ND	Instellingstoets kwaliteitszorg	: ja, positief besluit van 6 mei 2014

bijlagen

3

Beoordelingskader

Beoordelingskader voor de beperkte opleidingsbeoordeling van de NVAO (Stcrt. 2010, nr 21523).

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.

Samenvatting bevindingen en overwegingen panel.

Standard 1

The committee concludes that the academic and professional level of intended learning outcomes of the master's programme are in line with the Domain Specific Framework of Reference and international standards. The necessary competences are represented clearly in the intended learning outcomes of the programme. The programme has an appropriate research oriented profile. According to the committee this profile could be aligned more explicitly with the requirement of the professional field. The committee understood that the planned introduction of streams is meant to improve this.

Standard 2

The Computer Science and Engineering master's programme is organized around eight research topics (related to the research groups within the department): Algorithms, Visualization, System architecture and networks, Databases and hypermedia, Security, Software engineering and technology, Architecture of information systems and Formal system analysis. The programme also offers two specialized tracks: Information Security Technology (IST) and Service Design and Engineering (SDE). The curricula of the regular master's programme and the two specialized tracks IST and SDE have the same structure: core courses (25-36 EC), electives (25-60 EC), a research seminar (4-6 EC) and the final project (30 EC).

The committee concludes that the curriculum is coherent and that the students are well prepared for obtaining their final qualifications. There is a close link between research and education. The research seminar, capita selecta and master's thesis enable students to become independent researchers. The course proposition is broad and flexible. The committee observed that as a result of the flexibility of the programme, it is sometimes necessary to bridge gaps in prerequisite knowledge of some of the students. This can interfere with realising an in-depth level.

The study yield of the programme is low. The programme has the ambition to increase the study yield to 90% of the students graduating in 2.5 years. The committee concluded that there is not yet a clear plan on how to realize this ambition. The committee is enthusiastic about the facilities that are offered to students. The housing is modern and well equipped. Study guidance is sufficiently available for students.

The committee is very pleased with the teaching staff, in both quantitative and qualitative terms. There is a policy in place to promote the teaching skills of the lecturers. The committee is of the opinion that the programme is well organized and that the students are well prepared for obtaining their final qualifications. It is impressed by the way in which the programme is continuously focussing on quality improvement.

Standard 3

The committee concluded that the assessment system of the programme is adequate. Students are well informed about evaluation criteria and examination procedures. The Board of Examiners and university management have installed different instruments to safeguard assessment quality and graduation level. The committee appreciates the proactive role of the Borgingscommissie in this process. The committee was very pleased by the wide range of initiatives that the department took in the context of this standard and it

Pagina 3 van 6 appreciated very much the high standard of the assessment of the courses, the projects and the theses. The committee advises to complement the assessment policies with an assessment plan for the programme and a general fraud policy.

To assess the final level realised by the students, the committee examined a range of final projects. It concluded that the final level of the projects was high and matched with what could be expected of a graduate of a master's programme.

Besluit

Ingevolge het bepaalde in artikel 5a.10, derde lid, van de WHW heeft de NVAO het college van bestuur van de Technische Universiteit Eindhoven te Eindhoven in de gelegenheid gesteld zijn zienswijze op het voornemen tot besluit van 10 juni 2014 naar voren te brengen. Bij e-mail van 20 juni 2014 heeft de instelling ingestemd met het voornemen tot besluit.

De NVAO besluit accreditatie te verlenen aan de wo-master Computer Science and Engineering (120 ECTS; variant: voltijd; locatie: Eindhoven) van de Technische Universiteit Eindhoven te Eindhoven. De NVAO beoordeelt de kwaliteit van de opleiding als voldoende. De opleiding kent de volgende tracks: Computer Science and Engineering, Information Security Technology en Service Design and Engineering.

Dit besluit treedt in werking op 31 juli 2014 en is van kracht tot en met 30 juli 2020.

Den Haag, 31 juli 2014

De NVAO

Voor deze:



Ann Demeulemeester
(vicevoorzitter)



Lucien Bolleer
(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.

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 opleidings specifieke voorzieningen maken het voor de instromende studenten mogelijk de beoogde eindkwalificaties te realiseren	Voldoende
3. Toetsing en gerealiseerde eindkwalificaties	De opleiding beschikt over een adequaat systeem van toetsing en toont aan dat de beoogde eindkwalificaties worden gerealiseerd	Goed
Eindoordeel		Voldoende

Tabel 1: Rendement.

Cohort	2007	2008	2009
Rendement	62%	68%	83%

Tabel 2: Docentkwaliteit.

Graad	Ma	PhD	BKO
Percentage	100%	100%	47%

Tabel 3: Student-docentratio.

Ratio	1 : 28
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Tabel 4: Contacturen.

Studiejaar	1	2
Contacturen	12-18	1

- Prof.dr. J. Paredaens (chairman), retired professor in Database Research, Antwerp University;
- Prof.dr.ir. B. Preneel (member), professor in Information Security, KU Leuven;
- Prof.dr. S. Mauw (member), professor in Security and Trust of Software Systems, University of Luxembourg;
- Prof.dr.ir. W. Van Petegem (member), associate professor and Director Teaching and Learning, KU Leuven;
- P. Boot Bsc (student member), master student Computer Science, Utrecht University.

Het panel werd ondersteund door drs. J. van Zwieten MA, secretaris (gecertificeerd).