

Besluit **Besluit strekkende tot het verlenen van accreditatie aan de opleiding wo-master System and Network Engineering van de Universiteit van Amsterdam**

	Gegevens	
datum	31 juli 2014	Naam instelling : Universiteit van Amsterdam
onderwerp	Besluit accreditatie wo-master System and Network Engineering van de Universiteit van Amsterdam (002298)	Naam opleiding : wo-master System and Network Engineering (60 ECTS)
uw kenmerk	--	Datum aanvraag : 10 december 2013
ons kenmerk	NVAO/20142402/SL	Varianten opleiding : voltijd, deeltijd
bijlagen	3	Afstudeerrichtingen : Networking, Forensics
		Locatie opleiding : Amsterdam
		Datum goedkeuren panel : 17 juni 2013
		Datum locatiebezoek : 18 juni 2013
		Datum visitatierapport : 11 oktober 2013
		Instellingstoets kwaliteitszorg : ja, positief besluit van 10 juni 2013

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 goed heeft bevonden.

Samenvatting bevindingen en overwegingen van het panel.

As the panel has observed, the programme management has taken up the suggestions for improvement, made by the panel that conducted the previous review of the programme in 2007. In particular, academic and research skills (dealing with uncertainties, presentation of data and drafting hypotheses) have been given a more prominent place in the curriculum, supervision during the research projects has been intensified and independent work and reflection have been given more weight in the research project's assessment.

The panel considers the programme's objectives to be relevant for a master's programme in the system and network engineering field. The learning outcomes are appropriate representations of the programme's objectives, addressing the general requirements for the programme as a whole as well as the specific requirements for the two specializations, Networking and Forensics. In the learning outcomes domain-specific knowledge and understanding, knowing how to apply these to problems in professional practice, are addressed, as well as general academic skills and research skills and the interdisciplinary nature of the programme. As two minor points, the panel recommends to address the ethical, societal and social aspects more strongly and to give the business organization aspects a more prominent place. The learning outcomes are aligned with Dutch and international external frameworks and with the business requirements. The programme management, adequately, keeps the learning outcomes up-to-date. The learning outcomes comply fully with the requirements of a master's level programme. The programme has a clear profile in addressing Open Technology and in emphasizing security subjects. With respect to Open Technology, the panel considers the programme to occupy a unique place in the world. The panel recommends to consider changing the name of one of the two specializations from Forensics to Security, because the latter name matches the contents of this specialization, being broader than the subject of forensics alone.

The entry requirements for the programme are relevant and the admission process is conducted in a very effective way. Also, the students are well-informed about the challenging nature of the programme. The study modes (full-time and part-time), which are offered, give different student groups of students the opportunity to complete this programme. The panel advises to keep the student number at a maximum of 40, because admitting more students may hamper the effect of the educational model, thereby depriving the programme of one of its most distinctive features.

All the intended learning outcomes have been covered in the programme, the courses addressing the domain-specific knowledge and skills, general academic skills and academic research skills. The panel is enthusiastic about the build-up of the courses, theory and practice being closely related. The panel recommends to give the colloquia a more formal place in the curriculum and to award credits for these. The structure of the curriculum is coherent, the students being taught and trained the core of this field. The programme management is very active in keeping the course contents up-to-date, incorporating new technological developments and the research outcomes. The professional practice is strongly represented in the curriculum and the resonance group ensures the programme management to be in touch with the professional field.

Pagina 3 van 7 The panel has a high regard for the lecturers in the programme. Their expertise and educational abilities meet the requirements and their research orientation is strong. The teaching staff is focused on enhancing the effect of the learning processes. The panel advises to attain 90% BKO-lecturers in 2014.

The educational model of the programme and the study methods are excellent and one of the main factors for the programme's success. Because of the very intensive guidance by the lecturers and the lab teachers, the students acquire knowledge and skills at a very high pace. The programme is challenging for the full-time students, who regularly spend more than 40 hours per week. The part-time students attend classes on three days of the week, which is very challenging as well. The programme management is keeping the study load manageable, by means of intense guidance.

Having visited the programme's lab, the panel considers the facilities to be more than adequate for this technology-oriented programme. The panel is positive about the formal and informal evaluation mechanisms the programme management has put in place.

The panel regards the assessment policy of the programme to be appropriate, the regulations being in line with the university's and the Faculty of Science's policies. As the programme's board of examiners is in the process of implementing measures to regularly review the examinations, the panel recommends to accelerate this process. The examination methods of the programme, assignments, papers and written examinations are valid methods to test the students' results. The panel has found the examinations to be of a good quality and level. The programme management has taken appropriate measures to prevent students from free-riding in case of group assignments. The research projects processes have been thoroughly organized, stressing the academic research contents of the projects. The assessment of projects is organized equally well, the academic examiners as well as the assessment components ensuring a reliable and valid assessment.

The research projects demonstrate creative thinking, a strongly developed scientific structure and a substantial level of complexity. A number of projects have been submitted to scientific journals and have led to scientific publications. The graduates acquire relevant positions in the professional field and, for a programme in this field, a relatively large number of graduates choose to pursue a Ph.D.-trajectory. The success rate of the programme is impressive, about 90% of the students completing the programme within two years.

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 Universiteit van Amsterdam te Amsterdam in de gelegenheid gesteld zijn zienswijze op het voornemen tot besluit van 26 mei 2014 naar voren te brengen. Bij e-mail van 1 juli 2014 heeft de instelling ingestemd met het voornemen tot besluit

De NVAO besluit accreditatie te verlenen aan de wo-master System and Network Engineering (60 ECTS; variant: voltijd, deeltijd; locatie: Amsterdam) van de Universiteit van Amsterdam te Amsterdam. De opleiding kent de volgende afstudeerrichtingen: Networking en Forensics. De NVAO beoordeelt de kwaliteit van de opleiding als goed.

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:


Dr. A.H. Flierman
(voorzitter)


J. Bollema
(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	Omschrijving	Score
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	Excellent
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		Goed

De standaarden krijgen het oordeel onvoldoende (O), voldoende (V), goed (G) of excellent (E). Het eindoordeel over de opleiding als geheel wordt op dezelfde schaal gegeven.

Tabel 1: Rendement.

Cohort	2009	2010
Rendement	75%	79%

Tabel 2: Docentkwaliteit.

Graad	Ma	PhD	BKO
Percentage	82%	64%	36%

Tabel 3: Student-docentratio.

Ratio	6,77:1
--------------	--------

Tabel 4: Contacturen.

Studiejaar	1
Contacturen	17,65

Pagina 7 van 7 **Bijlage 3: panelsamenstelling**

- G. Dierick MSc, panel chair, network & security expert at Vlaamse Radio- en Televisieomroep (VRT) and a lecturer at the Katholieke Hogeschool Leuven;
- K.M. Begnum Ph.D., panel member, associate professor at Oslo Akershus University of Applied Sciences;
- O.M. Kolkman MSc, panel member, director of NLnet Labs;
- B. van Os BSc, student member, studying the master's programme Artificial Intelligence at University of Groningen.

Het panel werd ondersteund door W. Vercouteren MSc, secretaris (gecertificeerd).