NVAO • THE NETHERLANDS

INITIAL ACCREDITATION

HBO-BACHELOR

B SOFTWARE DEVELOPMENT

Global School for Entrepreneurship B.V.

FULL REPORT

3 APRIL 2024

Content

1 Peer review

The Accreditation Organisation of the Netherlands and Flanders (NVAO) determines the quality of a new programme on the basis of a peer review. This initial accreditation procedure is required when an institution wishes to award a recognised degree after the successful completion of a study programme.

The procedure for new programmes differs slightly from the approach to existing programmes that have already been accredited. Initial accreditation is in fact an ex ante assessment of a programme. Once accredited the new programme becomes subject to the regular review process.

The quality of a new programme is assessed by means of peer review. A panel of independent peers including a student reviews the plans during a site visit to the institution. A discussion amongst peer experts forms the basis for the panel's final judgement and the advisory report. The agenda for the panel visit and the documents reviewed are available from the NVAO office upon request.

The outcome of this peer review is based on the standards described and published in the limited NVAO Assessment framework for the higher education accreditation system of the Netherlands (Stcrt. 2019, nr. 3198). Each standard is judged on a three-point scale: meets, does not meet or partially meets the standard. The panel will reach a conclusion about the quality of the programme, also on a three-point scale: positive, conditionally positive or negative.

NVAO takes an accreditation decision on the basis of the full report. Following a positive NVAO decision with or without conditions the institution can proceed to offer the new programme.

This report contains the findings, analysis and judgements of the panel resulting from the peer review. It also details the commendations as well as recommendations for follow-up actions. A summary report with the main outcomes of the peer review is also available.

Both the full and summary reports of each peer review are published on NVAO's website www.nvao.net. There you can also find more information on NVAO and peer reviews of new programmes.

2 New programme

2.1 General data

Institution	Global School for Entrepreneurship B.V.
Programme	HBO-Bachelor B Software Development
Variants	Fulltime: Yes. Partime: Yes. Dual: No.
Degree	Bachelor of Science
Tracks	Non-applicable
Locations	Amsterdam
Study load	240 EC[1]

2.2 Profile

The Bachelor of Science in Software Development is a new programme of the Global School for Entrepreneurship (GS4E). GS4E has developed a new educational profile for this programme: Tomorrows Software Developer. This profile combines the development of hard skills with the development of the personal soft skills of its students. The focus is on the fundamentals of the IT profession: the students are trained to master concepts instead of learning specific techniques. The new profile aims to make the students 'future proof', to allow them to keep up with the pace of innovation in software development. The programme has a solid connection to the working field, students will for instance work on real-world challenges. The programme amounts to 240 EC and is offered both as a full-time programme of four years and a part-time programme of six years.

2.3 Panel

Peer experts

- **Anne Vanmaercke, chair,** is strategic advisor VIVES University of Applied Sciences (Belgium), Lecturer in Commercial Sciences and Business Administration at the same institute;
- **Anke Coomans,** Programme Manager IT Factory at Thomas More University of Applied Sciences for the programmes Applied Informatics, Elektronics-ICT and Applied Computer Science;
- **Martijn Suijkerbuijk,** programme coordinator hbo-ICT, Windesheim Almere and previously coordinator of the Ad-programme Software Development at Windesheim;
- **Nienke Wessel student member ,** master student Computing Science; specialisation Data Science, Radboud University Nijmegen.

Assisting staff

Erik van der Spek (secretary)
Manuel Kleijmeer (NVAO policy advisor and process coordinator)

Site visit

Amsterdam, 28 februari 2024

[1] European Credits

3 Outcome

The NVAO approved panel reaches a *conditionally positive* conclusion regarding the quality of the Bachelor's Programme in Software Development offered by Global School for Entrepreneurship B.V.. The programme complies with six standards of the extended NVAO framework and partially complies with four standards.

The Bachelor in Software Development aims to educate professionals with a background in ICT to become 'Tomorrows Software Developers'. The students are trained to develop both their hard skills in programming and their personal soft skills. The panel got a good impression of the new Bachelor's programme in Software Development. Strengths include the intensive supervision and the didactic model, which focuses on the mbo4 graduates who make up the intake. Another strength is the focus on concepts rather than tooling, making the programme more sustainable.

At the same time, the panel identified a number of areas for improvement. This is initially reflected in the non-transparent manner in which the programme structure is presented: it took the panel quite some time and effort to find out how the programme is structured and how testing is arranged. The panel feels it is important that prospective students are well informed about these topics.

Other improvement have to do with the areas of intake procedure, quality assurance and student assessment. When it comes to the intake procedure, it is important that it is clear what requirements the programme sets for the student's workplace. In quality assurance, the involvement of the Work Field Committee and the Exam Board should be strengthened. On assessment, the panel believes that the programme should make it clearer how it guarantees that students achieve the final level.

Thus, although the panel identified a number of areas for improvement, it believes that the programme is capable of making relevant improvements in the short term. Moreover, the panel believes that the programme is relevant, sustainable and geared to the needs of the professional field. Therefore, the final assessment is conditionally positive. The panel has set four conditions, one for each of the standards where the panel noted areas for improvements. These improvements are included in chapter 5, *Conditions and recommendations*.

Standard	**Judgement**
1. Intended learning outcomes	meets the standard
2. Curriculum: orientation	meets the standard
3. Curriculum: content	meets the standard
4. Curriculum: learning environment	partially meets the standard
5. Intake	partially meets the standard
6. Staff	meets the standard
7. Facilities	meets the standard
8. Tutoring	meets the standard
9. Quality assurance	partially meets the standard
10. Student assessment	partially meets the standard
Conclusion	*conditionally positive*

4 Commendations

The programme is commended for the following features of good practice.

1. ***Good didactic model*** – The programme developed a didactic model that fits the needs of the target group. Peer-to-peer review forms an important part of this model.

2. ***High level at the start*** – Since the programme only admits students with an mbo4 diploma in software development, students start at a higher level than comparable programmes; this means that they can also reach a higher end level.

3. ***Focus on concepts*** – The programme has a focus on concepts (fundamentals) instead of tools; this makes the programme more sustainable, according to the panel. This focus is also appreciated by the professional field.

4. ***Coaching*** – The students are guided and supervised intensively by the learning coaches, often one-to-one, so the guidance is very much tailored to their needs.

5. ***Learning by doing*** – Individual assignments form a large component in the programme, which allows the students to master software development through learning by doing.

5 Conditions and recommendations

The panel posed a number of conditions that need to be fulfilled to fully meet the NVAO quality standards. For each of these conditions, a time limit of six months is set, starting with the date NVAO publishes its final decision:

1. Standard 4, ***Learning environment***: Provide a clear and accessible study manual, which insightfully incorporates the relationship between the intended learning outcomes, the learning objectives per course and/or module, the content of the modules and their assessment. Also ensure that the content of this study manual is in line with the information available on NexEd.
2. Standard 5, ***Intake****:* Review the intake procedure before the start of the programme, and provide clarity on admission requirements, workplace and supervision requirements, and exemption policy.
3. Standard 9, ***Quality assurance***: Provide reports from the Work Field Committee and the Exam Board proving that they have reviewed the curriculum and the courses. Make clear how the Exam Board ensures the quality of assessments and rubrics. Expand the Work Field Committee with members with sufficient expertise in the field of software development.
4. Standard 10: ***Assessment***: Provide a clear description of the graduation process, including assessment form(s), and clarify how the programme and the Exam Board monitor the student's achievement of the required final level.

In addition, the panel advises a number of follow-up actions.

1. ***Professional field*** – strengthen the involvement of the professional field in the further development of the programme.
2. ***Lectures*** – clarify the function of lectures within the didactic concept and the degree of flexibility within the programme.
3. ***Soft skills*** – make sure all students receive sufficient training in soft skills and make clear how soft skills are assessed.
4. ***Staff*** – invest in more educational experience and knowledge on NLQF6 before the programme starts. Also, make sure that research expertise is sufficiently represented in the staff.
5. ***Assignments*** – make sure the programme uses authentic and realistic business assignments.

6 Assessment

6.1 Standard 1: Intended learning outcomes

The intended learning outcomes tie in with the level and orientation of the programme; they are geared to the expectations of the professional field, the discipline, and international requirements.

Judgement

Meets the standard

Findings, analysis and considerations

The Global School for Entrepreneurship (GS4E) has developed a new educational profile for the new programme: Tomorrows Software Developer. This development is motivated primarily by the needs of the professional field: according to the programme developers, much of the knowledge and skills of graduates in current IT-related bachelor programs do not fit the employers' needs. Graduates need to be able to keep track of fast changes within the IT-field. Therefore, the new programme focusses on the fundamentals of the IT profession: students need to master fundamental concepts instead of learning specific techniques, since these fundamental concepts will last. A second central theme is the focus on soft skills, such as skills in cooperation and communication. These two aspects – the focus on fundamental concepts and the focus on soft skills – form the core of the new profile.

The panel learned that this professional profile has been designed with the aid of the HBO-i model. This model is structured as a cube that allows to visualise the different aspects of the professional profile in three dimensions, namely Architectural Layers, Activities and Proficiency levels. The programme developers have finetuned the HBO-i-model to their own purpose, which results in a model that, according to the programme developers, is specifically adapted to Tomorrow's Software Developer. The panel agrees this model offers a solid base for the new programme.

Intended learning outcomes

The model mentioned above leads to four learning outcomes: Build, Analyse, Manage, Collaboration. According to the programme developers, these learning outcomes provide a comprehensive framework for software developers to structure their learning and development journey. Each learning outcome represents a set of skills, attitudes and knowledge:

1. Build: students develop the ability to construct software solutions using appropriate infrastructure and techniques;
2. Analyse: students learn to analyse complex problems, gather requirements, and design effective software solutions;
3. Manage: students learn the fundamentals of project management, task prioritisation, and effective resource allocation.
4. Collaboration: students are trained in effective communication and collaboration, and they learn to work in software development in interdisciplinary teams.

The panel has established that the intended learning outcomes of the new programme are aligned with the Dutch Quality Framework (NLQF) at level 6. Furthermore, a connection has been established between these learning outcomes and the Dublin descriptors.

The panel agrees with the intended learning outcomes and feels they offer a solid base for the new programme. However, during the discussions with representatives of the Work Field Committee the panel found that their involvement with the programme has been quite recent: their first meeting was a month before the site visit and the programme was only discussed briefly five days before the site visit. The programme board has told the panel that they have validated the learning outcomes in an

informal way, with individual companies. Still, the panel has not seen any documents that sustain that claim. The panel advises to strengthen and formalize the involvement of the professional field in the further development of the programme.

In summary, the panel is of the opinion that the intended learning outcomes meet the standard. The educational model and the intended learning outcomes provide a proper framework for the programme. An improvement can be made by strengthening the involvement of the professional field.

6.2 Standard 2: Curriculum: orientation

The curriculum enables the students to master appropriate (professional or academic) research and professional skills.

Judgement
Meets the standard.

Findings, analysis and considerations
The new programme is co-created with the Bit Academy. Bit Academy offers multiple courses in the domain of software development and has many connections within the professional and academic field. Skill training (both hard and soft skills) forms an essential part of the curriculum. Hard skills are mainly focussed on programming, both frond-end and back-end. Soft skills in the programme are for instance aimed at presentation, collaboration and programme management. However, the panel has learned that these soft skills are mainly covered during the coaching sessions; the curriculum does not contain specific modules on soft skills. The representatives of the working field feel that the soft skills should receive more attention in the programme. The panel advises to strengthen this part of the programme and to make sure all students receive sufficient training in soft skills.

The panel has established that the programme has a clear view on research. According to the programme developers, research and analysis are fundamental aspects of design thinking; this is shown by the incorporation of the learning outcome *analyse* within the programme. The students are trained to develop an investigative and design thinking mindset. They work continually on challenges, applying design thinking principles to their problem-solving process. Furthermore, students are trained to assess the quality and relevance of various sources, compare them, and analyse the content through the lens of user needs and experiences. The panel believes that the view on research and the way this view is incorporated into the curriculum are appropriate for a Bachelor's programme.

In short, the panel has established that the curriculum enables the students to master the necessary skills, both in research and in the professional domain. The programme therefore complies with the demands of standard 2. A stronger focus on soft skills training is advised.

6.3 Standard 3: Curriculum: content

The contents of the curriculum enable students to achieve the intended learning outcomes.

Judgement
Meets the standard.

Findings, analysis and considerations
Both the fulltime and parttime programmes follow the same build-up. In the first year, students become acquainted with the basics of software development. By the end of year 1, students know how to design and build a basic application. The panel has read the course outlines for the first year courses and has established these outlines have been worked out sufficiently. Both the information

provided and the assignments are appropriate to an introduction in software development at a Bachelor's level. Furthermore, the panel has established that the intended learning outcomes have been translated into learning objectives at module level. The way that this has been done, however, was not very transparent; it took a lot of effort for the panel to understand the way in which the programme has been developed.

Starting from the second year, students delve into more advanced topics and techniques, such as database management, testing, containerisation and project management. The following schedule gives an impression of the topics covered:

#	Modules Year 1	EC
1	Back-end Rookie	9
2	Front-end Rookie	9
3	Back-end Member	12
4	Front-end Member	12
5	Java for Web	12
6	Project Package Manager	6
	Total	60

#	Modules Year 2	EC
7	Networking	4
8	Linux	7
9	Tooling and AI	3
10	Docker	3
11	CI / CD	6
12	Testing	8
13	Security (software)	8
14	Agile (Project)	12
15	Design Patterns	6
16	Low Code	3
	Total	60

#	Modules Year 3	EC
17	Internship 1	30
18	Architecture (Project)	12
19	Functional Programming	6
20	Database Internals	8
21	Algorithms & Data structures	4
	Total	60

#	Modules Year 4	EC
22	Kubernetes	4
23	Cloud	6
24	Pentesting	3
25	Monitoring	5
26	Performance (Project)	9
27	Internship (2)	30
28	Final Package	3
		60

The panel agrees with the choice of topics that are covered. Since not all aspects of software development can be covered in-depth in a Bachelor's programme, the programme developers have made a number of choices. For instance, the focus is on back-end development, while the front-end part is restricted to the first year. Another choice is that hardware is not covered in-depth. The panel understands the choices that have been made and agrees with the explanation of these choices. The representatives of the professional field would like to see a stronger emphasis on data; this is something the programme could take into consideration.

The curriculum includes two comprehensive internships of 30 EC each, in year 3 and 4. The panel has been supplied with a description of these internships and of the learning goals and has discussed them with the programme developers. The panel learned that the first internship is mainly aimed at participating in a development team; in the second one, students must independently deliver a software component. The interns are supervised (at the side of the programme) by a SCRUM specialist that is specifically hired for that purpose. At the company where the students do their internship, they are supervised by a senior developer. Representatives of the programme visit the companies involved

and talk to the intended supervisors to judge whether the students can achieve the learning goals of both internships. The panel agrees with this approach.

A final point is the level the students reach in the various modules. The panel learned that in most modules in year 1 and 2 the students reach level 5, while the modules in year 3 and 4 allow them to reach level 6. The panel agrees with this set-up, but feels that the documentation could be more transparent on this issue.

In summary, the panel has established that the curriculum allows the students to achieve the intended learning outcomes. The curriculum contains topics and courses that are relevant for a Bachelor's programme on software development. The professional field agrees with the choices made, although it would appreciate more attention to the role of data in this domain.

6.4 Standard 4: Curriculum: learning environment

The structure of the curriculum encourages study and enables students to achieve the intended learning outcomes.

Judgement

Partially meets the standard.

Findings, analysis and considerations

The programme is offered both full-time (four years) and part-time (six years). The intention is to start with the part-time programme in September 2024; the full-time programme will start at a later stage. The programme is offered at the location of a partner, Bit Academy, in Amsterdam. Full-time students are required to spend at least 6 hours per day on-site, at Bit Academy; for the remainder (10 hours weekly) they can choose their own location. The part-time students come to Bit Academy one day a week.

At Bit Academy, students can profit from the support of the coaches and their fellow-students. The panel learned that the coaches are available full-time. A typical school day consists of a combination of classes, coaching and skills labs, individual and group projects. Each day starts with a check-in, during which the students discuss their goals and plans for that day with their learning coach. Each day contains at least one lecture; since the programme has to be condensed for the part-time students, they will be offered several lectures on the days they come to Bit Academy. The remainder of the time will be mainly devoted to individual and group assignments. At the end of the day a check-out is done, to discuss what has been achieved and what remains to be done.

Didactic approach is based on the model of High Impact Learning. The programme has defined seven key didactic elements: (1) urgency, (2) self-management, (3) collaboration and coaching, (4) hybrid learning, (5) action as knowledge sharing, (6) flexibility and (7) assessment as learning. The panel established that coaching is an important cornerstone, both by the learning coaches and the peers. Peer review also is key, since every assignment is assessed by another student. The panel is of the opinion that the didactic approach is an asset within the programme, since it is geared to mbo4 students that may experience difficulties while learning in a more formal setting. Also, the focus on coaching, both by peers and professionals, is a strong point of the programme.

Course materials and exercises are available on the online learning platform, named: NexEd. The panel was granted access to NexEd prior to the site visit and found it to be lacking in transparency. It was difficult for the panel to find clear information about items such as course setup, learning outcomes

and literature used. Also, it was a challenge to connect the course items found on NexEd with the intended learning outcomes as described in the self-evaluation report.

This brings the panel to the main point of improvement where this standard is concerned. It took a lot of effort to understand how the programme is organized and how the programme developers ensure that the intended learning outcomes are translated into the curriculum. Also, the documentation offered beforehand (the self-evaluation report) was not sufficiently aligned with the online platform NexEd.

This lack of transparency brings the panel to the verdict 'partially meets the standard'. Although the panel is positive about the didactic approach and the way coaching is embedded into the programme, it feels that the NexEd platform and the information provided by the programme should be improved. This leads to the following condition:

> *Provide within six months of the decision by the NVAO a clear and accessible study manual, which insightfully incorporates the relationship between the intended learning outcomes, the learning objectives per course and/or module, the content of the modules and their assessment. Also ensure that the content of this study manual is in line with the information available on NexEd.*

6.5 Standard 5: Intake

The curriculum ties in with the qualifications of the incoming students.

Judgement
Partially meets the standard.

Findings, analysis and considerations
The intake requirements of the programme were a bit confusing to the panel. Both in the original documentation and on the institutes website it was stated that all students with a Dutch havo, vwo or mbo4 diploma were admissible to the Bachelor of Software Development. For part-time students, in addition a suitable workplace and work experience is required (at least at the level of mbo4 Software Development). However, during the site visit the panel learned that admission is restricted to students with an mbo4 diploma in software development (both for full-time and part-time students). The other option is a 21+ test, supplied by the institute, and also geared towards software development.

The panel understands the restriction to students that have obtained a mbo4 level in software development. This allows the programme to start at a higher level and to reach a more in-depth insight in software development. Nevertheless, the panel is of the opinion that it should have been informed of this choice beforehand; the same goes for the prospective students.

The panel furthermore found that parts of the intake procedure have not been described in sufficient detail. The panel learned that there will be an introductory interview with each student, but this is not described. The same applies to the restrictions on the working environment of the part-time students: for instance, how many years of experience should they have and how many days a week should be their minimal contract?

A final point is the exemption policy. The programme management told the panel that no exemptions are possible. However, since the part-time programme is geared towards student with a few years of experience in software development, it seems reasonable to reward this experience with an exemption where relevant. The same goes for students who have obtained additional certificates in

specific topics in software development. The panel invites the programme to review the exemption policy.

In summary, the panel is of the opinion that the student intake partially meets the standard. The intake requirements should be clear to everyone. The intake procedure should be described in more detail and should include an exemption policy. Therefore, the panel sets the following condition:

> *Review the intake procedure before the start of the programme, and provide clarity on admission requirements, workplace and supervision requirements, and exemption policy.*

6.6 Standard 6: Staff

The staff team is qualified for the realisation of the curriculum in terms of content and educational expertise. The team size is sufficient.

Judgement
Meets the standard.

Findings, analysis and considerations
The programme is to be executed by a team of software development professionals, both staff from Bit Academy and from GS4E. All staff (five lecturers and coaches at the time of the site visit) have ample experience in the field. However, their educational and scientific backgrounds vary. Two lecturers have obtained an academic master's degree (although one in another field), two have a professional bachelor's degree in Software Development and one coach has a vwo degree as highest education. The panel believes that the professional experience is sufficiently present, but advises the programme to invest in more educational experience and in knowledge on NLQF6 when the programme starts. Also, make sure that research expertise is sufficiently represented in the staff.

According to the Self-evaluation report, all teaching staff are required to obtain a UTQ (BKO) certificate or similar within six months after their first employment. In the current situation no staff members are yet in the possession of such a certificate. However, GS4E has set up its own UTQ training and has a professionalisation programme on top of it. The intention is that all permanent staff will have their UTQ before the programme starts. A number of staff have also acquired a BKE certificate, ensuring sufficient expertise in assessment. Only staff with a BKE and a Master's degree are allowed to assess the graduation assignments.

In summary, the panel feels that the new programme In Software Development meets the requirements of standard 6. The staff team brings a lot of professional experience and the coaches are used to work with mbo4 students. The panel is confident that all teachers will have their UTQ before the programme starts.

6.7 Standard 7: Facilities

The accommodation and material facilities are sufficient for the realisation of the curriculum.

Judgement
Meets the standard.

Findings, analysis and considerations
The new programme is to be executed at the location of Bit Academy, the partner organization of GS4E in Amsterdam. Bit Academy is a provider of professional ICT education at mbo4-level. GS4E has a

separate workspace that contains several working areas with flexible workstations and some spaces for the skills labs. The building also houses a number of other companies, including IT-related organizations. The panel has seen the facilities during the site visit and has established that the facilities are suitable for providing training in Software Development. Therefore, the facilities of the programme meet the requirements of standard 7.

6.8 Standard 8: Tutoring

The tutoring and provision of information to students are conducive to study progress and tie in with the needs of students.

Judgement
Meets the standard.

Findings, analysis and considerations
The panel learned that tutoring is provided on a daily basis. The students start each day with a check-in with one of the coaches. During this check-in, the students set their goals for the day (part-time students do this once every week). Although students are expected to work independently and are responsible for their own learning process, coaches are available during the day to answer questions. Since a substantial number of projects are executed in groups, peer support is important as well.

The panel has established that coaching of the students is one of the strong points of the programme. The learning coaches act both as lecturer and personal mentor. In the first place, they coach the students to apply their knowledge when working on projects and assignments. In the second place, they act as mentors, ensuring the students' well-being and sense of belonging.

The panel has received limited information on support for students with a functional impairment. During the conversation with the programme management, it turned out that no policy has been developed for students with special needs. However, the premises are easily accessible and students with learning disabilities receive extra time for assignments. The staff received a training aimed at dealing with students with autism. Moreover, the staff already has some experience with students with a functional impairment from their other programs, and are thus well-equipped to deal with this. The panel concludes that sufficient measures are in place to support students with a functional impairment.

In summary, the panel has established that the programme fulfils the requirements of standard 8. Coaching is well-developed and the students receive sufficient support and guidance. The provision of information remains a point of attention.

6.9 Standard 9: Quality assurance

The programme has an explicit and widely supported quality assurance system in place. It promotes the quality culture and has a focus on development.

Judgement
Partially meets the standard.

Findings, analysis and considerations
The panel established that there is a system for quality assurance in place. This system consists of two cycles, a short cycle and a long cycle. The short cycle includes student surveys at the end of each module and a programme evaluation at the end of the year. The results will be discussed by the

Curriculum Board, that will be installed when the programme starts. This board will meet at least six times a year. In the long cycle, the Work Field Committee and the Quality Board (with members holding relevant positions in the field of research or education) will be invited to a bi-annually programme review.

During the site visit, the panel spoke with members of the Work Field Committee and the Exam Board. The panel found that the involvement of both committees with the current programme have been limited and (in the case of the Work Field Committee) very recent. The Exam Board has not yet reviewed the assignments and/or the rubrics. The Work Field Committee seems to be lacking members with a more in-depth knowledge of current software development. The current board did not contain any software engineering practitioners, but rather managers and scientists that operate at a different level. Another issue is that it remained unclear to the panel how, when and by which body quality assurance will be taken care off.

The conclusion is that although GS4E has set up a system in which all relevant actors – students, staff and professional field – have their place, the practical execution of this systems shows room for improvement. A case in proof is the current self-evaluation file: a proper quality circle would have ensured improvements that could have benefited both the programme and the panel. Therefore, the panel comes to the verdict 'partially meets the standard' on the quality assurance. The panel poses the following condition on this standard:

> *Provide reports from the Work Field Committee and the Exam Board within six months proving that they have reviewed the curriculum and the courses. Make clear how the Exam Board ensures the quality of assessments and rubrics. Expand the Work Field Committee with members with sufficient expertise in the field of software development.*

6.10 Standard 10: Student assessment

The programme has an adequate system of student assessment in place.

Judgement

Partially meets the standard.

Findings, analysis and considerations

The system of assessment of the new programme is based on the principle 'Assessment drives Learning'. To achieve this end, the programme uses both formative and summative assessments. Formative assessment are done by both peers and coaches. For summative assessments the programme employs various of types of assessment, such as product reviews, written reports, presentations, reflective assignments and criterion-oriented interviews. The panel has seen a limited number of assignments to be used during the first year, including the rubrics, and finds these to be fitting for a first year in a bachelor of Software Development. The panel furthermore has established that the Education & Examination Regulations include specific details about these assessments, as well as the assessment methods employed.

According to the self-evaluation report, all assessments will be constructed using the four-eyes principle. Two learning coaches will develop an exam or assignment in consultation with the subject expert. They will also develop a grading rubric, thereby ensuring consistency. Furthermore, examinations and assignments will be subject to approval by the Exam Board. However, the current assignments and rubrics have not yet been reviewed by the Exam Board.

The panel has met with a number of representatives of the Exam Board, including the chair and secretary of the board. The Exam Board will be responsible for all Master's and Bachelor's programmes of GS4E. For each programme, a dedicated member will be included. The Exam Board will meet at least five times per year to ensure effective governance of the assessment process. The responsibilities of the Exam Board include the appointment of examiners; they should have obtained a Master's degree and a BKE qualification. Also the panel has seen that the Exam Board has an ambitious programme of quality assurance, including a review of 25% of written assessments and grades to investigate their validity.

During the conversation with the members of the Exam Board, it turned out that the board has reviewed the learning objectives and the curriculum of the new programme. The board has discussed the programme design several times, and also stressed the importance of the connection between learning outcomes and rubrics. However, the actual assignments and rubrics have not yet been reviewed by the Exam Board. The panel advises to strengthen the involvement of the Exam Board with the assignments and rubrics.

An important issue in student assessment is the way the programme guarantees that students obtain the required level, NLQF6. The panel discussed this topic with both the programme developers and the Exam Board. The panel learned that level 6 will be assessed mainly in the final project and the final internship in year 4. The final project (3 EC) is essentially the finalisation of a multi-year project, the 'Package Manager'. The students complete their portfolio on this project and discuss their solution during a presentation. However, the panel has not gained a clear impression on how the students are assessed, since an assessment form for this final project is still lacking.

In summary, the panel comes to the verdict 'partially meets the standard' on standard 10. Although a system of student assessment has been designed, a number of deliverables are still lacking. The panel has seen a limited number of assessments and has not gained a clear insight in the way the programme ensures that its students reach the required end level. Moreover, the involvement of the Exam Board with the actual assignments has been limited. The panel therefore poses the following condition:

> *Within six months, provide a clear description of the graduation process, including assessment form(s), and clarify how the programme and the Exam Board monitor the student's achievement of the required final level.*

6.11 Degree

The panel advises awarding the following degree to the new programme: Bachelor of Science

The full report was written at the request of NVAO and is the outcome of the peer review of the new programme B Software Development of Global School for Entrepreneurship B.V.

Application no: AV-2107

NVAO

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