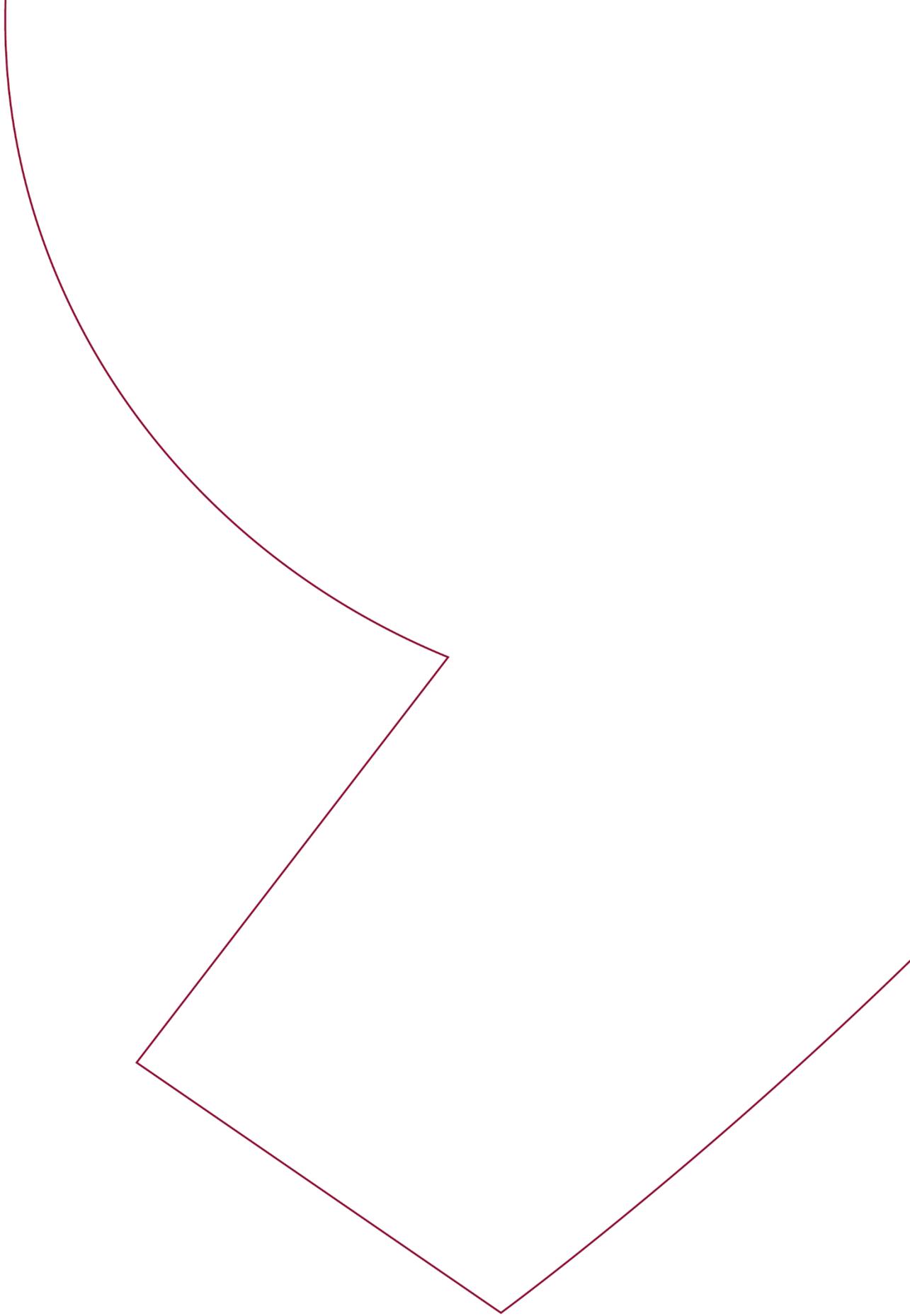


## **ASSESSMENT REPORT**

Assessment after three years

**Bachelor programme**  
**Digital Transformation Management**  
full-time

**SRH Haarlem University of Applied Sciences**



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**Bachelor programme**  
**Digital Transformation Management**  
full-time

**SRH Haarlem University of Applied Sciences**  
(programme formerly part of Global School for  
Entrepreneurship Foundation)

Rio registration: 39310

Hobéon Certificering & Accreditatie  
3 September 2024

**Audit Panel**

Prof. dr. R. Koper (chair)  
Prof. dr. H. Mulder  
Dr. X. Peng  
N. Wessel BSc BA (student member)

**Secretary**

Drs. P. Gertenaar

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## 1. GENERAL DATA

NAME INSTITUTION	SRH Haarlem University of Applied Sciences
Status	not funded
Outcome of Institutional Quality Assessment	n.a.
Name of the programme in Registration Institutions and Programmes (RIO)	B Digital Transformation Management
ISAT-code RIO	39310
Domain / sector	Economics
Orientation and level	Hbo bachelor
Degree	Bachelor of Science
Tracks	Artificial Intelligence, Cybersecurity
Number of credits	240 EC
Location	Haarlem
Mode of study	Full-time
Joint programme	-
Language	English
Date site visit	18-06-2024

## 2. INTRODUCTION

This assessment report is the result of an 'Assessment after three years' of the Digital Transformation Management Bachelor Programme of the SRH Haarlem University of Applied Sciences. At the time of this assessment, the programme was part of the Global School for Entrepreneurship Foundation. However, during the assessment period, the institute was transferring the bachelor programmes to the Haarlem Institute for Higher Education B.V., which uses the name SRH Haarlem University of Applied Sciences in all its communication. Therefore, the name SRH Haarlem University, or SRH for short, is used in this report.

The initial accreditation of the Bachelor Programme Digital Transformation Management took place on 3 December 2021 (online). On 21 March 2022, SRH Haarlem University of Applied Sciences received a positive accreditation decision for the programme from the NVAO. Because SRH Haarlem University of Applied Sciences did not undergo an Institutional Audit, a midterm assessment must be carried out after three years. This evaluation after three years focuses on testing and assessment (standard 10) and the level achieved (standard 11). This midterm assessment took place on 18 June 2024.

The members of the panel consisting of independent experts (see Annex III for an explanation) were the same as the panel of the Initial Accreditation. The panel used the 2018 framework of the Dutch-Flemish Accreditation Organisation (NVAO) for its assessment.

This report deals successively with the panel's findings, considerations, and conclusions regarding the NVAO quality standards 'assessment' and 'achieved learning outcomes'.

### **The Institute**

The SRH Haarlem Campus is part of SRH, a German-based foundation active in education and health. SRH is one of the oldest and largest private universities in Germany. There are six universities in Germany, one in Paraguay, and one in Haarlem. Across the different locations, students can choose from more than 40 innovative degree programmes in the areas of computer science, media and design, business administration, engineering and architecture, the social sciences, law, therapy, and psychology. Together, the institute covers over 150 degree programmes with over 20.000 students.

The organisation and didactic approaches are based on the Competence-Orientated Research and Education principles CORE-, developed by the German institute. In 2019, the German accreditation organisation ZEvA formally validated and accredited the CORE principle.

The Haarlem Campus offers three bachelor's degrees and one Master's programme for a very international group of 200+ students. The programmes are delivered by a team of Dutch and international professors and lecturers, in conjunction with guest lecturers from the work field.

### **Characteristics of the programme**

The Bachelor's programme in Digital Transformation Management is based on three pillars; Business, IT, and Data Science. It aims to prepare students to become tomorrow's digital experts who can translate business issues into data-driven solutions in the Dutch or international labour market.

The CORE study model is based on a constructivist learning approach. These CORE competencies are based on a summary of the 21st-century skills and form the four objectives of the programme:

- Specialist competencies related to the Dublin descriptors and NLQF indicators of Context, Knowledge, and Applied Knowledge;

- Methodological competencies are aligned with the competencies of information and problem-solving indicated by the Dublin descriptors and NLQF indicators;
- Social competencies related to the communication skills of the Dublin and NLQF frameworks;
- Personal competencies focus on learning skills and autonomy and responsibility described in the Dublin descriptors and NLQF indicators.

These four programme objectives have been translated into programme outcomes. The panel was provided with an overview of how the individual modules contribute to the overall programme objectives and outcomes as well as a table of the assessment of competence levels per study programme phase.

To reach the required competencies, the study programme is built on three consecutive development learning phases: Introduction, Development, and Integration phase. The first semester is the Introduction Phase, the second to fourth is the Development Phase, and the fifth to eighth semester is the Integration Phase. In the early stages of the programme, students work with limited levels of complexity and are given structured assignments and case studies. Gradually, the programme will increase the complexity of assignments, with less guidance, so students work more independently.

The start of the programme was intended for the year 2021-2022, but had to be postponed. Due to the COVID-19 restrictions, international students were unable to travel to Haarlem. This explains why at the time of the site visit, the most advanced students were in their second year, semester 4, just starting the Development Phase.

### 3. FINDINGS AND JUDGMENTS PER STANDARD

#### 3.1. Student assessment

**Standard 10: The programme has an adequate system of student assessment in place.**

Explanation NVAO: The student assessments are valid, reliable and sufficiently independent. The requirements are transparent to students. The quality of interim and final examinations is sufficiently safeguarded and meets the statutory quality standards. The tests support the students' own learning processes.

#### Findings

##### ***Vision on assessment***

The institute's vision on assessment is: 'Assessment creates and validates value for learning'. This vision is based on the CORE approach, which means that all intended learning outcomes, including practical components, are part of the summative assessment(s). In addition, the programme provides formative assessment through continuous feedback and self-reflection. The Digital Transformation Management programme has translated this vision into the curriculum. The study programme has a modular structure, to enable students to focus on a singular subject in each of the 29 study modules. Each module has a structure of objectives, intended learning outcomes, and appropriate assessment methods.

Each module consists of a five-week programme with active learning methods such as group work, debates, company visits, and presentations. At the beginning of each module, the syllabus is handed out and discussed with students. All syllabi describe the course, goals, rubrics, the outline of each week in the module, the assessment, and the schedule of the exams. The lecturers continuously monitor the progress of the students. Formative assessment is used to provide feedback to students. During the site visit, the panel learnt that formative assessment is often conducted in class, where lecturers and students evaluate students' contributions. For many modules, mock midterm exams are supplied and practiced with students. Summative assessment methods include essays, oral or written exams, debates, reflective interviews, and (group) presentations.

After the first academic year, SRH Haarlem Campus identified some points of improvement concerning assessment. The panel was informed that the Assessment Policy is being updated since there is a need for more standardization of assessment-related documentation. An Exam Office has been installed to support lecturers in the preparation and assessment of their module and to decrease the workload. The Exam Office is, for example, supporting the update of rubrics and designing assessment templates to improve consistency between modules. The perspective on new technologies, including opportunities and risks for assessment of Artificial Intelligence (AI) will also be included in the Assessment Policy.

Also, SRH has noted that, given the CORE model, the current assessment methods are predominantly group projects and presentations. Students are graded as a group, but also on their individual contributions to the assignment. Students have expressed a desire for more diverse and individual assignments. This is partly because of a need for more variation and partly because students are troubled by the 'free rider' behaviour of fellow students. The programme has initiated discussions with the assessors and examiners and staff are now working on more balanced and varied assessment methods. The panel learnt that in the next academic year an updated Assessment Policy will be implemented.

The panel notes that the current formative and summative assessments cover all the intended learning outcomes of the programme.

The panel encourages the programme to adopt new technologies in the Assessment Policy. This can include online simulations, automated feedback systems, and AI-based assessment platforms. These tools can provide immediate and personalized feedback to students, enhance

the efficiency of evaluations, and ensure a more standardized and objective grading process. The use of such tools will also prepare students for the increasingly digital and technology-driven professional environment and can further enhance the efficiency of evaluations.

The panel endorses the development of more types of assessment, as is described in the updated Assessment Policy. The panel encourages the programme to take up other formats, such as debates and practical assignments. To complement group assignments and address the issue of free-riding, the programme is advised to increase the diversity and frequency of individual assessments. This may include individual case studies, personalised projects, and solo presentations. By doing so, students' unique contributions and understanding can be better evaluated, ensuring that each student is meeting the learning objectives independently.

### ***Transparency, reliability, and validity***

The programme makes use of various instruments to ensure transparency, reliability, and validity and reflects on these aspects in the various documents provided to the panel. The assessments are designed according to the guidelines set out in the Assessment Policy. All assessments are designed by examiners, who are appointed by the Exam Board. Examiners are experienced lecturers. The Academic Officer, appointed in 2023, also plays an important role in assessment, e.g. by reviewing rubrics and mentoring examiners. Rubrics and the four-eyes principle guarantee a basis of reliability and validity. The programme aims to improve the application of the four-eye principle during the assessment development.

Handbooks or syllabi inform students of each module's objectives, assessment, and criteria and are handed out and discussed at the beginning of each module. The students confirmed to the panel that the grading criteria were clear to them. Students also appreciate continuous feedback throughout each module.

The Exam Office recently provided an overview of the results for each module, which the lecturers analysed. This has resulted in adjustments to assessments, such as rephrasing ambiguous questions. Examiners regularly calibrate grading, although there are no formal procedures for this yet. According to the panel, a quick win could be to make notes of calibration sessions to document considerations and decisions.

The panel concludes that the student assessments are valid, reliable, and sufficiently independent. The panel encourages the programme to continue with the identified points of improvement such as regular calibration sessions and applying the four-eyes principle to all design of assessment.

### ***Final assessment***

The panel was informed of the graduation contents and procedures. At the time of the site visit, there were no graduate students, only first and second-year students. In the final year, students choose between a specialisation in Artificial Intelligence or Cybersecurity, two increasingly important topics in the field of ICT and Data Sciences. The specialisation will cover the entire last year of the programme with a study load of 60 EC. The final module of the study programme, known as the Applied Research Project, will cover all four programme objectives. In the current setup for graduation, students complete their final work through the following deliverables:

1. Research paper (40%)
2. Development and implementation of a product or service (40%)
3. Study portfolio (10%)
4. Reflective interview (10%).

Each of these four components must be passed for the student to graduate.

At the time of the site visit, the programme was creating a graduation protocol, that includes criteria and directions for students, supervising staff, examiners, and companies where students conduct research. The panel was interested to hear that management is building connections

with industry and universities in different countries, to give students international opportunities for an internship and graduation in their final year.

The panel discussed how research skills are addressed. The panel was informed that research skills are taught systematically throughout the four-year programme. A lecturer specializing in research methodology has been hired to present dedicated modules on research methodology. This lecturer can also support students with their research papers in their final year.

The panel thinks the student preparation for the final assessment is adequate. The panel appreciates the efforts of the programme to design a final assessment procedure in which students can demonstrate that they achieved the intended learning outcomes.

### ***Examination Board***

SRH has a joint examination board that covers the various programmes on the Haarlem Campus. The Examination Board consists of several external members, including the Chair. Also, there are members of the bachelor programmes in Digital Transformation Management, Business Psychology, Creative Media, and the Master in Applied Sustainability Management. Since the beginning, the Examination Board has undergone several staff changes. Members stepped down due to new positions in or outside of SRH. The panel is pleased to see that board members no longer also have a management position, as was the case at the start of the programmes.

The Examination Board takes a number of steps to ensure assessments are valid. Members attend assessments and classes and review exams on the desired level and standards. The Examination Board regularly meets with the Institutional Board and advises them on policies and procedures. For example, recently, the Examination Board addressed the need for specific professionalization of lecturers. New (international) staff coming in means that more knowledge is needed about the use of rubrics. The programme management acted on this advice by organizing staff training on rubrics. Although examiners often are knowledgeable about assessment because of previous experience, the programme intends to start with training its core lecturers on basic assessment competencies in the next academic year, to enhance the quality and alignment of assessments. The panel endorses the intention to train lecturers on the creation and validation of assessments. The panel thinks that BKE training is a good starting point to improve the alignment of the intended learning outcomes, the content of the courses and the assessment.

The Examination Board also follows developments regarding Artificial Intelligence (AI). Whilst the academic staff explores educational possibilities of AI, the Examination Board focuses on the risks to assessment practices. The panel read a draft AI policy and welcomes the awareness of the programme to the threats of AI to the validity of the assessment. At the same time, the panel encourages the programme to continue its efforts to infuse AI into the curriculum to prepare students for the workforce.

Based on the findings mentioned above, the panel believes that the Examination Board understands its duties and is accountable for them. The panel concludes that The Examination Board is improving the internal organization, quality assurance of assessment, and professionalization.

### ***Considerations and Judgement***

The programme has established a clear system of assessment, with adequate checks and balances in place. Testing is generally done in a transparent, valid, and reliable way in both formative and summative assessment. The Exam Office standardises the analysis of grades and documentation of assessments and supports lecturers in achieving a more uniform design of assessment in courses. The panel identifies greater diversity in types of assignments, the use of digital assessment tools, and more individual grading as areas for improvement.

The panel is satisfied with the design and preparation for the final work in year 4.  
The Examination Board is in control and has a proactive role in the quality assurance of assessment in the programmes.

The panel is confident that the programme will address the previously mentioned points of improvement.

The panel concludes that the programme meets standard 10.

## 3.2. Achieved learning outcomes

**Standard 11: The programme demonstrates that the intended learning outcomes are achieved.**

Explanation NVAO: The achievement of the intended learning outcomes is demonstrated by the results of the tests, the final projects, and the performance of the graduates in actual practice or in post-graduate programmes.

### Findings

#### ***Panel's assessment of achieved learning outcomes***

As SRH only started the DTM programme in 2022, there were no alumni or graduate students at the time of the site visit. Instead, the panel reviewed the work of the students to determine if the expected level was met in the first two years of the programme.

In preparation for the site visit, the panel studied a selection of student work from the academic year 2023-2024 and their assessment forms. The panel studied samples from twelve students and five courses: Applied Mathematics & Data Science, Finance & Accounting for Business, Global Challenges, Informatics 2, and Software Methods & processes 1. These courses show the different methods of assessment, e.g. written work, written exams, presentations, group assignments like case studies, and reflective interviews. The panel was given access to video recordings of presentations. For each course, the panel also studied the syllabi, assessment matrix, rubric, and grading forms. Due to the small class sizes, the panel studied the work of all students in group assignments, typically three to four papers or other products.

The panel concludes that, in general, the student's work demonstrates the level and quality expected of first- and second-year bachelor students. The panel is aware that most topics will be repeated in years 3 and 4 of the programme. Therefore, the modules of years 1 and 2 are meant to provide basic knowledge and skills, that will be enlarged and deepened in later years. From the discussion with the Examination Board, the panel learned that in the first year the programme found room for improvement. The Module Handbook helps lecturers to meet the standards for each course.

Overall, the panel feels that the assignments were assessed fairly and the grades aligned with the panel's assessment. Feedback is given orally in class, in case of presentations. Feedback on written work is given in evaluation forms that are clear and mark points of improvement.

The panel did observe that the level of student work varied quite a bit. The programme is aware of these differences in achievement and thinks that this is largely due to the international group of students. Some students have had an excellent secondary education in their home country, others not quite so. These different backgrounds mean that some students have more work to do in the first year to reach the desired outcomes for each module, which is reflected in the variation in the grades.

The panel noted that in some of the studied assessment rubrics, a student can get a passing grade (6 out of 10 points) without achieving the competency 'understanding'. Understanding is generally for 7+ grades. The panel would expect understanding to be important to reach the required bachelor level and suggests the programme reviews these rubrics.

#### ***Performance of alumni***

As there are no graduates yet, it is not known how alumni perform in the work field or further education. However, the panel is confident that graduates will be well prepared for the industry. Firstly, this is because courses and tests are in line with programme-designed competencies that specifically develop professional, methodological, social, and personal competencies. Second, the panel understood that students are often offered (part-time) jobs by companies in the work field, indicating that their knowledge and skills are in demand.

During the site visit, the panel learned that the programme aims for global competencies, but implementation is different in different cultures and countries. The students indicated that they would like to add their own experiences and work on solutions that would work in their country. The panel feels an exchange of how things work in different cultures could be a meaningful addition to the curriculum.

### ***Considerations and Judgement***

The panel concludes that student work shows that the intended learning outcomes are achieved in years 1 and 2 of the programme. Generally, student work is of the level and quality that may be expected from a bachelor's programme in the field of IT, data, and management. The panel feels that in two years, the graduates of the programme will be prepared for the (international) job market.

When the programme is reaccredited in 2026, the future panel will examine whether this positive impression continues in the final theses of the first graduates.

The panel concludes that the programme meets standard 11.

## **4. OVERALL CONCLUSION**

The programme Digital Transformation Management has developed noticeably since its first accreditation in 2021. The panel met with enthusiastic lecturers and staff, who are collaborating on the further development of the programme. The panel appreciates the self-critical attitude and the efforts that the programme makes to continuously improve. Also, the way students are guided and how their feedback is acted on is appreciated by the panel.

The panel finds that the Bachelor programme Digital Transformation Management offered by SRH Haarlem University of Applied Sciences in Haarlem meets the requirements of standard 10 and 11 of the NVAO framework for extensive programme accreditation.

## 5. RECOMMENDATIONS

For further improvement of the programme, the panel makes the following recommendation:

- Group assignments are an important and valuable part of the programme. To reduce free-riding in group assignments, the panel recommends better recording of student (individual) contributions to group projects and giving them an appropriate weight in the grading of group assessments. Additionally, the panel recommends to establish more individual types of assessment.

## ANNEX I Agenda of the site visit

### Digital Transformation Management, The site visit took place on 18 June 2024

Time	Activity
08.30 - 09.00	Arrival and welcome of the audit panel
09.00 – 09.30	Meeting with the Institutional Board
09.30 – 10.30	Meeting with teaching staff
10.30 – 10.45	Break
10.45 – 11.45	Meeting with students
11.45 – 12.30	Meeting with the Examination Board
12.30 – 12.45	Consultation panel
12.45 – 13.00	Feedback from panel
13.00 – 13.30	Lunch

The names of auditees are not included in this report due to privacy concerns. The names of the auditees are known to the secretary of the panel.

#### Working methods

This is an assessment after three years. The focus of this assessment is on the progress made after the initial accreditation, more specifically on the way of examining and on the final level achieved, i.e. standards 10 'Testing and assessment' and 11 'Achieved learning outcomes'.

#### Selection of the auditees

In compliance with the NVAO regulations, the audit panel before the audit decided on the composition of the auditees' delegations in consultation with the programme management and based on the points of attention that arose from the panel's analysis of the provided documentation.

#### Auditing process

The following procedure was adopted. The panel studied the documents regarding the programme (see Annex Documents reviewed), as well as midterm assessments and project results. The panel secretary organized input from all auditors and distributed the preliminary findings among the panel members before the audit. An online preparatory meeting with all panel members took place before the site visit. The audit took place on 18 June 2024.

The panel formulated its preliminary assessments per theme and standard immediately afterward the site visit. These were based on the findings of the site visit, and building on the assessment of the programme documents.

The first version of the assessment report was drafted by the secretary and circulated among all members of the panel. They all reviewed the draft report and gave their comments. The final draft was subsequently forwarded to the institute to correct factual inaccuracies. The panel finalised the report on 3 September 2024.

#### Assessment rules

According to the NVAO assessment rules, a programme can meet, partially meet or not meet the requirements of each standard. Hobéon applied the decision rules for the limited programme assessment, as listed in the "Assessment Framework for Higher Education Accreditation System Netherlands, September 2018".

## **ANNEX II List of documents examined**

- Midterm assessment report
- Appendix A - Educational Profile and Objectives
- Appendix B - Mapping of Learning Outcomes
- Appendix C - Teaching Staff
- Appendix D - Assessment Policy
- Appendix E - Introduction to CORE
- Appendix F - Lecturer Workshops 2023-2024
- Appendix G - Module Handbook
- Appendix H - Exam Board Report 2022-2023
- Appendix I - Grading Sheet Template
- Appendix J - Exam Board Report 2021-2022
- Appendix K - Draft graduation protocol
- Appendix L - Teaching staff onboarding document
- Appendix M- Slidedeck Exam Board Training
- Appendix N, Education and Examination Regulations 2023-2024
- Assessment overview of courses and types of assessment
- Quick Reference Card on rubrics
- Table of assessment forms, competencies, formative, and summative assessment methods
- Education introduction, video to support onboarding faculty staff
- Recording Faculty meeting on rubrics
- Samples of student work, course rubric and grading forms of the following modules:
  - i. Applied Mathematics & Data science;
  - ii. Finance & Accounting for business;
  - iii. Global Challenges, Informatics 2;
  - iv. Informatics 2;
  - v. Software Methods & processes 1.

The panel reviewed student work (assessments and project work) of 5 modules from the first and second year (see above for course titles). For privacy reasons, the names of these students and their student numbers are not included in this report. The names of the students and their student numbers, are known to the secretary of the audit panel.

### ANNEX III Composition of the panel

Name visitation group	Not applicable
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#### Bachelor programme Digital Transformation Management

Name	Succinct CV's
Prof. dr. R. (Rob) Koper	Emeritus Professor of the Open University, with areas of interest in educational innovation, educational sciences, ICT in education, and data science.
Prof. dr. H. (Hans) Mulder	CEO of Venture Informatisering Adviesgroep and affiliated with the University of Antwerp and working as a professor of Policy Informatics.
Dr. X. (Xiao) Peng	Associate professor Data Science, Utrecht UAS
N. (Nienke) Wessel, BSc BA	Student Master Computing Science, Specialisation Data Science, Radboud University

Drs. P. (Pien) Gertenaar	Independent NVAO registered secretary
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Prior to the audit, all panel members signed a declaration of independence and confidentiality which is in possession of the NVAO. This declaration certifies, among other things, that panel members do not currently maintain or have not maintained for the last five years any (family) connections or ties of a personal nature or as a researcher/teacher, professional or consultant with the institution in question, which could affect a fully independent judgement regarding the quality of the programme in either a positive or negative sense.

On 3 June 2024, the NVAO endorsed the composition of the panel to assess the bachelor Digital Transformation Management of Stichting Global School for Entrepreneurship UAS (case number: PA-1948).

**Hobéon** 

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