# MSc Digital Business and Innovation

# Vrije Universiteit Amsterdam

Advisory report of the assessment of the existing programme
Site visit: 12 – 14 November 2024

## Colophon

# Summary

From 12 to 14 November 2024 an assessment panel of AeQui visited the School of Business and Economics (SBE) at VU Amsterdam to perform a quality assessment of eight degree programmes in Business Administration. This external assessment is part of a broader cluster evaluation of wo-bedrijfskunde programmes in the Netherlands. The underlying document reports on the panel assessment of the Master of Science (MSc) in Digital Business and Innovation (DBI) according to the NVAO framework for limited programme assessment. The panel's overall judgement of the programme is positive.

## Intended learning outcomes

The MSc DBI is a one-year full-time 60 EC programme offered in English. Originally a specialisation in the master Business Administration, DBI became a stand-alone degree programme in 2019. The programme focuses on the management of innovations enabled by digital technologies, addressing the organisational consequences they bring. It trains students to help organisations effectively use digital technologies to innovate their business processes, products, services and business models. In addition to recent bachelor graduates, the programme also attracts professionals with work experience and an interest/job in digital innovation. The master DBI has a clear and distinctive profile, features proper learning outcomes, and is well connected to the professional field. Its profile and learning goals are very much in line with the mission and educational vision of the university and the school. The DBI programme is quite unique in the Dutch higher education landscape: it combines academic knowledge with real-world applications, bridges business and IT, and equips students for digital business challenges. Hence, it attracts highly committed and interested students who enrol with a clear purpose. The formulation of the intended learning outcomes is adequate and reflects the domain, the level and the orientation of the programme. The programme involves the professional field in different ways, thereby enhancing the learning experience of its students and maintaining the relevance of its profile and (learning)

objectives. The newly re-established Advisory Board and the contacts with alumni ensure a structural connection to the world of work. The panel concludes that the MSc DBI **meets** this standard.

## Teaching-learning environment

The master DBI has a strong teaching-learning environment featuring a coherent curriculum, a befitting didactic concept, a diverse student audience and well-qualified teaching staff. The panel endorses the decision of the school to offer the programme in English, and approves of its English-language title. The geographical, cultural, and disciplinary diversity of the student cohorts constitutes a value added for both students and staff. Since the previous accreditation, the programme team enhanced the curriculum involving relevant stakeholders. The current curriculum reflects even better than before the programme profile and objective, and underlines the unique features of the DBI programme at VU. Moreover, the course objectives in the curriculum are clearly aligned with the programme learning outcomes. After a start with more than 120 students per year, the intake has decreased to around 90 in the last two years. About half of the staff and approximately 30% of the students is international. The DBI programme has an elaborate didactic concept, which reflects the educational vision of both VU and SBE and befits its specific profile and objectives. Moreover, the teaching staff is well qualified to apply these educational principles to the substance of their

courses, the different teaching formats and the diverse group of students. The DBI programme has a positive vibe: the programme management created a community of students with different nationalities, backgrounds and interests who are taught and supported by an equally diverse, competent and enthusiastic staff team. The panel concludes that the MSc DBI **meets** this standard.

### Student assessment

The master DBI can rely on a robust system of assessment. Both course and thesis assessments are embedded in well-established policies and frameworks at the level of the university and the school, while the DBI assessment plan safeguards that course learning goals are assessed adequately and cover the programme objectives. Course and thesis assessments have undergone several changes since the previous accreditation round, and these adjustments are for the better. The Examination Board has the capacity and competency to assume a variety of assessment tasks and safeguards the assessment quality of the master DBI. The DBI thesis review demonstrated that in terms of assessment, the evaluation form is relevant, the scoring is appropriate and the written feedback insightful. The new online thesis trajectory platform is likely to facilitate an even more consistent handling of the DBI thesis process. The panel concludes that the MSc DBI **meets** this standard.

### Achieved learning outcomes

Students who graduate from the master DBI have effectively acquired all intended learning outcomes. In the DBI master thesis (15 EC),

students do theoretical and empirical research on a topic of personal interest or related to the research themes of the department. The selected and reviewed DBI theses are invariably of good quality and meet the expectations for a final project of academic orientation at master level. DBI graduates, moreover, have been well prepared for a professional career during their studies as they tend to find quickly suitable employment that is in line with the level and domain of their studies. The panel concludes that the MSc DBI **meets** this standard.

### Recommendations

With an eye on the future, the panel offers the following points for development:
- accommodate the technological challenges and future developments in DBI in the programme profile and curriculum;
- develop the international dimension of the DBI domain in the curriculum;
- promote the value added of the existing international and intercultural community of students and staff in communications;
- make admission criteria more transparent without lowering the level of enrolment;
- highlight the research themes at the KIN department as potential topics for a master thesis;
- strengthen the connection in the thesis evaluation form between individual criteria scores and the overall thesis result;
- prepare students during their studies for an even wider range of career paths, including research-informed positions in- and outside of academia.

All standards of the NVAO framework have been positively assessed. On this basis, the panel provides a positive recommendation regarding the accreditation of the MSc Digital Business and Innovation.

On behalf of the entire site visit panel,
Utrecht, April 2025

Eric Dooms                                                    Mark Delmartino
Chair                                                         Secretary

# Introduction

## Institution

Vrije Universiteit (VU) Amsterdam is a university with nine faculties. Since its foundation in 1880, VU Amsterdam has stood for scientific and value-driven education, research, and knowledge transfer. Its education and research are closely linked and have a strong social orientation. All education is provided on one campus in the heart of the Zuidas Knowledge District.

The School of Business and Economics (SBE) is one of VU's faculties and offers five BSc, ten MSc, and 15 postgraduate programmes in economics and business administration. Since its establishment in 1948, SBE has evolved into a school with over 9,000 students and over 500 academic and non-academic staff members.

The school is governed by the SBE faculty board under the leadership of the dean. The academic staff is divided in departments; each head of department assigns the teaching, research, and administrative tasks. SBE has a well-established system of quality assurance of teaching and assessment, which is based on the VU Manual for Quality Assurance of Teaching and Learning and to which all programmes adhere. SBE has three examination boards: one governing all government-funded programmes, one for accredited postgraduate programmes, and one joint board with the University of Amsterdam for the master Entrepreneurship. Since the last accreditation in 2018-2019, the school obtained both AACSB and EQUIS accreditation, which has further improved the quality assurance process.

Each degree programme has a dedicated programme director who is responsible for content, organisation and quality assurance. The director ensures that the curriculum is adjusted to the intended learning outcomes and that the learning environment meets the quality requirements of SBE. In the bachelor and larger master programmes, a programme coordinator assists the director. Each degree programme has a programme committee comprising of an equal number of students and lecturers, appointed by the SBE faculty board.

## Programme

The Master of Science (MSc) in Digital Business and Innovation (DBI) is a one-year full-time 60 EC programme taught in English. Offered since 2010-2011 (first under the name Information and Knowledge Management, later it became DBI) as a specialisation of the MSc Business Administration, the DBI master became as a stand-alone programme in September 2019. Over the years, the focus of the programme has shifted from information systems in business and society to digital innovation and the use of digital technologies to improve and renew business. DBI students are trained to function as a link between digital technology and the 'business'. The student intake consists of both recent bachelor graduates with some background in Business Administration and professionals with work experience and an interest/job in digital innovation. About half of the staff and approximately 30% of the students is international. After a start with more than 120 students per year, the yearly intake has decreased to around 90 in the last two years.

## Assessment

The external assessment of this programme is part of a wider wo-Bedrijfskunde cluster visit involving 20 degree programmes at eight higher education institutions in the Netherlands. VU Amsterdam has commissioned AeQui to carry out the assessment. At VU, the cluster

assessment features eight bachelor, master and post-experience (executive) master programmes.

In the run-up to the visit, a preparatory meeting was held with representatives of SBE to exchange information and plan the dates and programme of the site visit. In collaboration with the programme, AeQui assembled an independent and knowledgeable panel (see Attachment 1). The panel explicitly oriented itself to the cluster in which the programme is placed. The visit was carried out from 12 until 14 November 2024 according to the programme presented in Attachment 2.

The assessment was conducted based on the Accreditation Framework for Higher Education in the Netherlands. VU Amsterdam has a positive institutional audit decision, and therefore the panel assessed four standards of the framework. During the previous accreditation round, the then panel made recommendations for further development. The actions taken in response by the programme are listed in Attachment 3. The panel has integrated this follow-up into its considerations for the current assessment.

The MSc DBI programme put at disposition many relevant materials, which served as background information before and during the visit. An overview of these materials is listed in Attachment 4. In the run-up to the site visit, the panel studied the programme's self-evaluation report and reviewed a sample of 15 theses. Their first impressions on the report and the thesis (evaluations) formed the basis for discussion during an online preparatory meeting on 7 November 2024, and guided the panel's questions during the visit.

An Open Consultation Hour for students, teaching and support staff was organised in connection with the preparatory meeting; eventually, nobody used the opportunity to speak individually and confidentially with the panel. At the initiative of VU Amsterdam, a Development Dialogue will take place in Spring 2025. The results of this meeting will not affect the assessment presented in this report.

The panel conducted the assessment independently. At the end of the visit, the chair informed the programme and institutional representatives about the panel findings, considerations and conclusions. A draft version of the underlying report was sent to the programme, whose response was incorporated into this final version of the report.

# Intended learning outcomes

*Standard 1: 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.*

### Findings

**Profile**

The master programme DBI focuses on the management of innovations enabled by digital technologies, and addresses the organisational consequences they bring. It equips students with the knowledge and skills to help organisations to effectively use digital technologies to innovate their business processes, products, services and business models. DBI students are trained to serve as a crucial link between digital technology and the 'business'. The master DBI therefore offers students not only an academic challenge but also a preparation for their future professional life. By integrating Ethics in the curriculum and encouraging self-reflection, DBI students also develop an awareness of their role as responsible citizens in society.

The panel gathered from the written materials that the aspirations of the DBI programme are directly derived from the educational vision of both VU and SBE. This vision is formulated along two axes: the (1) behavioural component is firmly embedded in the core values Responsible, Personal and Open of the VU; and (2) the content component consists of the roles Academic, Professional, and Citizen. During the discussions on site, the panel noticed that these components are not mere theoretical constructs on paper, but are effectively underpinning the profile, design and implementation of the DBI programme. Hence, the panel endorses that integrating the academic, professional and citizen roles with the behavioural components responsible, personal and open creates a unique

profile for both SBE and for the master students that graduate from the DBI programme.

Following the recommendation of the previous accreditation panel to improve the programme's branding and attract more students to its unique profile, the DBI programme team has been working on enhancing its communication strategy, thereby stressing the unique combination of Information Systems and Innovation Management. The current panel gathered from the discussions on site that the DBI programme, being a specialisation of the MSc BA during the previous accreditation visit, could benefit from a sharper programme profile and curriculum. Now, six years later, both information systems and information management constitute a consistent theme across all courses, while the communication to (potential) students is emphasising the bridge between technology and business. Despite these efforts, student intake has been lower than expected over the last two years. In response, the programme team is revisiting the profile in collaboration with staff, fellow programme directors and the Advisory Board in the current academic year 2024-2025. According to the latter, the label 'digital' is still sufficiently strong and meaningful. The panel acknowledges the continuous efforts of the DBI programme team with regard to profiling and branding, which has been quite effective in attracting the current student cohorts.

In fact, the panel noticed in the written materials and during the discussions on site that the unique profile of the DBI programme is well known to students. In their dedicated section of the report, students mentioned that they chose

for DBI because they wanted to do both a technology-related and business-related master. International students praised in addition the person-centred approach (right from the very start during the application process), as well as the location (campus and accessibility). Students who had studied at VU before referred also to positive experiences during the bachelor study and the personal approach by (teaching) staff. Moreover, one of the alumni interviewed by the panel shared that, having applied for different master programmes at VU, he was happy to be accepted for his 'first choice', the multifunctional DBI programme connecting innovation to digital business. Alumni confirmed in the student chapter and during the site visit that the DBI programme delivered fully on their expectations: they praised the programme's clear and effective implementation. Its practical approach integrating academic knowledge with real-world applications in digital transformation and innovation, is a particular strength. Moreover, the international and diverse student backgrounds enhance the learning experience, fostering a global perspective on digital business challenges. Finally, students and alumni confirmed to the panel that the programme successfully prepares them to serve as a bridge between business and IT.

Furthermore, the panel gathered from the interesting benchmark section in the report that a growing number of programmes/specialisations across Dutch universities is focusing on the domain of digital business and innovation. However, the DBI programme at VU is (still) quite unique in its focus on the use of digital technology to innovate products, services, business processes and business models. Most other programmes are focusing in particular on one of the two domains, emphasising for instance information systems rather than digital business or innovation management. Moreover,

the panel was informed that the researchers of SBE's Knowledge & Information Networks group collaborate with academic staff involved in comparable master programmes abroad, for instance at the London School of Economics or the Warwick Business School.

**Intended learning outcomes**
The panel gathered from the written materials and the discussions on site that SBE has developed a single – and according to the panel relevant – framework to guide the formulation of the learning outcomes of its degree programmes. The intended learning outcomes of the master DBI consist of learning goals and learning objectives: the goals refer to what graduates are or have and are set SBE-wide; the objectives refer to what graduates can do or make and are specific to the DBI programme. The panel observed that there is a direct link between the respective goals and objectives, and that both goals and objectives are clustered around five dimensions: academic and research skills, bridging theory and practice, social skills, broadening your horizon, and self-awareness.

The DBI programme features five learning goals and six learning objectives. While their formulation essentially remained the same, the intended learning outcomes have been reorganised in view of the initial AACSB accreditation: the Association to Advance Collegiate Schools of Business is a highly reputed accreditation body whose international quality standard SBE managed to obtain in 2022. The panel has studied the intended learning outcomes and noticed that they are aligned with the Dublin Descriptors, formulated at the appropriate master level and reflect the academic orientation of the programme. Moreover, while the panel found that some of the learning objectives were formulated in a rather ambitious way ('command of all academic research skills' and 'work well in

a team and reflect on all roles'), it also appreciated their specific focus on the domain of digital business innovation.

**Professional Field**

The panel noticed that all degree programmes under review adopt a similar yet programme-specific approach in their structural connections to the professional world. These contacts invariably serve to improve the learning experience of students, to understand the needs of corporations and organisations, and to enhance the quality and relevance of the respective programmes. The contacts of the DBI programme with the professional field have led to the involvement of companies and organisations in several courses through guest lectures, assignments and cases.

Furthermore, the panel was informed that a dedicated Advisory Board was established in 2022-2023. It currently consists of four members, including two alumni, who all represent the professional field. Since its establishment, the board has been meeting twice per year and provided valuable advice on the required skills, on generational differences, and on the label 'digital' in DBI. Apart from exchanging viewpoints with programme management, the Board also interacted at some point with current students and recent alumni on the changing requirements of the job market and the implications for the DBI programme. The panel welcomes the creation of an Advisory Board as a structural tool to monitor and ensure the continued relevance and alignment with industry needs of the DBI programme.

Finally, the panel noticed that the school is conducting systematic research among its alumni, while programme management also keeps track of the professional whereabouts of its graduates. These efforts ensure that there is ample contact between the programme and its alumni, who in turn provide DBI students with a glimpse of their professional future.

Considerations

Based on the above-mentioned findings, the panel thinks highly of the overarching way in which the mission and educational vision of the university and the school are underpinning the profile and the learning goals of all degree programmes under review. This common approach, which is also visible in the contacts with the professional world, ensures consistency and recognition across programmes.

In this regard, the panel considers that the DBI programme has a clear and distinctive profile, features proper learning outcomes, and is well connected to the professional field. The panel welcomes the efforts of the programme team to emphasise the unique DBI profile both in its communication to (potential) students and in its programme. This branding exercise has clearly carved a stand-alone position for this DBI programme in the Dutch higher education landscape and has attracted committed and interested students. The panel agrees on the one hand with students and alumni that the strength of the programme lies in the combination of academic knowledge with real-world applications, that it succeeds in bridging business and IT, and that it equips students for digital business challenges. On the other hand, the panel also notices - together with the teaching staff and management - that the profile and branding need more work to accommodate the technological challenges and developments in the future. Moreover, the panel sees room for developing the international dimension of the domain in the curriculum, as well as for highlighting the (existing) international and intercultural community of students and staff as a value added of this unique programme.

The panel endorses the way the intended learning outcomes have been adjusted since the previous visit. Their formulation in both learning goals and learning objectives is adequate and reflects the domain (digital business and innovation), the level (master) and orientation (academic) of the programme.

The panel appreciates the different ways in which the DBI programme is involving the professional field. By doing so, it enhances the learning experience of its students and maintains the relevance of its profile and (learning) objectives. According to the panel, the recently established Advisory Board and the efforts to keep track of alumni constitute important steps for the programme to ensure a structural connection to the world of work.

Taking these considerations into account, the panel assesses that the programme **meets** this standard.

## Teaching-learning environment

*Standard 2: The curriculum, the teaching-learning environment and the quality of the teaching staff enable the incoming students to achieve the intended learning outcomes.*

**Programme**

The master Digital Business and Innovation is a one-year full-time programme. The curriculum of 30 EC is spread over the six periods of the academic year at VU and covers four domains: academic core, information systems, innovation management, and digital transformation. All DBI students follow the same five courses (27 EC) and write a master thesis (15 EC). Moreover, students can tailor the rest of the programme to their own interest by choosing three courses from a restricted list of electives (18 EC). Students can replace one of these restricted electives by a free elective, pending approval by the programme management and the Examination Board.

The panel gathered from the written materials and the on-site discussions that the programme team has made significant efforts to address the recommendations of the previous accreditation panel regarding the integration of the two core domains (information systems and digital innovation) and the actuality of the programme contents. The Digital Business and Information Systems course now explicitly builds on the concept of digital innovation, while the Management of Digital Innovation course builds on a conceptualisation of digital innovation that is based in the Information Systems literature. In addition, digital innovation has become a more explicit part of the Management of Sustainable Innovation course. The Business Process Management and IT Alignment course is now called Digital Transformation and Business Process Management and departs from the idea that

digital transformation changes the logics of both process management and IT management. Furthermore, the newest developments in the domain – both in terms of literature and practice - are discussed frequently. The programme contacts with the business world and the recently established Advisory Board ensure that the most recent developments are integrated in the courses. Finally, the panel was informed that the thesis and the research methods course have been redesigned and are now much more attuned to one another. The panel welcomes these adjustments to the curriculum and thinks that these changes are for the better, leading to a curriculum that is (even) more coherent and integrated than before.

Since the previous accreditation, the programme team has also worked hard on the constructive alignment between programme learning outcomes, course learning goals and assessments. The preparations for the initial AACSB accreditation brought along a reformulation of the intended learning outcomes at programme level, while the curriculum revision entailed changes in the course learning objectives. The curriculum map shows which learning objectives are addressed per course. The curriculum assessment connects the respective courses to the types of assessment. The DBI assessment plan brings together all programme, course and assessment elements, which in turn allows to monitor and evaluate the level of constructive alignment in the programme. Students are informed about this connection / alignment in the course descriptions of their study guides. The materials and discussions demonstrated convincingly, according to the panel, that there is a

clear connection between the DBI programme learning outcomes and the DBI course objectives.

The panel gathered from the student chapter and the discussion with DBI students on site that they are overall satisfied with the curriculum. They like the combination of, and coherence between, the courses, as well as the opportunity to tailor the programme to their own interest. In this regard, students were particularly happy with the recently installed free elective option. Moreover, students feel heard when they raise concerns, notably in and through the Programme Committee, and notice that there is willingness among the management and the staff to change/improve. When they were asked what can be improved, students indicated that the study association is very active but could operate with more support and in closer connection with the programme, the school and the university. Moreover, students would like a reduction of the number of deadlines, a more efficient scheduling of courses, a better spread of the study load across the academic year, and some more informative courses in the second half of the programme. Finally, students who had followed the premaster found it very challenging. The panel gathered from the discussion with management and teaching staff that the programme is addressing these concerns.

**Language of instruction**
The title of the DBI programme is in English, and so is the programme's language of instruction. The panel gathered from the written materials and the discussions on site that this is an explicit and obvious choice in view of the international orientation of the programme and the future professional careers of the graduates. In fact, DBI essentially prepares students to operate in a global business community, in which English is the leading language in both academia and the business world. Moreover, many graduates will afterwards join an employer with an international workforce, be it an internationally oriented Dutch firm or an international firm operating in the Netherlands. It is therefore very likely that DBI graduates will be working in an environment where English is the default language.

The panel also learned that the programme attracts a considerable number of international students (30%) because it is offered in English. This diversity in turn is critical to deliver on one of the key DBI programme objectives as students encounter people from diverse backgrounds and learn to operate in an international context. Working and learning in diverse teams, moreover, is in line with the university-wide educational model of the 'Mixed Classroom' that builds upon differences to enrich the learning experience for all students. This, in turn, requires a sufficient number of staff with appropriate international and intercultural expertise, as well as good quality language skills. The panel was informed that more than half of the lecturers on the DBI programme is non-Dutch, while it is university-wide policy that lecturers (can follow training to) display English language skills at level C1.

Based on the written materials and the discussions on site, the panel endorses the English title of the programme, as well as the extensive motivation that underpins the decision to offer the master DBI in English.

**Didactics**
The DBI programme features an educational concept that accommodates a variety of learning approaches: (1) *academic foundation:* the programme engages students with the latest research through its link with the KIN research group. Bringing state-of-the-art academic

research into the classroom helps to enhance students' understanding of new developments and to develop a critical mindset to distinguish hype from reality; (2) *practical relevance and future-orientation*: the programme closely follows developments in practice to stay up-to-date and be relevant for students' future; (3) *project-based courses*: all courses involve project work that often involves real-life organisations, which in turn gives students the opportunity to increase both their network and knowledge and prepares them optimally for their professional careers; (4) *multidisciplinary*: courses build on the combination of perspectives to understand the multifaceted phenomenon of digitalisation. The primary domains of information systems and innovation management are taught in a multidisciplinary way by specialist staff in organisation and management, engineering, sociology, and economics; (5) *customised approach*: students can choose between topical electives and future work orientation in an established organisation, in a consultancy, or in an entrepreneurial role; (6) *international community*: attracting a diverse student population in terms of nationality, work experience and prior education, the programme fosters a sense of community among the students in which international students feel at home. The VU concept 'Mixed Classroom' stimulates a diverse atmosphere in class and provides an inclusive learning environment for all students; (7) *opportunities to excel*: - ambitious DBI students can get involved in research projects as a student assistant, and in an extended trajectory that prepares for a PhD position; (8) *active-blended learning*: reflects the vision of the university to develop online teaching tools with the ambition to combine on-campus teaching with technological opportunities that enhance teaching effectiveness.

The panel gathered from the discussions on site that the didactic concept is far more than a theoretical construct: in fact, each of these approaches stands for several concrete initiatives and (good) practices that are implemented in the day-to-day delivery of the DBI bachelor programme.

**Student admission, intake and success rate**

The panel noticed in the self-evaluation report and the detailed appendix on student data that since the initial accreditation, the yearly intake has decreased from 130 (in 2020-2021) to 87 (in 2024-2025), while the number of applicants has risen steadily from 524 to 734. The programme has been analysing the reasons behind the declining conversion rate from applications to enrolments, and has come to the conclusion that the admission policy is up for revision. Prospective students continue to need at least an academic bachelor degree, as well as a sufficient background in business administration. While students still need to have demonstrable knowledge of information systems and innovation management, the programme does no longer require a certain number of EC in these topics. Hence, the programme can now attract a broader variety of hardworking and motivated students, with an educational background in (International) Business Administration or other domains such as Social Sciences, Economics, Computer Sciences and Industrial Design. In addition, the programme will evaluate its premaster programme, which had the reputation to be particularly tough, and focus on bringing premaster students up to par with the above-mentioned minimum requirements in terms of business administration and research skills (academic bachelor degree). Provided that the new cohorts continue to start more or less on an equal footing irrespective of their entry qualification (bachelor or premaster), the panel endorses the new admission policy. After all, their diversity in educational backgrounds is an important value added for the DBI students. The

panel realises this is a balancing act: it therefore encourages the programme to ensure that its new admission policy allows to maintain the same level of education and thus avoid a situation in which (several of the) newly enrolled students would have to work even harder during the year to catch up and achieve the end level qualifications.

According to the student data, the share of students dropping out is rather limited (less than 10%). In terms of success rate, the average study duration is 15 months: students complete their one-year study with an average delay of 3 months. About 60% of the DBI students finish within the nominal duration of one year, while 80% do so in two years. Students indicated to the panel that most courses were feasible in their own right, but that the study load was not divided equally across the year with one or two courses being particularly demanding. The panel was informed that the programme is currently looking to streamline the study load across the different periods. Moreover, the new and structured approach to the thesis trajectory is likely to help students in finishing the programme in time, or at least to not further enhance their study delay. The panel welcomes the (envisaged) changes to enhance study success and reduce study delay.

**Staff**
The panel gathered from the self-evaluation report that almost all teaching is performed by academic staff belonging to one SBE department, Knowledge, Information & Innovation (KIN). According to the staff overview, the DBI programme features 24 teaching staff, ranging from 7 full professors over 6 assistant professors to 2 lecturers. About half of the staff is female, and 54% has an international background. The faculty members are active in research, hence they can guide students to the current academic

research frontiers, help shape their conceptual skills, and prepare them to engage in research. In addition, there are several lecturers who hold positions at SBE and in industry, and are thus well placed to support students in building bridges between science and practice. During the visit the panel established that staff dedicated to the DBI programme has good research credentials.

Furthermore, the panel noticed that staff development is well organised at DBI as it is embedded in policies and documents including 'SBE HRM educational policy', 'SBE BKO policy', and 'SBE Tenure Track procedure'. All academic staff are expected to have English language proficiency at level C1. Permanent staff members can pursue continuing education in specific fields such as active blended learning, mixed classrooms, activating work formats, examinations and assessments. Currently, 80% of the academic staff involved in DBI holds a university teaching qualification (BKO) and 21% obtained also the senior qualification (SKO/LOL). The latter group is particularly active in course innovation, notably with regard to active blended learning in both teaching and assessment. During the visit, DBI staff gave some very concrete examples of how they are adjusting their teaching practice to serve both large and small groups of students. Students from their side emphasised the expertise, didactic skills and commitment of the staff. Taking all these elements together, the panel is convinced that the DBI staff is well qualified to teach a diverse student audience.

Based on the written materials and the discussions on site, the panel established that the programme is well managed and coordinated. The discussions on site have shown that both the programme director and the programme coordinator are experienced and co-operate as a

very effective team. The DBI staff indicated to the panel that their management is very supportive and of crucial importance to help teaching staff to navigate across the different educational approaches when designing, preparing and delivering the respective courses. Moreover, programme management goes at lengths to create a team spirit among staff who primarily belong to one department, through meetings, regular programme updates, and by improving the onboarding process of new staff. In addition to the informal 'coffee corner moments' which happen naturally as all department staff have their offices on the same floor, the department also organises so-called "Kincubators", a weekly staff gathering meeting on a specific research, didactical or educational topic. According to the panel, the DBI programme is doing well because the management is good at facilitating the teaching staff to operate as a team. This team approach is also recognised as a strength by DBI students.

## Considerations

Based on the above-mentioned findings, the panel considers that the master Digital Business and Innovation has a strong teaching-learning environment featuring a coherent curriculum, a befitting didactic concept and well-qualified teaching staff. The panel moreover endorses the decision of the school to offer the programme in English, and approves of its English-language title. According to the panel, the geographical, cultural and disciplinary diversity of the student cohorts constitutes a distinctive feature of the programme, as well as a value added for both students and staff.

The panel thinks highly of the efforts of the programme team to enhance the curriculum in line with the recommendations of the previous accreditation panel and the internal developments at university and school level. The current curriculum with its combination of mandatory and elective courses reflects even better than before the profile and objective of the programme, and underlines the unique features of the DBI programme at VU. Moreover, the DBI course objectives in the curriculum are clearly aligned with the programme learning outcomes.

The panel is impressed by the didactic concept that underlies the programme. Together the different components reflect the educational vision of both VU and SBE and befit the specific profile and objectives of the DBI programme. In addition, the teaching staff is well qualified to apply these educational principles to the substance of their courses, the different teaching formats and the diverse group of students.

During the site visit, the panel felt a positive vibe among all stakeholders it spoke to. The panel commends the programme management for creating in this programme a community of students with different backgrounds and interests who are taught and supported by an equally competent and enthusiastic staff team.

In addition to these positive considerations, the panel welcomes the efforts of the programme team to address some of the previously reported challenges and weaknesses in terms of profile, admission, study load, feasibility, and electives. While some of the changes are still relatively new, the panel is confident that these initiatives will further strengthen the teaching-learning environment.

Taking these considerations into account, the panel assesses that the programme **meets** this standard.

# Student assessment

*Standard 3: The programme has an adequate system of student assessment in place.*

## Findings

### Assessment system

The panel gathers from the extensive written materials and the discussions on site that the DBI programme operates an assessment system that complies with the assessment policy and procedures of SBE, which in turn are based on a university-wide policy on assessment quality. The programme has put at disposition both policy documents, the Manual for Quality Assurance of Teaching and Learning – VU Assessment Framework and the SBE Policy Plan – Assessment Policy. Moreover, every degree programme has a dedicated Assessment Plan, which is updated every year and describes the assessment vision, the programme and course objectives, the curriculum map and curriculum assessment, and the forms of testing. Both programme director and examination board use the assessment plan to control the relationship between the programme's intended learning outcomes, the course-level objectives and their assessment.

The panel has looked into the most recent Assessment Plan for the master DBI and established that the elaborate document does justice to both central policies and the specificity of the degree programme, ensuring constructive alignment between goals, objectives and assessment. It is programme-wide policy that every course includes different forms of assessment and that a substantial part of the grade is based on an individual assessment component. In this regard, the panel was informed that several course assessments feature a group component and that such assignments include safeguards against free-riding and/or individual reflections.

During the visit, the panel discussed on several occasions and with different stakeholders the developments in the field of Artificial Intelligence (AI) and its impact on course delivery and assessment. The Examination Board included regulations on the use of (Generative) AI in its Rules and Regulations, which have been further specified by the respective programme directors. Across the school/programmes, these regulations follow the principle that they should instigate awareness and action rather than punishment, and that they should foster autonomous and critical thinking while recognising that AI can also be a support for learning. Hence, all course coordinators address AI in their manuals and choose from a menu of AI usage options for assignments. These options range from AI not being allowed at all to AI being mandatory. Both staff and students indicated to the panel that the rules are clear at the level of the individual assessment/course. In addition, programme and SBE management mentioned that the university and the school are working on comprehensive policies, which are likely to affect the contents of the courses, the delivery of education, the organisation of assessment, and eventually the intended learning outcomes of the respective programmes. Currently, there is a focus on the acquisition of AI skills, which differs at bachelor and master level. This specific area of attention is very new, and its implementation differs per programme. The panel gathered from the discussion with staff and management that there is not only a good working relationship with the central level, but that DBI staff also actively share their knowledge

about these tools with colleagues. In sum, the panel found that the DBI programme is addressing issues of (Generative) AI in a mature and appropriate way. Nonetheless, it is clear to the panel – and the programme – that the developments regarding (Generative) AI require ongoing attention not only in terms of thesis writing and assessment, but also in didactics.

**Course assessment**

At the level of individual courses, coordinators select the most appropriate assessment methods for testing the learning goals. They do so in close collaboration with the programme director who ensures that across the programme a variety of assessment methods is used. Each course has its assessment file. This file contains a test blueprint, the exam, resit exam and/or assignments, a model answer plus scoring guide, a test and item analysis, the results of the course evaluation, and a short reflection report by the examiner. Course coordinators are free to tailor the different exam components to the requirements of their course, provided they inform the programme management accordingly. The teaching staff is encouraged to experiment with innovative forms of teaching and testing; in every course, however, the individual student performance should be the decisive factor in the assessment. The panel agrees to the emphasis on individual assessment components and the promotion of diversity and innovation in assessment formats. It welcomes the elaboration of assessment files, which constitutes a good basis for the Examination Board to monitor the quality of assessment per course and disseminate the good practice examples they come across in their reviews.

The panel was informed that in order to enhance the alignment between learning goals and assessment, some DBI courses (such as Management of Sustainable Innovation)

switched their assessment forms recently. For the same reason – that a particular assessment form aligns best with the goals and activities of a course – the team grade allocated to the Digital Entrepreneurship Project goes beyond the stated rule/policy, a decision that was validated by the programme director before. The cases and exceptions cited and presented were relevant, according to the panel. It therefore appreciates the meticulous approach of the programme team, the course coordinators and the examiners in implementing the assessment system.

Furthermore, the panel noticed both in the written materials and during the discussions on site that DBI students appreciate the programme's approach to assessment. In their dedicated section of the report, students mentioned that the scope of examination differs per course. Some exams aim to capture critical thinking and/or application of theory in practice, while other tests focus more on the replication of knowledge. Students also find the practical assessments relevant, and often fun. In addition, students emphasised that assessment is organised in a transparent way, and that feedback is either provided automatically or can be obtained upon request. If anything, students indicated – in line with the high pace and dense workload mentioned before – that the many deadlines and in-course tasks make it challenging to study and prepare for exams. The panel acknowledges this point raised by the students and, having discussed it with staff and programme management, encourages the team to look into ways to reduce the number of (interim) deadlines.

**Assessment of graduation works**

The master thesis is the culmination of the DBI programme. The thesis process is governed by clear rules and procedures, which are explained

in an information session to students and in the thesis manual. The master thesis is conceived as a course with learning goals and a detailed assessment grid. A dedicated DBI thesis coordinator oversees the entire process, which is very similar to other master programmes at SBE. Master theses at SBE can only be supervised and assessed by academic staff members with a PhD. The DBI thesis coordinator proposes a second reader who is knowledgeable of the thesis topic and / or its methodology and can offer an independent assessment. The panel acknowledges that the entire thesis process is well structured and includes a proper manual for students and an instruction for supervisors. Students from their side indicated that the thesis manual is comprehensive and the thesis process clear.

As part of its external assessment, the panel reviewed a representative sample of 15 DBI master theses, as well as the corresponding completed evaluation forms. The selected theses were submitted in the academic year 2023-2024. The quality of the DBI theses will be addressed under the next standard. In so far as thesis assessment is concerned, the panel noticed that the thesis evaluation form is relevant as it contains a well-developed rubric that allows students to understand the assessors' appraisal of the different thesis components. Moreover, the panel found that the rubrics were being used by both assessors and that the final scores were very much in line with the respective appreciations of the panel members. The assessors generally provide extensive feedback both at an intermediate stage (by the supervisor) and upon submission of the final version (by the second reader and the supervisor, separately). In all cases the panel thought the evaluation forms had been completed in an insightful way. As a point for attention the panel noticed that the visualisation of the evaluation forms was confusing and their printed/digital form

was extremely long. Moreover, it was not entirely clear how the scores on the various criteria lead to a final grade, nor how differences in grading between the assessors lead to a joint assessment.

During the discussion on-site, the programme team indicated – and alumni confirmed – that students do get extensive and constructive feedback orally or by e-mail during the thesis trajectory and again after the final presentation. Moreover, the new online thesis trajectory platform, which has been piloted in other programmes but is not yet been used by DBI, should facilitate the production/printout of workable evaluation forms. The team indicated that across the different degree programmes including DBI there is no fixed or calculated weighting of the evaluation criteria that automatically lead to a final score. Such decisions are left to the discretion of the programme director and/or the individual assessors. While it understands this argument, the panel nonetheless invites programme directors and Examination Board(s) to check if there are ways to link the sub-scores on evaluation to the overall score on the thesis. This is all the more important as some criteria cover several thesis components.

**Quality assurance**
The panel gathered from the written materials that different stakeholders are involved in assuring the quality of assessment: there is first and foremost the Examination Board, but also the programme director and individual examiners play a role. The Examination Board supervises the examination process and carries final responsibility for safeguarding the quality control of assessment and examinations. It investigates systematically whether the process of assessment within SBE is carried out according to predefined criteria. These criteria are well established and include the reliability and validity of

the tests. In the event that tests are not up to standard, the Examination Board reports to the programme director and the examiner and issues interventions for improvement.

During the site visit, the panel met with representatives of all three Examination Boards. It gathered from the written materials and the discussion that these Boards – there is one for all publicly funded degrees, one for privately funded programmes, and one joint Board for the joint programme with the University of Amsterdam – fulfil their legal tasks adequately and have relevant expertise regarding assessment, fraud and legal issues. The external member has extensive assessment expertise. It is a conscious decision of SBE to have several programmes supervised by one Examination Board as this leads to greater uniformity, clarity and authority.

Because the entire assessment process is a complex chain of processes, products, procedures, and agreements, the Examination Boards at SBE not only guard the quality of assessment, but also look into assessment policy, assessment plans, assessment construction, and organisation. The panel was informed that in 2022-2023, the Examination Board paid extra attention to the reliability and consistency of the thesis assessments. The reason for this was the previously observed inconsistency between thesis forms and the increasing doubts around the authenticity of some theses through the use of outside assistance or AI tools in writing the thesis. This endeavour resulted in recommendations for adjustment of the thesis process and thesis manuals. The discussion with representatives from all three Examination Boards demonstrated according to the panel that the board members are knowledgeable about the different degree programmes they monitor and committed to their quality assurance tasks. Moreover, the panel noticed with satisfaction that the external members are highly valued members of

the respective boards because of their assessment expertise.

The Examination Board for publicly funded degree programmes is in charge of assuring the assessment in the DBI programme. The panel noticed from the materials and discussions that the Examination Board follows-up attentively on any issue that may pop up in the programme. On average the board selects two DBI courses per year for further examination. Programme management is informed about this decision, supports course coordinators in submitting the dossier, and includes the received feedback in course coordinator conversations. According to the panel, the quality assurance of DBI assessment is in competent hands with the Examination Board.

### Considerations

Based on the written materials and the discussions on-site, the panel considers that the master DBI can rely on a robust system of assessment. This appreciation is based first and foremost on the fact that both course and thesis assessments are embedded in well-established policies and frameworks at the level of the university and the school. The DBI assessment plan, moreover, demonstrates that course learning goals are assessed adequately. This, in turn, ensures that the learning outcomes at programme level are covered.

Course and thesis assessments have undergone several changes since the previous accreditation round, and these adjustments are for the better, according to the panel. The panel is also positive about the capacity and competency of the Examination Boards, as is demonstrated by the variety of assessment tasks it is assuming. The panel is convinced that the Examination Board for publicly funded degree programmes is very

capable of assuring the assessment quality of the MSc DBI programme.

The panel's review of the DBI master theses demonstrated that in terms of assessment, the evaluation form is relevant. Moreover, the panel agreed in all cases to the thesis scores and found that all DBI thesis evaluation forms were completed in a comprehensive and insightful way. The panel wants to commend the DBI programme and its thesis assessors for their efforts and skills. In line with its suggestion across degree programmes, the panel welcomes the new online thesis trajectory platform and invites also the DBI programme to strengthen the connection in the thesis evaluation form between the individual criteria scores and the overall thesis result.

Taking these considerations into account, the panel assesses that the programme **meets** this standard.

# Achieved learning outcomes

*Standard 4: The programme demonstrates that the intended learning outcomes are achieved.*

There are two ways to establish whether the intended learning outcomes have been achieved: by reviewing the quality of the graduation projects and by looking at the professional whereabouts of the alumni after their graduation. The panel has looked at both elements when assessing the quality of the programme.

**Quality of graduation projects**

The achievement of the intended learning outcomes is assessed by the cumulative results of the exams and the thesis. The DBI master thesis is the culmination of the programme and as such assesses most of the learning objectives. As part of its external review, the panel looked at a selection of 15 master theses, which were representative in terms of final scores.

The panel found that the DBI theses were generally of a high standard. The research questions were actual and intriguing and the theoretical background was often well developed. Across the sample the panel saw a variety of research designs, both qualitative and quantitative, which befitted the research question and were implemented correctly. While the quality of the thesis sample was good - and very much in line with the final scores - the panel did wonder why only few theses could be linked to the research of the academic staff. The programme team indicated that students are informed prior to the thesis trajectory about the actual research themes in the KIN department, as well as about possible thesis topics. However, students are at liberty to propose a thesis topic of their own interest, which will be accepted where appropriate and possible. While emphasising that students should have the opportunity to come up with their own topic, the panel suggests that the research themes of the supervisors be more clearly highlighted. In this way, students can benefit (even more) from the expertise of both researchers and KIN.

In sum, the panel is positive on the overall level of the DBI master theses as it reviewed several good research projects and only a few that were merely sufficient but still clearly beyond the pass/fail threshold. It is fair to conclude that through the master thesis, DBI students demonstrate that they have reached the (intended) learning goals and objectives.

**Performance of graduates**

The panel gathered from the written materials and the discussions on site that DBI graduates are prepared for professional life after the master programme. As part of the student chapter, recent graduates indicated that they were satisfied with the competences they acquired during their study and which they can now use on the labour market. Moreover, because of the programme's strong links to industry and the practical assignments involving companies in class, most students quickly secure suitable employment as soon as they enter the job market.

The panel welcomes the efforts of the DBI programme to keep track of its graduates. A dedicated alumni survey through LinkedIn mid-2023 showed that alumni of the 2020 and 2021 cohorts found employment in a wide range of jobs and positions: in digital innovation or IT departments across sectors and including healthcare and government, as IT-consultant or project manager, in consultancy positions supporting

clients in the use of digital technology in change processes, or with digital start-ups.

As a point for attention, students and recent alumni highlighted that the programme puts significant emphasis on a career in consultancy, while many other opportunities exist, including in academia. Within established organisations there are relevant staff and managerial roles related to digital innovations, in addition to numerous opportunities in start-ups. The panel noticed in the discussions on site that the programme management is aware of this concern and is looking for ways to not only broaden the students' professional horizons but also prepare them for a wider range of career paths. In this regard, the panel suggests the programme to also inform DBI students more explicitly about career opportunities in research, for instance with ABRI, the business research institute at SBE.

In sum, the panel thinks highly of the employability of DBI graduates. The fact that they manage to find a relevant position quickly and in a wide variety of relevant positions and sectors demonstrates that the programme delivers high-quality students.

## Considerations

Based on the above-mentioned findings, the panel considers that students who graduate the master DBI have effectively acquired all intended learning outcomes. According to the panel, the selected and reviewed DBI theses are of good quality and meet the expectations for a final project of academic orientation at master level. Moreover, DBI graduates are well prepared during their studies to find suitable employment that is in line with the level and domain of their studies. While alumni find relevant jobs in different positions and sectors, the panel encourages the programme to prepare students for an even wider range of career paths, including research-informed positions.

Taking these considerations into account, the panel assesses that the programme **meets** this standard.

## Attachment 1: Assessment panel

**dr. Eric Dooms, chair**
Associate Professor of Strategy-TIAS

**dr. Johanna Vanderstraeten, expert**
Associate professor Entrepreneurship at University of Antwerp, Belgium

**prof.dr. Albert Boonstra, expert**
Professor Information Management, Faculty of Economics & Business at the University of Groningen

**Karen Taselaar, student-member**
Student BSc International Business Administration, University of Twente

The panel was supported by Mark Delmartino MA, certified secretary.

All panel members and the secretary have completed and signed a statement of independence and impartiality, and these have been submitted to NVAO.

# Attachment 2: Site visit programme

<u>Location</u>: NU Building, VU campus, De Boelelaan 1111, Amsterdam

**Tuesday 12 November 2024**

| | |
|---|---|
| 09.00 | Arrival panel and internal meeting |
| 10.00 | Faculty Board |
| 10.45 | Programme Management BSc Bedrijfskunde & BSc International Business Administration |
| 11.45 | Students/Alumni BSc Bedrijfskunde & BSc International Business Administration |
| 12.45 | Lunch and internal meeting |
| 13.30 | Lecturers BSc Bedrijfskunde & BSc International Business Administration |
| 14.30 | Break |
| 15.00 | Programme Management MSc Digital Business and Innovation |
| 15.35 | Students/Alumni MSc Digital Business and Innovation |
| 16.10 | Lecturers MSc Digital Business and Innovation |
| 16.40 | Internal deliberations |
| 17.45 | Preliminary feedback programmes day 1 |
| 18.15 | End of day 1 |

**Wednesday 13 November 2024**

| | |
|---|---|
| 09.00 | Arrival panel and internal meeting |
| 09.30 | Programme Management MSc Verandermanagement |
| 10.05 | Students/Alumni MSc Verandermanagement |
| 10.40 | Lecturers MSc Verandermanagement |
| 11.10 | Break |
| 11.30 | Examination Boards all programmes |
| 12.30 | Lunch and internal meeting |
| 13.15 | Programme Management MSc Business Administration fulltime |
| 13.50 | Programme Management MSc Business Administration parttime |
| 14.25 | Students/Alumni MSc Business Administration parttime |
| 15.00 | Lecturers MSc Business Administration parttime |
| 15.30 | Break |
| 15.40 | Students/Alumni MSc Business Administration fulltime |
| 16.15 | Lecturers MSc Business Administration fulltime |
| 16.45 | Internal deliberations |
| 17.45 | Preliminary feedback programmes day 2 |
| 19.00 | End of day 2 |

**Thursday 14 November 2024**

| | |
|---|---|
| 09.00 | Arrival panel and internal meeting |
| 09.30 | Programme Management MSc Transport Supply Chain Management & MSc Entrepreneurship |
| 10.30 | Students/Alumni MSc Entrepreneurship |
| 11.05 | Lecturers MSc Entrepreneurship |

11.35   Break
11.55   Students/Alumni MSc Transport & Supply Chain Management
12.30   Lecturers MSc Transport & Supply Chain Management
13.00   Lunch and internal meeting
14.30   Preliminary feedback programmes day 3
15.00   Internal deliberations
16.30   Plenary feedback all programmes
16.30   End of site visit

The names of the participants are available with evaluation agency AeQui.

## Attachment 3: Recommendations from previous assessment

The MSc Digital Business and Innovation programme was last assessed in 2018-2019. The overall assessment was satisfactory. The panel issued five points of feedback. Since the previous visitation, a series of smaller and larger changes have been implemented to enhance the programme's quality in line with the feedback of the previous accreditation report.

The most important changes are as follows:

**1. To consider to improve its branding, in order to attract more students to the programme with its unique profile**

We have been gradually working on the communication about our programme, indeed emphasizing the unique value of combining Information Systems and Innovation Management in one programme. This is what sets the MSc DBI apart from comparable programs, and we also see that this is acknowledged by students as they apply for the programme. Over the past two years we have witnessed a slight decline in student numbers which has re-emphasised the importance of this issue. In the academic year 2024-2025, we will reflect on the profile of our programme with our lecturers, other programme directors, and our Advisory Board.

**2. To strengthen the integration between the two domains of Information Systems and Digital Innovation, since students can avoid the integration of the two domains. This integration is part of the unique profile of the programme, and therefore should be consistently implemented throughout the curriculum**

The integration of the two domains has been implemented throughout the programme. For instance, the Digital Business and Information Systems course explicitly builds on the concept of digital innovation. Finally, the Management of Digital Innovation course builds on a conceptualisation of digital innovation that is based in the Information Systems literature. Nevertheless, as courses are updated we increasingly see a more explicit integration of the domains, as we also see in our research. For instance, the Business Process Management and IT Alignment course is now called Digital Transformation and Business Process Management and departs from the idea that digital transformation changes the logics of both process management and IT management. Digital innovation has also become a more explicit part of the Management of Sustainable Innovation course.

**3. To reconsider the contents of the course on sustainable innovation management; the digital aspect in this course is quite limited and as such, the course does not connect very well to the programme as a whole**

**4. To keep ensuring that new developments find their way into the curriculum in due time**

We frequently discuss the newest developments – both in the literature, as well as in practice. Thanks to our many contacts with the business world, we are always able to integrate the most recent developments in our courses. The advisory board, which was initiated in 2022, has played a very important role in this.

**5. To implement the systematic review of theses.**

Although the programme did not have a formal VU mid-term evaluation due to the successful completion of the AACSB accreditation in early 2022, we did conduct a formal review of thesis samples with an external panel in 2023. The external panel did not mention any significant problems with the thesis sample. We have also organised a session focusing on internal alignment on thesis assessment (January, 2024). The input for this session was one specific thesis, which was assessed by all attendees. In the session we discussed the different considerations people had for their assessment. This provided important input for a further refinement of the assessment criteria and procedures.

# Attachment 4: Reviewed documents

Self-evaluation report
MSc Digital Business and Innovation, Self-evaluation report NVAO accreditation cluster Business Administration, VU Amsterdam 2024.
- General information
- Intended learning outcomes
- Teaching-learning environment
- Assessment
- Achieved learning outcomes
- Strengths and weaknesses analysis
- Student's paragraph

Appendices
- Intended Learning Outcomes
- Programme 2023-2024
- Course descriptions 2023-2024
- Assessment plan 2023-2024
- Thesis Manual and thesis assessment form 2023-2024
- SBE Assessment policy
- VU Assessment policy
- Teaching and Examination regulations 2023-2024
- Regulations and Guidelines regarding examinations SBE 2023-2024
- Annual report examination board funded programmes SBE 2022-2023
- Overview of academic staff
- Graduates in academic years 2022-2023 & 2023-2024
- Intake, drop out and success rates
- AACSB Memorandum

Additional materials
- Cluster bedrijfskunde – curriculumwijzigingen 2024-2025
- Cluster bedrijfskunde – instroom 2024-2025

Thesis review
A representative sample of 15 graduation works and their assessment forms, selected among students graduating the master programme Digital Business and Innovation in 2023-2024. Names and student numbers are available with evaluation agency Aequi.