



Postbus 5050

NL-3502 JB Utrecht

+31 30 87 820 87

www.AeQui.nl

info@AeQui.nl

Bachelor Logistics Management Breda University of Applied Sciences

Report of the extensive programme assessment
6 and 7 June 2024

September 2024

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Assessment Agency for Higher Education

Colophon

Programme

Breda University of Applied Sciences
Breda

Bachelor: Logistics Management

Location: Breda

Mode: fulltime

Croho-number: 35522

Panel

Ab Groen, chair

Rianne Niewold, member

Mark Delmartino, member

Sophia Pasbecq, member

Lisette Sinnige, student member

Linda van der Grijspaarde, secretary

The panel was presented to the NVAO for approval.

The panel assessed on the basis of NVAO Framework 2018

AeQui VBI

Postbus 5050

3502 JB Utrecht

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Summary

On 6 and 7 June 2024 an assessment panel of AeQui visited the Bachelor programme Logistics Management at Breda University of Applied Sciences (BUas). The panel judges that the programme meets each standard; the overall quality of the programme **meets the standard**.

Intended learning outcomes

The programme aims to educate professionals who are able to think from a supply chain perspective, rather than focusing on separate links within the chain. On top of that they have several skills in communication, collaboration and research, and a broad perspective on topics like marketing, purchase, sales and finance. The intended learning outcomes, in the form of competencies, are logically derived from the national educational profile. The intended learning outcomes are well described in terms of level and orientation. The panel assesses that the programme meets this standard.

Programme

The fulltime programme offers a Dutch-taught and an English-taught track. Also, there is a 3-year track for VWO entrants and a 3-year track for MBO entrants. The different tracks fit well with the needs and abilities of students from different backgrounds. The intended learning outcomes in the form of competencies are translated into learning objectives of the courses. The modules together form a complete palette of subjects and contents. Research skills are sufficiently incorporated in the programme; there is continuous focus on research and project skills through the programme. Much attention is paid to the alignment between research by the professorships and its application in education. Students are involved in conducting research from the very first year, for example by taking measurements in the field. The programme allows for the development of professional practice skills by interweaving current practice into the teaching. The programme has chosen a learning environment that provides the opportunity to achieve the intended learning outcomes, with a wide variety of didactic approaches and many

opportunities to collaborate with fellow students, researchers and in practice. The panel assesses that the programme meets standards 2, 3, 4 and 5.

Staff

The programme has a driven, substantively strong teaching team. The number of staff is more than sufficient for the realization of the educational programme. The panel notes that the team is sufficiently diverse and that the expertise of the staff is in line with the requirements of the bachelor's degree programme. By having lecturers participating in research activities, they are active in innovation, develop their research skills and through this innovation of the educational programmes is guaranteed. The panel assesses that the programme meets standard 6.

Facilities and support

The programme is offered at the campus of BUas in Breda. The campus is inspiring, adequately furnished and easily accessible. The campus environment is a very pleasant environment, contributing to a small scale setting and promoting cross-domain cooperation and learning for education, research and industry. The study guidance is personal and is easily accessible to the students. They receive tutoring from the Personal & Professional Development coach and during the third and fourth years, individual guidance in the form of tutoring is also offered by the coordinators and supervisors of the placement and graduation project. The facilities and digital learning environment are adequate. The panel assesses that the programme meets standards 7 and 8.

Quality assurance

The programme has a comprehensive and carefully designed quality assurance system. There are

various roles and duties to ensure quality at the academy level. With the introduction of team-based working, lecturers within a semester team are also expected to take control over evaluation and improvement of education. Partly due to the involvement of all stakeholders in qualitative and quantitative evaluations and the careful feedback of outcomes, there is a strong culture of quality. The programme takes good care to close the quality loop by following up on areas for improvement that emerged from evaluations. The panel assesses that the programme meets standard 9.

Assessment

The programme has an adequate assessment system and assessment procedures. Multiple types of assessments have been implemented and they are aligned with learning outcomes and the Body of Knowledge and Skills. The programme provides a good balance between oral and written exams, between individual and group assignments, and between exams and assignments. The choice of competency-based education is evident in the forms of assessment chosen. The panel assesses that the programme meets standard 10.

The assessment was carried out according to the schedule presented in attachment 2. The panel has carried out its assessment in relation to, and in consideration of, the cluster of programmes in which this programme is placed. The contextualisation of the programme within its cluster was conducted by the complete panel during the preliminary meeting and the final deliberations. The knowledge required for this was present in (part of) the panel. The programme has made several developments, based on the results of the former assessment (see attachment 3). The panel considered these developments as an integral part of the current assessment. The panel has assessed the programme in an independent manner; at the end of the visit, the chair of the panel presented the initial findings of the panel to representatives of the programme.

All standards of the NVAO assessment framework are assessed positively; the panel therefore awards a **positive recommendation** for the accreditation of the programme.

On behalf of the entire assessment panel,
Utrecht, September 2024

Ab Groen
Voorzitter

Achieved learning outcomes

Achievement of intended learning outcomes is measured by both the internship and the graduation project. Based on the final products of a selection of alumni, the panel assesses that students reach bachelor's level. The programme delivers professionals who are ready for complex tasks and responsibilities that fit the profile of the logistics manager. The professional field is positive about the BUas graduates. Many alumni choose to pursue a master's degree after the bachelor's. The panel assesses that the programme meets standard 11.

Recommendations

The panel issues the following recommendations:

- When translating the revised version of the national Logistics profile into programme learning outcomes, ensure that you add your own colour/profile to the competencies. Consider the focus on internationalisation and the '+shaped' profile, for example.
- When renewing the (graduate) internship assessment forms, ensure that it is clear how the Level 2 and Level 3 competencies are operationalized.

Linda van der Grijspaarde
Secretaris

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

The bachelor's programme Logistics Management is positioned in the Academy for Built Environment & Logistics (ABEL) of Breda University of Applied Sciences (BUas).

The programme aims to educate professionals who are able to think from a supply chain perspective, rather than focusing on separate links within the chain. On top of that they have several skills in communication, collaboration and research, and a broad perspective on topics like marketing, purchase, sales, finance and entrepreneurship. Students specialise in for example Last-Mile Logistics, Supply Chain Resilience or digital transformation within logistics. Students also have the opportunity to specialise in Crowd Safety Management or Healthcare Logistics.

The document *Beroeps- en Opleidingsprofiel Logistiek* (BOP, 2019) serves as the basis of all education for technical and economic logistics professionals at the bachelor's level in the Netherlands, including the bachelor's programme Logistics Management. The document was established in consultation with industry representatives, among them the logistics industry committee of ABEL. In the BOP a Professional Logistics Profile is described, based on professional practice, professional roles and professional situations. A new revised BOP was adopted in March 2024. The programme will implement it in the programme in the 2025-2026 academic year. Graduates of the programme

must also meet the competencies of the Higher Economic Education standard (2017). This standard covers the domain competencies of all degree programmes in the field of economics.

Based on the educational profile, logistics competencies have been formulated for both the Logistics Management and the Logistics Engineering degree programmes. The core competency is developing, managing and executing logistics processes in a professional manner. This core competency has been elaborated in 14 sub-competencies at bachelor's level. Because the professional field is subject to rapid changes and innovations, the competencies are deliberately described in a somewhat abstract manner.

In addition to the core competency and the sub-competencies, the BOP contains a Body of Knowledge and Skills (BoKS). The BoKS describes the minimum knowledge and skills that students should develop in the programme. In the programme, there is room to deepen this minimum level of knowledge and skills and there is also room to broaden, which relates and appeals to the professional profile and is in connection with the student's chosen profile.

The BUas programme considers integrated working and thinking as one of the distinguishing characteristics for the logistics professional. Therefore, rather than the traditional T-shaped profile – deep expertise in a single domain with the ability to collaborate with and apply knowledge in other domains – the programme aims to deliver '+shaped' professionals, whose education both in and across domains enables them to think and work in a transdisciplinary manner. According to the programme, the '+profile' will not just enable the students to add

something to their industries and society at large, but to be adaptable, to spot new developments early and act on them, to continue to learn and shape themselves as well as everyday practice. The logistics professional should therefore also be able to connect with new disciplines.

ABEL's logistics industry committee and ABEL's researchers are involved in advising the programme on trends in the industry. The composition and working method of the committee has recently been updated. In March 2022 a (partly) newly composed committee started that consists of experienced professionals from the logistics industry. The professionals participating are experienced managers or researchers and all work in an international context. The industry committee gives advice on future trends and developments in logistics that need to be part of the programme, the necessary competency development of the students to prepare them for their professional lives, and they give advice on increasing the inflow/outflow of students.

ABEL is a member of the European Forum of Logistics Education. The main goal of the forum is to work together with other partner universities of applied sciences in order to increase the internationalisation of education by sharing information regarding study programmes in logistics and by visiting each other's institutions. The forum partners also share the goal to keep in line with the latest trends and technologies in the logistics sector.

Considerations

According to the panel, the programme has described an appropriate profile that is recognised in the field. However, the programme's own identity could be more clearly expressed in the profile description, the panel believes. In the

interviews, this individuality comes out well, but on paper the panel sees limited reflection of it.

The intended learning outcomes are logically derived from the national profile *Beroeps- en Opleidingsprofiel Logistiek*. According to the panel, the intended learning outcomes are well described in terms of level and orientation. Again, however, the panel sees limited reflection of the programme's own profiling in the intended learning outcomes.

The panel of the previous visitation in 2018 also found that the programme's signature could be made more explicit in the programme's profile and competencies. Since the current panel comes up with a similar finding, the panel recommends that when translating the upcoming new national profile to the own profile and competences, the programme should focus more on its own colour. The panel is thinking of content profiling around the specialization themes, but certainly also the intercultural and international colour of the programme and the focus on the '+shaped' professional. The updated set of intended learning outcomes could also reflect this own profiling more. Now it is only visible in the course-level learning objectives derived from the intended learning outcomes.

There is an active logistics industry committee, paying close attention to the specifics of the programme. According to the panel, the committee actively contributes to the profiling and organization of the programme, together with researchers and teachers from the field. They can therefore play a good role in revising the profile of the intended learning outcomes following the new national profile, the panel expects.

The assessment panel establishes that the programme **meets** this standard.

Programme

Orientation

Standard 2: The programme enables the students to master appropriate (professional or academic) research and professional skills.

Findings

The fundament of the programme consists of the model of building blocks. The programme focuses on the organisation, planning, execution and control of physical, information and financial flows, being the inner peel of the model. The outer peel in the model consists of three building blocks: competencies for research skills (judgement), for personal development (communication and learning skills) and for business and environment related topics (knowledge, understanding and applying). A layer for the international and intercultural aspect was added to emphasise that logistics and therefore the focus of the programme (both English- and Dutch-taught) is on the international professional field and all the skills and attitude components that come with it. Each of these building blocks is incorporated in every semester of the logistics programme. Per building block learning goals have been defined.

Considerations

The panel finds that the orientation and content of the programme sufficiently guarantee the development of skills in the field of practice-oriented research. According to the panel, research skills are sufficiently incorporated in the programme; the building block Research skills secures continuous focus on research and project skills through the programme. Much attention is paid to the alignment between research by the professorships (lectoraten) and its application in education. Students are involved in

conducting research from the very first year, for example by taking measurements in the field.

The programme allows for the development of professional practice skills. The panel appreciates the interweaving of current practice into the teaching from the very first module. The panel saw appealing examples of this during the visitation and notes that students work extensively on their professional skills in both the in-school education and out of school internships. The programme of the first two years includes three times the study component Connection to research and industry (3 x 5 EC). The panel notes that this is a valuable addition to the programme, where actual integration between theory, research and practice takes place.

The assessment panel establishes that the programme **meets** this standard.

Contents

Standard 3: The contents of the programme enable students to achieve the intended learning outcomes.

Findings

The fulltime programme offers a Dutch-taught and a (content identical) English-taught track. Also, there is a 3-year accelerated track for VWO entrants and a 3-year short track for MBO entrants. VWO entrants have the option to start in the second year of the programme, and complete an accelerated 3-year VWO programme of 180 EC. The students with an MBO education who would like to take part in the short-track programme are required to spend one day a week in the BUAs programme for half a year

during their 3rd year MBO programme. This gives them an idea of the content and level of the programme. Based on their results, they are advised to start in year 2, or required to start in year 1.

In 2019, the programme started designing a new educational programme by academic year that was gradually implemented. The new programme is competency-based, and aims for students to learn and use skills and knowledge in a variety of contexts. In 2021 the renewed year 1 programme was implemented; in September 2023 the renewed year 3 started. The year 4 programme, which will not change a lot, will be implemented in 2024-2025.

A student manual for each study component describes the objectives, assessment structure, content description and literature.

The programme is divided into semesters of 30 EC. The first four semesters include courses of 5 EC and 10 EC. Each semester has the course Personal & Professional Development. Semesters 2 to 4 offer the course Connection to Industry & Research. The first semester of the programme exists of study components with introductory characteristics. The broad scope of logistics and supply chain management is presented, and the student is able to experience the basics of the industry. The second semester is a deepening into the theme of Physical Flows (Transport, Warehousing, Distribution and Inventory Management) and an introduction to Service Operations Management. The third semester focuses on Operations Management, in which students focus on the technical aspects of a production process, and Cross-Border Supply Chains. The fourth semester revolves around Supply Chain Redesign, Entrepreneurship and Sustainability. Semester 5 includes the placement. In semester 6, students choose a "challenge" (15 EC), where

they conduct a practical research project. During this semester, students learn how to specialise in a logistics topic, with a focus on design thinking and decision making in an innovative context. They also take two courses and there is again the Personal & Professional Development course. Semester 7 includes a minor or exchange and semester 8 includes the Graduation Internship.

What is new in the new programme of year 3, is that students can specialise in a semester by choosing from a theme based on the logistic challenges of the future, such as digital transformation, artificial intelligence, last-mile logistics, supply chain resilience and sustainability. These components will be linked to current logistics topics that are being researched within BUAs. Students work together with researchers and industry on these topics.

The Personal & Professional Development course is also new in the programme. One of the main goals for this course is to be able to articulate their development as it relates to the various competencies.

The programme focusses on international and intercultural skills. Many of the topics used in the courses are oriented towards international companies and cross-border issues. Students are encouraged as much as possible to do the work placement, minor or graduation internship abroad.

Considerations

The panel observes that the programme provides appropriate education. The intended learning outcomes in the form of competencies are translated into learning objectives of the courses. According to the panel, the modules together form a complete palette of subjects and contents.

The panel appreciates the design of the new curriculum, with large teaching blocks and recurring components around personal development and around the integration of research, practice and theory. Students have ample opportunities to specialize.. The panel suggests making semesters 5 to 8 more distinct from each other in descriptions of goals, content and focus. For example, the distinction between the focus in and requirements of placement and graduation could be made clearer; both could be more distinct. In addition, the elaboration into different specializations in the second half of the programme is not yet clear enough for the panel. For this, the minor and the specialization could also be explained more clearly.

The panel is positive about the attention for internationalization and intercultural education in the programme. This ensures that after graduation, students are ready for the logistics industry, which is usually internationally oriented. The panel here makes the suggestion to emphasize 'internationalization at home' more. Make it clear that even students who do not go abroad become proficient in international and intercultural competencies. The panel notes that guest speakers and lecturers bring international practice intensively into the programme. The panel suggests making this more explicit in the programme's explanations on internationalisation and intercultural education in the programme. The assessment panel establishes that the programme **meets** this standard.

Structure

Standard 4: The structure of the programme encourages study and enables students to achieve the intended learning outcomes.

Findings

The programme has a number of different didactic approaches: workshops, field trips, lectures and guest lectures, interviews. In addition, the programme offers online learning and training platforms combining theory and exercises.

Within the logistics programme, students are also regularly offered the opportunity to get to know each other and the logistics industry from the first year onwards.

The team's ambition for the new programme was to integrate the Dutch and international groups more regularly into the programme, recognising the anticipated benefits of learning from each other's backgrounds and cultural values. The new programme adds new elements to existing opportunities, such as joint assignments in projects and cases or joint international activities. The first international week in May 2022 was a specific initiative to bring the two tracks of students together. The international week is now divided into several days during the academic year to also bring students from the first, second and third years together and give companies more opportunity to participate.

Considerations

The panel notes that the programme has chosen a learning environment that provides the opportunity to achieve the intended learning outcomes. The panel appreciates the wide variety of didactic approaches and the many opportunities to collaborate with fellow students, researchers and in practice. The variety of didactic approaches helps students to prepare for working in multidisciplinary teams in their future jobs.

The programme runs a track in Dutch and one in English. The English track is designed for

international students and for Dutch students who would like to take the programme in English, in a more international environment.

The panel considers this a well-founded decision, offering the best suited programme to the different groups of students.

The assessment panel establishes that the programme **meets** this standard.

Incoming students

Standard 5: The programme ties in with the qualifications of the incoming students.

Findings

BUas offers a variety of orientation activities for prospective students. To inform students and to help them to make the right decision in their choice of study, BUas organises open days and evenings to provide information but also to allow the visitors to get a taste of the atmosphere of the academy, the lecturers and the campus. After submitting their enrolment application, students receive an invitation to matching activities, such as doing an online assessment and attending a matching day. This results in a recommendation about the student's suitability for the study programme.

In 2021 a new recruitment activity was started. Dutch students are encouraged to engage with the degree programme during secondary school when they are required to deliver a paper, which is called 'profielwerkstuk/meesterproef'. They can be guided by one of the lecturers or students.

Students with havo, vwo and with mbo level 4 can be admitted to the programme. For

students with a vwo certificate with the right profile it is possible to apply for a 180 EC study track. When a student is admitted, the student can choose for the Dutch or the international track.

International students need an equivalent of a Dutch havo or vwo diploma. If there is any doubt about the student's entry level, the diploma is evaluated by Nuffic for advice. International students who have a secondary school diploma that is comparable to the Dutch vwo diploma are eligible for admission into the three-year track. The international students are required to demonstrate sufficient results on an English language test unless they completed their diploma in a native English-speaking country or English was one of their exam subjects at school.

Considerations

The panel notes that the programme and design of education are in line with the qualifications of entering students and that the admission requirements used are realistic given the intended learning outcomes. The panel assesses that the programme has appropriate entry requirements. The panel is positive about the different tracks, which fit well with the needs and abilities of students from different backgrounds. For students with a vwo diploma, entry into the 180 EC track is possible and for mbo students a careful procedure is in place to assess whether they may also follow a shortened programme based on exemptions.

The assessment panel establishes that the programme **meets** this standard.

Staff

Standard 6: The staff team is qualified for the realisation of the programme in terms of content and educational expertise. The team size is sufficient.

Findings

The educational team that is responsible for the logistics bachelor's programmes of Logistics Engineering and Logistics Management consists of 29.2 FTEs, of which 3.8 FTEs are allocated to the master's programme, 3.5 FTEs to research and 1.6 FTE are working on BUas-wide projects. This leads to a student-teaching staff ratio for both logistics bachelor's programmes of 1: 18.3. The ratio has improved over the past five years. To achieve this, BUas has reduced the number of support staff members over the past few years in order to free up capacity for teaching. In addition, a substantial portion of the Quality Agreements funds for improving the quality of education has been allocated to more teaching staff.

According to the programme management, work pressure requires attention. Although the student-staff ratio has improved and the pressure on testing has decreased in the new educational set-up, employees still experience work pressure. The academy participation council together with the management team is working on an action list with attention points that will be implemented in order to contribute to reducing work pressure.

The majority of staff involved in the programme has some form of experience in the industry and there is a diverse array of international and cultural backgrounds.

BUas offers training for required qualifications such as didactics and English, training for

strategic topics such as team-based working, intercultural training and training in AI, and individual development needs such as coaching. A refresher didactics course is also part of the BUas training programme for staff. Staff development also occurs through on-the-job learning. This on-the-job learning is facilitated within the team-based working approach, through interaction with the industry, as well as through participation in research projects.

Team-based working, including more professional autonomy and leadership, is introduced within the various semester teams and expert groups. To support the development of maturity in team-based working, a change agent has been assigned. Two semester teams within logistics have been assigned a semester budget, which can be spent during the calendar year. According to the programme management, continued attention is necessary to advance the maturity level of team-based working. While semester teams have enhanced their collaborative skills in recent years, this progress requires ongoing attention. The connecting layer structure has room for further optimisation. Moving forward, all teams will be allocated a budget.

Although staff are still in the midst of a transition phase, most of the study components can be taught by multiple staff members, making the programme more resilient to unforeseen personnel changes than it was in the past.

ABEL has a large number of applied and other research projects and cooperates with Logistics Community Brabant on even more applied and other research projects. Additionally, ABEL hosts two professorships, one of which is focused on logistics: the professorship of Smart Cities and Logistics. Over the last four years 60% of the

lecturers teaching in the logistics bachelor's programmes have participated in research activities.

Considerations

The panel finds that the number of staff is more than sufficient for the realization of the educational programme. The panel found a driven, substantively strong teaching team. The panel notes that the team is sufficiently diverse and that the expertise of the staff is in line with the requirements of the bachelor's degree programme. By having lecturers participating in research activities, they are active in innovation, develop their research skills and through this innovation of the educational programmes is guaranteed.

The panel appreciates the focus of the programme and academy management on workload. The panel thinks this will continue to be needed in the future, as will a plan of action to deploy more teachers when Quality Agreements funds are cut.

The envisioned internationalisation requires development of English language skills, intercultural understanding, as well as a diversification of the staff. According to the panel, the programme has a good understanding of the expertise and composition of the team needed around internationalization and the new programme. There is sufficient attention to strengthening the team in these areas of expertise. According to the panel, the current team is already coming a good way in the desired direction. The team in the international track is well capable of providing English-language instruction, the panel notes.

The panel particularly appreciates the team-based way of working. Teachers visibly take responsibility in small teams for providing teaching in the semesters and optimizing quality.

The assessment panel establishes that the programme **meets** this standard.

Facilities and support

Accommodation

Standard 7: The accommodation and material facilities (infrastructure) are sufficient for the realisation of the programme.

Findings

The programme is offered at the campus of BUas in Breda, where three buildings offer room to more than 7,000 students and more than 700 employees. Each building features standard classrooms as well as creative classrooms. Apart from small classrooms for groups up to 20 students, there are classrooms available for 40 and 80 students and a few even larger lecture halls. The Academy for Games & Media and the ABEL academy are situated together in one of the buildings.

Considerations

The housing is appropriate according to the panel. The new campus in which the programme is housed is inspiring, adequately furnished and easily accessible. The panel notes that the campus environment is a very pleasant environment for both students and staff, contributing to a small scale setting and promoting cross-domain cooperation and learning for education, research and industry. The (material) facilities are adequate according to the panel.

The assessment panel establishes that the programme **meets** this standard.

Tutoring

Standard 8: The tutoring of and provision of information to students are conducive to study progress and tie in with the needs of students.

Findings

The first point of contact for all kinds of questions is the Personal & Professional Development coach. This formal tutoring is also part of the Personal & Professional Development programme. It provides personal guidance and support in the case of personal issues. During the third and fourth years, individual guidance in the form of tutoring is also offered by the coordinators and supervisors of the placement and graduation project. In the case of personal issues, students can also address their concerns with them.

Secondary student support is offered by ABEL's student counsellors. It concerns students who, due to personal circumstances, risk a delay in their studies and/or require more intensive or specialist guidance than their own study coach can offer. Specific attention is given to students with functional impairments. The student counsellors participate in BUas-wide and Higher Education networks and may decide to refer students to the BUas psychologist or to aid agencies outside BUas.

In recent years, digital information and collaboration systems have continued to evolve. For example, the implementation of a new digital learning environment began in 2022 and has been operational for the past two years.

Considerations

According to the panel, the study guidance and tutoring is personal and is easily accessible to

the students. Students spoke positively to the panel about the personal guidance they received, as well as the support when problems arose. The panel notes that the provision of information is well established. The digital learning environment contains the necessary information.

The assessment panel establishes that the programme **meets** this standard.

Quality assurance

Standard 9: The programme has an explicit and widely supported quality assurance system in place. It promotes the quality culture and has a focus on development.

Findings

The Education, Research, & Information Management office within the Education & Research team is responsible for setting up a quality assurance system that fits the BUAs organisation and for providing support to the academies with regard to analysing numerical education-related information and qualitative evaluation results.

Every organisational unit within BUAs uses their own PDCA cycle, in which the BUAs goals are central. In addition, academies have scope to define additional objectives as long as they are in line with the BUAs objectives. The basis of the BUAs quality assurance system is continually improving through iterations of the PDCA cycle.

Within ABEL, there are various roles and duties to ensure quality at the academy level, including the Degree Programme Committee and the board of examiners. In addition to the academy roles, the semester teams have come to play a role in the quality assurance process. With the introduction of team-based working, lecturers within a semester team are also expected to take more control over evaluation and improvement of education.

ABEL uses online surveys for study components and semester evaluations. Evaluation of study components focuses on students' appreciation for information, coaching and feedback, content, teaching methods, practice orientation and study load. The study components evaluation is a combination of quantitative questions and

open questions, in which students can explain their appreciation and suggest ideas for improvement. Several themes are also questioned per semester, such as testing, timetabling and the international aspect of the programme.

In addition to the standardised evaluation surveys as described, all students are invited to 'round tables', in which the evaluation results are discussed, and shared opinions of the entire class are retrieved. The students can raise their own topics, in addition to the topics that are addressed periodically.

Starting from last academic year, all evaluation results supplemented with the team's own experiences, are discussed with student representatives and within the team of lecturers during student feedback sessions once a year. The results of these student evaluations, round tables and student feedback sessions, both quantitative and qualitative, are shared with the study component and semester coordinators. The quantitative results from the survey are shared with the whole ABEL team.

Considerations

The panel assesses that the programme has a comprehensive and carefully designed quality assurance system. Partly due to the involvement of all stakeholders in qualitative and quantitative evaluations and the careful feedback of outcomes, there is a strong culture of quality. According to the panel, the programme takes good care to close the quality loop by following up on areas for improvement that emerged from evaluations. Students told the panel that it is clear to them what the programme is improving in the new programme, following the findings of the first groups. The panel noticed during the interviews that the Degree Programme

Committee has limited awareness among students. The panel suggests making this committee more visible to the students who do not serve on it.

The assessment panel establishes that the programme **meets** this standard.

Assessment

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

Findings

The programme has a variety of summative assessment forms, such as examinations with multiple-choice and/or open questions, assignments such as papers, essays, poster presentations, research projects and (placement and thesis) reports, portfolios, process or reflection reports and assessment interviews.

Formative assessment tools are for example interactive discussions, feedback moments, mock examinations and quizzes, peer- and self-assessments. Formative assessment is used on the one hand for motivating students, for measuring their development, and for achieving study success, and on the other hand for informing lecturers to tune didactics to the students' level.

In line with BUas' and ABEL's educational vision, a vision on assessment has been formulated in the ABEL Assessment Policy Plan. The assessment programme is set up by the development team, approved in the programme committee and adopted by the management team after seeking advice for consent from the degree programme committee. When constructing a test/assessment, a fixed assessment cycle is followed by the examiner.

When starting as a lecturer, the Basic Examination Qualification course is mandatory. Most of the lecturers are BKE qualified. Two educational advisors have obtained Senior Examination Qualification certification. A few colleagues within ABEL, including the board of examiners, have also started working towards this certification.

ABEL has its own board of examiners that carries out the duties set out in the legislation regarding the Dutch Higher Education and Research Act. The board of examiners of ABEL consists of a chair, a secretary, three lecturers, a student counsellor (for advice) and secretarial support. Members are appointed for four years and may be reappointed for one additional term.

Considerations

The panel found that the programme has an adequate assessment system and assessment procedures.

Multiple types of assessments have been implemented in the new programme and are aligned with learning outcomes and the BoKS, according to the panel. The programme provides a good balance between oral and written exams, between individual and group assignments, and between exams and assignments. Assessments are scheduled so that students have sufficient time to prepare. The panel appreciates the amount of formative assessment, which suits the small-scale and personal environment and provides ample opportunities for informal interaction between students and staff. The choice of competency-based education is evident in the forms of assessment chosen, for example, in assessment interviews and the collection of study results, deliverables, feedback and reflections in a portfolio.

The Board of Examiners performs its duties thoroughly and proactively monitors the quality of assessment, assessment procedures, and learning outcomes achieved. The Board of Examiners demonstrates a good knowledge of the programme and its assessment.

The panel appreciates the extension of the four-eye principle to the assessment of third-year internships. This will further increase the reliability of assessment, the panel expects.

At the previous visitation in 2018, the panel recommended that the final level assessment form be more specific to the programme by translating not only the general hbo competencies into the assessment criteria, but also the logistics competencies. The panel looked at the assessment of the final works and noted that although the assessment criteria were more linked to the programme's own logistical competencies, there was a very holistic approach. For graduation in the new programme, the programme is choosing assessment criteria that are more linked to the intended learning outcomes, the panel understood. The panel appreciated these adjustments, which provide more clarity while still maintaining the desired holistic view.

The programme opts for level 3 in some competencies, where level 2 is chosen in the national profile. The panel does not see sufficient reflection in the assessment forms of how the programme operationalizes level 3 and recommends that the programme pays attention to this when compiling the new forms.

The programme has a connecting layer which includes representatives from each semester, an educational advisor, and a representative from the Board of Examiners. This connecting layer fulfills the role of a testing committee. This committee has been especially supportive in developing the assessment for the new programme, the panel notes. The panel suggests that this committee should also be used more robustly to measure and ensure the quality of testing and assessment.

The assessment panel establishes that the programme **meets** this standard.

Achieved learning outcomes

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

Findings

Achievement of intended learning outcomes is measured by both the internship and the graduation project. The year 3 programme includes the internship period. In the old programme, there were two short internships of 2 x 20 EC. In the new programme, offered for the first time this academic year, there is one internship of 30 EC.

During the placement period, students carry out one or several individual assignment(s) within a company, such as advice, screening, (market) analysis or process improvement. Based on research, collecting data and analysing data, students have to determine the priorities, solutions or follow-up steps. Another option is that the student takes on a role within a specific project in which the student can take on and demonstrate partial responsibility, leadership and contribution. Examples are a role in software implementation, in the implementation of a production line or machines, or the phasing in of new products in existing production lines, in product development of logistics processes or services, in market development, etc.

During the graduation period, students must demonstrate mastery of all competencies on the end level. At the moment, the graduation process is being analysed and adjusted to align with the revised programme and placement approach, emphasising competency assessment.

The work placement is assessed by a university supervisor (a lecturer who guides the process during the work placement), a second assessor

(who only assesses the deliverables and attends the oral final assessment) and a company supervisor (who manages expectations with the company and student and guides the student at the company during the entire placement period). The final mark is based on the discussion between the university supervisor and the second assessor, using the placement assessment form, input from the company supervisor, and the assessment criteria for each competency.

After completion of the graduation project, the student will present and defend his thesis before an assessment committee. This committee consists of the student's supervisor, the chair, an external assessor and the company supervisor (as advisor). The external assessor is an industry professional who monitors the quality from the perspective of the professional field and must meet a number of criteria.

Traditionally, almost two-thirds of the graduates are offered a job at the client of the graduation internship or start soon after graduation at another organisation. One-third move on to further study at a master's programme.

Considerations

In order to form an opinion about the students' achievement of the intended learning outcomes, the panel read a total of the final products of fifteen students and viewed the assessments of these works. These are final products delivered in the past two years, with a variety of grades. The panel assesses that all final products attest to bachelor's level.

Although all the final works are convincing and undoubtedly of bachelor's level, the panel does make some comments about the students'

written works. The panel notices that for most students, a lot of time goes into the descriptive phase, for example by going into the structure of the organization. The literature review is on the limited side in some cases. In addition, little attention goes to the implementation of the proposed innovation. Therefore, the balance usually goes to exploration and design rather than implementation. The reports are often quite voluminous. The panel suggests that in revising the thesis work for the new programme, more attention should be paid to a (mandatory) theoretical deepening and opportunities should be sought to create more space for the design and implementation phase. There could also be attention to concise reporting and writing a to-the-point and appealing management report.

The panel finds, based on the documentation and interviews with various stakeholders, that the programme delivers professionals who are ready for complex tasks and responsibilities that fit the profile of the logistics manager. The profession is positive about its graduates. Many graduates choose to pursue a professional or academic master's degree. Their success shows according to the panel that the bachelor LM also prepares its students for higher-level careers.

The assessment panel establishes that the programme **meets** this standard.

Attachment 1: assessment panel

Dr. Ab F. Groen Voorzitter
Bestuurder in het onderwijs

H.J. (Rianne) Niewold-Riezebosch MSc
Opleidingsmanager Bedrijfskunde bij Hogeschool Windesheim

Sophia Pasbecq
Docent en coördinator Transport & logistiek, Artevelde Hogeschool Gent

Mark Delmartino
Zelfstandig onderwijsadviseur

Lisette Sinnige, Student-lid
Student Bestuurskunde Hogeschool van Amsterdam

The panel was supported by Linda van der Grijspaarde, as a certified secretary.

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

Attachment 2: site visit schedule

Campus BUas, Breda

Day 1: 6 June 2024

Time	Meeting	Attendants
11.00-13.00	Deliberations panel	
13.00-14.00	Board & management	<ul style="list-style-type: none"> - ABEL Academy Director - ABEL Academy Director 2018-2023 - Educational Manager Logistics
14.15-15.00	Showcases	<ul style="list-style-type: none"> - Students, lecturers/researchers
15.15-16.15	International officers	<ul style="list-style-type: none"> - Director of Global Engagement - Lecturer, International Coordinator Logistics - Lecturer, International Coordinator Built Environment - Lecturer /DALI / Middle East College, Oman Project
16.30-17.30	Alumni & industry partners	<ul style="list-style-type: none"> - Chair Industry Committee / Global Vice-President Logistics Sandvik - Member Industry Committee / Director Logistics & Supply Chain - Interfood Group - Member Industry Committee – Asset Management Building and Facility Manager - UPS Europe - Member Industry Committee – Strategic Supply Chain Manager – Ricoh Europe Supply Chain - Alumna - International track, MSc Supply Chain Management - Alumna - Dutch track, MSc Supply Chain Management - Alumna – International track
17.30-18.00	Deliberations panel	
18.00-18.10	Evaluation day 1	Accreditation project team

Day 2: 7 June 2024

Time	Meeting	Attendants
08.45-09.45	Researchers	<ul style="list-style-type: none"> - Associate Professor Smart cities and logistics - Research and Business Innovation Manager - Lecturer, DALI, LCB - Lecturer, LCB Programme Manager Event Logistics - Lecturer, CoE
9.30-10.00	Showcases	<ul style="list-style-type: none"> - Student, lecturer/researcher
10.15-11.30	Teaching staff	<ul style="list-style-type: none"> - Lecturer, Degree Programme Committee, Curriculum Committee - Lecturer, Degree Programme Committee, Curriculum Committee

		<ul style="list-style-type: none"> - Lecturer - Lecturer, Academy Participation Council - Lecturer, Placement Coordinator, Graduation coordinator - Lecturer, Researcher - Lecturer, Academy Participation Council
11.45-12.30	Board of Examiners, Testing committee	<ul style="list-style-type: none"> - Educational Advisor - Chair Board of Examiners - Secretary Board of Examiners
13.30-14.45	Students	<ul style="list-style-type: none"> - 1st year student International track - 1st year student International track - 2nd year student Dutch track - 2nd year student International track - 3rd year student Dutch track - 3rd year student International track - 4th year student International track - 4th year student Dutch track
14.45-16.15	Deliberations panel	
16.15-16.30	Feedback findings and judgments by chair	All participants

Initiated by the programme, a development dialogue will be planned in the course of 2024. The results of this development dialogue have no influence on the assessment presented in this report.

Attachment 3: Recommendations former assessment

At the previous visitation in 2018, the panel gave the following recommendations (summarized):

- The panel believes that the signature of the programme can be made more explicit in the programme's profile and competencies;
- The panel recommends that the final level assessment form be made more specific to programme by translating not only the general hbo competencies into the assessment criteria but also the logistics competencies.

The follow-up was discussed at the relevant standards.

Attachment 4: documents

- Self evaluation
- Overview of recommendations and improvements Logistics Management
- Strategic direction 2022-2025: BUas+ more than a University of Applied Sciences
- Academy Plan ABEL+ 2022-2025
- Influx - Recruitments & Admission
- Beroeps- en Opleidingsprofiel Logistiek (Professional and Educational Profile Logistics, 2019)
- Composition of the Logistics Industry Committee
- Creating Professional Value, Strategy 2018-2021, September 2017
- Education@work: Educational Vision 2014-2024
- Staff connected to building blocks
- ABEL's Assessment Policy Plan 2021-2024
- Overview of the types of study components with descriptions, didactical approaches and competencies
- LM Study Component Catalogue 2023-2024
- Overview of employees
- Team-based working
- Standard BUas training for required qualifications
- Semester teams and expert groups
- Policy Plan on student well-being
- White Paper on BUas Skills for Life
- Quality Agreements 2019-2024
- Quality Assurance System for Education
- LM assessment programme 2023-2024
- Placement Handbook
- Graduation Handbook
- Graduation rubric with competencies
- Criteria for external examiners
- 2022 HBO monitor
- Graduation work of 15 students

Attachment 5: Overview

The judgements per standard are presented in the table below.

Standard	Judgement
1. Intended learning outcomes	<i>Meets the standard</i>
2. Orientation of the programme	<i>Meets the standard</i>
3. Contents of the programme	<i>Meets the standard</i>
4. Structure of the programme	<i>Meets the standard</i>
5. Qualifications of incoming students	<i>Meets the standard</i>
6. Staff: qualified and size	<i>Meets the standard</i>
7. Accommodation and infrastructure	<i>Meets the standard</i>
8. Tutoring and student information	<i>Meets the standard</i>
9. Evaluation of the programme	<i>Meets the standard</i>
10 Assessment system	<i>Meets the standard</i>
11 Achieved learning outcomes	<i>Meets the standard</i>
Overall	Positive

