Postbus 5050
NL-3502 JB Utrecht
+31 30 87 820 87
www.AeQui.nl
info@AeQui.nl

M Research Master
Business Data Science (joint degree)

Erasmus Universiteit Rotterdam
Universiteit van Amsterdam
Vrije Universiteit Amsterdam

Advisory report of the assessment of the existing program
17 June 2025

Colophon

Institution and programme

Erasmus Universiteit Rotterdam, Universiteit van Amsterdam, Vrije Universiteit Amsterdam
Location: Rotterdam and Amsterdam
Institutional Audit: yes

Programme: M Research Master Business Data Science (joint degree)
Site: TI Amsterdam Campus
Mode: fulltime
ISAT-number: 65024

Assessment panel

Drs. R. van Aalst, chair
Prof.dr. I. De Wolf, expert
Prof.dr. B. Werker, expert
Prof.dr. J. Wieringa, expert
Jeanne Olla BSc, student-member
Dr. J. De Groof, secretary

AeQui Nederland
PO Box 5050
3502 JB Utrecht
The Netherlands
www.AeQui.nl

Summary

On 17 June 2025, an AeQui assessment panel visited the Business Data Science Research Master, a two-year, full-time research master's programme (120 ECTS) offered jointly by the Erasmus University Rotterdam, the University of Amsterdam, and Vrije Universiteit Amsterdam. The programme ties the foundations of data science to different business fields, preparing talented students for PhD trajectories in Business or for high-level research positions outside academia. The panel judges that the programme meets all standards of the 2024 NVAO framework for limited programme assessment as well as the additional criteria for research master's programmes (2016). The panel therefore issues a **positive** recommendation for accreditation.

Intended learning outcomes

The programme's emphasis on rigorous training in data science research methods and their application in business and management is both distinctive and innovative. Its objectives align well with international standards for research-oriented master's programmes in Business and Data Science. The programme's explicit focus on preparing students for PhD trajectories and academic research careers is commendable. The intended learning outcomes (ILOs) reflect the programme's research orientation and are benchmarked against leading international institutions. The alignment of the ILOs with the Dublin descriptors and NLQF-7 is clear and precise. They cover the full empirical and theoretical research cycle and include critical aspects such as ethics, scientific integrity, and responsible data management. The ILOs are regularly reviewed to reflect academic developments, including those related to generative AI. The panel welcomes the programme's plans to further streamline the current set of ILOs. The panel concludes that the programme **meets the standard**.

Teaching-learning environment

The BDS programme offers a highly engaging and research-intensive learning environment. A key strength is the exemplary collaboration between the three participating institutions, which together form a coherent academic environment. The programme's selective admission process ensures a strong academic profile among incoming students. The curriculum is robust and well-structured. It effectively combines theoretical foundations, methodological training, and substantial thesis research, while successfully integrating data science with business components. The considerable flexibility available to students, supported by rigorous checks and balances, allows tailored academic pathways. Small-scale, interactive teaching methods, combined with a cohesive community, enhance student engagement and learning, and provide a supportive environment. Staff members are highly qualified, experienced, and well-suited for research master's instruction. The panel identifies some areas that require ongoing attention, including helping students to manage stress levels, maintaining vigilance regarding social safety, enhancing students' critical reflection on methodological choices, and carefully reconsidering the planned reduction of internship opportunities due to their significant value in the programme. The panel concludes that the programme **meets this standard**.

Student assessment

The programme has a valid, reliable, and transparent system of student assessment. Constructive alignment is consistently applied, and a range of assessment formats is used, with a

clear progression over the two years. The panel values the rigorous application of quality assurance procedures, and the explicit attention to scientific integrity, including responsible AI use. The Examination Board is commended for its structured and proactive role in safeguarding assessment quality across the three schools. The thesis assessment procedure is exemplary, featuring a well-structured pre-defence and multiple independent assessors. The panel suggests explicitly aligning thesis assessment criteria with the programme's ILOs. The panel also sees room to strengthen the internship assessment procedure. The panel concludes that the programme **meets this standard**.

Achieved learning outcomes

The programme successfully delivers high-quality graduates who are well prepared for national and international (academic) research careers. The reviewed theses demonstrate academic rigor, a clear mastery of the research cycle, and publication potential. The panel notes room for improvement regarding students' critical reflection on methodological decisions and evaluation of their own research outcomes. Most graduates successfully continue into PhD positions, while others pursue research-intensive roles outside academia. Alumni maintain close ties to the programme, contributing to a vibrant and engaged academic community. The panel concludes that the programme **meets this standard**.

The panel considers this an exemplary research master's programme. While no separate recommendations are provided, several points requiring ongoing attention have been highlighted throughout the report.

All standards of the NVAO assessment framework (2024) as well as the additional criteria for research master's programmes (2016) are assessed positively; the assessment panel therefore awards a positive recommendation for the accreditation of the programme.

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

Drs. Raoul Van Aalst
Chair

Dr. Jetje De Groof
Secretary

Introduction

Profile

The Tinbergen Institute

The Business Data Science Research Master programme (henceforth 'BDS programme') is a collaborative programme jointly offered by the Erasmus School of Economics at Erasmus University Rotterdam (EUR), the School of Economics and the Amsterdam Business School at the University of Amsterdam (UvA), and the School of Business and Economics at Vrije Universiteit Amsterdam (VU), collectively referred to as 'the Schools'. These institutions coordinate their efforts in research master's and doctoral programmes through the Tinbergen Institute. The Institute plays a central role in recruiting, selecting, and training highly promising students, providing them with comprehensive research facilities and placement services. Each of the partner universities actively contributes teaching staff, financial support, and office facilities, and they give priority consideration to programme graduates for PhD vacancies within their institutions. The BDS programme operates alongside the Tinbergen Institute Research Master in Economics (henceforth 'TI programme'), with EUR serving as the coordinating ('penvoerder') institution for both.

In terms of governance, the Tinbergen Institute is headed by the TI Director. Until 2024, the BDS and TI programmes each had their own Director of Graduate Studies (DGS). As of 2025, this role has been consolidated into one position, covering both programmes. The Tinbergen Institute is overseen by a Supervisory Board consisting of the Deans of the three partner Schools. The BDS and TI programmes share an external Advisory Board composed of scholars from internationally prestigious institutions. Each research master programme retains its own Scientific Board and Admissions Board, yet they share a joint Examination Board and Educational Board.

The Business Data Science Research Master

The BDS programme is a multidisciplinary two-year (120 ECTS) research master designed to prepare talented students for a PhD trajectory, or for qualified research roles outside academia. Since the start of the programme in September 2020, the annual student intake ranged from 9 to 23. The programme aims to provide rigorous academic training, expert thesis supervision from leading scholars, and fosters a close-knit, research-focused environment. The curriculum offers students a robust foundational core combined with extensive elective choices, allowing individual profiles to be developed in alignment with students' interests and career objectives. Around 79% of graduates proceed to PhD positions, predominantly within the three participating Schools, while others readily move into positions requiring highly skilled knowledge workers and researchers.

The programme received its initial accreditation in May 2020, which went hand in hand with several recommendations that have been addressed (see Appendix 4). The programme implemented measures such as online self-assessment tests, refresher courses, and preparatory materials to address potential knowledge deficiencies at the start. Provisions were established to ensure continuity of programme leadership and responsibilities in case of the DGS's absence. To monitor course contributions to overall objectives, systematic evaluations and regular feedback cycles were introduced. The resit policy has been closely monitored, with ongoing discussions confirming its suitability for maintaining effective study progression.

A midterm review was conducted in January 2024, during which the panel judged all standards to be satisfactory and offered additional recommendations. The programme responded

by expanding its scientific council to include external business-sector representation, enhancing diversity initiatives to attract a more inclusive student body, and defining alternative course options well in advance to mitigate the impact of potential course cancellations.

The assessment

EUR, UvA, and VU commissioned AeQui to conduct the current assessment, which took place simultaneously with the assessment of the TI programme. For this purpose, AeQui, in collaboration with the two programmes, has assembled an independent and knowledgeable panel. A preparatory meeting with represent-tatives of the programme has taken place. The site visit took place on the Amsterdam campus. The panel informed itself on the Rotterdam campus specifics through documentation and the conversations during the site visit.

The assessment was conducted based on the Accreditation Framework for Higher Education in the Netherlands (2024), according to the programme outlined in Appendix 3. The institution has a positive institutional audit decision, and therefore four standards were assessed.

Recommendations for further development were made during the previous assessment, to which the programme has taken action in response (see Appendix 4). The panel has integrated this follow-up into its considerations for the current assessment.

The panel conducted the assessment independently; the panel received the necessary information to arrive at a judgement. At the end of the assessment, the programme was informed of the findings and conclusions.

This report was sent in draft to the programme; the programme's responses have been incorporated into this final report.

At the initiative of the programme, a development meeting will take place in the second half of 2025. The results of this development meeting will not affect the assessment presented in this 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 BDS programme is a two-year (120 ECTS) research master primarily designed to prepare students for the next phase of their (academic) research career, namely a PhD trajectory or a qualified research position outside academia. The programme focuses primarily on training (academic) researchers who apply data science techniques in the discipline of business. The programme therefore aims to provide rigorous training in state-of-the-art data science techniques and current developments within their chosen field of specialisation. It wants to guide students in identifying impactful research problems within the business discipline, applying advanced data science methods, and critically evaluating research outcomes, including their ethical and societal implications. The programme further has the ambition to equip students to conduct original research, communicate effectively, collaborate both independently and within teams, and consistently adhere to the principles of scientific integrity.

The vision behind this joint research master's programme, as explained by programme management during the site visit, is to combine the strengths of the three universities. This cooperation creates a critical mass of students and makes optimal use of the extensive networks and expertise of faculty members. Central to this vision is fostering a vibrant research community that offers students both breadth and depth in their educational experience, including a range of elective courses tailored to individual academic and professional aspirations.

Current students and alumni confirmed that they find the programme's profile attractive, highlighting its clear PhD orientation and close connection with the three partner schools, and emphasising the opportunity for students to move directly into PhD positions with their thesis supervisor within the participating schools.

Historically, the three schools have consistently provided enough PhD positions for all graduates. However, recent budgetary restrictions proposed by the Dutch government have introduced uncertainty regarding future availability of these positions. The panel discussed with programme management their approach to mitigating the potential future shortfall in PhD positions. They highlighted several adaptive strategies, including actively promoting available positions in the partner Schools, and providing direct assistance to students applying for positions outside the internal matching process. Management emphasised that BDS-graduates are highly valued due to their rigorous training and strong research capabilities. It also stressed that the lack of guaranteed PhD positions is communicated transparently during the admission interviews. To further support students, the programme facilitates applications to external institutions, particularly by leveraging existing relationships and by assisting faculty members in securing external research grants. The panel learned that the programme's adaptive approach is valued by students.

Intended learning outcomes

The BDS programme explicitly benchmarks its intended learning outcomes (ILOs) against

graduate programs at leading international institutions in business, including Harvard University, Stanford Graduate School of Business, London Business School and INSEAD Business School. The panel noted that the ILOs reflect a high level of knowledge and research skills appropriate for the (academic) research careers they are prepared for.

The first learning outcome ensures students acquire advanced knowledge and a comprehensive understanding of data science methodologies and their applications within business and management contexts. The second learning outcome enables students to develop deeper insights into key research areas of business, including entrepreneurship, finance, human resources, marketing, and operations research. The programme also places substantial emphasis on applying knowledge practically (ILOs 3-6), training students to independently formulate relevant research questions, select suitable theories, rigorously collect data, and apply advanced data science methods. Students moreover learn to develop innovative data science approaches tailored to specific challenges, design analytical models addressing managerial issues, and validate these models and algorithms using robust scientific methods. Learning outcomes 7–13 focus on critically evaluating research outcomes, reflecting on their ethical and societal implications, producing structured research papers, effectively presenting and defending research to academic audiences, and contributing original research under academic supervision. Additionally, these outcomes stress adherence to scientific integrity, ethics, responsible data management, and privacy, as well as independently tracking developments in their specialisation, effective teamwork, and critically reflecting on their contributions within collaborative contexts. Collectively, the ILOs clearly reflect the standards and expectations of a research master's programme.

The panel confirmed, based on detailed mapping tables, that the programme's ILOs are aligned with the Dublin descriptors at the master level, as well as NLQF level 7. During the site visit, the panel discussed potential adaptations of the ILOs in response to developments in generative artificial intelligence (GenAI). Programme management indicated that after careful consideration, it was decided that the current ILOs already reflect technological and academic developments by emphasising critical thinking, creative and soft skills, in addition to traditional knowledge and methods. No further immediate updates to the ILOs were seen as necessary, a position supported by the scientific committee. The panel was pleased to learn that, although the programme is relatively new, it regularly evaluates the relevance of the ILOs through discussions with partner institutions, the scientific council, the advisory board, department heads, lecturers, students, and alumni. The programme management also indicated it wants to streamline the ILOs further, which is scheduled for the upcoming year.

Considerations

The panel concludes that the programme has a strong and appealing profile, fully aligned with the objectives and standards of a research master. Its focus on rigorous training in data science research methodology and its applications in business and management is unique and innovative. By prioritising the identification of academically and societally relevant research questions and promoting high-level scientific contributions grounded in integrity and responsible research practices, the programme effectively prepares students for (academic) research careers and PhD trajectories. The panel particularly values the close collaboration between the three partner schools. It moreover values that the BDS programme operates alongside the TI programme in one joint (research) environment.

The programme's research orientation is clearly evident from the ILOs, which are well-defined and comprehensively reflect the full research cycle. They emphasise rigorous methodological training and extensive exposure to cutting-edge research. Furthermore, the panel appreciates that the ILOs explicitly incorporate elements of scientific integrity, ethics, responsible data management, and privacy. The alignment of these ILOs with the Dublin descriptors and NLQF-7 is clear and precise, and their benchmarking against globally leading institutions significantly strengthens the programme's international standard. Additionally, the panel noted that the ILOs are frequently aligned with ongoing academic and technological developments, such as GenAI. The panel sees an opportunity to streamline the current set of ILOs and welcomes the programme's intention to undertake this in the coming year.

The panel particularly values the programme's active efforts to maintain access for its graduates to PhD positions, despite financial constraints. The proactive and creative approach of programme management in dealing with these uncertainties and transparently communicating the situation to students is commendable. Still, the panel expresses concern about the increasing reliance on grant-based positions, as this might restrict students' academic freedom by limiting their choice of research topics, potentially impacting the quality of their research.

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.

Selection and admission

Findings

The BDS programme is a selective research master's programme aimed at academically ambitious students, with a maximum annual capacity of 25 students. The selection procedure is conducted by an Admissions Board comprising experts from the three partner schools. Candidates are evaluated and ranked based on several criteria, including holding at least a Bachelor's degree with strong analytical and quantitative skills, top 10% scores on the quantitative sections of GMAT or GRE (for non-Dutch degree holders), excellent English proficiency (verified through TOEFL or IELTS for non-Dutch degree holders), submission of a writing sample, a strong motivation letter emphasising a career in academic research, two letters of recommendation, and a detailed curriculum vitae. The BDS programme has established a steady annual flow of 70 to 80 high-quality applications. From this pool, the programme rejects over 70% of applicants, selecting only the strongest candidates with clear ambitions to pursue a PhD trajectory.

In response to the recommendation of the Initial Accreditation panel, the programme's website provides prospective and admitted students with a self-assessment module to evaluate their mathematics and programming skills prior to enrolment. Guidance is also available online regarding the expected level of knowledge and suggestions for improving quantitative skills if necessary. Additionally, webinars and site visits clarify expectations related to the writing sample and motivation letters.

The Admissions Board initially has two members review each application in detail. Members from the Admission Board the panel spoke to during the site visit explained that the DGS plays a substantial coordinating role in the process, guiding discussions and ensuring consistency. Candidates are categorised into groups of clear acceptances, rejections, and borderline cases. All applicants considered for admission are interviewed. These interviews, typically conducted online, assess motivation, academic readiness, and language proficiency, aiming to ascertain the suitability of the candidate for the specific demands of the research master's programme. During these interviews, the distinctive nature of the research master compared to other master programmes is emphasised to ensure alignment with student expectations and programme requirements.

Members of the Admissions Board explained to the panel that the low dropout rate and high success rate suggest the effectiveness of the admission procedure, noting that an internal analysis showed a strong correlation between admitted candidates and those who successfully complete the programme.

Considerations

The panel concludes that the BDS programme has implemented a thorough and effective selection scheme, ensuring a high-quality student intake with a strong academic profile, in line with the expectations of a research master. The panel also values that the expectations and required skills of the programme are transparently communicated during the selection process.

Curriculum

Findings

The two-year (120 ECTS) curriculum is structured around five blocks per academic year, each consisting of eight weeks with typically three courses per block. The curriculum is designed around three pillars: Data Science Foundation, Business Foundation, and Research Practice. Students are required to specialise in a business track, selecting either quantitative finance, management science (encompassing entrepreneurship and innovation, marketing science, human resources and organisation), or operations analytics.

In the first year, students complete 11 core courses (44 EC), a Parallel Computing course (3 EC), and track-specific field-courses, electives and optional research internships (12 EC). The curriculum also features Business Foundations activities (1 EC), including visits to the research departments of the participating schools, which guide the track selection process and kickstart the matching process with a thesis supervisor. Students begin the first year by exploring business challenges that data science can address, then build a solid methodological foundation in the core courses. Depending on their previous expertise, students choose foundational courses (e.g., Mathematics, Statistics, Econometrics, Machine Learning) or advanced equivalents (e.g., Advanced Mathematics, Asymptotic Statistics, Advanced Econometrics, Advanced Machine Learning). Both students and lecturers expressed satisfaction with this approach, highlighting its appropriateness in catering to diverse academic backgrounds and goals. In the third block, students focus on a given business track: quantitative finance, management science (consisting of entrepreneurship and innovation, marketing science, human resources and organisation), or operations analytics.

The second year allows further specialisation. Students must complete the Bayesian Econometrics course (3 EC); 24 EC consisting of mandatory track-specific field courses (up to 12 EC), electives, and optional research internships (the latter up to 6 EC); skills courses (3 EC); and their final thesis (30 EC). The second-year curriculum offers a wide variety of advanced field courses and electives covering state-of-the art materials in various domains within business and data science, including specialised research methods, advanced theory, and applied research topics. The mandatory skills workshops focus on academic writing, presentation skills, academic integrity, and ethics. Data management and ethical standards are further reinforced by the requirement to submit a comprehensive data management plan during thesis preparation.

Research internships are an important component of the curriculum, with the opportunity to complete max. 4 internships (max. 14 EC in total) over the first and second year of the program. The internships aim to familiarise students with the research process and deepen their knowledge within a specific area, allowing them either to broaden their academic perspective or specialise further in a particular subfield. Students shared with the panel that they consider internships a highly valued part of the curriculum and expressed regret about the current plans to reduce the space allocated to them.

The *thesis* (30 ECTS), conducted in the second half of the second year, requires students to independently design and execute a research project under expert supervision. The aim is to achieve a quality level suitable for inclusion in PhD work or publication in peer-reviewed journals. The thesis process has recently been changed to include a pre-defence that closely mirrors the academic paper development cycle. This pre-defence simulates a conference experi-

ence, where students receive structured feedback and engage constructively with reviewers' comments. Post pre-defence, students receive detailed reports outlining required improvements before submitting the final version of the thesis, along with their responses to reviewers' feedback. Lecturers indicated that the pre-defence introduces an intermediate deadline in June, which results in more students completing their thesis on time. Both students and alumni expressed satisfaction with the supervision provided and confirmed the pre-defence's substantial added value.

Students explained that the matching process between students and supervisors begins early, initially through departmental visits and further refined through field courses and research internships. This structured process supports students in finding appropriate thesis supervision and potential PhD opportunities.

The panel inquired whether the business component is adequately represented in the curriculum, given the strong emphasis on data science in the first year. Programme management and lecturers clarified that the heavy initial focus on data science is a deliberate choice, necessary for students to reach the required technical proficiency. Nevertheless, significant efforts have been made to introduce students early to fundamental business challenges, through seminars, department visits, research hackathons, electives, and internships. The programme moreover selectively includes courses from its partner universities and network, providing diverse electives to enhance students' business knowledge. Students appreciated that the programme's flexibility in course and internship selection ensures they can opt for business courses they need for their trajectory, noting recent improvements, such as increased access to relevant courses of the Amsterdam Business Research Institute at VU.

This flexibility also prompted questions about how the programme ensures that courses maintain the appropriate level and research-oriented character, and whether the curriculum consistently supports students in achieving all ILOs. Programme management clarified that field courses and internships can only be taught by selected faculty with an excellent research track record, thereby maintaining standards suitable for a research master's level. External courses, capped at nine EC per student, require explicit approval based on predefined criteria assessed by the Examination Board. The latter confirmed that students must clearly justify how external courses align with their academic trajectories. Internships are similarly subject to rigorous approval procedures. The panel learned that although not all field courses address the same ILOs, students take a variety of field courses that together ensure that all relevant programme level ILOs are met.

The panel also discussed curriculum coherence across the three partner schools, recognising the inherent challenges of multi-institutional collaboration. Students confirmed that there is ample coordination in courses with different lecturers, as well as between courses, leading to a coherent curriculum. Lecturers explained that the DGS plays a central role in maintaining consistency, closely coordinating with course coordinators both before delivery and after evaluations, and overseeing alignment across courses. Regular coordination meetings involving the DGS, the administrative office, and the Educational Board further ensure consistent curriculum alignment.

Finally, the panel reviewed how critical thinking is embedded within the programme. While critical reflection on methods and results evaluation is a key ILO, the panel noted this aspect was occasionally underrepresented in the final theses despite their generally high quality (see also

'Standard 4'). During the site visit, the programme management explained that the pre-defence was specifically introduced to strengthen critical discussions around students' work. Alumni added that class discussions and the analysis of state-of-the-art research papers substantially contribute to developing students' critical thinking skills. Nevertheless, lecturers acknowledged opportunities for enhancement in encouraging deeper reflection on methodological decisions and trade-offs in students' own research.

Considerations

The panel concludes that the BDS programme offers a robust, research-oriented, and attractive curriculum, effectively preparing students for PhD trajectories and (academic) research careers. The extensive variety of advanced courses across diverse business and data science domains, combined with the curriculum's intensive structure provides both foundational breadth and substantial opportunities for specialisation and depth.

The curriculum demonstrates clear coherence and a systematic progression toward the ILOs. Academic and research skills receive strong emphasis, notably through field courses, the research internships, the skills workshops, and the thesis. The panel concludes that, despite the strong initial emphasis on data science, the programme succeeds in effectively integrating data science and business components, with internships playing a crucial role in fostering both theoretical depth and specialised expertise within students' chosen business tracks. Given the significant value that research internships add, in terms of practical research training, supervisor matching, and providing theoretical knowledge, the panel suggests carefully reconsidering whether reducing the space allocated to internships is advisable.

The thesis setup fully meets the expected standards for a research master's programme, clearly demonstrating students' ability to conduct independent, high-quality research. The newly implemented pre-defence is particularly commendable, effectively simulating an academic environment and enhancing students' capacity to integrate constructive feedback, leading to improved outcomes and timely completion.

The panel appreciates the significant flexibility built into the curriculum, enabling students to personalise their academic pathways within the broader programme framework. The necessary checks and balances are well-established, ensuring high quality and consistent alignment of courses offered, closely overseen by the Educational and Examination Boards and the DGS.

The panel highly values the systematic and effective matching process between students and supervisors, facilitating optimal alignment of thesis supervision and potential PhD placements. It also identifies room for improvement in embedding critical thinking, particularly concerning the reflection on students' own methodological decisions and outcomes. Enhancing this component would further strengthen the programme.

Teaching-learning environment

Findings

Teaching approach and facilities

The teaching methods in the BDS programme are designed to actively engage students. All core courses combine traditional lectures with guided tutorials, which focus on applying theoretical concepts through practical exercises and on the training of methods and techniques. Students also complete regular assignments throughout each course. They are encouraged to explore their research interests through various specialised courses and activities employing

diverse teaching methods. These include site visits to business departments, electives offered by the BDS programme, the TI programme, and the participating Schools, hackathons, research internships, and independent research papers. Small elective courses can be organised as reading groups, while internships and research papers benefit from one-to-one mentorship by internationally recognised faculty. Together, these elements broaden students' research horizons and foster close connections with faculty members.

The small class sizes provide ample opportunity for active discussion and participation. Core courses typically host between 10 to 50 students, while specialised field courses range from five to 20 students. All courses are accessible to qualified external research master and PhD students. Students have approximately 4.5 weekly contact hours per core course and around three weekly contact hours per elective.

Lecturers expressed high satisfaction with the teaching conditions, also highlighting the interactive environment fostered by small class sizes. They praised the enthusiasm and eagerness of students but also emphasised the importance of the close involvement and supportive presence of DGS. Students confirmed, both during the site visit and in the Student Chapter, their satisfaction with the interactive teaching approach, praising the quality of teaching across the three participating institutions.

A distinctive strength repeatedly mentioned by all interviewees is the strong sense of community within the BDS programme, enhanced by the dedicated programme location in Amsterdam. The close-knit community atmosphere encourages frequent interactions between students, lecturers, and programme management. Regular individual and group meetings facilitated by the DGS ensure personalised monitoring of students' progress and effective support throughout their studies. Both students and lecturers highlighted the physical proximity as significantly contributing to an approachable and responsive environment, reinforcing strong professional and personal networks.

In addition, students indicated that flexible building access, including extended evening hours and available amenities, accommodates intensive study schedules. Features such as a library stocked with essential textbooks and diverse study rooms actively support collaboration within and across cohorts. The building's proximity to other UvA and VU study locations further enhances flexibility. Students highlighted that a dedicated space is crucial for creating an optimal learning environment, helping them feel comfortable, engage actively with peers, and make the most of their educational experience. They also noted that providing a comparable facility in Rotterdam would help ensure equal learning opportunities for all students.

Workload and study guidance

The panel observed, in the self-evaluation report, the Student Chapter, and during the site visit that workload and mental health remains an ongoing concern. While measures such as workload balancing, spreading assignment deadlines, and a mentoring system pairing first-year students with second year 'buddies' have been implemented, stress levels remain high.

Still, students told the panel they feel heard and supported, appreciating the close proximity and responsiveness of lecturers and the DGS. Students with a disability can request for special adaptations with regard to the teaching and practical training. Alumni acknowledged the stress but indicated it mirrors the demanding nature of PhD research environments. Frequent meetings with the DGS, along with peer support, have created effective coping strategies.

These measures have contributed to a low drop-out rate, further indicating that programme management's responsive strategies are effective.

Despite these efforts, students and alumni suggested that additional attention should be given to mitigating stress.

Research orientation and embeddedness

The BDS programme is embedded within the research communities of the participating schools of EUR, UvA and VU. The programme selects leading scholars from the participating schools as lecturers, thesis supervisors, admissions committee members, and scientific board members, ensuring regular student interaction with top researchers. Recently, the BDS programme adopted formal research fellows system, similar to the TI programme, to further strengthen this approach. Moreover, the most recent research reviews of the participating schools, spanning from 2015 to 2020/2021 confirm that research at these groups is conducted at the highest standards of quality, relevance, and viability.

Students are regularly exposed to cutting-edge research through departmental site visits, seminars, workshops, and conferences organised by BDS research fellows, including internationally recognised scholars and high-calibre academics. During the site visit, students indicated their appreciation for the opportunities provided in many courses to interact closely with faculty members about their ongoing research, particularly during the field courses and research internships, and the thesis. Together, these curriculum components account for a sizeable portion of the curriculum.

Students indicated moreover that many assignments require reviewing current literature, formulating research proposals, and engaging with the latest developments in the field, which familiarises them with state-of-the-art studies and enhances their skills in critically reading research papers. They also highlighted that research projects are expected to include novel elements and that substantial feedback is provided on the originality and innovativeness of their research ideas.

Use of English and international classroom

The language of instruction and assessment in the BDS programme is English. The self-evaluation report highlights that this choice reflects the programme's international orientation, its goal to prepare students effectively for PhD trajectories, and alignment with global academic and professional standards. Using English as the working language enables the programme to create an international classroom environment, which students' understanding of global issues, strengthens their cross-cultural communication and collaboration skills, and equips them to work effectively in international research contexts.

Diversity

Following a recommendation made by the mid-term review committee, the programme has succeeded in increasing the diversity of its teaching staff, both in gender, nationality, and age. The panel learned that in the student body, the balance in terms of female to male ratio and in terms of country of origin is also improving. Communication campaigns have been adapted to portray a more inclusive cohort in terms of gender and ethnicity. In addition, the programme now provides targeted guidance during webinars and info-sessions on the application procedure, with the explicit aim of encouraging less confident but equally talented students to apply. The panel welcomes the progress made and appreciates that diversity remains a point of continued attention within the programme.

Quality culture

The panel observed, both in the preparatory documents and during the site visit, that the BDS programme is clearly committed to continuous improvement and carefully addresses identified areas for development. Recommendations from previous accreditations and reviews have been rigorously followed up (see Attachment 3). The DGS consistently monitors the relevance of the curriculum for all stakeholders, including students, faculty, and the broader job market. Site visit discussions were open and constructive, highlighting that student feedback is actively sought and appropriately acted upon. Members of the Educational and Examination Boards confirmed their close collaboration with programme management in continuously enhancing programme quality.

Considerations

The panel highly values the intensive, interactive teaching environment fostered by the TI programme, emphasising small-scale classes and strong research-oriented instruction. The high-quality, intensive teaching-approach, combined with an exceptionally cohesive community, significantly enhances the learning experience. Despite spanning three institutions, the programme remarkably functions as one cohesive team, facilitating close interactions and collaboration among students and faculty.

The visible and approachable role of the programme management, especially the DGS, significantly contributes to the programme's supportive and responsive environment. The close-knit community and short lines of communication create robust support networks and productive interactions between students and staff. While discussions revealed no current concerns regarding social safety, the panel notes that a high-stakes, pressure-intensive academic environment such as this one requires ongoing vigilance. The panel advises ensuring that effective support structures remain securely in place to safeguard continuity and responsiveness in addressing potential issues.

The panel welcomes the programme's measures addressing student workload and stress, such as mentorship initiatives and community-building activities. It also welcomes the possibility for students with a disability for special adaptations to the teaching and practical training. However, the persistent high stress levels remain an area requiring ongoing attention. Continuous vigilance in this area is advised.

The panel commends the programme's strong research orientation and extensive embeddedness within the high-quality research environments of the partner institutions. This embeddedness significantly enhances the academic rigor and relevance of the BDS programme, successfully preparing students for subsequent (academic) research careers.

The panel finds that the choice of English as the name of the programme and the language of instruction is well justified. The decision to offer all educational activities and assessments in English is based on the research-intensive nature of the programme. It also shows how research is embedded in an international environment. The panel welcomes the progress achieved in staff and student diversity and values that this remains a point of continued attention.

Staff

Findings

All course coordinators and lecturers in the BDS programme hold a PhD. The lecturers for the programme consist of faculty members from the Schools selected by the DGS to teach in the program based on their outstanding academic performance, teaching skills, and knowledge

contribution. As indicated above, the BDS has recently started to select research fellows, following the example of the TI programme. Tutorials for first-year core courses are provided by second-year Research Master students or PhD students, who receive specific in-house training and operate under close supervision by course instructors. The panel discussed this practice during the site visit, inquiring whether the proximity in academic level might present issues. However, all parties convincingly argued that this close academic proximity is a positive factor, as it ensures tutors have recent, relevant experience, enabling them to effectively guide and support the students.

The BDS programme employs approximately 5.1 full-time equivalent (fte) teaching capacity for around 36 students across both years of the programme, resulting in an average student-teacher ratio of roughly 1:10. Additional faculty hours dedicated to thesis supervision and internship guidance are not included in this calculation.

Coordination between teachers is primarily managed by the DGS, who ensures alignment in course content, teaching methods, and assessments. An annual plenary meeting is organised by the DGS to ensure effective communication, foster interaction among teachers, and present the year's policies and plans. The Educational Board further oversees horizontal and vertical alignment within the curriculum. Also, the panel learned that for both field and core courses, the DGS strives to have two instructors from two different Schools.

All lecturers have either a University Teaching Qualification (BKO - Basiskwalificatie Onderwijs) and/or have substantial teaching experience in English. In the student chapter, students indicated strong satisfaction with the quality of the teaching staff, emphasising their responsiveness, accessibility, and deep expertise. Students also positively highlighted the senior lecturers' well-developed teaching skills, the quality of additional, personally created educational resources provided. They indicated their English-language proficiency to be up-to-standard. Additionally, the openness of teachers to feedback and their readiness to offer individual guidance through office hours were greatly appreciated. This positive impression was further validated by both students and alumni during the site visit. They confirmed that this high quality of staff applies to lecturers provided by all three partner schools of the BDS programme.

Considerations

The panel values the high qualifications and dedicated involvement of the BDS teaching staff, significantly contributing to the programme's educational quality. The careful selection of teaching staff ensures that students interact with leading academics who actively integrate current research into their teaching.

The favourable student-teacher ratio ensures personalised attention and contributes significantly to a responsive learning environment. Regular coordination by the DGS and Educational Board maintains consistent quality and coherence across courses. The panel appreciates the practice of assigning two instructors from different schools to core and field courses, as this promotes effective collaboration and coordination. It emphasises the value of maintaining this high level of accessibility and responsiveness among the teaching staff, recognising it as a vital element of the programme's success.

Conclusions

Based on the above findings and considerations, the panel concludes that the BDS programme provides a strong, research-oriented, and engaging teaching-learning environment. The selection procedure is rigorous and transparent. The curriculum is robust, intensive, and

thoroughly research oriented. Its overall coherence and systematic progression towards the ILOs is clear. The panel appreciates the substantial flexibility built into the curriculum, yet effective checks and balances are in place to ensure that all students achieve the programme's ILOs. Moreover, students' critical reflection on their methodological choices and outcomes could be strengthened.

The programme's strong research orientation and integration within high-quality research communities significantly enhance its academic rigour and relevance. The panel finds the choice of English as the name and language of instruction well-justified, reflecting the international and research-intensive nature of the programme. It welcomes that diversity among staff and students remains a point of continued attention.

The panel highly values the interactive, small-scale teaching approach and cohesive academic community across the three participating institutions, creating a supportive environment. However, persistent high stress levels remain a concern requiring ongoing attention. Also, the panel emphasises the importance of ongoing vigilance and robust support structures to ensure social safety.

The panel appreciates the exceptional qualifications and active involvement of the BDS teaching staff. Regular coordination ensures consistent quality and coherence across all courses and participating Schools. The programme's quality culture and orientation towards constant improvement were visible throughout.

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 policy and plan

The panel examined the carefully drafted assessment plan. It emphasises constructive alignment, ensuring coherence between course objectives, teaching methods, and evaluation formats. The assessment methods specifically target knowledge acquisition, application, judgment, and communication skills. Assessments vary across the two years of the programme, reflecting the progression of learning goals. In the first year, the focus is on acquiring a strong foundational knowledge. Assessment methods are varied, depending on content and objectives of a course. Grading is based on weighted averages of exams and one or more assignments. These assignments aim to help students deepen their understanding and prepare for the exams. Assessment methods in the core courses that are shared with TI primarily consist of sit-in written examinations, which in most cases count for 85% of the final grade, complemented by graded assignments contributing 15%.

The panel discussed extensively the appropriateness of the weighting (15%-85%) of the first-year assignments with different groups. Students indicated having mixed feelings about this distribution. Some expressed satisfaction, while others mentioned spending significant effort on assignments, feeling the weighting should be higher to better reflect the actual time invested. Lecturers explained the reasoning behind this weighting: assignments are intended as lower-stakes learning opportunities that encourage students to actively engage with the course material without excessive pressure. In their view, assignments primarily serve to enhance exam preparation and allow room for mistakes as part of the learning process. However, programme management indicated that the assignment weighting is set to increase to 25% in the near future, acknowledging students' feedback on the subject.

In the field courses during the first and second year, assessments shift towards methods that emphasise active student participation and independent research skills. Common formats include presentations, participation in discussions, take-home exams, research essays, and oral examinations. The panel observed a balanced variety in assessment forms, effectively aligned with the advanced learning outcomes. The observation in the self-evaluation report that the internships are currently assessed on a pass/fail basis, with the evaluation conducted solely by the supervisor, prompted a discussion on this topic during the site visit. It was confirmed by the lecturers that, at present, the programme does not use explicit assessment criteria or involve multiple assessors in the internship evaluation.

The programme does not schedule exam retakes within the same academic year. Instead, a compensation rule applies within certain course sequences: a failing grade (5) can be compensated by a high grade (7.5 or higher) in a related course. The panel initially was critical of the absence of resit opportunities, particularly in view of the potential added stress for students. This topic was discussed extensively during the site visit. Students shared nuanced views: while some indicated that the policy helps to prevent an excessive workload in subsequent blocks, others saw retakes as potential opportunities to master the content better. Lecturers explained that the no-retake policy encourages students to focus their efforts on succeeding the first

time, enhancing overall engagement. They emphasised that, in exceptional circumstances, flexibility is provided. Specifically, in case of emergency a re-sit is granted by the Examination Board. In other cases, students can retake courses the following academic year. The Examination Board also confirmed that extra scrutiny is applied to ensure reliability of exams, given the no-resit policy, and added that this approach aligns with international graduate programme standards.

Since the previous assessment, the emergence of GenAI has posed challenges for student evaluations. To address this, the programme reviewed its assessment methods and concluded that its varied mix of closed-book exams, research papers, and presentations effectively mitigates potential misuse. Recognising that GenAI can assist students in tasks such as coding or writing, the programme has introduced measures to safeguard integrity. Students now sign an integrity pledge at the programme's start and participate in an ethics session that explicitly addresses the ethical use of AI in academic tasks. Moreover, lecturers clarify permissible AI usage within their courses, requiring students to transparently report any use of AI tools in submitted assignments. Teachers are instructed to report any suspected cases of inappropriate use to the Examination Board. Additionally, oral assessments complement written work, further reducing risks associated with GenAI misuse. The panel confirmed that the current assessment structure, combining closed-book tests, papers, and presentations, effectively addresses the challenges posed by GenAI.

Quality assurance

The panel reviewed the quality assurance measures in place for assessments, noting clear procedures designed to guarantee validity, reliability, and transparency. Responsibilities for maintaining assessment quality are explicitly assigned and shared primarily between lecturers, the DGS, and the Examination Board.

Lecturers (examiners) are responsible for the design and grading of assessments. They must ensure their exams align with course objectives and the ILOs. Lecturers receive clear guidelines from the DGS about assessment methods and are required to have their exam assignments peer-reviewed before administration. They also have to provide clear rubrics and answer models.

The DGS is responsible for selecting and guiding examiners, issuing guidelines on course content and assessment methods, and ensuring that course assessments align with the programme's ILOs. The panel confirmed that course manuals provide detailed information to students, including learning objectives, rubrics, test blueprints, and exam procedures. After each course, the DGS conducts individual meetings with instructors to evaluate course quality, assessment results, and student feedback.

The Examination Board independently monitors assessment quality using multiple measures. It reviews grades and pass rates, comparing them across years to detect deviations or issues. If significant discrepancies or unusually high averages arise, the Examination Board investigates further. It also monitors dropout rates, intervening if they exceed predefined thresholds. Annually, the Examination Board examines a representative sample of graded theses, paying close attention to alignment with program-level ILOs, consistency and justification of grades, and the quality of provided documentation, including comments from pre-defence evaluations.

The Examination Board, shared with the BDS-programme, comprises four members: one from each participating school, and one external assessment specialist. It operates independently

but collaborates closely with the DGS to address any identified quality concerns. The Examination Board meets regularly according to a structured agenda, systematically assessing course exams and theses. The panel's discussions with the Examination Board revealed a structured and proactive approach, characterised by short communication lines, comprehensive monitoring, and rigorous follow-up. The panel observed that the Examination Board rigorously fulfils its legal responsibilities, ensuring that assessment policies, planning, and quality assurance are consistently implemented across the three participating schools.

Thesis assessment

The panel closely reviewed the assessment procedure for the thesis, which serves as the final, integrative examination of the research master program. The thesis process has recently been updated (as of summer 2024), introducing a pre-defence to strengthen the formative aspect of the assessment. The panel learned from both documentation and site-visit interviews that the pre-defence is positively received by students, lecturers, and management, although lecturers acknowledged it involves additional effort.

The pre-defence takes place before a committee consisting of the thesis supervisor and at least two independent faculty members who were not involved in supervising the thesis, with at least one from a different school than the supervisor. During this public session, students receive structured feedback, simulating an academic peer-review environment. Students then revise their thesis and submit a final version along with a concise explanation of how they addressed the committee's feedback.

The final thesis is evaluated by the two independent committee members who were not involved in supervision. The supervisor contributes to the assessment by grading specific elements of the thesis process and student progress. Each thesis undergoes a plagiarism check before final grading.

The panel studied a sample of 15 theses in detail to assess evaluation quality. It concluded that the use of clearly structured rubrics and detailed feedback significantly enhances transparency and objectivity. The rubrics effectively reference every step of the empirical cycle, appropriately reflecting a research master's standards. While the rubrics align with the programme's ILOs, the panel suggests that directly translating ILOs into assessment criteria could further enhance efficiency and clarity, aiding the Examination Board's evaluation of programme-level outcomes.

Considerations

The panel concludes that the assessment policy and practices of the programme are valid, reliable, and transparent. Assessments are well aligned with the ILOs, clearly communicated, and carefully implemented, using detailed rubrics and clear grading guidelines. The panel highly appreciates the transparent procedures, systematic peer review of exams, detailed assessment plan, and explicit attention given to scientific integrity, including the responsible use of AI.

The panel initially approached the no-resit policy with caution but, after extensive discussions with students, lecturers, and the Examination Board, concludes that this policy is the result of careful considerations and appropriate given the intensive and research-oriented nature of the programme. The compensation mechanism for core courses and the flexibility to retake a course entirely the following year provide adequate safeguards. Moreover, the Examination

Board's willingness to consider exceptions reassures the panel of the balanced implementation of this policy.

A particular strength of the programme lies in the assessment of the thesis. The introduction of a pre-defence significantly enhances the feedback provided to students and aligns well with authentic academic practice. The thoroughness and transparency of thesis assessments, supported by detailed rubrics, multiple independent assessors, and rigorous feedback, were particularly appreciated. The panel suggests more explicitly incorporating the programme's ILOs into the thesis assessment criteria, which would enhance both clarity and the Examination Board's ability to monitor the achievement of these ILOs.

The panel identified room for improvement in the assessment of internships. While internships are highly valued by students and recognised as an important element of the curriculum, it is remarkable that their evaluation is less rigorous compared to other programme components, involving only a single assessor and lacking explicit assessment criteria. The panel suggests formalising and strengthening internship assessment procedures.

Finally, the panel expresses its appreciation for the Examination Board's proactive and thorough approach. The systematic monitoring of assessment practices, careful sampling and reviewing of theses, and consistent interaction with the programme management contribute significantly to maintaining high standards of assessment.

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.

Findings

Thesis Quality

The thesis (30 ECTS) is the final examination of the programme, serving as an integrative assessment to confirm students' achievement of the intended learning outcomes. Specifically, the thesis demonstrates students' ability to independently develop and carry out a scientific research project, contributing meaningfully to the scholarly debate. The thesis is supervised by senior faculty which ensures high-quality guidance. In most cases, these supervisors subsequently act as PhD supervisors, enabling the master's thesis to form a substantial part of the student's PhD dissertation and giving students a significant head start in their doctoral trajectories.

To verify whether graduates indeed achieve the programme's ambitions, the panel reviewed a selection of 15 recent theses. The panel is satisfied with the high quality observed in these theses, noting they clearly reflect the master's level and cover all essential stages of the research process. The theses typically demonstrate considerable publication potential in international, peer-reviewed journals. Grades awarded by the programme align closely with the panel's assessment.

While the theses consistently showed strong academic rigor and relevance within their research contexts, the panel observed that critical reflection on methodological choices and the evaluation of research results, though explicitly stated as key ILOs, could be enhanced in some theses. This finding aligns with earlier observations regarding the broader embedding of critical thinking in the curriculum (see standard 2).

Graduates, outflow to positions inside and outside academia

Except for the 2020 cohort affected by Covid, the programme has consistently low dropout rates. Once past the initial block, most students successfully complete the programme, with nearly two-thirds graduating within the expected timeframe. The panel observed an impressive success rate of programme graduates transitioning into PhD positions. Data from recent cohorts (2020–2022) indicate that approximately 79% of graduates continue to PhD positions, often within the partner schools. The programme's graduates that have started a PhD will soon start to graduate and report to be on track to complete their PhD. This underlines the programme's success in preparing students for academic careers.

This strong track record was confirmed in discussions with alumni and PhD supervisors during the site visit. Supervisors highlighted that BDS graduates distinguish themselves by their readiness to conduct independent research, clearly surpassing peers from other master's programmes who primarily demonstrate advanced disciplinary knowledge but lack extensive research experience.

A small number of students choose career paths outside academia, and it is reported that they readily obtain positions that require highly skilled knowledge workers and researchers, for example, government and non-government organisations such as research institutes and the financial sector. Programme management noted during the site visit there are clear benefits to students following the career trajectory in terms of establishing strong networks and connections with influential organisations in policy-making and finance.

The panel observed that alumni maintain close ties with the programme, regularly returning for collaboration or to seek advice on complex data-related questions. Alumni frequently attend institute-organised activities, demonstrating their ongoing engagement and appreciation for the community and professional networks established during their studies.

Considerations

The panel is fully convinced that the programme consistently delivers high-quality graduates who are exceptionally well-qualified for both academic and non-academic labour markets. Graduates demonstrate a high academic standard, as evidenced by the quality of their theses, which consistently exhibit strong academic rigor, relevance within their respective research contexts, and potential for publication in international, peer-reviewed journals. This quality is further reflected in the high average grades awarded, indicating rigorous and meaningful assessment.

Furthermore, the strong record of PhD inflow, successful completion, and placement clearly demonstrates that the programme achieves its ambitious intended learning outcomes. The panel highly values the impressive success rate of graduates entering PhD positions, and demonstrate strong performance and career progression thereafter. Those who pursue career paths outside academia secure prominent positions, enriching the network and influence of the programme beyond academia.

The panel highly values the programme's active and vibrant alumni community, recognising it as a significant strength. The ongoing connection between alumni and the programme, reflected in frequent participation in programme activities, highlights the lasting professional and personal relationships fostered during the programme.

Alongside these evident strengths, the panel notes an area for further improvement: students' critical reflection on their methodological decisions and the evaluation of their research results in some theses. While the theses reviewed showed thoroughness and academic rigor, enhancing explicit critical reflection could further strengthen graduates' preparedness as independent researchers.

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

Attachment 1: administrative data

Institution	
Name in RIO	Erasmus Universiteit Rotterdam
Addres	Burgemeester Oudlaan 50 3062PA ROTTERDAM Rotterdam
Website	www.eur.nl
BRIN-number	21PE
Status (funded or unfunded)	Funded
ITK (yes or no)	Yes
Programme	
First name, as in RIO	Research Master Business Data Science (joint degree)
Location	Rotterdam and Amsterdam
Programme number in RIO	65024
Orientation and level (wo/hbo/ad/ba/ma)	WO-MA (WO Master)
Research master?	Yes
Language of instruction	English
Legal) professional requirements (yes or no)	No
All programme tracks/specialisations	Quantitative Finance, Management Science and Operations Analytics
Joint programme degree	Joint degree with Erasmus Universiteit Rotterdam, Universiteit van Amsterdam and Vrije Universiteit Amsterdam
Special feature	N/A
Degree and addition	Master of Science
Studyload in EC (60, 90, 120, 180, 240, 360)	120 EC
Modes: fulltime, parttime, dual	Fulltime
Working with units of learning outcomes (full-time, part-time, dual)	N/A
Assessment cluster	WO OZM Economie
Submission date	1 November 2025
Other (e.g. name change or extension of study duration)	N/A

Attachment 2: assessment panel

Drs. Raoul van Aalst, chair
Independent management consultant, cultural and organisational philosopher, researcher and Investment Partner Great Stuff Ventures

Prof. dr. Inge de Wolf, panel member
Professor Education Systems at ROA, Maastricht University

Prof. dr. Jaap Wieringa, panel member
Professor Research Methods in Business, University of Groningen

Prof. dr. Bas Werker, panel member
Professor Econometrics and Finance, Tilburg University

Jeanne Olla BSc, Student member
Student research-master Economics and Financial Research, Maastricht University

The panel was supported by dr. Jetje De Groof, certified secretary.

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

Attachment 3: site visit program

Schedule panel visit accreditation TI and BDS research master programmes June 17, 2025 Location: Tinbergen Institute Amsterdam		
Start	**End**	**Session**
08:30	08:45	Panel meeting
08:45	09:45	TI Director, Director of Graduate Studies and Dean ESE
09:45	10:00	Panel evaluation
10:00	11:00	Students (both programmes)
		Panel evaluation
11:00	11:45	Work field: PhD supervisors (both programmes)
11:45	12:45	Panel evaluation and lunch
12:45	13:45	Teachers (both programmes)
		Panel evaluation
13:45	14:30	Alumni (both programmes)
14:30	14:45	Panel evaluation
14:45	15:30	Examination Board (both programmes)
15:30	16:00	Panel evaluation
16:00	16:30	Second meeting Directors
16:30	17:45	Panel evaluation
17:45	18:00	Presentation first findings

Attachment 4: Recommendations from previous assessment

Initial Accreditation May 2020

Standard	Panel Recommendations	Key actions taken
2	Monitor possible deficiencies in students' knowledge at the start of the programme	Online tests for self-assessment of the students' in math and programming; pre-program refresher courses; admission office provides incoming students with list of preparatory material (videos, online courses, textbooks, online resources) to compensate for any deficiency and prepare ahead for courses; current students advise incoming students in the Buddy system on how to best prepare for the programme; information sessions for incoming students.
2	Consider the appointment of a deputy director to pick up issues in the absence of the DGS.	We modified the ILOs, better structured the skills courses to strengthen the training of soft skills, and broadened the thesis procedure to pay more attention to the presentation and interaction with other researchers. The first year now has three research-oriented field courses (instead of two) and there is a two-session workshop on research idea generation.
2, 3	Monitor the contribution of individual courses to the overall programme objectives.	We do this by systematically reviewing course manuals, assessment matrices, course evaluations, and by reflecting with teachers and students every block.
3	Monitor the resit policy and its effect on individual students.	The resit policy (and the compensation rule) have been discussed at length in the Examination and Educational Board. The students themselves recognise that the lack of resits allows them to focus fully on the next block of courses without having to catch up on previous course while trying to digest new course material. The compensation rule allows students (under strict conditions) to compensate a 5 in a course sequence with a 7.5 or higher in another course. This helps the students to stay on track. In the future, we will continue to monitor this policy.

Midterm Review January 2024

Standard	Panel Recommendations	Key actions taken
	Considering the possibility of also admitting non-academics (or former academics) to the (scientific) committee to obtain a broader understanding of the field's requirements.	In 2025 the scientific council was expanded with a member from the business sector.
3	Explore opportunities to ensure the best possible diversity of the student population.	To stimulate diversity we worked on our communication campaigns, where we strive to display a more inclusive cohort (in terms of gender and ethnicity). In our webinars and infosessions, we provide guidance on the application procedure. This information is important to stimulate less confident but equally talented students to apply. We will continue to focus on diversity, not only among our students but also among our faculty.
2	In case of course cancellations, the programme should provide a comparable alternative.	Cancellation of courses are announced in advance, giving students ample time to select alternative courses or apply for a research internship (guaranteeing field-specific exposure). Moreover, several elective courses have been designated as mandatory within each track. This ensures the minimum enrolment threshold of five students per course, reducing uncertainty related to whether courses will be offered.

Attachment 5: reviewed documents

- Self-evaluation report
- Appendices:
    1. Student Chapter
    2. ILOs and Dublin descriptors
    3. Inflow and outflow of students
    4. Impact budget cuts
    5. Academic and Exam Regulations 2024-2025
    6. Integrity pledge 2024
    7. Study Guide 2024-2025
    8. Thesis manual 2025
    9. Assessment plan 2024-2025
    10. Course information on the following courses: Asymptotic Statistics, Econometrics II, Heuristic Optimisation Methods, Machine Learning II, Natural Language Processing, Social Network Analysis
    11. Annual report 2023-2024 Educational Board
    12. Annual report 2023-2024 Examination Board
    13. Rules and Regulations Examination Board
    14. Research environment
    15. Slides of visits to the departments
    16. Research review Erasmus School of Economics
    17. Research review 2015-2020 Economics and Business
    18. Overview of key figures, teachers and thesis supervisors and their qualifications
    19. Fellowship Charter
    20. Annual Research Report 2024
    21. Panel report initial accreditation March 2020
    22. Panel report midterm review January 2024
    23. Gemeenschappelijke regeling van het Amsterdam Rotterdam Consortium for Graduate Education in Economics and Business
    24. Partnership Agreement Research Master Business Data Science
    25. Financieel convenant voor de gezamenlijke uitvoering van de Research Master Business Data Science (joint degree)

- Graduation work of 15 students