

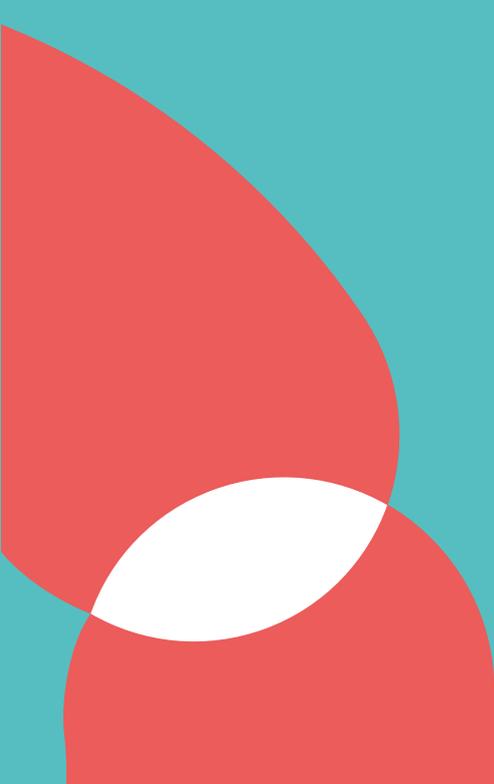


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## INITIAL ACCREDITATION

MASTER IN SUSTAINABILITY TRANSITIONS  
Rotterdam University of Applied Sciences

ADVISORY REPORT  
3 JULY 2025



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## 1 Peer Review

The Accreditation Organisation of the Netherlands and Flanders (NVAO) assesses the quality of a new programme through a peer review process. This initial accreditation is mandatory for an institution that seeks to award a recognised degree upon the successful completion of a study programme.

The procedure for accrediting new programmes differs somewhat from that for existing programmes that have already been accredited. Initial accreditation serves as an ex ante assessment of a programme's quality. Once accredited, the new programme becomes subject to the standard review process for existing programmes.

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

The peer review outcome is guided by the standards outlined and published in the NVAO Assessment framework for the higher education accreditation system of the Netherlands (Staatscourant 2024, nr. 6405). Each standard is evaluated on a three-point scale: meets, partially meets, or does not meet the standard. Based on this evaluation, the panel will rate the programme's overall quality as positive, conditionally positive, or negative.

NVAO makes the decision on the programme's quality based on this advisory report. This accreditation decision can be positive, conditionally positive or negative. If the decision is positive, with or without conditions, the institution may proceed to offer the new programme. Graduates of the programme will then be entitled to receive a legally accredited degree.

This report presents the panel's findings, analysis and judgements resulting from the peer review. It also details the commendations and recommendations for follow-up actions. A summary report highlighting the main outcomes of the peer review is also available.

Both the full and summary reports of each peer review are published on NVAO's website [www.nvao.net](http://www.nvao.net). There you can also find more information about NVAO and peer reviews of new programmes.

## 2 New Programme

### 2.1 General data

<b>Institution</b>	Rotterdam University of Applied Sciences
<b>Programme</b>	Sustainability Transitions
<b>Variant</b>	Fulltime
<b>Degree</b>	Master of Science
<b>Location</b>	Rotterdam
<b>Study load</b>	60 EC <sup>1</sup>

### 2.2 Profile

The professional master's programme in Sustainability Transitions (STR) intends to educate change-makers and system-shifters who connect disciplines and stakeholders, thus catalysing sustainable transitions. The programme ensures a good balance between theory and skills development – integrating business tools, sustainability theory, systems thinking, interdisciplinary knowledge and leadership to solve complex sustainability challenges. Graduates can facilitate both organisational transformation and long-term system-level change.

The programme has been developed by Rotterdam Business School (RBS), part of Rotterdam University of Applied Sciences (RUAS). RBS has an international profile and offers programmes at bachelor's and master's level. RBS participates in the Master in Sustainability Transitions (MST) coalition, a national initiative involving twelve universities of applied sciences that has led to seven new professional master's programmes, each with a distinctive profile based on regional priorities. STR will focus on energy transitions, circular economy and business models – all related to its location close to the port of Rotterdam.

### 2.3 Panel

#### Peer experts

- Dr. Elles Bulder (chair), Professor Environment in Transition at Hanze University of Applied Sciences;
- Dr. Frank van Rijnsoever, Associate Professor in the field of innovation, entrepreneurship and sustainability at Utrecht University;
- Mr. drs. Henriëtte Graveland, strategic consultant at Waterschap De Dommel;
- Anina Jonker, student MSc Climate Studies at Wageningen University & Research.

#### Assisting staff

- Anne Martens, secretary;
- Reina Louw, NVAO policy advisor and process coordinator.

#### Site visit

Rotterdam, 28 May 2025

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<sup>1</sup> European Credits

### 3 Outcome

The NVAO-approved panel reached a positive conclusion regarding the quality of the professional master's programme in Sustainability Transitions (STR) that is proposed and developed by Rotterdam University of Applied Sciences (RUAS). The institution intends to offer the programme of 60 EC as a full-time programme in Rotterdam. The programme complies with all standards of the limited NVAO assessment framework.

The ambitious programme intends to educate change-makers and system-shifters who connect disciplines and stakeholders, thus catalysing sustainable transitions. Students develop their abilities in strategic sustainability foundations, strategic business tools, finance, applied research and leadership for sustainability transitions. The programme meets national and international requirements and aims to deliver graduates who can solve complex sustainability challenges and facilitate both organisational transformation and long-term system-level change. It has been developed in cooperation with other universities of applied sciences. Together, they have formulated six intended programme learning outcomes that meet the level of a professional master's programme. The STR programme in Rotterdam is focused on themes that are especially relevant to RUAS and its location close to the port of Rotterdam: energy transitions, circular economy and business models.

The curriculum of the programme is well structured, ambitious and ensures a good balance between theory and skills development. Overall, the programme uses a variety of teaching and assessment methods. Throughout the programme, students work on real-world sustainability challenges and prepare a Sustainability Transition Action Plan (STAP). These projects enable students to make their own choices for a specific project topic, according to their personal interests.

The programme strives for a heterogeneous student population, with students from a wide range of different backgrounds – in terms of academic discipline, professional experience and nationality. The programme intends to create a strong learning community and foster a sense of belonging right from the start of the programme. This will likely support students in dealing with a substantial study load. The programme has developed a well thought-out and structured assessment plan which supports students' learning trajectories. It deploys a diverse and balanced set of assessment methods throughout the curriculum.

The programme has been developed by a team of qualified, dedicated and enthusiastic staff members with relevant interdisciplinary expertise and international experience. An experienced Examination Board safeguards the quality of assessment.

The panel concludes that the professional master's programme in Sustainability Transitions is a relevant, ambitious and well-structured programme. The panel supports the programme's argumentation regarding its choice for English as the language of instruction.

Standard	Judgement
1. Intended learning outcomes	meets the standard
2. Teaching-learning environment	meets the standard
3. Student assessment	meets the standard
<b>Conclusion</b>	<b>positive</b>

## 4 Commendations

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

1. External stakeholders – The programme has strong links with external stakeholders from the professional field, RUAS's Research Centres and other universities of applied sciences.
2. Curriculum – The programme has a structured curriculum, that prepares students for the creation of a Sustainability Transition Action Plan (STAP).
3. Learning community – The programme focuses on creating a strong learning community and fostering a sense of belonging right from the start of the programme.
4. Assessors – RBS organises mandatory assessor trainings for external assessors, who are also required to attend calibration sessions both before and after assessments.
5. Examination Board – A strong and experienced Examination Board safeguards the programme's assessment quality.

## 5 Recommendations

The panel recommends several follow-up actions to further improve the quality of the programme. These recommendations do not detract from the positive assessment of the programme's quality.

1. Advisory Board – Involve more representatives from the public sector (e.g., national and regional governmental organisations) in the Advisory Board.
2. Case studies – Discuss the case studies regularly with industry representatives to keep the curriculum materials up-to-date with current developments – for example regarding policies and (global) politics that put the programme under pressure.
3. Research methodologies – Increase the lecture time for theory about research methodologies in the curriculum, to ensure that all students acquire the necessary knowledge and expertise in a range of research methods and techniques.
4. Assessment rubrics – Further develop the programme's assessment rubrics with more concrete criteria to improve the transparency of assessment. Continue the development trajectory that has already been started and ensure it is clearly reflected in the implementation phase.

## 6 Assessment

### 6.1 Standard 1: Intended learning outcomes

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

#### **Judgement**

Meets the standard.

#### **Findings, analysis and considerations**

The professional master's programme in Sustainability Transitions (STR) intends to educate change-makers and system-shifters who connect disciplines and stakeholders, thus catalysing sustainable transitions. Students develop the capacity to analyse organisational structures and to apply business strategies, systems thinking, strategic leadership and policy frameworks to solve complex sustainability challenges and to drive transformation in a variety of regions, industries and sectors (e.g., corporate, governmental, non-profit and social enterprises). Graduates can facilitate both organisational transformation and long-term system-level change.

The programme has been developed by Rotterdam Business School (RBS), part of Rotterdam University of Applied Sciences (RUAS), and aligns with RUAS's strategic agenda and RBS's impact agenda. RBS participates in the Master in Sustainability Transitions (MST) coalition, a national initiative involving twelve universities of applied sciences. Since 2019, the institutions created a framework to address sustainability education across seven regions within the Netherlands, sharing expertise in tackling transnational sustainability challenges through an interdisciplinary and regional lens. This cooperation led to a national MST profile and the development of seven new professional master's programmes, balancing a shared cohesive, interdisciplinary and strategic approach with distinctive regional priorities. The programme management explained that STR focuses on energy transitions, circular economy and business models – all related to its location close to the port of Rotterdam.

Before the site visit, the panel had questions about the focus and the scale of the programme. The course profile states that the programme instils a global perspective and encourages students to transcend local limitations and craft solutions with worldwide impact. However, the documentation included examples of projects and challenges with a regional or global focus. During the site visit it was clarified that the programme applies a multi-level approach: global sustainability issues are investigated through local, regional and international cases. The panel deems it important that the programme communicates its profile clearly towards prospective students and the professional field.

The programme is based on a nationally defined set of six intended programme learning outcomes, translated to knowledge, skills, attitudes, values and ethics (KSAVE framework). According to the panel, the documentation convincingly demonstrates that the learning outcomes have been formulated at master's level. The programme has linked the outcomes to the elements of the professional master's standard (Vereniging Hogescholen), the Dutch Qualifications Framework NLQF level 7 and the Dublin Descriptors. During the site visit, the programme developers further illustrated the level of the STR in comparison to the bachelor's level 6. The documentation and the programme representatives also explained how the programme relates to the United Nation's Sustainable Development Goals (SDG). In addition, the programme aligns with the KIA 2024-2027 Framework, which defines the key focus areas for sustainability in the Netherlands.

The programme has strong links with external stakeholders. It participates in the national MST network for education and research on sustainability transitions LOO&O, which serves as a platform for continuous learning, strategic dialogue and coordinated action. An Advisory Board with representatives from several industries has been actively involved in the development of the profile and curriculum. According to the panel, this board has a strong business focus. The panel believes it will be of added value to involve more representatives from the public sector (e.g., national and regional governmental organisations) and recommends strengthening this point of view in the Advisory Board. Given the current challenges in society, the public sector also has a demand for graduates of the STR programme. A broader representation of the public sector will likely contribute to crosslinks with other sectors – something the panel considers beneficial to all stakeholders. In addition to the Advisory Board, the programme has created a Research Advisory Board with representatives from RUAS's Research Centres. The panel

spoke with representatives of both boards, who were very committed, showed a clear vision for the programme and stressed the need for graduates with the STR profile. They provided concrete examples of how their feedback has been implemented in the programme.

The panel concludes that the new professional master's programme STR is relevant and has clearly defined intended learning outcomes. These outcomes represent the professional master's level. The panel commends the programme for the strong involvement of external stakeholders in the development of the programme. Based on these findings and considerations, the panel concludes that the programme meets Standard 1.

## 6.2 Standard 2: Teaching-learning environment

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

### Judgement

Meets the standard.

### Findings, analysis and considerations

The STR is a one-year, fulltime master's programme with a study load of 60 EC. The curriculum has a strong structure with four blocks, four core learning lines and five interwoven modules. The first four modules each focus on a specific learning line: (1) Strategic Foundations for Sustainability Transitions, (2) Strategic Business Solutions for Sustainability Transitions, (3) Applied Research for Sustainability Transitions, and (4) Leadership for Sustainability Transitions. They equip students with the knowledge and skills required to develop the components of the final Graduation Portfolio. Throughout the curriculum, students develop their abilities in strategic sustainability foundations, strategic business tools, finance, applied research and leadership for sustainability transitions. The documentation clearly shows how the module learning outcomes relate to the programme's intended learning outcomes. For each module, the programme has specified the core concepts, key skills and milestone events. According to the panel, the module descriptions provide sufficient information about the modules' content. The programme prescribes relevant and up-to-date literature.

Initially, the panel had the impression that the curriculum was very theoretical, with a focus on desk study, and lacked a practical approach. However, representatives of the programme convincingly illustrated that STR has a strong applied nature and ensures a good balance between theory and skills development. They provided multiple examples of how case studies support the development of competencies and soft skills, and how students apply theoretical concepts in interdisciplinary projects that reflect complex real-world sustainability challenges. The master's level of the cases will be assessed by standardised procedures. The panel recommends discussing the cases regularly with industry representatives to keep the curriculum materials up to date with current developments – for example regarding policies and (global) politics that put the programme under pressure. The programme coordinator explained that the curriculum does not include an internship because of the limited duration of the programme. Nevertheless, the panel suggests considering whether an (optional) internship can be added to the curriculum, to immerse students in a transition context.

The programme emphasises the development of competencies that are needed to guide sustainability transitions, such as convincing people and organisations to change the way they think and behave. Representatives of the professional field stressed the importance of communication and conflict resolution. Skills development is a key aspect of the programme; the learning line on transition leadership skills runs through the entire curriculum and students reflect on their development every other week. At the start of the programme, students participate in a GAP analysis to identify their preferences, talents, as well as areas of development. The programme coordinator explained that students are offered a 'toolbox' with change approaches that they can use when dealing with complexities and systemic change. The panel suggests teaching students how they can contribute to entirely new transition plans, which may require not just building up but also tearing down existing structures.

Throughout the curriculum, students work towards the capstone assignment Sustainability Transition Action Plan (STAP), in which they demonstrate their ability to apply what they have learnt to real-world sustainability challenges, offering actionable and transformational solutions. The programme encourages students to select a

sector and an organisation for their STAP early in the programme, allowing them to tailor their learning and focus on a specific sustainability transition challenge relevant to their personal interests and career aspirations. This is supported by the organisation of a so-called Sustainability Summit in the first block, which gives students the opportunity to connect with industry leaders, policymakers and academics.

The panel established that the programme's teaching and learning environment is well-embedded in RUAS's and RBS's educational visions. STR considers process-centred learning, active learning and meaningful learning as its key didactic approaches. This is reflected in the various learning methods, including workshops, supervision and coaching, collaborative projects, guest lectures, fieldwork and industry involvement. Students are required to collaborate with peers, lecturers and stakeholders from the professional field. The projects – such as STAP – offer students the opportunity to make their own choices for a specific topic of their personal interest.

The documentation describes RUAS's and RBS's vision on applied research. Central to this is the investigation of questions from the field, resulting in reliable and replicable answers with a real-world impact in business, sustainability and governance. In the final module, students complete a Graduation Portfolio that builds on their independent applied research initiated in the third module. This portfolio includes the STAP and a Feedback Integration Report (FIR), both of which reflect students' ability to apply research to real-world sustainability challenges. The programme has strong links with RUAS's Research Centres, which play a pivotal role in bridging academia, industry and research to enhance the educational experience. In the STR programme, the Research Centres contribute academic content, research methods, market sector contacts, research problems and guest lectures. The panel appreciates this close involvement of the Research Centres and lecturers in the development and implementation of the programme and considers this essential for the further development of the research aspects in the curriculum. The panel recommends increasing the lecture time for theory about research methodologies, to ensure that all students acquire the necessary knowledge and expertise in a range of research methods and techniques. The panel also supports the suggestion of one of the lecturers to involve teachers more in the activities of the lectorates – which could also contribute to their professional development regarding research methodologies. In addition, the panel advises to monitor whether the involvement of the Research Centres also contributes to students' skills development.

Representatives of the teaching team and the professional field acknowledged that the programme is very ambitious and that one year is not enough to fully master all skills that are expected of change-makers, but it does prepare students to make a career start in sustainability. The panel suggests developing life-long-learning modules for graduates, which may also increase their continued involvement with the programme and contribute to an alumni network.

According to the panel, the development team has formulated clear admission criteria that align with the programme's intended learning outcomes. Applicants should hold a bachelor's degree and demonstrate their English language proficiency. For mid-career professionals, relevant work experience and a compelling personal statement may be prioritised over academic qualifications. RBS offers a premaster's programme to prospective students who do not yet meet the admission criteria. The programme developers created three personas, representing different student profiles, and worked out the corresponding student journeys and difficulties these students may encounter during the programme. They explained that the programme will offer additional support through its online learning management system to students who lack specific knowledge.

The programme strives for a heterogeneous student population, with students from a wide range of different backgrounds – in terms of academic discipline, professional experience and nationality. This should create intercultural and interdisciplinary diverse student cohorts, as is already common in other RBS master's programmes. RUAS has a policy on diversity and inclusion and offers training sessions on intercultural competences to students and staff members. Students may also benefit from RUAS's general facilities, including an extensive structure for international students with support questions and personalised support to students with additional needs. The panel appreciates the programme's focus on creating a strong learning community and

fostering a sense of belonging right from the start of the programme. This will likely support students in dealing with a substantial study load – the panel advises measuring this study load regularly.

STR will be fully taught in English and bears an English name. In the documentation, the programme argues that sustainability challenges are inherently international and that an English-language curriculum reflects the global nature of the field. The programme intends to expose students to a rich diversity of knowledge, perspectives and real-world case studies to prepare them to navigate and lead in a world increasingly shaped by global challenges. Furthermore, RBS has an international profile and is located close to the port of Rotterdam, which is an international environment with companies that operate globally. Finally, the name has been agreed on within the MST coalition. During the site visit, representatives of the professional field confirmed that graduates will likely be employed in an international context. Based on these arguments, the panel supports the choice for English as language of instruction. RBS has set its admission criteria accordingly and has procedures to assure the language proficiency of teaching staff. Nevertheless, the panel deems it important to monitor whether all students are able to participate fully in the programme and provide additional language support whenever necessary.

The panel established that the STR developing and teaching team consists of dedicated and enthusiastic staff members with relevant interdisciplinary expertise and international experience. All lecturers hold a master's or PhD degree, as well as teaching qualifications. During the site visit, it was clearly visible that the lecturers form a strong team. The programme management explained that additional lecturers will be recruited if the programme grows and that relevant expertise is already available within RBS.

The panel concludes that the programme has adequately translated its intended learning outcomes to an ambitious and well-structured curriculum. STR has a strong applied nature and ensures a good balance between theory and skills development. The programme provides adequate support to students and enables them to make their own choices for a specific project topic, according to their personal interests. The lecturers are sufficiently qualified and dedicated to the new master's programme. The programme has provided sufficient arguments for the choice to offer the programme in English and why it bears an English name. Based on these findings and considerations, the panel concludes that the programme meets Standard 2.

### 6.3 Standard 3: Student assessment

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

#### **Judgement**

Meets the standard.

#### **Findings, analysis and considerations**

RBS has developed an assessment policy, which intends to ensure that assessments are both meaningful and aligned with the programme's educational goals. Assessments are considered to be an integral part of the learning journey. Students of the STR programme apply their knowledge and skills in authentic, practice-based settings, such as case studies, industry-based strategic projects, sustainability challenges and interdisciplinary collaboration. This ensures that students are not only evaluated on their theoretical understanding but also on their ability to effectively implement solutions in complex, dynamic contexts.

The panel established that the programme has developed a well thought-out and structured assessment plan which supports students' learning trajectories. The programme deploys a diverse and balanced set of formative and summative assessment methods throughout the curriculum. Each module concludes with a summative assessment, which may be oral or written. These include group and individual assignments; all modules will be at least partly assessed individually. In addition, students deliver reflection reports regularly and thus monitor their own progress. It is positive that the programme pays attention to feedback literacy.

Students conclude the STR programme with a Graduation Portfolio, consisting of three assignments: (1) the STAP, (2) the FIR and (3) a Leadership Retrospective. In a final oral defence, students present the key elements of the STAP, the research conducted and reflections on their leadership journey – thus demonstrating their ability to

lead complex sustainability transitions at a strategic level. Each of these components is assessed by two assessors, taking into account the advice of an external commissioner related to the project's organisation.

The programme has adequate procedures for assessment quality assurance, as described by means of an 'assessment cycle' that clearly defines the roles, tasks and responsibilities of everyone involved in assessment. Student rights are outlined in the Education and Examination Regulations (OER), the Student Statute and the Hogeschoolgids (RUAS Guide). Students will be adequately informed about the assessment procedures and criteria through the module descriptions through the online learning management system. This information will include the grading rubrics.

A strong and experienced Examination Board (EB) further safeguards the programme's assessment quality. RBS has an independent EB for (pre)master's programmes, with a separate chamber for English-language programmes. The EB is supported by a Quality Assurance Committee, which monitors the quality of all assessments except the final Graduation Portfolio. The panel was impressed by the professional approach of this body, as explained by the EB's chair. The EB has been informed continuously about the development of the programme; when applicable, the EB has given advice or indicated possible risks. During the site visit, the panel learnt that the Examination Board has recommended further developing the programme's assessment rubrics – especially the rubric that will be used to assess skills and personal development – with more concrete criteria to improve the transparency of assessment. The panel is confident that the programme will be able to follow up on this recommendation before the intended start of the programme in September 2026.

According to the panel, RUAS has clear requirements for assessors and provides sufficient training to assessors. All assessment developers and internal assessors need to obtain the Basic Qualification Examination (BKE). The programme organises regular calibration sessions. During the site visit, the panel learnt that the programme may employ external assessors, in addition to internal assessors. RBS organises mandatory assessor trainings for these external assessors, who are also required to attend calibration sessions both before and after assessments. The panel considers this a strength.

RUAS has developed a vision text about the uses of generative artificial intelligence (GenAI). In the module descriptions, educational developers explain to what extent students may use GenAI. The use of oral exams makes the assessment within STR less vulnerable to GenAI.

The panel concludes that the programme has an adequate system of assessment in place. The programme deploys a diverse and balanced set of formative and summative assessment methods, supporting students' learning trajectories and covering all intended learning outcomes. A strong and experienced Examination Board safeguards the programme's assessment quality. Based on these findings and considerations, the panel concludes that the programme meets standard 3.

#### 6.4 Degree

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

## Abbreviations

EB	Examination Board
EC	European Credit
FIR	Feedback Integration Report
GenAI	Generative artificial intelligence
MST	Master's programme in Sustainability Transitions (national coalition)
NLQF	Dutch Qualifications Framework
NVAO	Accreditation Organisation of the Netherlands and Flanders
RBS	Rotterdam Business School
RUAS	Rotterdam University of Applied Sciences
SDG	Sustainable Development Goals
STAP	Sustainability Transition Action Plan
STR	Professional master's programme in Sustainability Transitions (RUAS title)

