

Assessment report
Limited Framework Programme Assessment

Master Information Studies

University of Amsterdam

Contents of the report

1. Executive summary	2
2. Programme administrative information.....	5
3. Findings, considerations and assessments per standard	6
3.1 Standard 1: Intended learning outcomes	6
3.2 Standard 2: Teaching-learning environment	9
3.3 Standard 3: Student assessment.....	12
3.4 Standard 4: Achieved learning outcomes.....	14
4. Overview of assessments	15
5. Recommendations	16
Appendix: Assessment process	17

1. Executive summary

In this executive summary, the panel presents the main considerations which led to the assessment of the quality of the Master Information Studies of the University of Amsterdam. The programme was assessed according to the standards of the limited framework, as laid down in the NVAO Assessment framework for the higher education accreditation system of the Netherlands.

The panel regards the organisation of the programme to be appropriate. Programme management is considered by the panel to be skilled and engaged.

The panel notes programme management adequately responded to the recommendations of the previous external assessment panel.

The panel regards the programme objectives to be valid and sound. The programme studies both the fundamental aspects and the empirical aspects of information and information systems and teaches students to understand, address and solve complex problems for industrial and societal organisations. The objectives have been adequately translated into the intended learning outcomes, which are up-to-date and meet the master level requirements. The programme meets international standards as well as the Dutch Croho description for the information studies domain. The panel encourages management of this and other programmes in this domain to elaborate a national, Dutch framework.

Although the two specialisations or tracks Data Science and Information Systems of the programme are fitting, the panel recommends to state the common vision for the two tracks in more clear terms, to bring the tracks closer together and to articulate more clearly the relations between the tracks. The panel appreciates the programme preparing students for positions in the labour market.

The panel agrees with the reasons programme management has given for the English name of the programme and English as the language of instruction.

The number of students entering the programme is adequate. The panel feels the programme copes well with the rising numbers. The admission requirements are well-adjusted to the programme and tracks' contents. The panel appreciates the pre-master modules offered to incoming students to remedy deficiencies. Incoming students are generally well informed about the programme.

The panel considers the curriculum to be solid and to adequately mirror the intended learning outcomes. The panel regards the courses being very up-to-date and offering students insights in theories and methodologies. The curricula of each of the tracks are organised appropriately and display adequate coherence, but the panel proposes to strengthen the relations between the tracks. Although the human factors and the business administration/organisation fields are adequately represented in the curriculum, the research base of these is less solid. Therefore, the panel advises to reinforce the research base of these and link the course contents more intimately to research done

in these fields. The research skills and academic skills are appropriately represented in the curriculum.

The lecturers are experts in the subjects addressed in the programme. Their educational capabilities are up to standard as well, as proven by the very high proportion of BKO-certified lecturers. Although the lecturing team as a whole is sufficiently involved in research in the programme domain, the panel advises to raise the research time available for docents. The panel considers the educational work load of the lecturers as being high. The panel, therefore strongly advises to recruit more lecturers and also to raise the appreciation for education for the lecturers' career opportunities. In recruiting lecturers, the panel suggests to take the background and gender diversity of the teaching staff into account.

The educational concept and teaching methods of the programme match the programme contents. The distribution of hours of face-to-face education and self-study hours is balanced. The panel considers the information provision for and the study guidance of students to be up to standard. The panel praises programme management for accommodating part-time students in the programme scheduling. The study load of the programme is appropriate. The drop-out rates and student success rates are favourable for full-time students, but could be further reduced for part-time students. The panel is pleased with the planned relocation of the programme to the new, larger building.

The panel approves of the examinations and assessment rules and regulations of the programme, these being in line with University and Faculty guidelines. The measures taken by programme management and the Board of Examiners promote the validity, reliability and transparency of the examinations and assessments. The position and responsibilities of the Board of Examiners are up to standard. The panel welcomes the Boards' intensive inspection of examinations and Master Theses.

The examination methods for the courses correspond to the course contents. The measures to counter free-riding by students in group projects are up to standard. The panel regards fraud and plagiarism regulations to be adequate.

The supervision and assessment procedures for the Master Theses are regarded by the panel to be appropriate. The theses' assessments are conducted in a reliable way, involving two examiners and assessment forms with relevant criteria. The panel proposes to have the two examiners complete assessments forms separately. In addition, the panel recommends to add more elaborate written explanations to the assessments given.

The course examinations which the panel reviewed are up to standard. The Master Theses which the panel studied match the intended learning outcomes. The panel did not assess any of the theses to be unsatisfactory. The grades awarded by the programme examiners reflect the theses' quality.

The panel welcomes the programme preparing students for the labour market. The efforts taken by programme management to prepare students for the professional field are adequate.

The panel which conducted the assessment of the Master Information Studies of the University of Amsterdam assesses this programme to meet the standards of the limited framework, as laid down in the NVAO Assessment framework for the higher education accreditation system of the Netherlands, judging the programme to be positive. Therefore, the panel recommends NVAO to accredit this programme.

Rotterdam, 14 April 2020

Prof. dr. T. Bosse
(panel chair)

Drs. W. Vercouteren
(panel secretary)

2. Programme administrative information

Name programme in CROHO: Master Information Studies
Orientation, level programme: Academic Master
Grade: MSc
Number of credits: 60 EC
Specialisations: Information Systems, Data Science
Location: Amsterdam
Mode of study: Full-time, part-time (language of instruction: English)
Registration in CROHO: 21PK-60229

Name of institution: University of Amsterdam
Status of institution: Government-funded University
Institution's quality assurance: Approved

3. Findings, considerations and assessments per standard

3.1 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.

Findings

The Master Information Studies of the University of Amsterdam is a 60 EC academic master programme in the information studies domain. The programme is offered both in full-time and part-time study modes. The full-time study mode takes one year. The part-time mode takes two years.

The programme is one of the master programmes of the Faculty of Science of the University of Amsterdam. The programme is part of the Graduate School of Informatics of the Faculty. The Faculty Board, chaired by the Dean, is ultimately responsible for this and the other programmes of the Faculty. The director of the Graduate School is responsible for the quality of this and other master programmes. The programme director, assisted by the coordinators of the two specialisations or tracks, the programme coordinator and the study advisor, is responsible for the day-to-day management of the programme. The lecturers in the programme are mostly researchers at the Informatics Institute of the Faculty. Programme quality is evaluated regularly through written surveys. The Programme Committee, being composed of lecturers and students, processes the results of these evaluations and advises programme management about the quality of the programme. The Board of Examiners for the Exact Sciences and Information Sciences operates Faculty-wide and sets out the rules and regulations for the examinations of all Faculty programmes. The sub-Board of Examiners for this programme specifically monitors the examinations and assessments of this programme.

The panel was informed about the recommendations regarding the programme by the previous external assessment panel, six year ago, as well as about the steps programme management has taken to follow up on these recommendations.

Information studies is the study of the processes of organising, processing and communicating information and the role of information and communication technology in these processes. The processes are studied from cognitive, social and business perspectives. Information studies is an interdisciplinary field of study, drawing on and integrating insights from, among others, social sciences, economics and computer science.

The programme objectives are to teach students the fundamental aspects of information, such as information retrieval and knowledge representation, but also the empirical aspects in terms of information systems and users. The programme is primarily geared towards applied research in terms of understanding, addressing and solving complex problems for industrial and societal organisations. These problems are approached from stakeholders' perspectives. Students are taught

theoretical knowledge and are trained in practical and reflective skills and in critical thinking to address these problems.

The programme offers two specialisations or tracks. These are Information Systems and Data Science. The track Information Systems is geared towards the study at systems level of the core concepts data, information and knowledge and the relations between these. The track Data Science is directed towards the study of data, related structures and their algorithmic processing. Because of trends in the information studies domain and changing research foci of the Informatics Institute, the tracks offered in the programme have been rearranged in the period since the previous assessment. The track Information Systems is the merger of two previous specialisations Business Information Systems and Human Centered Multimedia and was offered for the first time in the academic year 2018/2019. The track Data Science has been updated in recent years. The previous specialisation Game Studies was terminated in the academic year 2016/2017. With the current two tracks, programme management feels the programme to be stabilised in this respect.

Students are trained to enter the professional field. Students normally do not proceed to PhD trajectories.

The programme objectives are in alignment with the international model curriculum and Global Competency Model for Graduate Degree Programmes in Information Systems of ACM/MSIS. In addition, the programme also meets international authoritative descriptions of concepts in information science, web science and data science. The programme conforms to the Croho description of the field of information studies. Within the Netherlands, the programme distinguishes itself from other master programmes in information studies. The programme is comparable to programmes in this domain in Europe.

The programme objectives have been translated into the intended learning outcomes of the programme. These include, as the main elements, knowledge and understanding of concepts, theories and technologies in the information studies domain, knowledge and skills to identify problems in this domain and to design and execute projects to address these problems, knowledge and understanding to critically evaluate disciplinary theories within the information studies domain, skills to work in line with scientific and industrial standards, communication skills, organisational sensitivity, skills to work in interdisciplinary teams, and reflective skills.

Programme management drafted a table from which the matching of the intended learning outcomes to the Dublin descriptors for master programmes may be inferred.

The name of the programme is in English and the language of instruction of the programme is also English. The reasons to present the programme in this language are to attract international students, who may not have the programme in this domain in their home country, and to recruit reputed international researchers in this field to lecture in the programme. International students are seen by programme management as an enrichment for the programme. Recruiting scholars internationally allows programme management to attract the best lecturers in the programme domain.

Considerations

The panel regards the organisation of the programme to be appropriate. Programme management is considered by the panel to be skilled and engaged.

The panel notes programme management adequately responded to the recommendations of the previous external assessment panel.

The panel regards the programme objectives to be valid and sound. The panel notes the programme studying both the fundamental aspects and the empirical aspects of information and information systems. The panel appreciates the programme teaching students to understand, address and solve complex problems for industrial and societal organisations. The panel welcomes the programme objectives to be aligned with the main domain-specific frameworks, such as the ACM/MSIS model curriculum. The programme, therefore, meets the international requirements of the information studies domain. In addition, the programme meets the Dutch Croho description. The panel encourages management of this and other programmes in this field to elaborate a dedicated national, Dutch framework.

The panel considers the two specialisations or tracks Data Science and Information Systems of the programme to be appropriate. The panel recommends, however, to state the common vision for the two tracks in more clear terms, to bring the tracks closer together and to articulate more clearly the relations between the tracks.

The panel appreciates the programme preparing students for positions in this domain in the labour market.

The programme objectives have been adequately translated into the programme intended learning outcomes. The intended learning outcomes of the programme correspond to the Dublin descriptors for master programmes and, therefore, meet the master level requirements. The panel notes the intended learning outcomes to be up-to-date.

The panel agrees with the reasons programme management has given for the English name of the programme and English as the language of instruction.

Assessment of this standard

These considerations have led the assessment panel to assess the programme to meet standard 1, Intended learning outcomes.

3.2 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.

Findings

The number of students entering the programme rose from 119 incoming students in 2015 to 187 students in 2019. Most students are full-time students. The proportion of part-time students is about 10 % to 15 %. The proportion of international students is about 30 % to 35 %. In recent years, most students applied for the Data Science track. Students interested to apply are informed through the programme website and twice per year on the University of Amsterdam Master Day events. The programme entry requirements are bachelor degrees with specified numbers of credits in programming, statistics, data modelling, multimedia information or information modelling courses. Entry requirements differ for each of the tracks and are tailored to the track contents. All applications are screened by the programme admission committee. In case of deficiencies which are regarded to be remediable, students are to take and have to pass specified pre-master modules, which are offered in electronic format. In taking these modules, students are guided by the module moderator.

Programme management presented the programme assessment matrices, demonstrating the intended learning outcomes of the programme to be covered in the curricula of each of the tracks. The curriculum itself comprises 60 EC and takes one year or two years to complete, depending upon the study mode. In the first part of the curriculum, students are introduced to the main concepts, theories, methodologies and problems of the track they have chosen. Students take three mandatory courses in their track and take one elective. During the first semester or first year, students of both tracks participate in the joint Data System Project, where block 3 covers the main part of the work. In this course, student work on real life projects, going through the stages of ideation, prototyping, production, validation and presentation. In the second semester or second year, students take one mandatory course per track and one elective. They finish the programme by designing and drafting the Master Thesis (18 EC). In the courses in the curriculum, lecturers introduce students to the research done in the fields addressed. Diversity and ethical issues are discussed in some of the discussion or debate sessions in the curriculum.

The number of staff members lecturing in the programme are 18 persons or 9.1 fte (figures for academic year 2018/2019). Lecturers are full professors, associate professors, assistant professors or docents. In addition, three so-called super teaching assistants or super TAs (3.0 fte) are employed. They support teaching assistants, guide students in tutorials or practical sessions and are involved in updating course material. The number of teaching assistants in the programme amounts to 0.9 fte. Staff members cover the subjects taught in the programme. Nearly 90 % of them are BKO-certified. The others are in the process of BKO certification. About 17 % of the staff are SKO-certified. Staff members are researchers at the Informatics Institute of the University of Amsterdam, being the research institute in this domain. Docents only have 20 % research appointments. More than 80 % of the staff members have PhDs. A full professor is responsible for

the Data Science track. For the Information Systems track, programme management is in the process of recruiting a full professor. At the moment, one of the associate professors coordinates this track.

The educational concept of the programme is directed towards promoting active learning on the part of the students. Students are guided in the first part of the curriculum to be able to work increasingly autonomously in the second part. The study methods applied in the programme are, among others, lectures, seminars, project meetings and discussion or debate sessions. Projects are done in small groups mostly in students' self-study time with supervised project meetings. The students-to-staff ratio of the programme is about 30/1. The programme activities for part-time students are scheduled on two specific days in the week. When working on projects, their groups are composed of only part-time students. This way, they may adapt the schedule of their activities to their possibilities. The programme is scheduled flexibly for part-time students. Students experience the curriculum as being challenging, but manageable. Having outlined their study plan, students fill out the Study Plan Application in the student monitoring system Datanose, which allows both the student and programme management to monitor the students' study progress. For assistance in their studies, students may approach programme management or the study advisor. On average 67 % of the full-time students complete the programme within one year and about 87 % do so within two years. Drop-out rates for these students are very low. The completion rates for part-time students are 48 % within two years and 75 % within three years. The drop-out rates for these students were the last years about 25 % to 30 %, but tend to improve. The Faculty building in which the programme is housed, is becoming too small to offer adequate teaching and learning facilities. This is the consequence of rising student numbers in the Faculty. In the coming years, the programme will relocate to a new and more spacious building.

Considerations

The number of students entering the programme is appropriate and rising. The panel feels the programme copes well with these rising numbers. The admission requirements for applicants are sound and well-adjusted to the programme and tracks' contents. The panel appreciates the pre-master modules offered to incoming students to remedy deficiencies. Incoming students are generally well informed about the programme, but some students were less well informed about the Data Science track.

The programme intended learning outcomes are covered in the curricula of both tracks. The panel considers the curriculum to be solid and to adequately mirror the intended learning outcomes. The panel regards the courses being very up-to-date and offering students insights into current concepts, theories and methodologies. The curricula of each of the tracks are organised appropriately and display adequate coherence, but the panel proposes to strengthen the relations between the tracks. Although the human factors and the business administration/organisation fields are adequately represented in the curriculum, the research base of these is less solid. Therefore, the panel advises to reinforce the research base of these fields and link the course contents more intimately to research done in these fields. The panel regards the research skills and academic skills such as creativity, critical thinking and reflective skills to be appropriately represented in the curriculum.

The lecturers in the programme are regarded by the panel to be experts in the fields and subjects taught in the programme. Their educational capabilities are up to standard as well, as proven by the very high proportion of BKO-certified lecturers. Although the lecturing team as a whole is sufficiently involved in research in the programme domain, the panel advises to raise the research time available for docents. The panel regards the educational work load of the lecturers as being high. The panel therefore strongly advises to recruit more lecturers and to raise the appreciation for education for the lecturers' career opportunities. In recruiting lecturers, the panel suggests to take the background and gender diversity of the teaching staff into account.

The educational concept and teaching methods of the programme match the programme contents and are, therefore, appropriate for this programme. The distribution of hours of face-to-face education and self-study hours is balanced. The panel considers the information provision for and the study guidance of students to be up to standard. The panel praises programme management for accommodating part-time students in the programme scheduling. The study load of the programme is appropriate. The drop-out rates and student success rates are favourable for full-time students, but could be further improved for part-time students. The panel is pleased with the relocation of the programme to the new, larger building.

Assessment of this standard

These considerations have led the assessment panel to assess the programme to meet standard 2, Teaching-learning environment.

3.3 Standard 3: Student assessment

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

The programme examination and assessment rules and regulations conform to the University of Amsterdam assessment policy framework and the Faculty of Science assessment policy.

As has been indicated, the Board of Examiners for the Exact Sciences and Information Sciences has the authority to monitor the quality of examination and assessment processes and products of this programme. The sub-Board of Examiners meets monthly to discuss issues pertaining to the quality of the examinations and assessments of this programme.

Examination methods adopted in courses are project reports, presentations or written examinations or the combination of these. Project reports are predominant, as most courses include projects. In most cases, projects are group projects. To ensure the achievements of individual students being assessed, students either submit individual reports or additionally take written examinations within courses. All written reports are checked for fraud or plagiarism.

For their Master Thesis, students are presented topics from Informatics Institute researchers as well as topics from industry. Students are encouraged to come up with their own subjects. Having chosen the thesis topic and having been linked to the thesis supervisor, students start in the Thesis Design phase to design the Master Thesis and to plan the Thesis Project. During the whole process, students are supervised by their supervisor. Students completing the thesis at companies, may also have a daily company supervisor. The thesis design, which includes the problem statement, research question and methodology to be adopted, has to be approved by the supervisor before students can start the Thesis Project. In the Thesis Project phase, students actually draft the Master Thesis, at the same time further elaborating the research question and the methodology. Both in the Thesis Design and in the Thesis Project phases, coaching sessions are scheduled. These are bi-weekly small group sessions under the guidance of one of the coaches. In these sessions, students are assisted by the coach in their thesis designing and writing process and are encouraged to help each other. Halfway the Thesis Project, student's progress is evaluated to ensure the thesis being finalised in time. The Master Thesis is assessed by the supervisor and the second, independent examiner on the basis of the written report and the oral defence. For the assessment, they make use of the standardised Master Thesis assessment form. Master Theses are checked for fraud or plagiarism.

Programme management and the Board of Examiners have taken measures to promote the validity, reliability and transparency of examinations and assessments. Course descriptions are in place for courses, containing course goals and course contents, and the learning methods and examination methods. Examinations are drafted by examiners and peer reviewed by their fellow examiners. Answer models for written examinations and detailed descriptions of the expected contents of reports are drafted. Through the course descriptions, students are informed about the course goals

and contents, examination methods applied and grading schemes. The Board of Examiners inspects yearly the examinations of five selected courses and six to nine Master Theses. Examinations with deviant grade distributions are inspected as well by the Board.

Considerations

The panel approves of the examinations and assessment rules and regulations of the programme, these being in line with University and Faculty policy guidelines. The position and responsibilities of the Board of Examiners are up to standard.

The examination methods for the courses correspond to the course contents. The measures to counter free-riding by students in group projects are appropriate. The panel regards fraud and plagiarism regulations to be adequate.

The supervision and assessment procedures for the Master Theses are regarded by the panel to be appropriate. The theses' assessments are conducted in a reliable way, involving two examiners and assessment forms with relevant criteria. The panel proposes to have the two examiners complete assessments forms separately. In addition, the panel recommends to add more elaborate written explanations to the assessments given.

The measures taken by programme management and the Board of Examiners to ensure the quality of the examinations and assessments are adequate and promote the validity, reliability and transparency of the examinations and assessments. The panel appreciates the draft examinations being peer reviewed. The panel welcomes the intensive inspection of course examinations and Master Theses by the Board of Examiners.

Assessment of this standard

These considerations have led the assessment panel to assess the programme to meet standard 3, Student assessment.

3.4 Standard 4: Achieved learning outcomes

The programme demonstrates that the intended learning outcomes are achieved.
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Findings

The panel studied the examinations of a number of courses of the programme.

In addition, the panel reviewed fifteen Master Theses of the last two years. In their thesis, students are to demonstrate being able, among others, to produce sound academic work, to work in a self-reliant manner, to relate their work to current research and to the information studies domain, to approach subjects in the information studies field in novel or original ways, and to show adequate technical skills. In the last three to four years, about twenty Master Theses were turned into publications in conference proceedings or in peer-reviewed academic journals.

In the programme, students work on real-life assignments and projects, proposed by organisations in the professional field. Every six months, programme management discusses trends in the professional field with the Professional Advisory Board Information Sciences. This Board fulfils this role for the other information sciences programmes of the Faculty as well.

In November 2018, programme management conducted a survey among alumni. About 80 alumni completed and returned the survey. The results show alumni being generally satisfied to very satisfied about the programme (average score is about 8/10). About 75 % of the alumni indicated having secured employment within three months after their graduation.

Considerations

The course examinations which the panel reviewed are up to standard.

The Master Theses which the panel studied match the intended learning outcomes. The panel did not assess any of the theses to be unsatisfactory. The grades awarded by the programme examiners reflect the theses' quality.

The panel welcomes the programme preparing students for the professional field. The efforts taken by programme management to prepare students for the professional field are up to standard.

Assessment of this standard

These considerations have led the assessment panel to assess the programme to meet standard 4, Achieved learning outcomes.

4. Overview of assessments

Standard	Assessment
Standard 1. Intended learning outcomes	Standard met
Standard 2: Teaching-learning environment	Standard met
Standard 3: Student assessment	Standard met
Standard 4: Achieved learning outcomes	Standard met
Programme	Positive

5. Recommendations

In this report, a number of recommendations by the panel have been listed. For the sake of clarity, these have been brought together below.

- To state the common vision for the two tracks of the programme in more clear terms, to bring the tracks closer together and to articulate more clearly the relations between the tracks.
- To reinforce the research base for the business administration/organisation field and the human factors field and link the contents of the courses more intimately with the research done in these fields.
- To raise the research time available for docents.
- To recruit more lecturers, taking the background and gender diversity of the teaching staff into account and to raise the appreciation for education for lecturers' career opportunities.
- To have the two examiners of the Master Theses complete the assessments forms separately.
- To supplement the assessments of the Master Theses with more elaborate written comments and explanations.

Appendix: Assessment process

The evaluation agency Certiked VBI received the request by the University of Amsterdam to support the limited framework programme assessment process for the Master Information Studies of this University. The objective of the programme assessment process was to assess whether the programme would conform to the standards of the limited framework, as laid down in the NVAO Assessment framework for the higher education accreditation system of the Netherlands of September 2018 (officially published in Stcrt. 2019 no. 3198, on 29 January 2019).

Having conferred with management of the Master Information Studies programme of the University of Amsterdam, Certiked invited candidate panel members to sit on the assessment panel. The panel members agreed to do so. The panel composition was as follows:

- Prof. dr. T. Bosse, Full Professor of Artificial Intelligence and Communication Science, Faculty of Social Sciences, Radboud University Nijmegen, the Netherlands (panel chair);
- Prof. dr. G. Poels, Full Professor Management Information Systems, director Business Informatics research unit, Department of Business Informatics and Operations Management, Ghent University, Belgium (panel member);
- Dr. F. Wiering, Associate Professor Information and Computing Sciences, Utrecht University, the Netherlands (panel member);
- Drs. M. Stikker, Chair of Board/Director of Waag Society Foundation, research institute for creative technology and social innovation, the Netherlands (panel member);
- S.C. Jongerius BSc, student Master Applied and Industrial Mathematics, Eindhoven University of Technology, the Netherlands (student member).

On behalf of Certiked, drs. W. Vercooteren served as the process coordinator and secretary in the assessment process.

All panel members and the secretary confirmed in writing being impartial with regard to the programme to be assessed as well as observing the rules of confidentiality. Having obtained the authorisation by the University, Certiked requested the approval of NVAO of the proposed panel to conduct the assessment. NVAO have given their approval.

To prepare the assessment process, the process coordinator and management of the programme met to discuss the outline of the self-assessment report, the subjects to be addressed in this report and the site visit schedule. In addition, the planning of the activities in preparation of the site visit were discussed. In the course of the process of preparing for the site visit, programme management and the Certiked process coordinator had contact to fine-tune the process. The activities prior to the site visit were performed as planned. Programme management approved of the site visit schedule.

Well in advance of the site visit date, programme management sent the list of final projects of graduates of the programme of the most recent years. Acting on behalf of the assessment panel, the process coordinator selected fifteen final projects from this list. The grade distribution in the selection was ensured to conform to the grade distribution in the list, sent by programme

management. In the selection of the final projects, all specialisations in the programme and all study modes of the programme were evenly represented.

The panel chair and the panel members were sent the self-assessment report of the programme. The self-assessment report addressed the standards of the NVAO Assessment framework. In this report, the student chapter was included. The appendices to the self-assessment report comprised, among others, the domain-specific framework of reference, intended learning outcomes, curriculum overview, course descriptions, Teaching and Examination Regulations, staff overview, student and staff quality surveys, Master thesis assessment form, list of publications, based upon Master theses, and alumni survey results. The expert panel members were forwarded a number of final projects of the programme graduates, these final projects being part of the selection made by the process coordinator. The panel members were also sent the Trained Eye document of the Certiked evaluation agency, this document being the elaboration of the NVAO Assessment framework.

The programme currently offers two specialisations, being Information Systems and Data Science. The specialisation Information Systems is the merger of two previous specialisations Business Information Systems and Human Centered Multimedia and was offered for the first time in the academic year 2018/2019. The specialisation Data Science has been updated in previous years to allow students to take elective courses. The specialisation Game Studies was terminated in the academic year 2016/2017. In the assessment, the panel focused on the current programme, but took into account previous specialisations, where considered relevant. The panel also studied final projects of students who had taken previous specialisations.

A number of weeks before the site visit date, the assessment panel chair and the process coordinator met to discuss the self-assessment report provided by programme management, the procedures regarding the assessment process and the site visit schedule. In this meeting, the profile of panel chairs of NVAO was discussed as well. The panel chair was informed about the competencies, listed in the profile. The meeting between the panel chair and the process coordinator served as the briefing for panel chairs, as meant in the NVAO profile of panel chairs.

Prior to the date of the site visit, all panel members sent in their preliminary findings, based on the self-assessment report and the final projects studied, and submitted a number of questions to be put to the programme representatives on the day of the site visit. The panel secretary summarised this information, compiling a list of questions, which served as a starting point for the discussions with the programme representatives during the site visit.

Shortly before the site visit date, the complete panel met to go over the preliminary findings concerning the quality of the programme. During this meeting, the preliminary findings of the panel members, including those about the final projects were discussed. The procedures to be adopted during the site visit, including the questions to be put to the programme representatives on the basis of the list compiled, were discussed as well.

On 9 and 10 January 2020, the site visit took place on the University of Amsterdam campus. The Bachelor Informatiekunde and the Master Information Studies were both assessed in the course of

this joint site visit. The site visit schedule was in accordance with the planned schedule. The schedule was as follows.

Thursday, 9 January 2020

17.30 – 18.15 Faculty Board representatives and programme directors (both programmes)

18.15 – 19.15 Chair and members Board of Examiners (both programmes)

Friday, 10 January 2020

09.00 – 09.45 Programme management (Bachelor)

09.45 – 10.30 Lecturers and final project examiners (Bachelor)

10.40 – 11.20 Students, Programme Committee student member (Bachelor)

11.20 – 11.45 Open office hours (both programmes)

11.45 – 12.45 Deliberations panel, including lunch (closed session)

12.45 – 13.30 Programme management (Master)

13.30 – 14.15 Lecturers and final project examiners (Master)

14.20 – 14.50 Students, Programme Committee student member (Master)

14.50 – 15.20 Alumni and Professional Board members (Master)

15.20 – 16.45 Deliberations panel (closed session)

16.45 – 17.00 Main findings presented by chair to programme representatives (both programmes)

17.00 – 17.40 Development dialogue of panel and programme management (both programmes)

Open office hours were communicated two weeks prior to the site visit by programme management to employees, lecturers and students. No persons presented themselves during these open office hours. On the day of the site visit, the panel members were given the opportunity to study course material and examinations of courses, list of research interests of staff, Programme Committee minutes, and Board of Examiners annual reports.

In a closed session at the end of the site visit, the panel considered every one of the findings, weighed the considerations and arrived at conclusions with regard to the quality of the programme. At the end of the site visit, the panel chair presented a broad outline of the findings, considerations, assessments and recommendations to programme representatives.

Clearly separated from the process of the programme assessment, the assessment panel members and programme representatives met to conduct the development dialogue, with the objective to discuss future developments of the programme.

The assessment draft report was finalised by the secretary, having taken into account the findings and considerations of the panel. The draft report was sent to the panel members, who studied it and made a number of changes. Thereupon, the secretary edited the final report. This report was presented to programme management to be corrected for factual inaccuracies. Programme management was given two weeks to respond. Having been corrected for these factual inaccuracies, the Certiked bureau sent the report to the University Board to accompany their request for re-accreditation of this programme.