

KU Leuven
Master of Science in
Digital Humanities
Advanced Master's Programme

24 March 2014

NVAO Initial Accreditation

(Design) Panel Report

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1 Executive Summary

NVAO received a request for an initial accreditation procedure regarding the Master of Science in Digital Humanities, an advanced Master's programme leading to an Advanced Master's Degree. The request was made by the Board of the KU Leuven and accompanied by the information dossier.

The assessment panel gives a positive advice regarding the initial accreditation of the Master of Science in Digital Humanities to the NVAO. The panel discussed the application at a preparatory meeting, which resulted in a number of preliminary questions to the programme management, on which it received an adequate reply. During the site visit, the panel spoke to representatives of the University Board, to the Faculty Deans, the programme management and to the teaching staff and students, as well as to members of industry representing future employers. The additional explanations and materials, and in particular the discussions on site have convinced the panel that the Master of Science in Digital Humanities programme is in place and conforms to the quality standards of the framework for the initial accreditation.

The Master of Science in Digital Humanities is an Advanced Master's programme intended for academically and professionally oriented graduates from the Humanities and the Behavioral Sciences who have already made use of digital techniques in their studies, frequently through self-tuition. The programme will allow these graduates to attain a level in research and in work assignments from industry or public administration that is aided by digital techniques and that is much higher than can be attained through self-tuition. The students of the programme will be able to analyze problems by understanding the user's needs in the fields of the Humanities and the Behavioral Sciences and contribute to solutions using their detailed knowledge of the possibilities of IT tools.

The programme management formulated the Subject-specific Learning Outcomes on the basis of an international study of learning outcomes of other existing Master's programmes in Digital Humanities. The panel understands and appreciates the generic nature of the Subject-specific Learning Outcomes, as the programme is breaking new ground and is the first one of its kind in Flanders. According to the panel, the true character of the KU Leuven Digital Humanities is revealed in the programme's learning outcomes. These emphasize a practical and skill based orientation, supported by the existing expertise in the cooperating Faculties, in this case the Faculties of Sciences, Art, Psychology and Educational Sciences, and Social Sciences. The panel observed in conversations with students and members of industry that the specific focus of the programme is endorsed by these groups of stakeholders.

The panel establishes that the learning outcomes are positioned and specified at an Advanced Master's level. However, the panel advises the programme to be more specific on the possible application domains in view of the expertise present in KU Leuven, so future students know in detail what they may expect from the programme.

The programme is embedded in the Faculty of Sciences and therefore follows the guidelines concerning the educational concept of this Faculty, which relies heavily on task-based learning approaches by means of projects with concrete targets. The Master's thesis is the capstone project of the programme in which the students tackle research related questions

in one of the domains of Digital Humanities. The programme aims to be as flexible as possible for adapting itself to the research questions of the students. In view of this flexibility, the admission of students not only depends on experience and competencies, but also on the ability of the programme team to determine a trajectory that fits the student's background and expectations.

The panel observed that all courses in the programme will be tailored to the specific orientation of the KU Leuven Digital Humanities. Two new staff members will join the enthusiastic staff and will manage the interdisciplinary cooperation between the Faculties involved in order to build a strong research based programme. The programme can further rely on centrally designed policies and procedures in so far as staff, facilities, services, tutoring, quality assurance and assessment are concerned. The panel singles out two areas where improvement is required. Firstly, the programme must ensure that all courses meet the desired Master's level, particularly in the case of courses that have an introductory nature. Secondly, the modular nature of the curriculum emphasizes rather than bridges the separation between the Humanities and the IT components. The panel expects that the new staff members will find a way to further connect and 'glue' the parts together. This requires a thorough understanding of the various perspectives to be adopted in the programme and in research in the Digital Humanities.

The panel is convinced by the Faculty of Sciences' approach to evaluation and is also optimistic about the project related focus on formative evaluation and the strong emphasis on variety in assessment and feedback. However, the panel also observes that the assessment still strongly relies on the good practices of the teachers from different Faculties involved in the programme. Hence, a firmer alignment and balance of requirements and criteria is needed. However, the panel is convinced that the good practices of the teachers involved and the Faculty of Sciences' evaluation policy will lead to a valid, reliable and transparent evaluation.

In sum, the panel concludes that the proposed Advanced Master's programme in Digital Humanities is a unique programme in Flemish higher education, which is well-designed, and supported by an enthusiastic and dynamic team of teaching and research staff. Thereby the programme will enable students to successfully achieve the intended learning outcomes.

The panel advises the NVAO to validate the subject-specific learning outcomes as formulated in the information dossier.

The Hague, 24 March 2014

On behalf of the Initial Accreditation panel convened to assess the Master of Science in Digital Humanities at the KU Leuven,

Dr. ir. Jacques Van Remortel
(chair)

Dr. Dagmar Provijn
(secretary)

2 Assessment per generic quality standard

2.1 Generic quality standard 1: intended exit level

With respect to level, orientation and content, the intended exit level reflects the current requirements that have been set for the programme by the professional field and/or discipline from an international perspective.

Outline of findings:

In the information dossier and the additional information provided by the institution, the programme management refers to the increasingly digitalized world. This evolution not only affects IT industry, but also other areas of our society, be they professional, scientific, educational or personal. The Advanced master's programme in Digital Humanities is developed to prepare graduates and researchers in the Humanities and Behavioral Sciences to enter a professional world in which digital techniques play a pivotal role.

The programme is intended to be valuable for two groups of graduates from the Humanities and Behavioral Sciences. Firstly, academically oriented graduates, who are often confronted with the need for digital techniques in the set-up of their research; secondly, professionally oriented graduates, who are currently often confronted with IT-related job profiles. The programme will enable research oriented graduates to support and enhance research in the Humanities by means of non-trivial uses of digital techniques, such as: managing and/or querying databases, interconnecting, disclosing and/or querying web-based resources (linked open data, data mining), e-publishing, imaging and social network analysis, studying, developing and improving e-learning, and designing human-computer interactions.

Professionally oriented graduates will be able to apply non-trivial digital techniques in professional occupations related to the Humanities, such as: publishing, e-media, art, culture, history, libraries, e-learning tools and user-interaction applications.

The management of the programme formulated the Subject-specific Learning Outcomes on the basis of an international study of learning outcomes of other existing Master's programmes in Digital Humanities. In doing so, the programme follows international requirements and expectations in this field, which is still in the process of developing a distinctive identity. Consequently, the Subject-specific Learning Outcomes are quite generic in nature.

The formulation of the programme's learning outcomes closely follows the outcomes of the various courses in the programme. The programme management argues that it wants these outcomes to be easily verifiable and understandable for students and lecturers. Therefore, the learning outcomes show a relatively low level of abstraction.

The programme's learning outcomes of the Digital Humanities programme at KU Leuven seem to emphasize a more practical, skill-based orientation, instead of focusing on the conceptual and theoretical debates, which are at the center of many current Digital Humanities programmes in the UK and the USA. The programme management and the teaching staff emphasized to the panel that this orientation of the new programme was a conscious choice and is a result of its institutional context: the programme is explicitly conceived as a joint initiative by the Faculty of Science and a number of Faculties of the

Humanities and the Behavioral Sciences and is therefore clearly distinguished from existing Computer Science programmes. Hence, Digital Humanities graduates should not become software engineers, in the view of the programme management, but be able to analyze problems by understanding the user's needs in the fields of the Humanities and the Behavioral Sciences and contribute to solutions using their detailed knowledge of the possibilities of IT tools.

Because of the emphasis on analysis and modelling, the programme is oriented towards Master graduates in the Humanities or Behavioral Sciences who are already high level experts in a subdomain in one of these fields. For the IT related solutions, the programme aims to guide students to revisit and strengthen their Master competencies in a Digital Humanities context. The programme management and teaching staff expect that the students will already have learnt some digital techniques through self-tuition or other means. The Digital Humanities programme will allow them to attain a level in research that is aided by digital techniques which is much higher than can be achieved by self-tuition. This is also the reason why the programme is conceived at the level of an Advanced Master's programme.

The specific position of the proposed programme in the field and its orientation towards both researchers and professionally oriented graduates have been chosen following a survey by KU Leuven on the employment of non-IT graduates. This showed that a considerable number of Humanities and Behavioral Sciences graduates are employed in jobs related to a broader IT context for which a professional training, mostly provided by the employer, is required. Also researchers at Ph.D. level from both fields are more than often obliged to enter the digital world in order to properly perform their research, an entrance for which they are only minimally or not at all prepared during their original study.

During the site visit, the panel observed in conversations with students and members of industry that the specific focus of the programme was endorsed by these groups of stakeholders. Research oriented graduates clearly expressed their need for a bridge-programme guiding them to the right digital techniques once they had analyzed the research problem in their own field of expertise. Graduates from the professional field employed in IT related jobs, felt insufficiently capable to communicate problems and possible solutions to IT specialists.

The members of industry also pointed out that the advanced level of specialization of Master graduates is not seen as an impediment. The industry needs people with trans-disciplinary knowledge and skills: 'T-shaped' people who can look at problems from different angles and speak different professional idioms, enabling them to broker the requirements of a variety of different domains.

Another consideration which shaped the particular outlook of the programme is the existing expertise in the Faculties involved. The Department of Computer Science of KU Leuven has extensive expertise in the tools and techniques that are relevant for the Digital Humanities. The Faculties of Art, Psychology and Educational Sciences and Social Sciences provide extensive expertise in areas such as Language and Linguistic studies, e-Publishing, Web design, Human Computer Interaction, as well as in the use of e-tools and e-techniques in Educational Science. Moreover, two extra staff members will be appointed, one in the area of Computer Science for Digital Humanities in the Computer Science Department and one in the area of Digital Humanities in the Faculty of Arts.

During the site visit, the representatives of the University Board emphasized the strong support from the side of the University Board for this nationally and internationally unique programme. The KU Leuven intends to invest increasingly in interdisciplinary (post-disciplinary) programmes, which are valuable both to academically and professionally oriented graduates.

Considerations:

The panel reviewed the Subject-specific Learning Outcomes and the programme's learning outcomes for the Master of Science in Digital Humanities and concludes that the learning outcomes are positioned and specified at an Advanced Master's level. The panel was somewhat surprised by the generic nature of the Subject-specific Learning Outcomes and by the fact that the programme's learning outcomes are formulated at the level of course descriptions. It would have expected a somewhat higher degree of abstraction for the programme's learning outcomes.

The panel can understand and appreciate the generic nature of the Subject-specific Learning Outcomes, as the programme is breaking new ground and is the first one of its kind in Flanders. Hence, Subject-specific Learning Outcomes leave ample space for other institutions to develop their own approach in this young field of research and education. On the other hand, the panel also sees a 'chicken and egg' situation: a true understanding of what the Subject-specific Learning Outcomes mean for this particular programme heavily depends on how the programme defines the field of Digital Humanities.

The panel was convinced by the explanation of the orientation of the programme by the programme management and the teachers. It also witnessed the strong support for the choices made in the programme from students and members of industry, who pointed out that its research and professional orientation is a unique selling point and of great value for graduates.

The panel is convinced that sufficient expertise is present in the KU Leuven to start a research group with a solid vision on Digital Humanities, responsible for the organization of the Master of Science in Digital Humanities.

The panel observes that learning outcomes K7 and S9 list a broad range of possible applications in the Humanities and Behavioral Sciences: On-Line Publishing, Usability Design, Methods of Corpus Linguistics, Instructional Technology, Linguistics and Artificial Intelligence, Speech Science and Natural Language Processing. The panel advises the programme to be more specific and limit its offer of possible application domains to the expertise that is actually present at KU Leuven, so future students know in detail what they may expect from the programme. The current formulation suggests a broader range of domains than is actually supported.

The panel appreciates the outcomes of the Round Table discussion with members of industry during the developing phase of the programme. This kind of input from the members of industry will be continued in the form of a Programme Advisory Committee. However, the panel advises to further extend the number of stakeholders in these discussions, which will help the programme focus on what kind of expertise is needed in the job market.

The panel also advises to place less emphasis on the concept of 'digitalization' in the description of the programme, as increasingly the Digital Humanities is concerned with the analysis of 'born digital' material and much of the programme will focus on handling materials which are already in digital form.

In sum with respect to level, orientation and content, the panel considers the intended exit level being in line with the current requirements that have been set for the programme at an Advanced Master's degree level by the professional field and/or discipline from an international perspective.

Assessment: satisfactory

2.2 Generic quality standard 2: teaching and learning process

The teaching and learning process makes it possible for the students to realise the intended learning outcomes.

The findings of the panel are based on the application's information dossier and the written replies from the programme management to preliminary questions from the panel. The panel observed in these replies that some elements of the programme as presented in the information dossier have further developed since the date of the application.

Outline of findings:

Content and outline of the programme

The programme is organized in six groups:

- Introductory digitalization components: this group contains three mandatory courses providing the required background in digital competencies to engage in Digital Humanities research and application development. 18 ECTS
- Management Component: one component providing management and project leader skills. 3 ECTS
- Advanced Digitalization Component: one seminar component which familiarizes the students with emerging technologies and applications in Digital Humanities. 3 ECTS
- Master's thesis of 15 ECTS. This forms the central part of the programme in which the student shows the ability to integrate and exploit the competencies achieved in the other groups resulting in a new scientific contribution.
- Tools for the Digital World: this group contains three optional components providing additional background in the selection of technological tools, for human-computer interaction, web systems or data-mining. The student must at least select 6 and at most 15 ECTS in this group.
- Application Domains: in this group students select at least 6 and at most 15 ECTS in view of their application domain of interest, corresponding to the required technological tool they select from the previous group and possibly in line with their own background in the Humanities or Behavioral Sciences, be it 'online publishing', 'usability design', 'methods of corpus linguistics', 'topics in instructional technology', 'linguistics and artificial intelligence', 'natural language processing' or 'speech science'.

The information dossier provides a matrix which shows the relations between the programme's learning outcomes in terms of knowledge, skills and attitudes at basic and advanced level.

A number of courses in the programme will be newly built for the new programme, others will be based on existing courses but adapted specifically for Digital Humanities. The entire

programme will be unique and contribute to the specific orientation of Digital Humanities. The newly designed courses and the planned new courses for the programme were convincing elements in the panel's decision to positively advise on the application. Between the moment of the application and the site visit, the programme management and the teaching staff have also started developing an introductory course on Digital Humanities in line with present day reflexive discussions on this subject in the United Kingdom and the United States. This should allow the future students to put their own expertise within a broader framework. Still, the programme management and the teachers want to stay neutral in these discussions and emphasize their own practically oriented position in the field.

Master's thesis

The Master's thesis is the capstone of the programme in which the students must play an active role in tackling research related questions in one of the domains of Digital Humanities. It should result in a scientific text to be defended in an oral presentation, before a jury consisting of the thesis advisor and at least two readers. This research related project can be executed either in a research unit of the KU Leuven or in another organization, during an internship. Staff from the research units involved in the programme will offer a number of research topics. However, students can also make a paradigmatic proposal based on personal expertise in the Humanities or Behavioral Sciences. In the latter case, the student discusses the project with members of a research unit for fine-tuning and feasibility determination. A third option is the student selecting a Research and Development related topic offered by an external organization. Again approval and co-supervision by a staff member in the programme is required.

The Master's thesis research related projects should involve aspects of analysis, design, development, experimental evaluation and improvement or optimization of existing digital artifacts. Some examples are: data mining applications, preparing a digital scholarly edition on the web, developing a database and/or querying system; obviously situated in a domain in the Humanities or Behavioral Sciences.

In the case of an internship, students become familiar with the technological and scientific concerns addressed within a company or research center. They take part in the activities of the center by undertaking a critical scientific investigation into the center's technology within a framework of current research in the field at hand. This kind of internship lasts for a period of 12 weeks.

Didactical concept

The Advanced Master's programme is embedded in the Faculty of Sciences and therefore follows the guidelines concerning the educational concept of this Faculty, as well as the procedures for the guidance of students. The Faculty aims at guiding the students in becoming independent scientists that are ready to participate in a Life Long Learning process. The educational process relies heavily on task-based learning approaches by means of projects with concrete targets. These projects are usually accompanied by a written report and an oral defense of this report. Moreover, they integrate previously acquired competencies from other courses. The programme aims to be as flexible as possible for adapting itself to the specific research questions the students partly have before, and further develop during the programme.

During the site visit one of the teachers provided a convincing example of what may be expected as a kind of project running through different courses and even as an end goal for a Master's thesis project. It is the development of a user friendly interface for complex statistical tools applied in Corpus Linguistics. These statistical tools require a proper

learning process. A scripting task resulting in a more user friendly version of these tools would be an ideal task for students in Digital Humanities. This task can be divided in different building blocks of learning complexity, starting with a general course in scripting, followed by small scripting tasks and culminating in a Master's thesis project of user friendly visualizations of statistical tools in Corpus Linguistics. These kind of examples gave the panel insight into the way the courses are aimed at the level of Advanced Master and connect to the student's expertise in the Humanities or Behavioral Sciences.

Quantity and quality of the staff

The staff involved in the programme come from various Faculties and Departments:

- Department of Computer Science: five to six staff members and their teams will be involved in the courses of the programme, several other staff members will be involved in thesis supervision.
- Faculty of Arts: four staff members and their teams will be involved in the courses of the programme, four additional staff members will be active on related applications and in thesis supervision (if needed).
- Faculty of Social Sciences – Centre for User Experience Research: one staff member and her research team will be active in courses for the programme and in guiding thesis topics, one additional staff member can also guide thesis topics if needed.
- Faculty of Psychology and Educational Sciences – Unit 'Onderwijs en Opleidingskunde': one staff member and his research team will be active in courses for the programme, two additional staff members can provide guidance for thesis topics if needed.
- Faculty of Engineering: two staff members and their teams will be active in courses.
- Faculty of Medicine: one staff member and her team will be active in courses.

As many courses in the programme will be adaptations of existing courses that are offered in other study programmes, the extra teaching load for the involved staff members will be limited. At the start of the programme, most work will be related to adapting the courses to the field of Digital Humanities. Once the programme is running, additional work will be related to evaluation, project support, extra exercise sessions and feedback to the students. The existing courses were all available in digital format during the site visit.

Six new courses have to be developed for the groups Introductory Digitalization Components and Tools for the Digital World. These new courses will all be developed within the Department of Computer Science, both by existing staff members and a new staff member.

The guidance of Master's thesis projects will be the responsibility of all Departments and Faculties involved and of companies willing to guide students in internships.

The staff members of the KU Leuven involved in the programme can be divided in two groups: (i) the group from the Humanities and Behavioral Sciences that already performs research and takes care of courses related to topics in Digital Humanities and (ii) the group of experts in underlying digital technologies that performs research on related topics in Computer Science. Both groups have relevant expertise to engage in research on the Digital Humanities and are also well motivated to engage in teaching activities in the new programme.

The panel reviewed the quality standards of the KU Leuven for appointing new staff members by means of the job profiles that were added to the information dossier and concludes that these are appropriate for a programme at this level. Assistants performing teaching tasks, most often being PhD-students, are related to the research centers involved

in the programme and are as such adequately acquainted with the research basis of the courses.

Two new staff members will be appointed, one in the area of Computer Science for Digital Humanities in the Computer Science Department and one in the area of Digital Humanities in the Faculty of Arts. Both will take care of courses in their own Faculty, but will chiefly be responsible for teaching in the new programme, for research and most of all for managing the interdisciplinary cooperation between the Faculties and Departments involved in building a strong research-based Digital Humanities programme. Contrary to what is mentioned in the information dossier, the selection procedures for the two new staff members are already running, so they could be appointed in their position by October 2014. This early appointment, in view of the planned start of the programme in 2015, should allow the new people to take timely measures in view of their bridge-building task. The panel stresses that the tasks for which the two new staff members are responsible are essential for the success of the new programme.

Investments

The programme will have the existing infrastructure, instructional equipment, computing facilities, databases and rooms for practical sessions at its disposal. As the KU Leuven makes all this available for the programme, no new investments are needed to organize this programme in a qualitative manner. The most important investment relates to the two new staff members. The registration fee for the program will be of 2800 euro, which makes it a very attractive programme from an international perspective. The programme counts on an annual influx of about 50 students.

The letter of support of the Board of the Science & Technology group of the KU Leuven guarantees continuity of support whenever the programme is approved. The educational policies of the KU Leuven also guarantee registered students the possibility to complete their study if for some reason the programme could not be continued in the future. The required budget for the two new staff members has already been allocated, the possible candidates are already ranked after a selection procedure with interviews.

Selection procedure

Students will have to go through an admission procedure in order to enter the programme. This admission is based on a selection procedure for which candidates should submit an application containing detailed information on their prior studies, work experience, additional competencies, proof of proficiency in English and motivation statement. Only students being holder of a Master's degree in Human or Behavioral Sciences will be allowed. Students with a strong IT background will be advised not to enroll in the programme.

For each candidate, the decision of admission will also be based on the ability of the programme team to determine a trajectory that fits the student's background and expectations. By this means, the programme wants to deal with the potentially heterogeneous group of applicants that may very plausibly be expected in a domain as vast as containing both the Humanities and the Behavioral Sciences.

The programme explicitly aims at attracting international students, preferably in balance with the number of Flemish students that will enroll, in order to stimulate an international environment for both students and teaching staff.

Considerations:

The panel observes that the content of the programme corresponds to the problem solving perspective chosen for this programme in Digital Humanities. It is positive that attention is also given to reflexive discussions on the nature of the Humanities in the light of the growing field of Digital Humanities in a dedicated general course. The level of integration of skills as exemplified in the example of the statistical tool building project in Corpus Linguistics convinced the panel that the programme really is an Advanced Master's degree programme based on problem solving driven research on current problems in the field of Digital Humanities.

Nevertheless, the panel points at two areas for improvement. Firstly, the programme must ensure that all courses meet the desired Master's level. The panel understands that a programme of this kind requires a certain degree of introduction to the digital field, but advises the programme management to review the design of some courses, as for instance the *Topics in instructional technology* course, to make sure this reaches the Master's level and does not stop at a basic introduction. In the development of the new courses for the programme and in the adaptation of existing courses that is to take place in the run up to the start of the programme, the staff should make sure all courses are in line with the intended level and learning outcomes.

The panel would also advice to make the statistics component of the programme a more explicit part of the curriculum. It is present in the current design, but only in an implicit manner.

Given the abundance of advanced ideas presented by the teaching staff to make the courses meet the required level and complexity, the panel is convinced the programme components will be ready when the programme starts.

Another concern the panel has regards the modular nature of the curriculum. In the eyes of the panel this emphasizes rather than bridges the separation between the Humanities and the IT components in the curriculum. The panel often wondered what constitutes the 'glue' between the various modules and trajectories. It is evident that the projects have an important role in this respect, but it is not entirely clear how this is embedded in the courses. Each of the individual components of the programme is connected to a learning outcome, but the panel would like to see more effort being invested in integrating the parts in one overarching story that mirrors the programme's unique vision on Digital Humanities. This will create a more cohesive learning environment and prepare the students for a cohesive research project in Digital Humanities. The panel expects that the new staff members will bring with them the 'glue' that binds the current parts together.

This observation should expressly be read as a recommendation for the further development of the programme in the period up to the start and beyond to make the best use of the expertise that underpins the programme. The panel is convinced that the current design of the programme is sufficient to achieve the learning outcomes.

The panel has met an enthusiastic staff with a strong research orientation. The ideas they have on the content and the aim of the courses are sharper and better grounded in Digital Humanities than could be derived from the information dossier. So, the panel is confident about the people that will support the programme and provide the integration of which the panel thinks it is needed. Moreover, the existing team will also be able to rely on the support of the two new staff members who are selected to be the real bridge-building members of the programme.

However, the panel is slightly concerned with the required high level of cooperation between different Faculties to make the project work. It perceives that it will be up to the newly to be

appointed staff members with a typical multidisciplinary Digital Humanities profile, for whom the selection procedure already is running, to bring the partner Faculties together and establish the independent identity of the programme. Therefore, the panel advises the Faculties to keep watch over the progress of teamwork that is necessary and to support the new staff members in their bridge-building task.

The panel's initial worries regarding a clear definition of the range of application domains catered for in the programme, in a field as vast as the combination of the Humanities and the Behavioral Sciences, was removed by a further clarification on the selection procedure of potential students. Students starting the programme are guaranteed to find what they will be looking for.

Although the panel is convinced of the level of quality of the programme, it would urge the management to implement the given recommendations before the start of the programme in October 2015.

In sum, the panel concludes that all ingredients are convincingly present to offer a unique programme in Digital Humanities, supported by an enthusiastic team of teaching and research staff, and elaborated in such a way that students will receive all the chances to successfully reach the intended learning outcomes.

Assessment: satisfactory

2.3 Generic quality standard 3: evaluation

The programme has an assessment policy that sets up a sufficient evaluation system to ascertain whether the intended learning outcomes are being achieved.

Outline of findings:

From the application dossier and the discussions during the site visit, it became clear that the Master of Science in Digital Humanities falls under the organizational and administrative responsibility of the Faculty of Science. Hence, the programme adheres to the educational policy of this Faculty, which has a clear vision and policy regarding evaluation that is sufficiently and clearly expressed and communicated to lecturers and students.

The panel has seen the documents stating the Faculty's policies on evaluation. Central principles in the evaluation policy establish that all learning outcomes will be achieved by the students and guarantee a clear communication on evaluation methods and processes, making the learning outcomes transparent for students in view of the organization of their work. The Faculty of Science also guides its programmes in setting up and monitoring an appropriate evaluation framework.

Evaluation forms are chosen that are in line with the work forms, in the same way as the work forms are in line with the learning outcomes of the programme. As many of the central learning outcomes are related to practical and research oriented skills, the programme puts emphasis on work forms such as: projects, homework, exercise sessions, papers, reports and oral defenses of the projects, papers and reports.

The Master's thesis, comprising a thesis text and an oral defense, is evaluated by a jury consisting of the supervisor of the thesis and two readers. The supporting roster of the

Faculty of Science for the evaluation of Master's theses was available for inspection during the site visit.

Considerations:

The panel is confident in the Faculty of Sciences' approach to evaluation and the support it gave to the programme to establish an appropriate evaluation framework, which guarantees an objective and independent evaluation process. The panel is also optimistic about the project related focus on formative evaluation and about the strong emphasis on variety in assessment and on feedback. However, the assessment still strongly relies on the good practices of the different teachers from different Faculties. The modular projects are constructed around a variety of work forms and consequently use different evaluation forms. This makes it necessary for the staff to align the evaluation methods and criteria used in these projects. The panel is also of the opinion that the assessment is now embedded in a static sequence of lecture, project and assessment.

Another concern for the panel regards the internship alternative to the Master's thesis. The panel is strongly in favor of this internship, but still is a bit puzzled about how it will be evaluated and will be compared to the results of a 'normal' Master's thesis. However, the panel observed that internships are already successfully practiced in the Computer Science department and is confident this will provide enough experience with this kind of evaluation. Moreover, the internships have to be approved by the programme and are carried out in collaboration with a co-supervisor belonging to the staff. Besides, the internship project is always related to a research question resulting in a research report with an oral defense.

Still, the panel advises the programme both (i) to guard the alignment of the different assignment policies of staff members from different Faculties and (ii) to make the requirements for the evaluation of internships more explicit.

In sum, the panel concludes that the elaboration of the assessment policy leads to valid, reliable and transparent evaluation.

Assessment: satisfactory

3 Subject-specific Learning Outcomes

The Master of Science in Digital Humanities has, as a unique programme in Flanders, formulated the Subject-specific Learning Outcomes for this new programme (See annex 4). They were developed according to the VLUHR-manual and are inspired by the learning outcomes as formulated by the other Master's in Digital Humanities internationally. As the field is very young, even internationally, no formal agreement on international standards is available yet. Still, the learning outcomes are as much as possible in tune with international requirements and expectations.

The panel identifies the Subject-specific Learning Outcomes of the Master of Science in Digital Humanities programme as remaining within the framework of the Flemish Qualifications Framework (Vlaamse Kwalificatiestructuur (VKS)).

The level 7 level-descriptors of the VKS are covered by the learning outcomes. Accordingly, the programme can be legitimately characterized as an Advanced Master's programme.

The panel advises the NVAO to validate the subject-specific learning outcomes for the programme Master of Science in Digital Humanities.

4 Assessment process

The panel based its assessment on the standards described in the NVAO Assessment framework for the Initial Accreditation of higher education programmes in Flanders 2nd round, as ratified by the Flemish Government on 25 January 2013.

The members of the panel studied the information dossier submitted by the applicant institution for the proposed programme and discussed their impressions at a preliminary meeting in Brussels on 10 December 2013. During the meeting, the panel listed several issues it wanted the KU Leuven to clarify in writing before the site visit. Moreover, the panel announced it would raise other issues on site.

The panel met in the evening before the site visit to discuss the written clarifications. Whilst many topics had been addressed adequately in the additional information, the panel considered that certain issues would require further attention during the meetings at the KU Leuven. This site visit took place on 8 January 2013. The schedule of the visit is available in annex 4. The panel had discussions with the University Board, Faculty Deans, the programme management, the teaching staff on all aspects of teaching, students, as well as with members of industry representing receiving companies and organisations. of the examination and professional advisory boards, and with potential employers of programme graduates.

Immediately after the meetings, the panel formulated its considerations and preliminary conclusions per generic quality standard. These are based on the findings of the site visit and build on the assessment of the programme documents. The NVAO secretary then drafted the advisory report, based on the information dossier, the addendum to the dossier, the information available during the site visit and the discussions during the site visit, and circulated it to all panel members for review and feedback. The comments of the members

were incorporated in a final version, which was validated by the chair on 24 March 2014, and submitted on behalf of the panel to NVAO.

5 Overview of the assessments

The panel presents its assessments per standard, as outlined in chapter 4, in the following table.

Generic quality standard	Assessment
1 Intended exit level	Satisfactory
2 Teaching and learning process	Satisfactory
3 Evaluation	Satisfactory
Final conclusion of the panel	Satisfactory

Annex 1: Profile of the institution and the programme

Naam, adres, telefoon, e-mailadres, website instelling	Katholieke Universiteit Leuven Oude Markt 13 – 3000 Leuven Tel: +32 16 32 37 21 www.kuleuven.be
Status instelling	Ambtshalve geregistreerd
Naam associatie	Associatie KU Leuven
Naam, functie, telefoon, e-mail contactpersoon	Prof. dr. Didier Pollefeyt – vice rector Onderwijsbeleid +32 16 32 37 21 Didier.Pollefeyt@rec.kuleuven.be
Naam opleiding (graad, kwalificatie, specificatie)	Master of Science in digital humanities
Niveau en oriëntatie	Academisch gerichte master na master
Bijkomende titel	Geen
(Delen van) studiegebied(en)	Interdisciplinair: Wetenschappen - Taal- en letterkunde – Geschiedenis - Archeologie en kunstwetenschappen - Psychologie en pedagogische wetenschappen - Politieke en sociale wetenschappen
ISCED benaming van het studiegebied	Computer Science – Humanities – History and Archeology – Fine Arts – Psychology – Social and behavioural science – Education Science – Political science and civics
Opleidingsvarianten: - Afstudeerrichtingen - Studietraject voor werkstudenten	Geen
Onderwijstaal	Engels
Vestiging(en) opleiding	Leuven
Studieomvang (in studiepunten)	60
Nieuwe opleiding voor Vlaanderen	Ja
Aansluitingsmogelijkheden en mogelijke vervolgopleidingen	Geen

Annex 2: Subject-specific learning outcomes

- Posses the required competencies in digitalization techniques and tools to be able to successfully conduct research and successfully act as a professional in Digital Humanities.
- Posses advanced knowledge and understanding of the relevance and applicability of digital tools and techniques for research questions in the Humanities or the Behavioral Sciences.
- Have the ability to independently analyze, model and design solutions for problems involving the integration of digitalization in the Humanities or Behavioral Sciences research and to critically interpret the results of digital analysis and computationally produced outcomes.
- Are able to critically evaluate and assess novel problems in and solutions to digitalization issues in the Humanities or Behavioral Sciences context and situate the limitation of the state of the art.
- Are able to independently select appropriate technological means and constructively apply them to a problem in the Humanities or Behavioral Sciences.
- Are able to independently collect, consult and critically interpret scientific sources from different media.
- Have the ability to independently integrate digitally driven research goals and methods with discipline specific inquiry in a subfield of the Humanities or Behavioral Sciences.
- Are able to clearly and accurately report on scientific findings in the Digital Humanities, both in written and in oral form.
- Are able to follow-up and critically situate, within a sub domain of Digital Humanities, new scientific developments and to situate them, both in a broader context of the discipline, as in terms of their societal relevance.
- Have a critical insight is the interdisciplinary and international dimensions of Digital Humanities (research).

Annex 3: Composition of the panel

- Dr. ir. J. Van Remortel, chair:

Dr. ir. Jacques Van Remortel is an engineer of the Ghent University and has a PhD in Applied Mathematics from the University of Stanford. He has worked in the telecommunications business for Alcatel-Lucent-Bell and has retired 10 years ago as the director of the Research Center in Antwerp.

- Prof. dr. M. Valcke, member:

Prof. dr. Martin Valcke is full professor at Ghent University in the field of the educational sciences. He is a specialist in the domain of the innovation of higher education. he is very often involved in the design and evaluation of higher education curricula and accreditation activities.

- Prof. dr. A. Prescott, member:

Prof. dr. Andrew Prescott is professor of Digital Humanities at King's College London. He is a manuscript specialist by background and particularly interested in imaging. He is Theme Leader Fellow for the Digital Transformations theme of the United Kingdom's Arts and Humanities Research Council.

- Mr. R. Verbij BSc, student-member:

Mr. Ruud Verbij is a student Computer Science with the University of Twente, specialization IT Security. He has been involved with the NVAO since September 2010 and has accredited over 25 educational programmes in the Netherlands.

On behalf of the NVAO, dr. Thomas de Bruijn was responsible for the coordination of the assessment process. The NVAO secretary, dr. Dagmar Provijn, drafted the panel report in close cooperation with all panel members and in agreement with the chair. All panel members and the secretary signed a statement of independence and confidentiality.

Annex 4: Schedule

Location: Department of Computer Science – KU Leuven – Celestijnenlaan 200A, 3001 Heverlee	
Date of site visit: 8 January 2014	
8.45	Arrival of the panel at the location of the site visit
Session 1 9.00 – 9.30	Meeting with representatives of University Board, Faculty Deans, programme director Didier Pollefeyt , Vice rector Education Georges Gielen , Vice rector Science & Technology Ortwin de Graef , Vice Dean Arts Peter Lievens , Dean Sciences Jan Elen , Vice Dean Psychology and Educational Sciences Danny De Schreye , Programme director Master Digital Humanities
Session 2 9.30 – 10.15	Meeting with programme management Dirk Speelman , Faculty of Arts Jan Elen , Faculty of Psychology and Educational Sciences Danny De Schreye , Programme director
10.15 – 10.30	Break
Session 3 10.30 – 11.30	Meeting with teaching staff on all aspects of teaching - Core teachers (p.17 of dossier), teachers from all faculties involved. Fred Truyen , lecturer Online Publishing (Arts) Dirk Speelman , lecturer Methods in Corpus Linguistics (Arts) Bieke Zaman , lecturer Human-Computer Interaction and Usability Design (Social Sciences) Erik Duval , (co-)promoter theses + profile similar to new staff member "Computer Science for Digital Humanities + expert e-learning (Computer science) Bettina Berendt , lecturer Information Structures and Implications + designed syllabus for Web Information Systems (Computer science) Jesse Davis , lecturer Introduction to Data Mining (Computer science) Joost Duflou , lecturer Project Management (Engineering)
11.30 – 11.45	Break
Session 4 11.45 – 12.30	Meeting with students - students involved in setting up the program (if applicable); - prospective students. <u>3 recent graduates of Arts, with interests in DH:</u> Silke Vanbeselaere – Ancient History Nele Noppe – Japanese studies Karlien Franco - Linguistics <u>1 recent graduate, Bachelor of Arts, Bachelor/Master Computer science:</u> Vincent Nys <u>2 people who have been active in the work field and have interest in DH:</u> Sofie Taes – Musicology – professional background culture management, Europeana projects Jan Derboven – Linguistics and literature – professional background e-publishing, now moved to HCI
12.30 – 13.30	Lunch

Session 5 13.30 – 14.15	Meeting with members of industry representing receiving companies and organizations Jo Martens – CEO Nascom Creative industry Bart De Prins – Innovation manager ACCO Jill Cousins (Executive Director) and Alastair Dunning (Program manager) – Europeana Koen Vandaele – CIO Concentia and Corelio Paul De Jongh (CEO) and Wim Borgers (CIO) – Brepols publishers Saskia Kinds – Vice-President USG Professionals, HR-support company, providing professionals to other companies
14.15 – 14.30	Break
14.30 – 15.00	Second meeting with programme management Dirk Speelman , Faculty of Arts Jan Elen , Faculty of Psychology and Educational Sciences Danny De Schreye , Programme director
15.00 – 17.00	Deliberation of the panel

Annex 5: Documents reviewed

Programme documents presented by the institution

- Information Dossier Initial Accreditation Master of Science in Digital + annexes, KU Leuven, 25 January 2013.
- Reply to the questions formulated by the assessment panel, December 2014, 5 pages.

Documents made available during the site visit

- Assessment policy of the Faculty of Sciences
- Assessment roster for Master's theses
- Annexes of the application dossier for the 'Erkenningscommissie' (annex 10: results from the round table discussion with representatives of Flemish companies; annex 11: report of the KU Leuven alumni-survey concerning IT related employment of non-IT graduates)
- Assessment Policy of the KU Leuven
- Electronic version of courses that will be adapted for the programme
- Programme booklet for the Master of Science in Digital Humanities

Annex 6: List of abbreviations

CV	curriculum vitae
ECTS	European Credit Transfer System
IT	Information technology
KU	Katholieke Universiteit
NVAO	Accreditation Organisation of the Netherlands and Flanders
VKS	Vlaamse kwalificatiestructuur (Flemish Qualifications Framework)
FTE	Full-time equivalent
VLUHR	Vlaamse Universiteiten en Hogescholen Raad

The panel report has been ordered by NVAO for the initial accreditation of the programme Master of Science in Digital Humanities of the KU Leuven.

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