IT Faculty

REPORT

DEVELOPMENT PLAN

N2DIG – Digital Leadership Master's Programme, 120 credits

Associate Professor Aleksandre Asatiani

Program Manager for the Digital Leadership Master's Programme

The Department of Applied Information Technology, and the Digital Leadership master's program would like to thank the external assessment group for their hard work and insightful report summarizing their findings. We believe that the recommendations made by the assessment group are fair and accurate, and we see the pathway to implementing the majority of these recommendations.

The assessment group provided eight sets of recommendations aligned with the criteria outlines in the *Policy for Quality Assurance and continuous Quality Improvement of Education at the University of Gothenburg.* In this report, we present development plan that will address the recommendations. The report presents a short summary for each recommendation, along with action points, timeframe for implementation, and actors responsible for implementation. The recommendations (R) are presented in the order they appear in the evaluation report and are grouped based on evaluation criteria (C). The order is as follows:

C1: Achieved study results match intended learning outcomes and the qualitative targets of the Higher Education Ordinance.

- R1: Map the learning outcomes on the course-level with the outcomes on the program-level to identify more courses that enable the students to reach certain program-level outcomes.

C2: Teaching is focused on student/doctoral-centered learning.

- R2: Ensure a healthy balance between theoretical and abstract module contents and real-world cases in which students engage in realistic situations and get feedback from external stakeholders.

C3: The content and form of teaching rests on scientific and/or artistic bases and proven experience.

- R3: Develop further the plan to establish a partnership program with industry, public authorities and NGOs.

C4: Teachers have up-to-date and adequate competence as regards their subjects and teaching and learning in higher education, and the numbers of teachers are in proportion to the scope and content of study courses and programmes.

- R4: Ratio of teachers to students should be kept at a reasonable level, while ensuring the mix of teachers with real-world and theory focus.

C5: Study courses and programmes are relevant to the needs of the students/doctoral students and society.

- R5: Get better data on employability and jobs for the graduates of the program through establishing connections to alumni.
- R6: Identify further research sites for the final dissertation and potentially the project modules, using alumni as a starting point.

C6: Students/doctoral students have influence in planning, implementing and monitoring study courses and programmes.

- R7: Consider including some existing students and alumni in future redesign efforts.

- R8: Program manager should consider encouraging students to elect 1-2 class representatives who can collate and communicate any issues that arise during the educational process.

C7: The study and learning environment is accessible and purpose-oriented for all students/doctoral students.

- R9: Consider providing the bridge for non-IS/informatics students to get up to speed with field-specific terms and concepts.
- R10: Explicitly review the background mix of the students in the class and identify what types of different perspectives this will allow them to explore and then encourage this diversity.

C8: The study courses and programmes are continuously monitored and developed.

- R11: Management should consider the implementation of written course reports, and document both the results of the surveys and other input, discussion of these results, and reflections of collected data made by the responsible teacher.

R1: Map the learning outcomes on the course-level with the outcomes on the program-level to identify more courses that enable the students to reach certain program-level outcomes

"The review team recommends that the program management map the learning outcomes on the course level with the outcomes on the program level with the aim of identifying more courses that enable the students to reach certain program level outcomes, such as e.g.: Exhibit deep knowledge about and ability to apply theories in innovation; Demonstrate ability to design and evaluate governance configurations and control for digital leadership; Demonstrate ability to develop future oriented business models based on digital infrastructures; Demonstrate ability to lead, implement and communicate development work within different organizational contexts; Demonstrate ability to compare and contrast industrial innovation and digital innovation. When performing the mapping exercise, particular attention should be paid to the distinction between mandatory courses and elective courses."

Summary: The external evaluation group discovered that certain program-level learning objectives have not been achieved, and that there was an insufficient coverage of certain program-level objectives, in individual course syllabi. To alleviate these, the evaluators recommend revising learning objectives and match course-level objectives, with program-level objectives better. The group also suggest to revise certain less tangible learning objectives and make them more concrete, to ensure their achievability.

Action: Program manager, together with the teacher team will revise program and course syllabi, to address the concerns of the evaluation group outlined above. The program manager will organize a number of workshops over the next year to gradually revise and adjust course-level syllabi, in tact with syllabus submission deadlines.

Timeline: Spring 2023-Summer 2024.

Responsibility: Program manager lead; Course responsible teachers support.

R2: Ensure a healthy balance between theoretical and abstract module contents and real-world cases in which students engage in realistic situations and get feedback from external stakeholders

"The review team recommends that there is a healthy balance between theoretical and abstract module contents and real-world cases in which students engage in realistic situations, and if possible, get feedback from case stakeholders."

Summary: The evaluation group noted that in light of the new program structure, the program needs to ensure the connection with the real-world practice and skills required at the job. The group also points out that there needs to be a feedback loop between the academic activities of students, and practitioners.

Action: The new program structure includes two project work modules and the final thesis seminar. These are designed to be the window for students to practice. We will continue working on achieving higher engagement of practitioners into these courses. In year 2022-2023 we are already piloting the idea of deeper engagement of a case organization in the first three theoretical modules of the course. The company will be hosting the project course that follows the theory modules. We will evaluate this pilot and design a roadmap to create a system of a deeper engagement of organizations with the programme.

Timeline: Spring-Autumn 2023 – evaluate the pilot. Autumn 2023 – Spring 2025 implement and evaluate the practitioner integration initiative with courses.

Responsibility: Lead: Program Manager; Support: Course responsible teachers for - Project work I, Project work II, and Master's Thesis.

R3: Develop further the plan to establish a partnership program with industry, public authorities and NGOs.

"The review team recommends that the plan for a partnership program with industry, public authorities, nongovernment organizations, and other organizations is developed further. This takes time, but it can provide long term relationships with different kinds of learning possibilities, as noted in the planning documents."

Summary: The evaluation group recommends deepening formal relationships with the practitioners and external collaboration partners. At the moment, the programme relies on informal connections through personal contacts, and other research projects.

Action: In combination with establishing an alumni network (see R5), we will leverage the network to start building a partnership program with the industry, public authorities, and NGOs. At this stage we will establish the contacts and involved the outside parties in project courses, thesis course, other educational events. This will serve as a foundation for the future development.

Timeline: Spring 2023-Winter 2026

Responsibility: Lead: program manager. Support: Study counsellor and Study office;

R4: Ratio of teachers to students should be kept at a reasonable level, while ensuring the mix of teachers with real-world and theory focus.

"The review team recommends that the ratio of teachers to students is kept at a reasonable level. As this is a digital leadership program, it is important to have teachers with real world leadership and digitalization competence as well as more theoretically versed teachers."

Summary: The evaluation group was impressed with the current resourcing and teacher/student ration at the program. They also appreciated the composition of the teacher team and their complimentary skills. The evaluators recommend maintaining such a balance to ensure continued quality of the program.

Action: The resourcing of each program is managed by the heads of the division and the department hosting the program. Currently, the program has support of these actors to maintain the resource level and composition of teacher team. Program manager will continue working with the heads of the department and the division to maintain this balance, and advise of recruitment decisions, if such directly impact the program teacher team.

Timeline: Continuous work, until the next program evaluation in 2027

Responsibility: Head of the Department of Applied IT; Head of the Informatics Division; Program Manager.

R5: Get better data on employability and jobs for the graduates of the program through establishing connections to alumni.

"The review team recommends more consideration of the kinds of jobs that their students will begin in. This may be done by getting better data on what alumni have done on graduating from the course and sharing this with current students; and building better connections with alumni so that they can come and talk to existing students and potentially even mentor those interested."

Summary: The evaluation group observed that digital leadership programme covers a fast-evolving field while engaging a diverse group of students. This could make it difficult for our graduates to navigate the competitive labour market, and select and appropriate career path. Therefore, the group recommends collecting more data from alumni about their career path, and sharing up-to-date information with current students. This would also open a possibility to have a more direct connection between alumni and students. At the moment, the program does not have a list of alumni to implement this.

Action: Start building an alumni network and surveying alumni regarding their careers. We will create a secure database to collect alumni information, and start collecting contact information from graduates, starting with 2021-2023 cohort. We will also run pilot exist survey to collect initial data. The input from this survey would be used to develop data collection operation further and systematize data collection in upcoming years. We will also start a practice of sharing employment and career data from the graduates with new students, starting 2024.

Timeline: Implementation will take place 2023-2025, with having a functioning alumni database and data collection mechanism in place by the end of 2025

Responsibility: Lead: Study counsellor and Study office; Support: Program manager.

R6: Identify further research sites for the final dissertation and potentially the project modules, using alumni as a starting point.

"The review team recommends that the faculty identify further research sites for the final dissertation (and potentially also the project modules) by building stronger connections with local organizations (potentially again using alumni as a starting point for this)."

Summary: Connected to R5, the evaluation group recommends utilizing external contacts and alumni to offer more research sites for final dissertation for students.

Action: We will keep developing the routine of connecting students with research sites. Autumn 2022, with the initiative from digital leadership student group we have already started holding information sessions for thesis. We will work on developing this into more formalized process. After building a reasonable database of alumni contacts, we will engage alumni with these sessions to expand our pool of potential research sites.

Timeline: Initial stage of institutionalizing information event 2023-2024. Engaging alumni network into the event 2024-2026.

Responsibility: Lead: Program manager; Support: Study counsellor; Responsible teacher for Master's Thesis course.

R7: Consider including some existing students and alumni in future redesign efforts.

"The review team recommends that future redesign efforts consider including some existing students and alumni in these processes."

Summary: The evaluation group noted that students where not involved directly in the program redesign process, and recommends to engage alumni and students in such an effort in the future.

Action: We will start with establishing an annual quality survey for students to collect their ideas regarding program development. We will also engage digital leadership student association in ongoing developments and solicit their suggestion. We will also periodically consult alumni (see action for R5), in soliciting their advice. Finally, we will formally engage alumni and student representatives in the next major program redesign.

Timeline: Survey and student involvement starting 2023. Alumni involvement starting 2024.

Responsibility: Lead: Program manager. Support: Study counsellor.

R8: Program manager should consider encouraging students to elect 1-2 class representatives who can collate and communicate any issues that arise during the educational process.

"The review team recommends that the Program Manager considers encouraging students at the start of the program to elect 1-2 representatives (that do not need to be affiliated to the SU and can be part of internal processes) who can collate and communicate any issues that arise during the semesters. The review team also recommends that the informal review process post course delivery be formalized to include minutes of what has been discussed. This will help to ensure that there is cumulative learning from these post-course reviews."

Summary: The evaluation group commends the program for an open dialogue among colleagues, and between teachers and students. Yet, they suggest to have means for a coordinated student feedback that would ensure everyone's voice is heard. For that they recommend to elect class representatives for every cohort who can serve as a voice for the whole cohort.

Action: We will institute class representatives going forward. The program manager will make sure to meet with these representatives and collect feedback. We will utilize Digital Leadership student association to facilitate this process.

Timeline: Starting with 2023-2025 cohort – Autumn 2023.

Responsibility: Lead: Program manager. Support: DL student association.

R9: Consider providing the bridge for non-IS/informatics students to get up to speed with field-specific terms and concepts.

"The review team recommends that the teaching team considers ways to provide a bridge for non IS/Informatics students so that they quickly get up to speed with the technical terms. This could be done right at the start of the program – a one-week induction course to introduce general themes, concepts and language that would help those entirely new to the subject area. Alternatively, at the start of each course, the first 1-2 sessions could potentially provide the bridging needed for these students."

Summary: The evaluation group appreciated the diversity of admitted students to the program, however, they are concerned about students with non-IS/Informatics background, and their ability to catch up with key concepts required to successfully navigate the programme. For this they suggest a type of a 'bridge' for such students to get up to speed with the key terms and concepts.

Action: In the new program structure, the course 'Technology' is aimed at introducing all students with the key terminology, concepts and developments in IS/informatics field. The original idea of the course was to create a foundation for everyone to build on. We will continue developing this course to provide a better bridge into the programme, but revising the themes we touch upon. In addition, to this we will make teachers aware about need to introduce certain key concepts at the start of the course, to ensure equal playing field for all students. This would trigger revision of course syllabi (together with the action for R1).

Timeline: Spring 2023-Summer 2024.

Responsibility: Lead: Program manager; Course responsible teacher for Technology. Support: Programme teaching team.

R10: Explicitly review the background mix of the students in the class and identify what types of different perspectives this will allow them to explore and then encourage this diversity.

"The review team recommends that faculty teaching courses explicitly review the background mix of the students in the class and identify what types of different perspectives this will allow them to explore and then encourage this diversity. This could be done, for example, by organizing the groupwork in teams which include students from different backgrounds; or by having questions that directly relate to the backgrounds of the different students in the class."

Summary: The evaluation group suggests leveraging the student diversity more through purposefully doing a group distribution for assignments or creating assignments and questions that leverage such a diversity.

Action: Starting from the next cohort we will share the background data of students to the teacher team and encourage them to think about group compositions. We will also include this as a part of a regular discussion in monthly teacher meetings. This information is in principle available already, however, it has not been actively used or shared for educational purposes. There has also been a discussion of more informed group formation, but again, no action has been taken up till now.

Timeline: Autumn 2023

Responsibility: Program manager

R11: Management should consider the implementation of written course reports, and document both the results of the surveys and other input, discussion of these results, and reflections of collected data made by the responsible teacher.

"The review team proposes that the management considers the implementation of written course reports, or the equivalent, in order to document both the results of the surveys and other input, discussion of these results, but most of all the reflections on the collected data made by the teacher responsible for the evaluation of each course."

Summary: The evaluation team would like to see a more thorough documentation of course evaluation, and actions taken in relation to such feedback. They would also like to see more discussion by responsible teachers within these documents.

Action: We will revise course report documents in the effort to make the more informative, and allow the better documentation of student feedback and their reflection. Both course report documents and student surveys are the subject of continuous development. We will use evaluator feedback to guide this development

Timeline: 2023-2025

Responsibility: Program manager; Study office