

**Plan for Recruitment, Retention, and Advancement  
of Talented Women, Internationals, and Parents**

**Department of Information Systems,  
University of Muenster**

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## Abbreviations

DIS	Department of Information Systems
EQUAL-IST	Gender Equality Plans for Information Sciences and Technology Research Institutions
IS	Information Systems
IT	Information Technology
SBE	University of Muenster's School of Business and Economics
WWU	University of Muenster

# 1 Preamble

The present Plan for Recruitment, Retention, and Advancement of Talented Women, Internationals, and Parents for the Department of Information Systems (DIS) at the University of Muenster (WWU), ‘Plan’ hereafter, has the following goals:

1. To improve the processes for personnel recruitment, retention, and advancement at DIS.
2. To ensure the sustainability of the activities towards higher gender equality, diversity, and work-family balance, which were initiated within the EQUAL-IST project (“Gender Equality Plans for Information Sciences and Technology Research Institutions”)<sup>1</sup>, ‘Activities’ hereafter.

The Plan was developed based on the outcomes of the EQUAL-IST project, where existing at DIS challenges related to gender equality, diversity, and work-family balance were revealed, the objectives to address these challenges were formulated, and the Activities to achieve these objectives were defined and implemented<sup>2</sup>. The initiated Activities were then analysed and those, which need or have potential to continue to be implemented beyond the project runtime, were identified and discussed with WWU Working Group members of the EQUAL-IST project and further stakeholders involved in the Activity implementation. The Activities were then classified as those (i) relevant only for DIS and (ii) relevant for the University of Muenster’s School of Business and Economics (SBE), which includes DIS. This Plan focuses on the Activities relevant for DIS, while the Activities relevant for SBE were proposed to be included into the SBE Gender Equality Plan (German: *Gleichstellungsplan der Wirtschaftswissenschaftlichen Fakultät*).

The Plan is foreseen as a living document, which will be discussed and monitored continuously and reissued every four years. The objectives and Activities in the future Plans will be refined based on the relevant challenges related to personnel recruitment, retention, and advancement at DIS.

In the following chapter an overview of the Activities is presented, where they are summarised according to the objectives they intend to achieve.

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<sup>1</sup> <https://www.uni-muenster.de/forschungaz/project/10219?lang=en>

<sup>2</sup> [https://www.wi.uni-muenster.de/sites/wi/files/attachments/wwu\\_dis\\_gep.pdf](https://www.wi.uni-muenster.de/sites/wi/files/attachments/wwu_dis_gep.pdf)

## 2 Objectives and Activities to Achieve them

The first objective of the present Plan is *to increase the share of women among Bachelor Information Systems (IS) students*. The under-representation of women at DIS at all levels was the main reason, why DIS participated in the EQUAL-IST project. During the project internal gender audit, it was revealed that the root problem for it was the low share of women among Bachelor IS students.

Note: In 2017 the share of women among Bachelor IS students was 13.2% (vs. 46% of women among all WWU students). The shares of women were higher in the Master IS study programme (25%), as well as among doctoral researchers (24%) and full professors (1 out of 6, 16.7%) at DIS, although the numbers were low in these categories too. The lowest share of women at DIS was observed among postdoctoral researchers (12%).

There are several reasons that might discourage women to enter the IS field. Women might have a distorted and even wrong image of IS careers and perceive them as uninteresting, while lacking a comprehensive understanding of their variety. The IS field is also often perceived as being for men only and the lack of visible role models of women working there reinforces this stereotype.<sup>3</sup>

The second objective of the present Plan is *to enhance inclusion of international IS students*. The results of internal gender audit showed that international IS students often felt excluded, especially from group work, as German students tended to team up with other German students. The Master IS study programme at WWU, where English is the only language of instruction, needs to be focused on, as the share of international students there is especially high.

The third objective of the present Plan is *to improve work-family balance of DIS academic staff members*. During the internal gender audit several academic staff members indicated that the expectations from them were not communicated clearly during the hiring process, which resulted in dissatisfaction and turnover intention. Difficulties in balancing work and family life were also highlighted by several parents working at DIS. The major challenge here was that the current offer of places in kindergartens for children of the WWU staff members was not sufficient (although since 2008 WWU has been certified as a “Family-friendly university”<sup>4</sup>). Although this challenge can only be addressed centrally at the WWU level, it is nevertheless important to investigate further ideas how this challenge could be tackled at the DIS level. Another

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<sup>3</sup> E.g., Gorbacheva, E., Beekhuyzen, J., vom Brocke, J., & Jörg, B. (2018). Directions for research on gender imbalance in the IT profession. *European Journal of Information Systems*, 28(1), 43–67.

<sup>4</sup> <http://www.uni-muenster.de/familien/ueberdasaudit>

aspect here was that male academic staff members at DIS tended to take only short parental leave (usually only two months), meaning a lack of family time for them and that their spouses were out of the workforce for a significantly longer period.

The processes for the improvement of personnel recruitment, retention, and advancement at DIS need to be sustainable to make a difference. According to the work done by Athena Swan<sup>5</sup>, the results of successful interventions become visible only after at least five years since the start of their implementation. Therefore, the proposed Activities to achieve the aforementioned objectives, which were initiated within the EQUAL-IST project, need to continue to be implemented and it is crucial to ensure their sustainability.

Table 1 - Table 4 contain key information about each Activity, as well as proposed Activity implementation frequency and the stakeholders responsible for leading the Activity management and implementation ('Activity Leads' hereafter). Activity Leads include DIS study coordinator (Dr. Stefan Schellhammer), further postdoctoral researchers at DIS (Dr. Armin Stein, Dr. Michael Räckers, Dr. Bettina Distel, Dr. Katrin Bergener, and Dr. Elena Gorbacheva), DIS professors, and IS student council. Implementation of most Activities will also require the involvement of further IS students and DIS academic staff members. Activity Leads together with the EQUAL-IST project leader at WWU (Dr. Elena Gorbacheva) are responsible for the development of an action plan for each Activity, including the definition of Activity target indicators, timeline, resources required, and further relevant aspects. Commitment of most Activity Leads has been achieved.

In the present Plan eight Activities were proposed to achieve the first objective (Table 1), four Activities to achieve the second objective (Table 2), and three Activities to achieve the third objective (Table 3). In order to achieve the first objective, both (inter)national marketing activities targeted at a larger audience and local 'in-person' activities were derived based on the outcomes of the EQUAL-IST project. Moreover, two further valuable Activities were proposed (Table 4), which deal with (i) raising awareness of topics related to gender equality among IS students and (ii) evaluating the implementation progress and success of all Activities.

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<sup>5</sup> <http://www.ecu.ac.uk/equality-charters/athena-swan>

## 2.1 Objective 1: To increase the share of women among Bachelor IS students

Title	Details	Implementation frequency / Lead
Conduct the event initiated within the “Girls’ Day” information days <sup>6</sup> .	<p>Goal: to promote the IS study programme, focusing on potential female students.</p> <p>Main idea: IS students and DIS academic staff members show to the participating girls various facets of the IS field.</p> <p>The event was initiated in 2018, conducted within “Girls’ Day 2018”, and repeated within “Girls’ Day 2019”.</p> <p>Short evaluation surveys were conducted at the end of the events; the survey responses were analysed and compared.</p>	<p>Annually within the “Girls’ Day” information days.</p> <p>Lead: Dr. Armin Stein and Dr. Bettina Distel supported by IS students and DIS academic staff members.</p>
Apply a gender-sensitive approach when revising existing or establishing new materials (including teaching materials).	<p>Goal: to ensure that in all materials (including teaching materials) (i) there is a balanced representation of men and women in images, (ii) gender-sensitive language is used in texts, and (iii) no gender stereotypes are transmitted in images or texts.</p> <p>Revision needs to be done in collaboration with SBE Equal Opportunities Officer and WWU Equal Opportunities Office.</p> <p>At DIS within the EQUAL-IST project the following marketing materials were revised applying a gender-sensitive approach: brochures (Bachelor, Master), flyer (Bachelor), introductory slides (Bachelor, Master).</p>	<p>Each time existing materials are revised or new materials are established.</p> <p>Lead: Dr. Stefan Schellhammer and Dr. Katrin Bergener.</p>
Establish collaboration with surrounding schools.	<p>Goal: to promote the IS study programme by engaging pupils (in particular, female pupils) with IS-related topics.</p>	<p>Continuously.</p> <p>Lead: Dr. Stefan Schellhammer.</p>
Conduct regular school visits and/or webinars with pupils.		<p>Once a year between December and March conduct visits of as many schools as possible.</p> <p>Lead: Dr. Stefan Schellhammer supported by IS students and DIS academic staff members.</p>
Conduct follow-up surveys “How did you learn about your study programme?” among IS students.	<p>Goals: (i) to understand, how current IS students, especially female IS students, learned about the IS study programme at WWU; (ii) to identify promising communication channels; (iii) to reveal, how current communication channels could be improved.</p> <p>Initial survey was conducted in 2018.</p>	<p>Aim for every 3 years; align with relevant survey(s) done at SBE.</p> <p>Lead: Dr. Stefan Schellhammer.</p>
Implement the required activities revealed from the analysis of the survey results.		<p>Continuously.</p> <p>Lead: Will be defined based on the required activities.</p>
Conduct follow-up workshops “Why should one want to study IS at WWU?”.	<p>Goals: (i) to understand the positive aspects of studying IS at WWU and decide, how to communicate and promote them to potential students, especially to potential female students; (ii) to understand the negative aspects of studying IS at WWU and decide, how to mitigate or</p>	<p>Annually within one of the meetings of IS student council (German: <i>WI Fachschaft</i>) and DIS professors.</p>

<sup>6</sup> <https://www.girls-day.de/>

	eliminate them in the future. Initial workshop was conducted in 2017 with DIS academic staff members; the feasible activities revealed during this workshop were implemented.	Lead: IS student council, Dr. Stefan Schellhammer, DIS professors.
Implement the required activities revealed during the workshops.		Continuously.  Lead: Will be defined based on the required activities.

**Table 1** Proposed Activities to achieve Objective 1: To increase the share of women among Bachelor IS students.

## 2.2 Objective 2: To enhance inclusion of international IS students

Title	Details	Implementation frequency / Lead
Establish a point of contact for international IS students.	Goal: to provide to international IS students a point of contact, where they can ask questions and receive support. For instance, contact hours can be provided by IS student council.	Continuous.  Lead: IS student council guided by Dr. Stefan Schellhammer.
Assign students to groups for group work activities within (Master) IS courses in a random way.	Goal: to enhance diversity among team members in group work activities within (Master) IS courses. During the Strategy Meeting of DIS professors on 19.12.18 (German: <i>Institutsstrategiesitzung</i> ) it was agreed to assign students to groups for group work activities in a random way. DIS professors need to communicate this information to the responsible lecturers at their Chairs.	Continuously.  Lead: DIS professors and DIS academic staff members.
Conduct the session “How to study successfully in Muenster” for (international) Master IS students.	Goal: to provide to first semester Master IS students, especially to international students, practical information and recommendations related to studying IS at WWU. The session was conducted within four Master Orientation Days in 2017-2019 and is planned to be repeated within future Master Orientation Days.	Every semester (twice a year) within Master Orientation Days.  Lead: Dr. Stefan Schellhammer supported by an IS student.
Implement the mentoring activities for international IS students initiated by IS student council. Engage international IS students to become members of IS student council.	A working group for supporting international IS students was established within IS student council and several mentoring activities were initiated.	Continuously.  Lead: IS student council.

**Table 2** Proposed Activities to achieve Objective 2: To enhance inclusion of international IS students.

### 2.3 Objective 3: To improve work-family balance of DIS academic staff members

Title	Details	Implementation frequency / Lead
Communicate the expectations to (potential) DIS staff members.	Goal: to improve expectation management of (potential) staff members. Each applicant and staff member should receive information about the upcoming tasks, expectations, and further peculiarities of work at DIS; each professor can decide individually on the communication format, level of details etc. The success of implementation of the Supervision Agreement between DIS professors and doctoral researchers (German: <i>Betreuungsvereinbarung</i> ), which was introduced at DIS in 2018, needs to be monitored and, if required, corrective activities need to be implemented.	Continuously.  Lead: DIS professors.
Conduct follow-up workshops “Why should one want to work at DIS”.	Goals: (i) to understand the positive aspects of working at DIS and decide, how to communicate and promote them to potential staff members, especially to potential female staff members; (ii) to understand the negative aspects of working at DIS and decide, how to mitigate or eliminate them in the future. Initial workshop with DIS academic staff members was conducted in 2017; the feasible activities revealed during this workshop were implemented.	Annually within the Strategy Meetings of DIS professors.  Lead: DIS professors, Dr. Michael Räckers.
Implement the required activities revealed during the workshops.		Continuously.  Lead: Will be defined based on the required activities.

**Table 3** Proposed Activities to achieve Objective 3: To improve work-family balance of DIS academic staff members.

### 2.4 Further proposed Activities

Title	Details	Implementation frequency / Lead
Raise awareness of topics related to gender equality among IS students within an obligatory lecture.	Develop and incorporate into the curriculum the lecture on the “History of Information Systems” within the course “Introduction to Information Systems” (German: <i>Einführung in die Wirtschaftsinformatik</i> ). In this lecture, current gender imbalance in the Information Technology (IT) profession should be highlighted as a challenge that needs to be addressed; women who influenced and shaped the IT field need to be introduced.	Before the start of WS 2019/2020.  Lead: Dr. Armin Stein, Dr. Elena Gorbacheva.
Implement monitoring activities.	Progress and success of implementation of each Activity included in the Plan need to be evaluated regularly.	Continuously.  Lead: Dr. Michael Räckers.

**Table 4** Further proposed Activities.



### **3 Concluding Remarks**

The present Plan will become effective from the date of approval by DIS professors and shall remain in force for the period of four years. Thereafter, it needs to be disseminated, implemented, as well as evaluated regularly and refined every four years. The overall progress and success of the Plan implementation will need to be evaluated, analysed, and discussed by all involved stakeholders. Based on the analysis results, the refined version of the Plan shall be developed, approved, and subsequently implemented.

The Plan and each of its Activities need to be disseminated to all target groups at DIS (i.e. staff members and students), as well as at the SBE and WWU levels. Specific Plan dissemination activities can include, for instance, press releases published on the DIS, SBE, and WWU websites, presentations at the DIS Lunchtime Seminar(s), meetings of DIS professors, SBE Faculty Council, and IS student council, as well as emails sent to DIS staff members, IS student council, and WWU Equal Opportunities Office.

During the Plan implementation, it needs to be continuously explored, how the initiated Activities could be incorporated further into the routine tasks of permanent roles and structures at DIS.