Analysis Unit, 4 January 2024

# Appendixes: the gender distribution across students and employees

## Introduction and assumptions

This document is a supplement to the Gender Equality Plan for the IT University of Copenhagen and shows diagrams concerning:

- Students Applicants
- Students Admitted
- Students Graduated
- Employees Population of employed per 31 December
- Employees New hires per year

In some diagrams, study programmes are shown divided by departments. Study programmes that precede the establishment of the departments in 2017 have been placed at the department they would naturally have been offered by. Additionally, it should be noted that new study programmes that were added in the period 2015-2023 are included continuously. It is therefore not the same study programmes that form the basis of the numbers shown when comparing between years.

For applicants and admitted, the following includes study programmes offered by:

- Business IT: B-GBI and K-DIM are included in the entire period
- Computer Science: B-SWU and K-SDT. In 2017, B-DS was added. In 2018, the K-SDT study program was split into two distinct study programs: K-SD and K-CS. In 2021, K-DS is added
- Digital Design: B-DMD, K-DDK, and K-GAMES. In 2018, the title of B-DMD changed to B-DDIT and the title of K-DDK has changed to K-DDIT.

Admitted are counted as newly admitted in the relevant study year, after early drop-out. Readmitted are not included in this number.

Employees have many different job titles. Job titles are recategorised to simplify them and make the employments comparable. Changes within a category are not considered as a change in position, but changes between categories are.

Only regular employed academic or technical-administrative staff are counted, not DVIP and other hourly-paid employees. Only employees paid by the IT University are counted - i.e., guests, Industrial PhDs, etc. are not counted among employees.

The number of employees is counted on 31 December. Additionally:

- PhD students who are associated with the IT University, but to whom the IT University no longer pays a salary, are not included
- Research assistants are normally counted as VIP. However, it has been chosen not to include diagrams for this group
- If an employee has several simultaneous positions in different categories per 31 December, then the employee in question is counted several times
- Whether an employment is part-time has not been taken into account.

Number of new hires is counted per year. Additionally:

- Employees who are re-hired in the same category of position:
  - If more than 30 days have passed since the end of the previous employment in the position, then the hire is considered a new hire. Except for PhDs, where breaks would otherwise be counted as new hires.

- If less than 30 days have passed (or the positions overlap in the data source), then the latest employment is considered an extension and is not counted as a new hire.
- If an employee is newly hired several times in a year, then all hires are counted.

#### Applicants – BSc



There has been an increased number of male as well as female applicants from 2015 to 2023 when looking across all BSc study programmes. The proportion of female applicants is slowly increasing across study programmes from all three academic departments, but most significantly for applicants to study programmes from Computer Science, where the proportion has more than doubled from 12 per cent in 2015 to 30 per cent in 2023. The proportion of females applying to study programmes offered by Digital Design is more than 50 per cent in 2023.

#### Applicants - MSc



The proportion of female applicants to MSc study programmes has, with slight fluctuations, been stable around 40 per cent in the years 2015-2023. The total number of both male and female applicants to MSc study programmes was higher in the period 2015-2017 than in the last six years. Both the total number of applicants and the proportion of female applicants have increased in the MSc study programmes offered by the Computer Science Department from 2015 to 2023. The total number of applicants for MSc study programmes offered by the departments of Business IT and Digital Design was higher in 2015-2017 than in recent years. Looking at the proportion of female applicants, the MSc study programmes offered by Digital Design have previously been above 50 per cent, whereas in recent years it has been hovering around 50 per cent. The proportion of female applicants to the MSc study programme offered by the Business IT Department has been around 40-45 per cent every year, varying a bit over the years, and for the first time, it has been above 50 per cent in 2023.

### Admitted - BSc



The number of males and females admitted to the IT University's BSc study programmes has been increasing during the years 2015-2020 but is decreasing and fluctuating in 2021-2023. Since 2017, the proportion of females admitted has been above 30 per cent and in 2022 and 2023 above 35 per cent. It is especially the BSc study programmes offered by the Computer Science Department that have increased the number of admitted students. The proportion of females admitted to these study programmes increased from 10 per cent in 2015 to 26 per cent in the years 2020-2023. The proportion of females admitted to BSc study programmes offered by the Digital Design Department has been more than 50 per cent in most years and the trend is increasing. In 2020 and 2021, the number of admitted to the BSc study programme offered by the Business IT Department was higher than in previous years. The proportion of females admitted to this study programme increased in the period from 2015-2019 from 16 per cent to 51 per cent but fluctuated more in the period 2020-2023.

### Admitted - MSc



In the period 2015-2023, the IT University has had an increasing number of admitted students to MSc study programmes, except for a small decrease in 2022. The proportion of females admitted has been 41 per cent or more every year and peaked in 2020 with 47 per cent females admitted. The proportion of females admitted on MSc study programmes offered by the Digital Design Department has been between 50 per cent and 59 per cent every year. The proportion of females admitted to MSc study programmes offered by the Computer Science Department has increased from 14 per cent in 2015 to 36 per cent in 2020 but has fluctuated the last three years. The proportion of females admitted to the MSc study programmes offered by the Science Department has increased from 14 per cent in 2015 to 36 per cent in 2020 but has fluctuated the last three years. The proportion of females admitted to the MSc study programme offered by the Business IT Department has increased from 42 per cent in 2019 to 66 per cent in 2023.

### Graduated - BSc



The number of graduated BSc students has increased in recent years for both males and females, but a small decrease is seen in 2022. In particular, the proportion of female graduates has increased. The number of graduates from the study programme offered by the Business IT Department has been slightly increasing since 2017. The proportion of female graduates has been increasing since 2018 and is now approximately at 50 per cent. The proportion of female graduates from BSc study programmes offered by the Computer Science Department has increased from 0 per cent in 2015 to 24 per cent in 2023. Looking only at the number of females graduated from Computer Science, there has been a clear increase the last three years compared with earlier years. The number of graduates from the study programme offered by the Digital Design Department is almost stable in the period but is slightly lower in 2022 and 2023. The proportion of female graduates from this study programme has been around 50 per cent throughout the years.

### Graduated - MSc



Except for 2017, the number of MSc graduates has been approximately 400 throughout the period 2015-2019, and the proportion of female MSc graduates has been increasing. The number of MSc graduates increased in 2017 as well as in 2020-2021 and 2023. The proportion of female graduates fluctuates but has been between 41 and 48 per cent since 2016. The number of female MSc graduates from the study programme offered by the Business IT Department is higher in the period 2017-2023 than in 2015-2016. After a decrease in 2021 and 2022 the number of female MSc graduates from the study programme offered by the Business IT Department is peaking in 2023. The corresponding proportion of females has also increased. Both the number and proportion of female graduates from study programmes offered by the Computer Science Department have been increasing almost every year from 2015 to 2023. The number of both male and female graduates from study programmes offered by the Digital Design Department fluctuates through the period, but the trend is that the numbers are decreasing compared to the early years. The proportion of female graduates from the study programmes offered by the Digital Design Department fluctuates through the period.

## Comparing admitted and graduated

Students admitted one year can be compared to graduated students by shifting the years in the diagrams forward by three years for BSc or two years for MSc. When comparing the above diagrams of admitted and graduated that way, the same fluctuations are seen in general, both in the numbers of students and in proportions of females. This indicates that the drop-out is unaffected by gender. This is also supported by previous analyses made at the IT University.

# Number of academic staff employed ultimo each year and new hires per year

The left diagrams show the number of scientific staff employed as of 31 December. If an employee has been employed across several years, that person is counted in the graphs each of these years. The right diagrams show new hires per year.

It is important to note that the number of new hires at the IT University is not very high - especially not when broken down by position. Therefore, even small changes in numbers can lead to large fluctuations in percentages.



The number of female PhD employees has been increasing throughout the period 2015-2023. Overall, the proportion of female PhD employees has also increased between 2015 and 2019, but a drop can be seen in the proportion of female PhD employees between 2019 and 2023 from 45 per cent to 39 per cent at the end of 2023. The number of new female PhD hires has increase from two in 2015 to 10 in 2023. In the period 2015-2019, the share of females among new hires fluctuates during the period 2015-2023.



The number of employed postdocs has been increasing in the period 2015-2021. The proportion of female postdocs has also increased from 26 per cent in 2015 to 50 per cent in 2021 but is decreasing to 39 per cent in 2023. The proportion of new hires of female postdocs has increased during the period 2016-2021 and has been above 50 per cent in 2020 and 2021 but is decreasing to 38 per cent in 2023.



The number of female assistant professors increased noticeably in 2019. The proportion of female assistant professors has been around 50 per cent in 2022 and 2023. In the period 2019-2023, a majority of the new hires of assistant professors were female.



The number of associate professors has increased throughout the period 2015-2023. However, the number of females has remained rather stable until 2021 and has been increasing in 2022 and 2023. Thus, the proportion of female associate professors has been decreasing until 2021. Except for 2017, the proportion of new hires of female associate professors was between 22 per cent and 33 per cent until 2021 and has increased to approximately 50 per cent in 2022-2023.



The number of professors has been increasing throughout the period 2015-2023. The proportion of female professors has also been increasing until 2021 but has decreased in 2022 and 2023. When looking at the gender distribution of new hires, it only makes sense to look at the numbers. They show that throughout the period, more males than females were employed in professorships. But also, that the IT University has succeeded in hiring female professors every year in the period 2017-2021 in a field traditionally dominated by males.

# Number of technical-administrative staff employed ultimo each year and new

#### hires per year

The below left diagrams show the number of technical-administrative staff (TAP) employed as of 31 December. If an employee has been employed for several years, that person is counted in the graphs for each of the years. The diagrams to the right show new hires per year.

The below diagrams will focus on the level of management among TAP employees, instead of specific titles or positions. The lower level of management includes team leaders or similar who, in turn, refers to a Head of Department. Heads of Department are categorised as middle-level of management. The top level of management includes the Rector, University Director, and Pro-rector.

It is important to note that the number of new hires at the IT University is not very high especially when distributed across levels of management. Consequently, even small deviations in numbers can be displayed as large fluctuations in percentages in the diagrams.



The number of TAP employees has been increasing throughout the period 2015-2021. The proportion of females has been increasing as well and has been above 60 per cent since 2017. In 2023 males make up 36 per cent of TAP employees. The number of new hires is also increasing until 2021 and follows a trend where approximately one-third of new hires are males. In 2023 the number of new hires of males and females was almost equal.



The number of lower-level managers has remained somewhat stable in the period 2015-2019. Even though the share of male lower level managers was 50 per cent in 2020 it has decreased in the last three years and is 17 per cent in 2023.



The number of middle-level managers increased from 2015 to 2019 and remained rather stable afterward. In recent years the proportion of males in middle-level management positions has been decreasing, with males making up 27 per cent of middle-level managers in 2023. No new middle-level manager has been hired since 2020.



No female has had a position in the top-level management from 2015-2023. All three new hires in the same period have been males.