## GENDER BUDGET <br> 2021

## 2021 GENDER BUDGET

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## FOREWORD

For the third year running, Politecnico di Milano turns the spotight on women to highlight the most significant aspects of their careers inside and outside the university. It does so, first of all, as usual by looking at the number of female freshers, which has grown. The focus then shifts to young female researchers, whose numbers are significantly high at the beginning of their careers. Finally, it reconfirms the difficult, but certainly possible, career climb for many of the higher ranked women professors. An overall positive picture that strengthens our convictions in favour of a more inclusive university and society.

New elements have emerged too. These include a look at female graduate employment rates five years after graduation. A far-reaching view that bears witness to the importance of a relationship that does not end with a university degree, but grows through exchange and dialogue. A relationship that should be encouraged in order to correct, where possible, the distortions that still characterize the gender employment and pay gap. Although these distortions have almost completely disappeared in the "hard" subjects of Engineering, they are still significant in some areas of Architecture and Design.

The present report then suggests a reflection on a few topical issues. The first one is limited to the local situation and concerns in particular the development of technical-administrative staff and more in general of the public administration. Being a cornerstone for the execution of many of the measures set out in the NRRP (National Recovery and Resilience Plan), the PA will need highly qualified staff in the coming years to implement actions of exceptional scope. A sector in which women, although more numerous than men, as the situation within our University shows, are still relegated to lower positions. This is an opportunity for growth that should not be wasted, both in terms of career progression and of the hiring of new professionals.
The second opportunity for reflection is provided by the global dimension and the excellent results achieved by international female students. These women, who often come from Asian countries, which are now at the centre of political and humanitarian dynamics of no small importance, choose Politecnico di Milano in a much higher percentage compared to Italian girls, especially in the field of Engineering: $46.5 \%$ compared to $35.3 \%$ in 2020 . These are women who find in their studies an important means of personal fulfilment and they are a resource and an example for our university and for our country.

| Ferruccio Resta | Donatella Sciuto |
| :--- | :--- |
| Rector | Vice Rector |

Donatella Sciuto
Rector


## INTRODUCTION

## An initial impact assessment

The third edition of the Politecnico di Milano Gender Budget, in the wake of the previous ones, updates the snapshot of our University and also allows us to make an initial assessment of the impacts of the gender policies undertaken in recent years. The trends of the last three years for student population, faculty and technical-administrative staff show encouraging signs of progress towards gender equality, with data in line with national and international trends.
As we did last year, we reassessed two crucial aspects in depth. On the one hand, the career path of female international students by comparing their careers with those of both male and female Italian students. On the other hand, we have investigated in detail the first steps of the academic career with a focus on the careers of young female researchers that highlight how new recruits of the Politecnico di Milano can really bring about the change enabled by equal opportunities.
In addition to these topics, this year the Gender Budget analyses how the job market welcomes Politecnico di Milano graduates based on the first 5-year-after survey carried out by the University Career Service. The survey reveals important data with an excellent employment rate for both genders, even if it is not always accompanied by equal pay for both genders, but by a gender pay gap.

Also in this 2021 edition, the Gender Budget was prepared in a manner consistent with the Guidelines for Gender Budget in Italian Universities, drawn up by the CRUI (Conference of Italian University Rectors) Group.

## ANALYSIS

An overview of the female component

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## STUDENTS

Providing equal opportunities for inclusive access to STEM (Science, Technology, Engineering and Mathematics) studies and careers. This is our first mission: not only for our University but for the country and for society.

On the occasion of this third edition of the Gender Budget, we would like to focus on the evolution of the gender "snapshot" of our University over the last three years.
Starting with students, we see that from 2018 to 2020, female students increased from 32.8\% of the population to $33.7 \%$ : an increase that, although at first glance it appears small, is actually encouraging

It is no secret, in fact, that reversing the trend and achieving the most equal possible participation of men and women in STEM studies takes time and perseverance, especially in the Engineering disciplines in which the vast majority of the University's students enrol.

In Architecture and Design, in fact, women have long represented the majority of students, while in Engineering in 2020 girls accounted for $23.6 \%$ of those enrolled in the Laurea Triennale (equivalent to Bachelor of Science) degree and $27.3 \%$ in the Laurea Magistrale (equivalent to Master of Science).

Moreover, the situation is not homogeneous within the Engineering study programmes. While women outnumber men in Biomedical Engineering, accounting for 59\% of enrolments, there are study programmes such as Mechanical, Electronic, Electrical and Computer Science Engineering where men exceed $85 \%$. The University is concentrating its efforts precisely on the rebalancing of these study programmes, with initiatives such as the Girls@PoliMI project, a programme of targeted scholarships for deserving new female students.

However, female students maintain a steady academic record, with fewer drop-outs than their male counterparts, with graduation marks in line with, if not higher than, those of men, and with a significantly higher female ratio (\% of women for every 100 men ) among female graduates than among male students, demonstrating the effectiveness of girls in completing their studies.
The PhD represents the highest level of education: the percentage of female PhD candidates in the three-year period is almost constant at University level. In Engineering, this percentage is below the national average (in 2020 28\% compared with 33\% in Engineering and Technology as indicated in the document drawn up by MUR (Ministry of University and Research) "Women's careers in academia", March 2021).

Percentage of students enrolled by study area, type of degree and gender - A.Y. 2018/19, 2019/20, 2020/21

## Architecture $\square$ Women $\square$ Men <br> Design <br> $\square$ Women $\square$ Men <br> Engineering Women $\square$ Men <br> 

First-year withdrawals by gender - Enrolled for the A.Y. 2016/17, 2017/18 and 2018/19
 graduation and by gender - Graduates in A.Y. 2017/18, 2018/19 and 2019/20

| Architecture |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Laurea Triennale (equivilent to Bachelor of Science) |  |  | Laurea Magistrale (equivalent to Master of Science) |  |  |
|  | Women | Men | Total | Women | Men | Total |
| A.Y. Title | Mean score | Mean score | Mean score | Mean score | Mean score | Mean score |
| 2017 | 102,8 | 101,3 | 102,1 | 107,3 | 100,3 | 106,9 |
| 2018 | 103,5 | 101,8 | 102,8 | 107,1 | 107,0 | 107,1 |
| 2019 | 104,3 | 102,0 | 103,3 | 107,7 | 107,3 | 107,5 |


| Design |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Laurea Triennale (equivalent to Bachelor of Science) |  |  | Laurea Magistrale (equivalent to Master of Science) |  |  |
|  | Women | Men | Total | Women | Men | Total |
| A.Y. Title | Mean score | Mean score | Mean score | Mean score | Mean score | Mean score |
| 2017 | 104,1 | 101,1 | 103,0 | 106,6 | 106,1 | 106,5 |
| 2018 | 104,5 | 102,6 | 103,8 | 107,1 | 106,2 | 106,9 |
| 2019 | 104,9 | 108,3 | 104,3 | 107,8 | 106,6 | 107,4 |
| Engineering |  |  |  |  |  |  |
|  | Laurea Triennale (equivalent to Bachelor of Science) |  |  | Laurea Magistrale (equivalent to Master of Science) |  |  |
|  | Women | Men | Total | Women | Men | Total |
| A.Y. Title | Mean score | Mean score | Mean score | Mean score | Mean score | Mean score |
| 2017 | 94,9 | 94,0 | 94,2 | 103,2 | 101,6 | 102,0 |
| 2018 | 95,1 | 93,8 | 94,1 | 103,2 | 101,8 | 102,2 |
| 2019 | 95,1 | 93,9 | 94,2 | 103,4 | 102, 1 | 102,5 |

Female ratio for enrolled students and graduates in the three areas of the University, for Laurea Triennale (equivalent to Bachelor of Science) programmes, Laurea Magistrale (equivalent to Master of Science) programmes, and overall data - Enrolled and graduates in A.Y. 2017/18, 2018/19, 2019/20

| Laurea Triennale (equivalent to Bachelor of Science) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Enrolled | Architecture | Design | Engineering | Total |
| 2017 | $119,2 \%$ | $151,9 \%$ | $27,6 \%$ | $42,6 \%$ |
| 2018 | $121,4 \%$ | $143,7 \%$ | $28,6 \%$ | $42,9 \%$ |
| 2019 | $123,7 \%$ | $140,9 \%$ | $20,8 \%$ | $43,9 \%$ |
| Graduates | Architecture | Design | Engineering | Total |
| 2017 | $130,5 \%$ | $188,9 \%$ | $33,6 \%$ | $53,9 \%$ |
| 2018 | $141,4 \%$ | $169,3 \%$ | $29,8 \%$ | $48,6 \%$ |
| 2019 | $133,1 \%$ | $167,1 \%$ | $30,9 \%$ | $48,7 \%$ |


| Laurea Magistrale (equivalent to Master of Science) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Enrolled | Architecture | Design | Engineering | Total |
| 2017 | $138,6 \%$ | $187,5 \%$ | $36,3 \%$ | $58,9 \%$ |
| 2018 | $146,9 \%$ | $184,6 \%$ | $36,3 \%$ | $57,9 \%$ |
| 2019 | $153,0 \%$ | $176,1 \%$ | $37,2 \%$ | $58,0 \%$ |
| Graduates | Architecture | Design | Engineering | Total |
| 2017 | $140,9 \%$ | $210,1 \%$ | $38,4 \%$ | $64,1 \%$ |
| 2018 | $140,7 \%$ | $216,7 \%$ | $36,6 \%$ | $61,2 \%$ |
| 2019 | $170,0 \%$ | $179,9 \%$ | $41,7 \%$ | $63,2 \%$ |

The femininity ratio is defined as the percentage of women per 100 men

## Percentage of PhD students in the three areas and University total for the last three years <br> (Picture as at 31.12)



## FOCUS ON

## INTERNATIONAL STUDENTS

In the 2020-2021 academic year, there were 2103 international students enrolled in Laurea Magistrale (equivalent to Master of Science) Study Programmes at the Politecnico di Milano, a quarter of the total. This proportion has been almost constant over the last 3 years, confirming that they are an integral part of the community of our University. Geographical origin is predominantly Asian, followed by non-EU countries and South America.
More than half of the Politecnico di Milano's international students choose Engineering. Enrolment data by gender shows that the percentage of foreign female students enrolled in 2020 was higher than that of the Italians in all three areas of the University. Globally, foreign girls account for 46.5\% of the enrolled, compared to $35.3 \%$ of the Italian (trends confirmed also by the comparison of the relationships of femininity between the two populations).
From the point of view of career progression, the analysis of career status shows that girls (both Italian and foreign) graduate at a higher rate than boys and drop out less, with greater discrepancies, however, in favour of female international students. These differences remain if we look at those who graduate on time and at "time to degree" (T2D), that is the time taken to obtain a degree, which again shows that girls have a better performance.

These results are also significantly improving year on year, with a gender gap that has reversed in favour of girls since 2015, demonstrating the excellent progress of female international students.

## Geographical areas of origin of international students <br> A.Y. 2018/19, 2019/20 and 2020/21

$\square$ International men $\quad$ International Women $\square$ Hatian men $\quad \square$ Hetian women


Aree geografiche di provenienza degli studenti internazionali
A.A. 2018/19, 2019/20 e 2020/21

- talian
- International

```
Europe Extra
- North America
- Ocaania
\({ }_{-}\)South
Artica
```



## Distribution of enrolled students by gender, comparison between Italian and international enrolled students

Distribution of enrolled
A.Y. 2016/17-2020/21


Change in the female ratio of enrolled female students by study area, comparison between Italian and international students - A.Y. 2016/17-2020/21


Career status of students by gender and year of enrolment, comparison between Italian and international
students - April 2021


Percentage of graduates on time out of total graduate by gender and acadiemic year of admission,
Italian and international students - April 2021


## FOCUS ON

## THE CAREERS OF GRADUATES AND PhD HOLDERS

We have seen over the past few years that the good performance of girls in education suffers a setback when they enter the job market, which welcomes them rather unfairly in terms of permanent employment rates and equal pay. This year we are able to go deeper into this analysis because the University's Career Service has completed an important survey 5 years after graduation, which provides a significant insight into the early stages of the working careers of graduates with a view also to the paths taken after their Ph.D.

According to the employment data for the Laurea Triennale (equivalent to Bachelor of Science) programmes 5 years after graduation, we observe a very high employment rate, although there are differences between the 3 main disciplinary areas. Women are less employed than men in Architecture and Design (-2\%), while they achieve full occupation in Engineering, where they actually do better than men ( $100 \%$ compared to $99 \%$ ). However, when we analyse the type of contract and salary, we see women performing worse than their male colleagues, in terms both of percentage of permanent contracts ( $-8 \%$ in Architecture, $-3 \%$ in Design and $-1 \%$ in Engineering) and salaries, with a gender pay gap particularly evident for Architecture (20\%), but also present for Design and Engineering (4\% and 7\%).
If we look at the Laurea Magistrale (equivalent to Master of Science) programmes, the employment rate in general is higher for Italian graduates than for international ones, even if both figures stand above $95 \%$. There is no employment gap in Engineering for Italian graduates (-4\% for international girls), while we see the same dynamics described above for permanent contracts and salaries, in particular for Italian graduates, who make up the most of the sample interviewed

We wish to stress the relevance of the gender pay gap, which is significantly constant for Laurea Magistrale programmes (in the case of Design and Engineering this is actually higher than the Laurea Triennale programmes, standing at $14 \%$ for Architecture, $13 \%$ for Design and $9 \%$ for Engineering). The data of PhD programme graduates confirms the trends seen for graduates. In terms of both permanent contracts and net monthly earnings, women are at a disadvantage compared to their male colleagues, both in Architecture and Engineering. The exception to this is Design, where salary figures show the opposite trend.
The data from the Politecnico di Milano is certainly encouraging with regard to employment rates and general salary levels, but it continues to show a job market which is less welcoming for women than for men, even if these differences are less pronounced 5 years after graduation than they were 12 months after obtaining the degree.

[^0]Employment data of 2015 Italian Bachelor's graduates, five years after graduation

| 2015 bachelor's graduates |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Architecture |  | Design |  | Engineering |  |
|  | Women | Men | Women | Men | Women | Men |
| Employment rate | 94\% | 96\% | 94\% | 96\% | 100\% | 99\% |
| Permanent contracts | 75\% | 83\% | 79\% | 81\% | 92\% | 93\% |
| Average net salary | 1.470 € | 1.849 € | 1.544 € | $1.602 \epsilon$ | 1.919 € | $2.070 €$ |

Employment data of 2015 Italian Master's graduates, five years after graduation

| 2015 Italian master's graduates |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Architecture |  | Design |  | Engineering |  |
|  | Women | Men | Women | Men | Women | Men |
| Employment rate | 96\% | 98\% | 96\% | 99\% | 99\% | 99\% |
| Permanent contracts | 73\% | 81\% | 87\% | 92\% | 92\% | 92\% |
| Average net salary | 1.652 € | $1.883 €$ | 1.754 € | 2.020 € | $2.037 €$ | $2.237 €$ |

Employment data of 2015 foreign Master's graduates, five years after graduation

| 2015 foreign master's graduates |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Architecture |  | Design |  | Engineering |  |
|  | Women | Men | Women | Men | Women | Men |
| Employment rate | 95\% | 91\% | 89\% | 100\% | 91\% | 95\% |
| Permanent contracts | 49\% | 41\% | 50\% | 50\% | 61\% | 61\% |
| Average net salary | 1.859 € | $2.189 €$ | 2.132 € | 2.125 € | 2.017 € | $2.309 €$ |

Employment data of PhDs four and five years after graduation

| PhDs 4 -5 years after graduation (talian + foreign master's graduates 2015-2016) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Architecture |  | Design |  | Engineering |  |
|  | Women | Men | Women | Men | Women | Men |
| Employment rate | 89\% | 94\% | 100\% | 100\% | 93\% | 96\% |
| Permanent contracts | 52\% | $67 \%$ | 55\% | 50\% | 67\% | 70\% |
| Average net salary | 1.673 € | $2.052 €$ | 1.950 € | 1.850 € | 2.124 € | 2.374 ¢ |



## PROFESSORS

Designing the future. Working and collaborating in a welcoming and inclusive environment. Not asking for sacrifices, but offering opportunities.

Female professors have also increased over the last three years, from $28.7 \%$ in 2018 to $30.2 \%$ in 2020. At national level, the latest MUR report on women's academic careers indicates a percentage of female professors of $41 \%$, which drops to $36 \%$ if only STEM fields are considered.
There is an encouraging and significant increase in the presence of women among RTDA (untenured researchers with permanent contract), the first researcher position in an academic career, where women increase from $34.6 \%$ in 2018 to $42.1 \%$ in 2020. This bodes well for a greater gender balance in the future: here too, as for female students, progress can only be slow, but the increasing figures reported by our University over the three-year period are still very positive.

In fact, as career levels progress, the discrepancies between men and women also increase here, leading to female associate professors representing $30.3 \%$ of those in this position at the Politecnico di Milano in 2020, and female full professors at $24 \%$. At national level, these percentages are $35 \%$ and $21 \%$, respectively, in STEM fields.
In recent years, we have constantly monitored the University Glass Ceiling Index, an indicator that compares the percentage of women within an organisation with the percentage of women at the highest level of the career (in the university case, that of full professors). The further the index moves away from 1, the more marked the gender gap. Over the last few years, this indicator has fallen significantly to 1.26 in 2020 (to be compared with a national average figure for STEM fields of 1.7). From the point of view of scientific productivity, we consider the success rate of research funding from European funds. The University shows in general an increasing success rate for both genders over the three-year period (rising from $14.4 \%$ in 2017 to $17.7 \%$ in 2019), with differences by gender narrowing in recent years. This figure, together with the fact that gender differences in the rates of participation in funding calls have also decreased in recent years, shows a picture of active and effective participation of Politecnico.

Distribution of Politecnico di Milano professor staff by position and gender
Years 2018 , 2019 and 2020 Years 2018, 2019 and 2020

| 100\% | ■ | Universit | $\square$ As | $\square$ Full Professors |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 21,6\% | 22,4\% | 21,8\% | 100\% | 30,1\% | 30,6\% | 30,0\% |
| 50\% | 43,7\% | 45,7\% | 44,9\% | 50\% | 42,1\% | 43,9\% | 44,6\% |
|  | 14.6\% | 10.7\% | ${ }^{8,3 \%}$ |  | 12,\% |  |  |
|  | 8.4\% | 9,8\% |  |  | 6.9\% | 10,6\% | 7,5\% |
| 0\% | 11,7\% | 11,4\% | 16,2\% | 0\% | 8,9\% | 7,5\% | 9,6\% |
|  | 2018 | 2019 | 2020 |  | 2018 | 2019 | 2020 |

The female component of professor staff at the Politecnico di Milano:
distribution by position, years $2018-2020$ distribution by position, years 2018-2020


Percentage of women and men in the various professor staff positions at the Politecnico di Milano by position - Year 2020


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Class Ceiling Index (GCI) of the Politecnico di Milano - Years 2018-2020


Percentage of funded projects out of total proposals - Years 2017, 2018 and 2019


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## FOCUS ON

## YOUNG ACADEMICS

Entering an academic career is a key moment for building one's working future in this field. The first positions are those of Research Fellow and Researcher. The latter is first characterised by the position of RTDA, which identifies a junior figure, and then that of RTDB, which identifies a senior researcher at the beginning of a path towards promotion to Associate Professor.
The three-year period from 2018 to 2020 was characterised by a general increase in the female population in these positions: female research associates increased from $40.6 \%$ to $44.3 \%$, a significantly higher percentage than the national average, which is $41 \%$ of women with a research fellow position in STEM fields.

Similarly, the number of female RTDAs has grown over the three-year period: of the 131 recruits in this position at the Politecnico di Milano over the three-year period from 2018 to 2020 - a number that testifies to the University's great attention to attracting young talent - as many as $42 \%$ are women, with a female ratio in this position of $72.4 \%$. The increase in female representation in this position over the three-year period is significant: from $30.2 \%$ in 2018 to $44.6 \%$ in 2020.
A critical element is the decline in the presence of women if we analyse RTDB positions: among those who entered this position at the Politecnico di Milano between 2018 and 2020, the female ratio falls to $50.6 \%$, a drop of almost 20 percentage points compared to RTDA. This is a wake-up call for a possible leaky pipeline ${ }^{2}$ phenomenon that will need to be closely monitored in the coming years.

As far as the average age of entry into researcher positions is concerned, the differences between men and women are minimal among RTDA, while they again widen if we consider the position of RTDB, where on average men enter two years earlier than their female colleagues.
However, this globally encouraging picture of the progress made towards gender equality in our university still reveals signs of the complexity of interactions between private and professional life. In fact, work-life balance is particularly difficult in the years when people are going through the first positions of their academic career, which often coincide with the creation of a family and the related caring tasks, which are unfortunately still often unbalanced between genders.

Changes in the precentage of women by position at Politecnico di Milano - Years 2016-2019

- Non post-doctorate esesearch grants $\square$ Post-doctorate esesearch grants $\square$ RTDA RTDB

|  | 46,7\% | 44,3\% |
| :---: | :---: | :---: |
|  | 41,3\% | 42,1\% |
| 38,0\% |  |  |
|  |  |  |
| 34,6\% | 35,3\% |  |
| 33,0\% |  | 33,6\% |
| 2018 | 2019 | 2020 |

\% of women among young academics by department - Year 2019


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Untenured assistant professor recruits by gender
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## Trend in average age of new recruits by position - Years 2018-2020

|  | Non post-doctorate research grants |  |  | Post-doctorate research grants |  |  | RTDA |  |  | RTDB |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Women | Men | Total | Women | Men | Total | Women | Men | Total | Women | Men | Total |
| Year | No. | No. | No. | No. | No. | No. | No. | No. | No. | No. | No. | No. |
| 2018 | 20,2 | 28,8 | 28,9 | 35,0 | 34,0 | 34,5 | 37,2 | 35,9 | 36,3 | 38,4 | 37,1 | 37,5 |
| 2019 | 29,0 | 28,3 | 28,6 | 33,8 | 34,7 | 34,2 | 35,5 | 34,1 | 34,8 | 39,8 | 38,4 | 38,9 |
| 2020 | 27,9 | 27,7 | 27,8 | 34,5 | 34,9 | 34,7 | 35,8 | 35,4 | 35,6 | 40,8 | 38,2 | 38,9 |

[^1]

## TECHNICAL/ADMINISTRATIVE STAFF

Work flexibility as a means of supporting conciliation:
to "break" the career gap and bring more women to the top of university administration.

In line with the MUR surveys, the overall female presence among technical and administrative staff (PTA) in 2020 is around $60 \%$. However, this does not mean that there are no open problems on the issue of gender equality: there is, in fact, a significant vertical segregation that greatly limits the presence of women in the top positions of the administration itself.

In 2020, starting with $68 \%$ of women in the B category, this percentage dwindles, resulting in the typical "scissor" pattern of the career figure. In fact, when moving up a level there is a reversal of the trend between the $D$ level (where women still account for $58 \%$ ) and the EP level (corresponding to the executive level in the private sector, where they fall to $38 \%$ ), and then to $37.5 \%$ among managers. This percentage is not specific to our university, but in line with the national level, where the average number of women managers in the PTA of universities is $38 \%$.
It is of particular interest, especially in this year still strongly characterised by the COVID-19 pandemic, to analyse whether and how smart working has been adopted in a gender-differentiated way. In fact, this year most of the university's PTA were called upon to carry out their work remotely.

This change has undoubtedly been facilitated by the pilot projects carried out by the University in previous years to experiment with forms of smart working, such as teleworking, which can be activated in response to special personal and family needs, which are clearly traditionally linked to care duties, mostly for women
The data actually confirms that in $90 \%$ of the cases women are the ones who choose teleworking, while smart working has had a clearly growing base compared to previous years, with a much greater gender balance ( $65 \%$ women vs. $35 \%$ men). The adoption of this form of work by both genders can also be a key to reshaping conciliation, allowing a greater sharing of care tasks

Numbers by gender and position of the Technical-Administrative Staff (PTA) at the Politecnico di Milano by category - Year 2020


Numbers by gender and position of the Technical-Administrative Staff (PTA) at the Politecnico di Milano by category - Year 2018-2020


Absences: percentage of Technical-Administrative Staff (PTA) members who took leaves out of the tota Absences: percentage of Technical-Administrative Staff (PTA)
number of PTA staff, broken down by type of leave - Year 2019

$\square$ Donne $\quad$ Uomini


## ACTIONS SUPPORTING EQUAL OPPORTUNITIES

Concrete support from the moment you enter the University.
In synergy with businesses and institutions
in the service of a common goal.
Making projects come true: at the Politecnico di Milano there are many concrete initiatives to support equal opportunities and combat all forms of discrimination

STRATEGIC PROGRAMMES AND COLLABORATIONS
POP - Pari Opportunità Politecniche (Politecnico Equal Opportunities)

- Gender POP is one of the five action lines of the POP programme dedicated to the promotion of equal opportunities


## Collaborations

Women's Forum for the Economy \& Society

- Interuniversity Research Centre on Gender Cultures
- Valore D

Parks - Liberi e Uguali [Parks Free and Equal]

- CRUI - Conference of Italian University Rectors, Working Group on gender-related themes
- National Conference of the Equality Bodies of the Italian Universities

COMBINING LIFE, WORK AND STUDY TIME
Crèches

- University crèche and agreements with private crèches at the Leonardo Campus
- Micro-crèche at the Bovisa Campus
- Agreement with a private crèche at the Lecco Campus

Hospitality Centres

- Childcare service for children of employees and non-employed staff (candidates students, research fellows, adjunct professors) during school holidays

Post-maternity leave economic support and free-of-charge crèche

- Economic support for female professors and researchers returning to research work after maternity leave
- Covering of crèche fees for female students, female PhD candidates and female research fellows who are new mothers

Genitori al Poli" (Parents at the Politecnico) Project

- Listening space on conciliation and parenting issues held online during lockdown periods


## GENDER IN TEACHING AND RESEARCH

DCxCG - Communication Design for Gender Cultures: rethinking Gender Oriented communication formats and rules

- Communication Design for Gender Cultures: laurea triennale (equivalent to bachelor of science) study programme to develop and favour a non-stereotypical gender representation
- Discriminations \& New Technologies: Risks and Opportunities: training module aimed a the PhD School of Complementary doctoral skills to raise awareness of harassment and discrimination issues
- Assessing Cognitive Bias and Affective States through Data Analytics: multidisciplinary PhD programme on gender bias issues
Promoting Diversity and Gender Equality in Education, Science, and in Society as a whole: a Multi-disciplinary Approach: multi-disciplinary approach for the promotion of inclusive policies
- WITECH: international project under Erasmus+ to design an entrepreneurship course for female students in technology-related subjects
- FOSTWOM: international project under Erasmus+ exploiting the potential of MOOCs to support girls' access to STEM fields

ORIENTATION AND EDUCATION

- Orientation for female high school students to choose STEM subjects
- Girls@Polimi: corporate scholarships for female students in engineering courses with a female attendance rate of less than 20\%
- EnginHERing: a project to bring girls closer to engineering studies
- Stem in the City in collaboration with the Municipality of Milan
- TechCamp@POLIM
- Coding Girls
- Educational moments on diversity and inclusion in the job market
- Training initiatives with Valore D

COMBATING BULLYING, HARASSMENT, DISCRIMINATION

- Awareness-raising event on the occasion of 25 November
- Psychological counselling service available by email stalkingsos@polimi.it
- Annual Pride sponsorship in synergy with PoliEdro student association
- Protocol for the definition of Alias careers for male and female students in gender transition
- Confidential Counsellor to guarantee the Politecnico's community in the field of mobbing, harassment and discrimination


## FOCUS ON

## THE POLITECNICO AND THE CORPORATE WORLD

The Politecnico strongly believes in the importance of continuous and synergistic collaboration with companies and institutions that share a commitment to actively promote inclusion and equal opportunities. The business world is in fact an indispensable ally of the University in supporting the path taken not only to consolidate its role as a driving force for research and innovation, but also to affirm its attention to the needs of society and the needs of the individual.
The University is calling for collaboration with the private sector for equal gender opportunities in four main areas:

1. Scholarships: the Politecnico di Milano invites companies to donate scholarships to support female students and and concrete actions favouring equal gender opportunities and the increase of female representation in STEM university courses

Every year, with the Girls@Polimi project, companies can donate one or more scholarships to female students who choose to enrol for the first time in an engineering programme with a female enrolment rate of less than $20 \%$.
2. Mentoring: the Politecnico di Milano proposes that companies should jointly organise female mentoring projects to accompany young female graduates as they enter the job market, helping them to develop a greater awareness of the challenges that await them and to discover their leadership skills.
3. Placement: the Politecnico di Milano aims to support companies in their employer branding and recruiting activities, to help them promote their open positions in a clear, fair and transparent manner, and to pay attention to avoiding possible unconscious biases in the selection process.
4. Guidance: the Politecnico di Milano invites companies to collaborate in vocational guidance activities in order to present career paths to male and female students, bring male and female professional role models into the University and illustrate their Diversity \& Inclusion policies to promote equal opportunities and all-round inclusion in the job market.

## ECONOMIC RESOURCES

For an effective and concrete support to actions aimed at supporting equal opportunities, the Politecnico di Milano, in the 2021-2023 Budget, allocated more than 5 million Euro for gender policies, not only confirming the strong sharing of values, but also putting in place adequate economic resources

| Resources allocated in favour of equal opportunities |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2021 | 2022 | 2023 | 2020/21 ad hoc funding | Funder |
| Contribution to crèche | 315,000 | 315,000 | 275,000 |  | University |
| Contribution to summer camp | 40,000 | 70,000 | 70,000 |  | University |
| Support for Guarantee Committee activities | 10,000 | 15,000 | 15,000 |  | University |
| POP - Pari opportunità Politecniche (Politecnico Equal Opportunities) Project | 300,000 | 300,000 | 300,000 |  | University |
| Teleworking | 200,000 | 200,000 | 200,000 |  | University |
| Smart working | 300,000 | 300,000 | 300,000 |  | University |
| Witech Project - female entrepreneurship in the field of STEM |  |  |  | $\begin{gathered} 89,657 \\ (2020-2022) \end{gathered}$ | Erasmus Plus |
| Fostwom project - gender balancing in the video and textual language of online training |  |  |  | $\begin{gathered} 48,295 \\ (2020-2022) \end{gathered}$ | Erasmus Plus |
| Girls@Polimi Scholarships | 240,000 | 240,000 | 240,000 |  | University/Companies |
| STEM 4 Future Scholarship |  |  |  | 143,000 | University/MUR FFO |
| PoliPsi | 141,100 | 169,500 | 169,500 |  | University |
| MultichancePoliteam | 182,000 | 182,000 | 182,000 |  | University/MUR FFO |
| Other initiatives | 30,000 | 30,000 | 30,000 |  | University |
| Total | 1,758,100 | 1,821,500 | 1,781,500 | 280,952 |  |

The 2021 Gender Budget has been prepared by a dedicated working group, involving University's different expertise:

- Donatella Sciuto, Executive Vice Rector, Rector's Delegate for Research and Head of the POP "Pari Opportunità Politecniche" (Politecnico Equal Opportunities) Strategic Programme
- Cristina Masella, Rector's Delegate for Budget and Management Control
- Cristina Rossi-Lamastra, Professor at the Department of Management Engineering and Member of the Steering Committee of the POP Programme
- Mara Tanelli, Professor at the Department of Electronics, Information and Bioengineering and Member of the Steering Committee of the POP Programme
- Alessandra Moroni, Head of HR and Organizational Development Division
- Silvia Barattieri, Equal Opportunities Unit
- Paola Carlucci, Planning, Control \& Analysis Unit
- Carlo Lizzari, Planning, Control \& Analysis Unit
- Paola Barzaghi, Professional Development Unit

Data processing and analysis were carried out by the Planning, Control \& Analysis Unit, under the supervision of the entire working group.

We would like to thank the colleagues who contributed to data collection and analysis, especially Paola Bertoli and Francesca Teresa Saracino for their help in analysing data relating to the employment situation of the graduate population.

Editorial Board: Mara Tanelli, Silvia Barattieri


[^0]:    ue caution.

[^1]:    The "leaky pipeline" is the metaphor widely used to indicate how women leave the job market or remain blocked at the lowest levels of managerial and academic hierarchies at every step of their career.

