

GENDER MONITORING EPFL 2017-2018

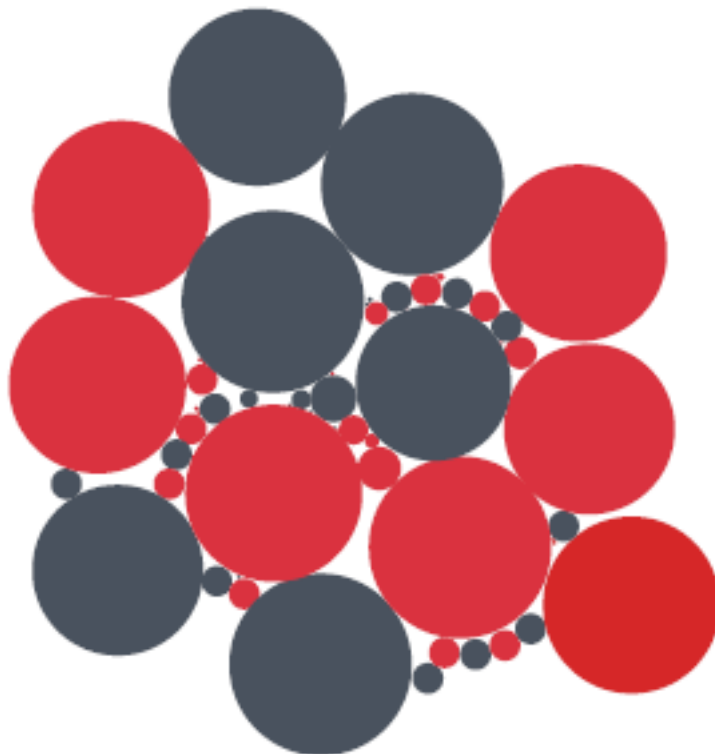


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ABOUT THIS REPORT

Gender Monitoring is part of CEPF's equal opportunity strategy. The objective of the biennial monitoring is to highlight the percentages of men and women - and the evolution of these percentages - at different stages of the academic career at EPFL and in the different Schools. It aims to provide a basis for defining action steps.

This 3rd EPFL Gender Monitoring consists of a general report and reports for the Schools of Basic Sciences (SB), Life Sciences (SV), Engineering Sciences and Techniques (STI), Computer Science and Communications (IC), Natural Environment, Architectural and Construction (ENAC). One report concerns the College of Management of Technology (CDM).

In order to reflect changes in gender representation, the monitoring covers the period 2008 to 2017.

LEAKY PIPELINE

The leaky pipeline presents an overview, at a given time, of the evolution of the percentages of men and women at the different stages of the academic trajectory. The graph below gathers data for 2008 and 2017. The detailed evolution is indicated by the graphs on the next pages.

It can be noticed that the rate of women and men has hardly changed at the Bachelor level. The percentage of female students has increased from 27% in 2008 (866/3242 Bachelor students) to 30% in 2017 (1621/5469 students).

At Master level, with 25% female students, the percentage of women in 2017 (412/ 1621 Master students) is the same as in 2008 (721/ 2881 students).

Among EPFL doctoral students, 26% were women in 2008 (421/ 1624 doctoral students) and 29% in 2017 (621/ 2142 doctoral students).

The percentage of women among scientific collaborators has increased in the same proportion, from 23% in 2008 (196.4 / 858.9 FTE) to 26% in 2017 (345.4 / 1333.9 FTE).

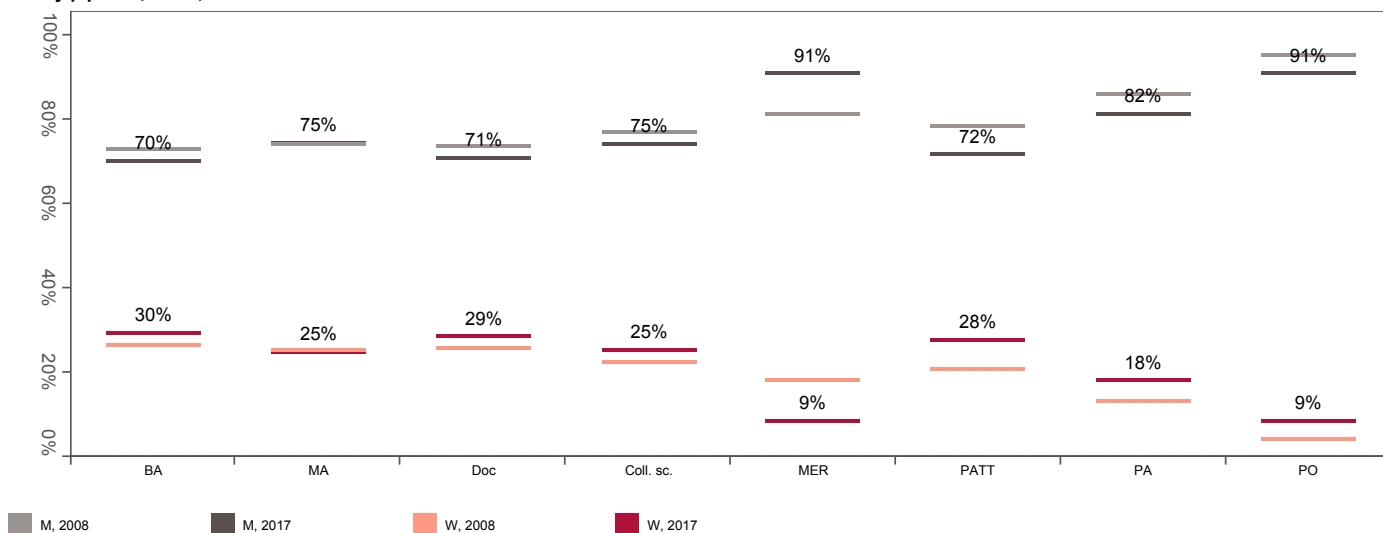
Between 2008 and 2017, the number of MER positions held by women fell from 18% in 2008 (8.2/ 44.7 FTE) to 10% in 2017 (7.6/ 75.7 FTE).

At the professorate level, the most marked increase in the rate of women is found among PATT and PA. The evolution in these two categories shows that academic career progression through the tenure-track system is an effective and sustainable strategy for equal opportunity.

From 21% in 2008 (11/ 52 FTE), the percentage of women among the PATT increased to 28% in 2017 (18/ 64 FTE). At PA level, the rate of women increased from 14% in 2008 (6.3/ 43.5 FTE) to 19% in 2017 (16.3/84 FTE). The increase among the PO between 2008 and 2017 was 4% (6.3/ 144.4 FTE), to 9% (14.6/ 165.4 FTE).

[1] See detailed data accessible on the website <https://information.epfl.ch/facts>

Leaky pipeline, EPFL, 2008 and 2017



BACHELOR STUDENTS

Students, number and %, Bachelor, 2008-2017



Since the last Gender Monitoring in 2015 and 2017, the number of Bachelor students has increased from 5205 to 5469. This is equivalent to an increase by a factor of 1.05. The number of female students has risen from 1422 to 1621, an increase by a factor of 1.14. The percentage of female Bachelor students has risen from 27% in 2015 to 30% in 2017.

The increase in the percentage of female students between 2015 and 2017 follows a relatively long period, since 2008, during which the percentage of female Bachelor students has hardly changed.

The increase in the percentage of female Bachelor students since 2015 can be monitored in all Schools.

The SV School shows the most significant increase (+ 5%), from 50% to 55% of female students at Bachelor level. In 2008, there were 47% female Bachelor students in SV.

At ENAC, the rate of female Bachelor students has gone from 41% in 2015 to 43% in 2017 (+2%). In 2008, there were 38% female Bachelor students at ENAC.

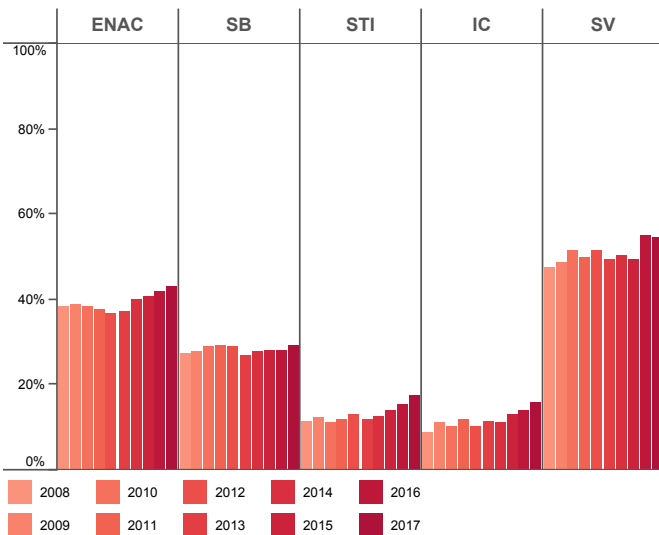
In STI, the female student rate has increased from 14% in 2015 to 17% in 2017 (+3%). In 2008, there were 12% female Bachelor students in STI.

In IC, the rate of female students has increased from 13% in 2015 to 16% in 2017 (+3%). This is the highest rate in 10 years. In 2008, the percentage of female Bachelor students in IC was 9%.

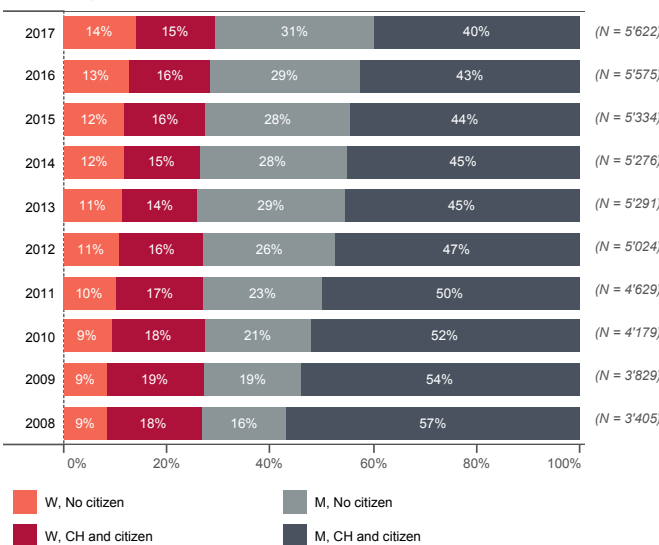
In SB, the rate of female students has gone from 28% in 2015 to 29% in 2017. This is the lowest increase in the female student rate among the 5 Schools, and a rate that had already been reached before (between 2010 and 2012)[1]. In 2008, the percentage of female students in SB was 27%.

[1] See the dynamic tables accessible via the site <http://information.epfl.ch/facts>

Percentage of women per School, Bachelor, 2008-2017



Percentage per nationality and residence, Bachelor, 2008-2017



In 2017, 55% of Bachelor students are of Swiss nationality or have been schooled in Switzerland[1], and 45% are of foreign nationality and have been schooled abroad. The Bachelor's student population has become internationalised compared to 2008, when 76% of students were Swiss (of Swiss nationality or educated in Switzerland).

The percentage of women is higher among students previously schooled abroad than among Swiss students (of Swiss nationality or schooled in Switzerland). However, the percentage of women has increased more among the latter, from xx% in 2008 to xx% in 2017. Among students schooled abroad, the percentage of women decreased from 35% in 2008 to 31% in 2017.

[1] The category CH + citizen regroups Swiss nationals and foreign students who have obtained their University access degree in Switzerland.

MASTER STUDENTS

Since the last Gender Monitoring in 2015, the number of Master students has increased from 2646 to 2881 (increase by a factor of 1.09). The increase was greater among students, whose number increased by a factor of 1.10, than among female students, whose number increased by a factor of only 1.05. The percentage of female Master students has therefore fallen from 26% in 2015 to 25% in 2017.

Between 2008 and 2017, the number of Master students increased by a factor of 1.8 (1.79 among male students and 1.75 among female students), going from 1607 to 2881 persons. The percentage of female students at EPFL as a whole has therefore not increased compared to 2008.

Several Schools show a decrease in the rate of female Master's students between 2015 and 2017.

The most significant decrease is recorded by the SB School. The percentage of women at Master level falls from 29% in 2015 to 26% in 2017 (-3%). Next comes CDM, with a decline from 27% to 25%, and the Schools of IC, where the percentage of female Master students falls from 13% to 12%, and ENAC, where the percentage of female Master students drops from 37% to 36%.

In STI the percentage of female master students remained stable compared to 2015 (15%), and in SV we can see an increase from 48% to 49%.

Observation over a 10-year period reveals that several Schools show a decrease in the percentage of female Master students. This decrease is most significant at the CDM, where the rate of female Master students goes from 32% to 27% (-5%), followed by the SB School, where the rate of female students goes from 30% to 26% (-4%)[1]. In IC, the decrease in the rate of female Master students is 3% between 2008 and 2017 and 5% if one takes as reference 2014, when the School had reached its highest rate of female Master students). The STI School has the same percentage of female Master students in 2017 and 2008 (15%). At ENAC there was an increase from 34% in 2008 to 36% in 2017.

[1] See the dynamic tables accessible via the site <http://information.epfl.ch/facts>

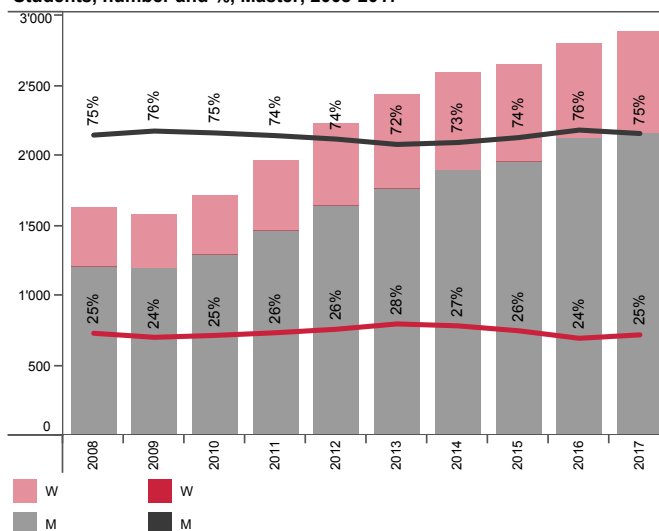
In 2017, of the 2881 Master students, 45% are Swiss nationals or have been schooled in Switzerland, and 55% are foreign citizens and have been schooled abroad. Women represent 21% of Master students of Swiss origin and 29% of students from other countries.

The increase in the number of Master students between 2008 and 2017 is linked to the increase in the number of students schooled abroad. Among female students, their number increased by a factor of 2.9, among male students by a factor of 2.6. Over the same time, the number of Swiss Master students or schooled in Switzerland increased by a factor of 1.8 for women and by a factor of 1.3 for men.

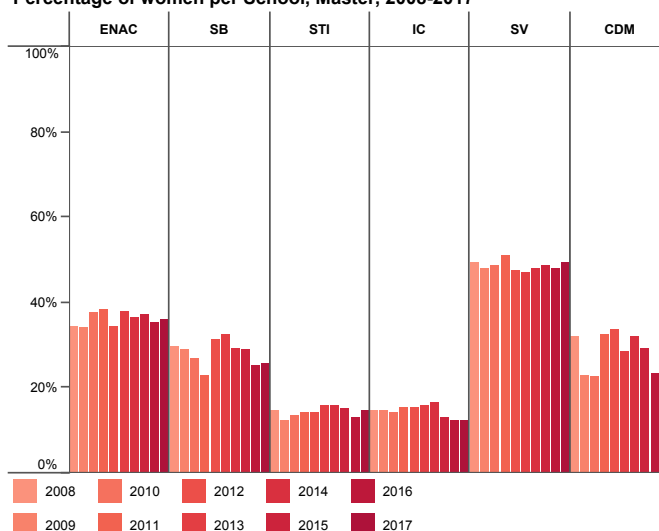
If we compare the trend since 2015, the increase in the number of Master students from another country is a factor of 1.2 for men and 1.1 for women. The number of Master students of Swiss origin or schooled in Switzerland remained stable among men, but declined among women (-9%).

[1] The category CH + citizen regroups Swiss nationals and foreign students who have obtained their University access degree in Switzerland.

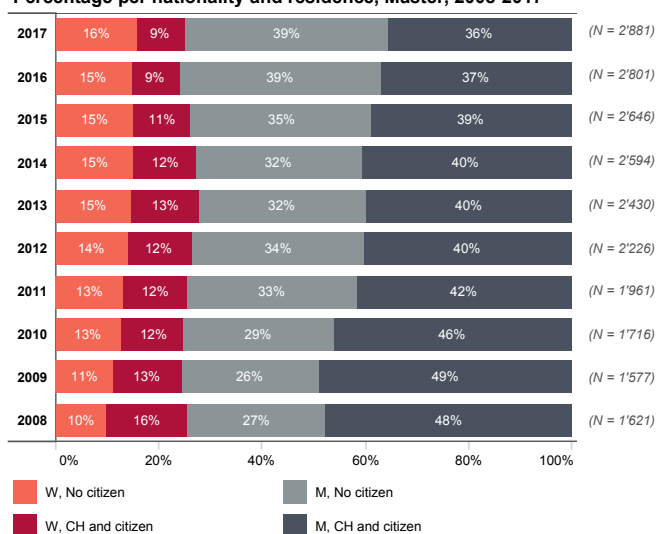
Students, number and %, Master, 2008-2017



Percentage of women per School, Master, 2008-2017

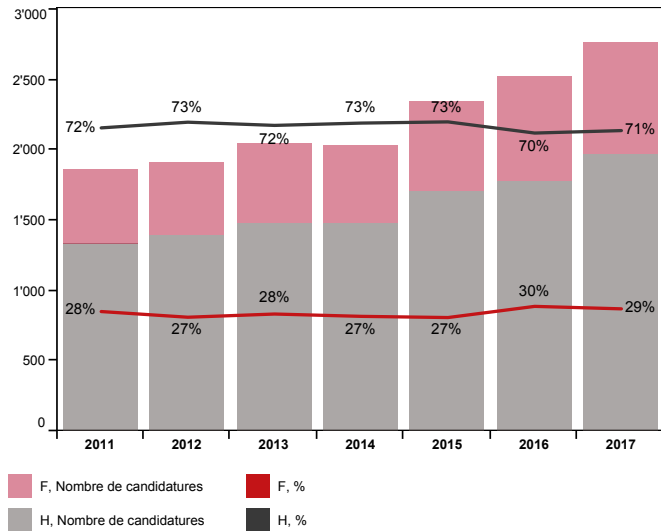


Percentage per nationality and residence, Master, 2008-2017



MASTER ADMISSIONS

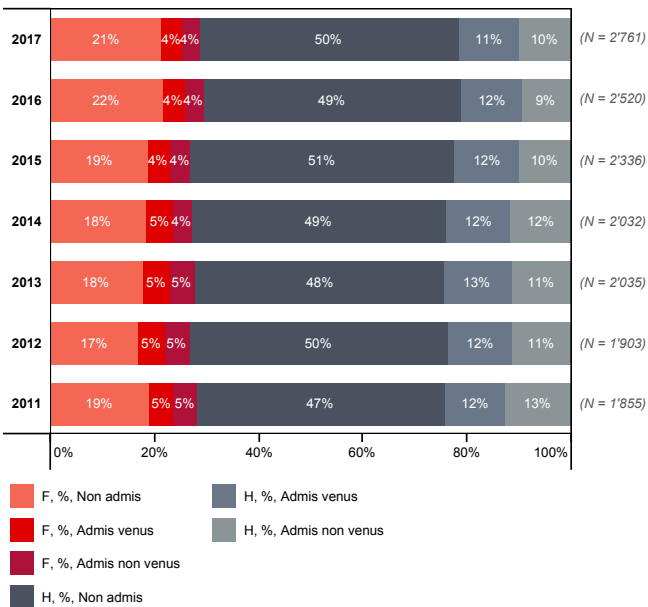
Applications received, number and %, Master, 2011-2017



Between 2011 and 2017, the number of admission applications for Master studies at EPFL increased overall from 1855 to 2761 (factor 1.49). Among female students the number increased from 525 to 799 (factor 1.52), among male students from 1330 to 1962 (factor 1.48).

The percentages of women and men among Master candidates therefore remained relatively stable between 2011 and 2017. The highest percentage of female Master candidates at EPFL was registered in 2016, with 30% of female candidates.

Applications received, % accepted or rejected, Master, 2011-2017



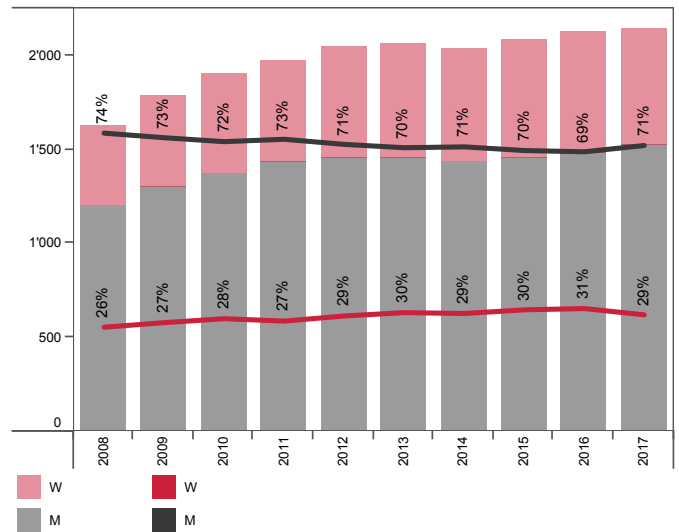
Both for women and men, the number of applications rejected increased more than the number of Master applications accepted. For women, the increase in non-admitted applications (factor 1.67) from 353 non-admitted applications in 2011 to 591 non-admitted applications in 2017 was slightly larger than for men (factor 1.56).

The increase in accepted applications was slightly higher for men (factor 1.31), from 451 applications accepted in 2011 to 592 applications accepted in 2017, than for women (factor 1.21), with 172 admissions in 2011 and 208 admissions in 2017.

The share of accepted students who register at EPFL for their Master studies and the share of accepted students who do not register at EPFL for their Master studies is relatively similar for both female and male students, with some variations from year to year.

PHD STUDENTS

Students, number and %, Doctorate, 2008-2017



Between 2008 and 2017, the total number of doctoral students increased from 1624 to 2142 (factor 1.3), the number of female doctoral students from 421 to 621 (factor 1.5). The percentage of female doctoral students has risen from 26% to 29%.

Since the last Gender Monitoring, based on 2015 data, the number of doctoral students has increased by 3%. The percentage of female doctoral students decreased from 30% to 29%.

The evolution of the percentage of female doctoral students varies according to Schools.

In SV, the rate of female doctoral students in 2017 (49%) shows an increase compared to 2008 (45%), but it is down compared to 2015 (54%) (-5%).

In SB, the percentage of female doctoral students in 2017 (25%) is down compared to 2008 (27%), and unchanged compared to 2015 (25%).

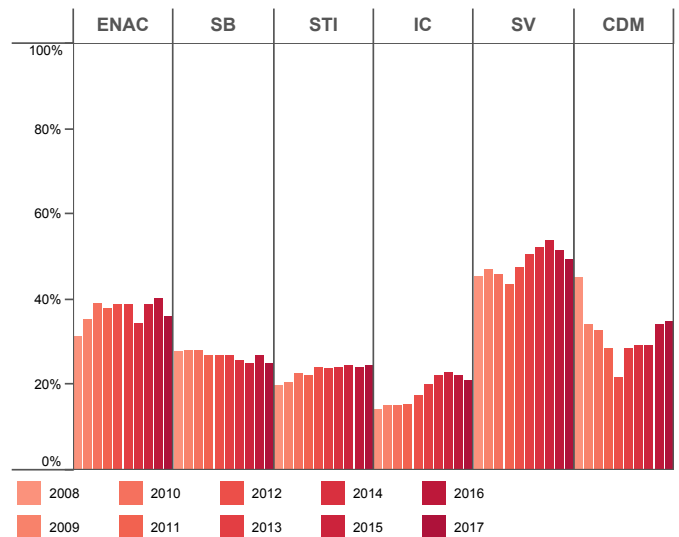
With 24% of doctoral students, the STI School shows an increase in the percentage compared to 2008, and a rate that does not change compared to 2015.

The IC School shows an increase in the percentage of female doctoral students of +7% between 2008 (14%) and 2017 (21%), and a decrease of -2% compared to 2015 (23%).

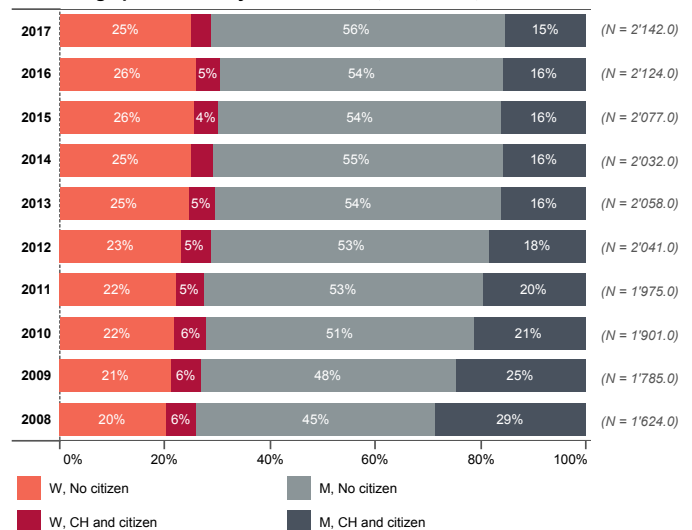
The same applies to ENAC, where the percentage of female doctoral students rose from 31% in 2008 to 36% in 2017, while in 2015, the percentage of female doctoral students was 39%.

The rate of female doctoral students at CDM in 2017 (35%) is down compared to 2008 (45%), but is up compared to 2015 (29%).

Percentage of Women per School, Doctorate, 2008-2017



Percentage per nationality and residence, Doctorate, 2008-2017



In 2017, of the 2142 doctoral students, 19% are Swiss nationals or schooled in Switzerland[1], and 81% are foreign citizens and schooled abroad. Women account for 20% of doctoral students of Swiss origin and 31% of doctoral students from other countries.

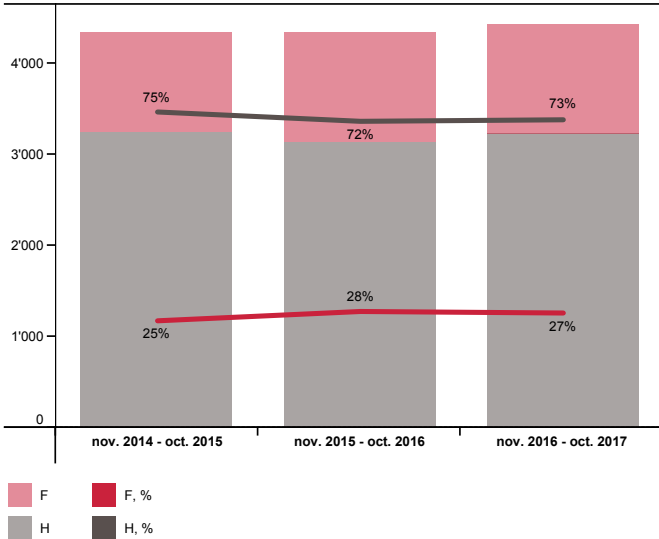
The increase in the number of doctoral students between 2008 and 2017 is linked to the increase in the number of doctoral students schooled abroad. Among female doctoral students, their number increased by a factor of 1.7, among male doctoral students by 1.6. Over the same time, the number of Swiss female doctoral students in Switzerland has increased by a factor of 0.9 for women and by a factor of 0.7 for men.

Compared to 2015, the number of male doctoral students has increased by 1.1 among doctoral students from other countries and stagnated among Swiss male doctoral students. Among female doctoral students, the number remained stable among female doctoral students from countries other than Switzerland and declined among the latter (-12%).

[1] The category CH + citizen regroups Swiss nationals and foreign students who have obtained their University access degree in Switzerland.

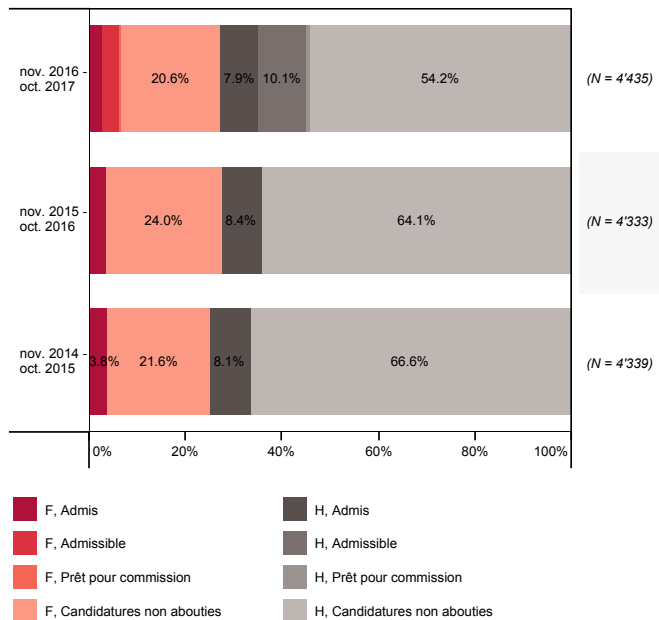
DOCTORATE ADMISSIONS

Applications received, number and %, Doctorate, 2014-2017



The number of applications to doctoral programs in 2014-15, 2015-16 and 2016-17 remained relatively constant. Requests from women show a slight increase (factor 1.1), from 1099 requests in 2014-15 to 1205 requests in 2016-17. As a result, the percentage of applications from women increased slightly from 25% in 2014-15 to 27% in 2016-17.

Applications received, % accepted or rejected, Doctorate, 2011-2017

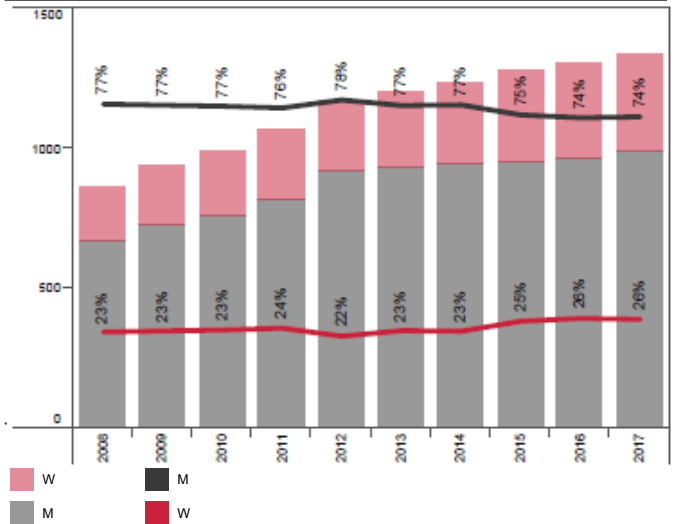


12% of the applications for admission to doctoral programs registered in 2014-15 and 2015-16 have been definitively admitted. Among the applications registered during 2014-15, the proportion of admissions is slightly higher for women than for men: 163 female applications are admitted (15%) against 936 applications which are rejected, and 352 male applications are admitted (11%) against 2888 which are rejected. Among the applications registered during 2015-16, the percentages are almost identical. 155 female applications are accepted, 1038 rejected (13%), and 362 male applications are accepted, while 2778 are rejected (12%).

At the end of March 2018, of the 1205 applications registered by women during 2016-17, 913 had not been successful (76%), 130 had been admitted (11%) and 147 are still eligible (12%). Of the 3230 male applications, 2403 were rejected (74%), 349 were admitted (11%), and 349 were eligible (14%).

SCIENTIFIC COLLABORATORS

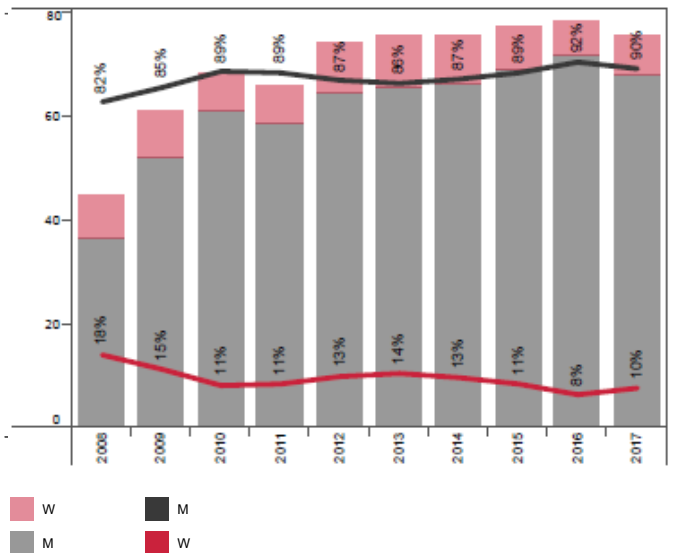
Scientific collaborators (excluding assistants), FTE and %, 2008-2017



The FTE number of female scientific collaborators (excluding assistants) increased by a factor of 1.8 between 2008 and 2017, from 196 to 345. During the same time, the number of male scientific collaborators increased by a factor of 1.5, from 663 to 989.

Between 2015 and 2017, the number of male scientific collaborators increased by a factor of 1.04, and the number of female scientific collaborators by a factor of 1.07. The percentage of women has increased from 25% in 2015 to 26% in 2017.

Senior scientists (MER), FTE and %, 2008-2017

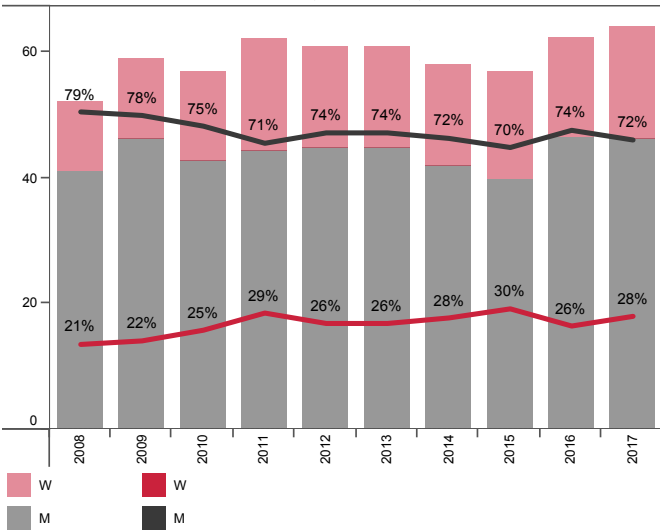


Between 2008 and 2017, the number of MER positions increased by a factor of 1.7. Positions held by men increased by a factor of 1.8, the number of positions held by women decreased from 18% in 2008 to 10% in 2017.

Since 2015, the total number of MER positions has slightly decreased from 77.6 to 75.7. The percentage of positions held by women has gone from 8.6 (11%) to 7.6 (10%).

PROFESSORS

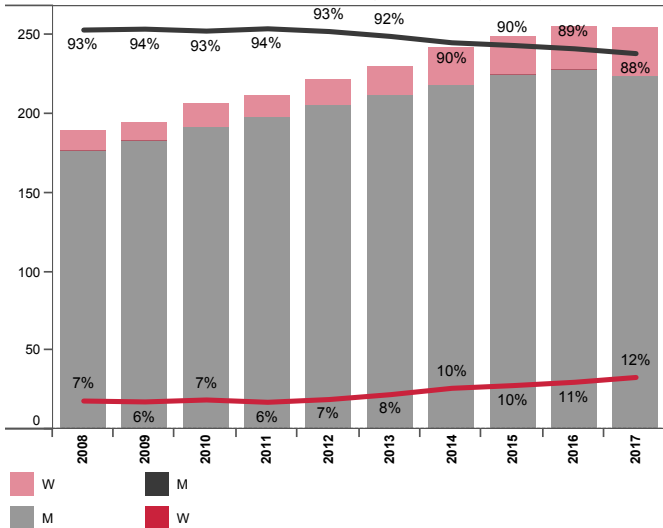
Tenure Track Assistant Professors, FTE and %, 2008-2017



In 2015, the percentage of women among PATT was 30%, the highest rate in the last 10 years. It then declined to 26% in 2016, reaching 28% in 2017.

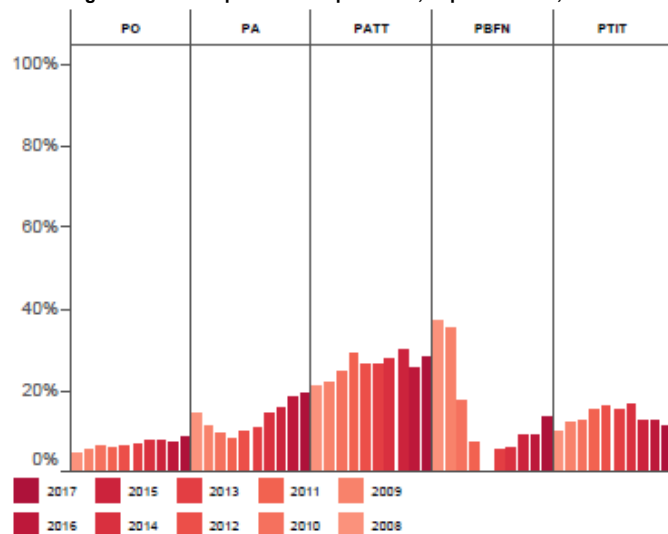
Over the entire time period between 2008 and 2017, women represented 26% of the PATT.

Associate Professors and Full Professors, FTE and %, 2008-2017



From 10% in 2015, the percentage of female associate and full professors increased by 2% to reach 12% in 2017. Over a 10-year period, from 2008 to 2017, the increase is 5%. In 2008, 12.6 out of 187.9 FTE PO/PA were occupied by women (7%). In 2017, this is the case for 30.9 out of 249.4 FTE PO/PA (12%).

Percentage of women in professorial positions, % per function, 2008-2017



The number of PO remained stable between 2015 and 2017. Considered over a 10-year period, from 2008 to 2017, the number of PO positions increased by 21 FTE, from 144.4 to 165.4 FTE. The percentage of women PO increased from 8% to 9% between 2015 and 2017. Considered over a 10-year period, the increase is 5% (4% in 2008; 9% in 2017).

Between 2008 and 2017, the number of PA increased from 43.5 to 84.0 FTE. The percentage of women among PA has increased from 14% in 2008 to 19% in 2017. Between 2015 and 2017, the increase was 3%: from 16% in 2015 to 19% in 2017.

The number of SNSF-funded Professors is very small. From 8 FTE in 2008, the number of positions has decreased to 5.8 FTE in 2017. Therefore, percentages should be interpreted with caution.

The number of FTE tenured professors decreased slightly from 47.2 in 2015 to 44.9 in 2017. The percentage of women has also decreased, from 12% in 2015 to 11% in 2017.

ORIGIN ACADEMIC STAFF

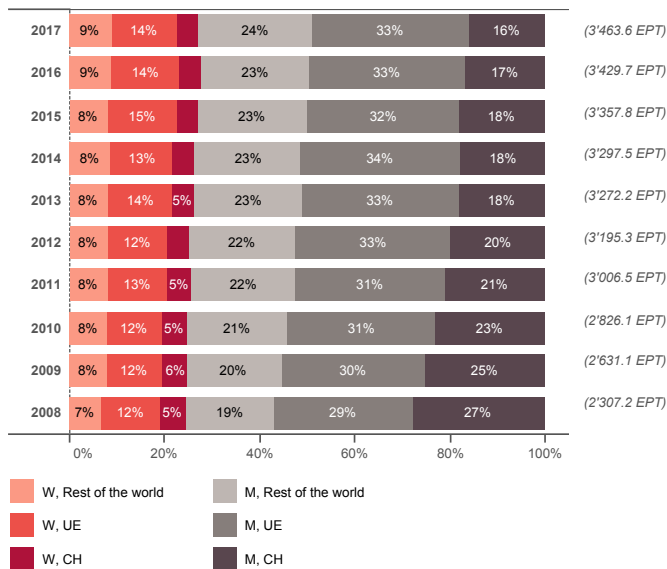
Between 2008 and 2017, the population of scientific collaborators at EPFL has become more international. This trend can also be observed between 2015 and 2017.

The percentage of women is highest among scientific collaborators from the European Union. Among this population, women represented 27% in 2008, 29% in 2015 and 28% in 2017.

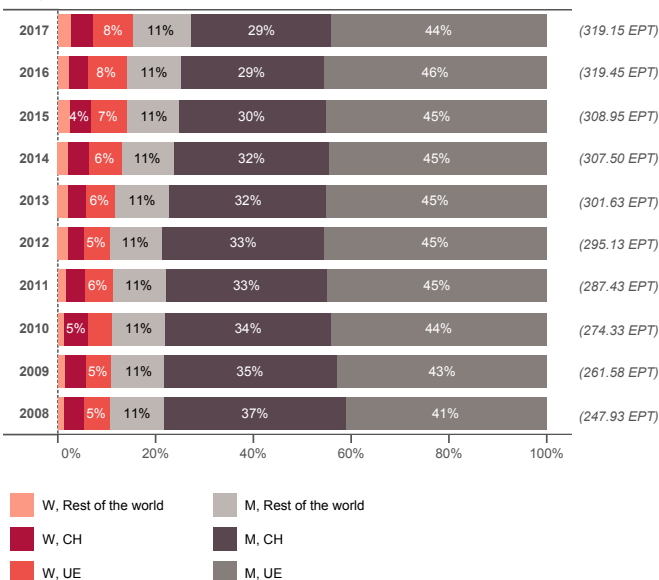
Among scientific collaborators from other countries than Switzerland, women represented 23% in 2008, 23% in 2015 and 24% in 2017.

Among Swiss scientific staff, the proportion of women increased from 15% in 2008 to 20% in 2015 and to 24% in 2017.

Origin of Scientific collaborators, % and FTE, 2008-2017



Origin of professors, % and FTE, 2008-2017

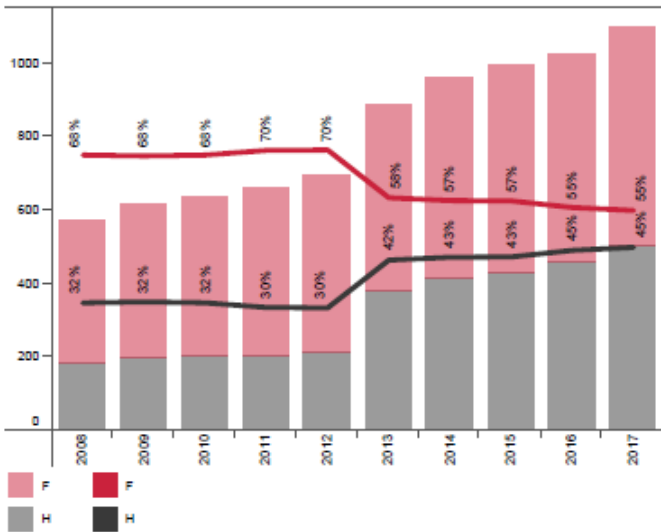


The composition of the professorial staff, in terms of its internationality, hardly changed between 2015 and 2017. In 2017, 33% of the professors (PO, PA, PATT and PBFN) are Swiss nationals, 53% come from European Union countries and 14% from other countries.

If we only look at female professorial staff, the share of female professors from European Union countries (55%) and other countries (18%) outside Switzerland is slightly higher.

ADMINISTRATIVE AND TECHNICAL STAFF

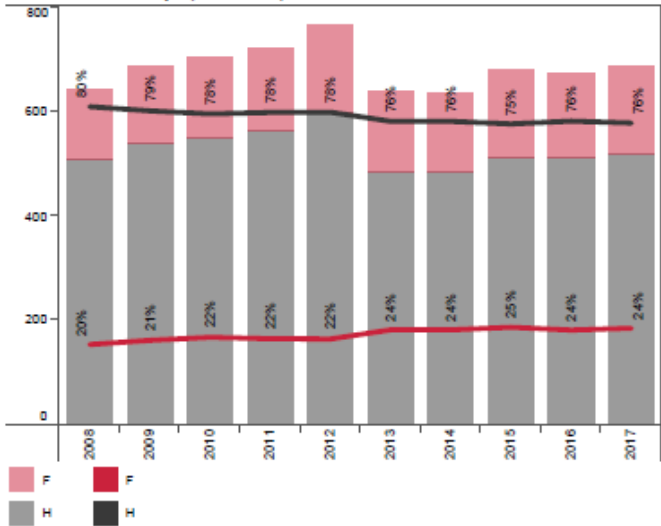
Administrative staff, FTE and %, 2008-2017



From 2015 to 2017, the percentage of women among administrative staff decreased from 57% to 55%.

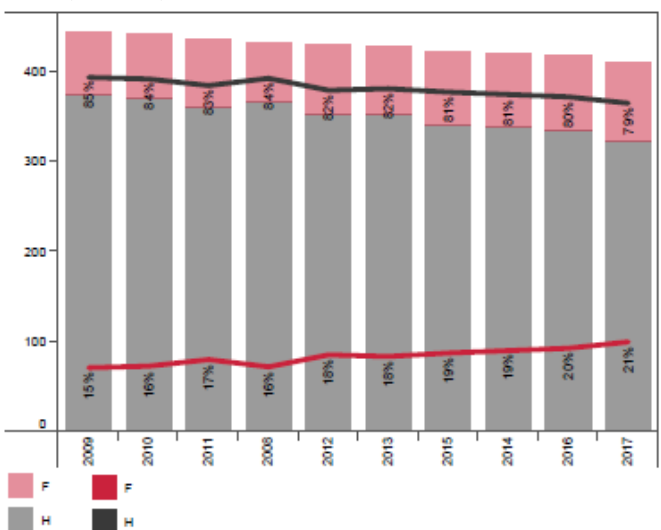
The sharp decrease in the rate of women between 2012 and 2013 is linked to a change in the distribution between administrative and technical staff. The increase in the headcount in 2017 is linked to a change in structure.

Technical staff, FTE and %, 2008-2017



The percentage of women among technical staff increased from 20% in 2008 to 24% in 2017. Between 2015 and 2017, the share of technical positions held by women decreased slightly from 25% to 24%.

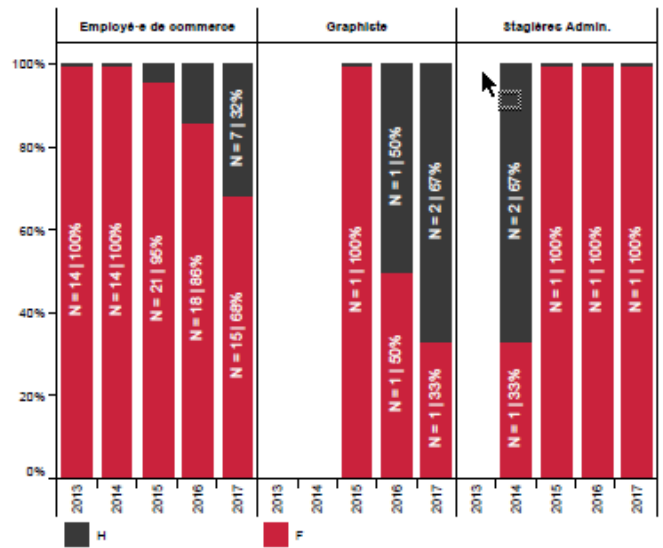
Cadres, EPT et %, 2008-2017



Managers include staff at functional levels ≥ 10 . The proportion of women in management (excluding professors) increased from 19% in 2015 to 22% in 2017. This category of managers includes scientific, administrative and management staff. With 37%, the share of women among managers is the highest among management staff (4.7/12 FTE), followed by administrative staff with 27% (46.5/174.25 FTE), and scientific staff (excluding professors) with 17% (37/222.65 FTE).

APPRENTICES

Apprentice-s and interns, % FTE, Administrative Professions, 2013-2017



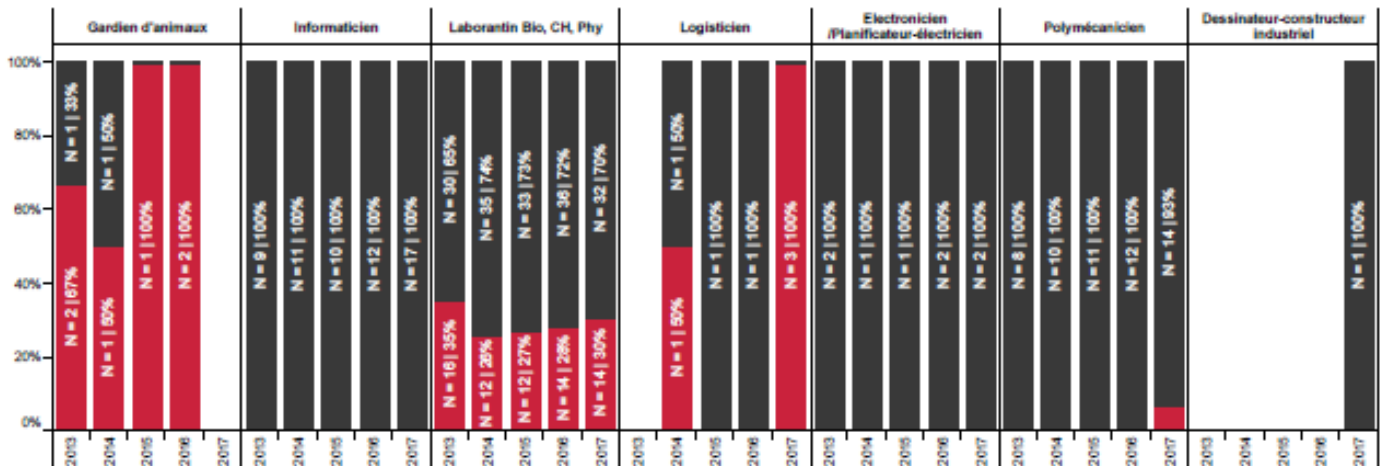
Between 2013 and 2017, the percentage of men among commercial apprentices increased from 0% (0/14) to 32% (7/22).

Among laboratory technicians in biology, chemistry and physics, the proportion of female apprentices fell from 35% in 2014 (16/46) to 30%(14/46).

Between 2013 and 2017, there are no female IT apprentices (0/9 in 2013; 0/17 in 2017). In 2017, 1 out of 15 apprenticeship places for polymechanics is occupied by a woman.

The overall percentage of apprenticeship places at EPFL occupied by women has slightly decreased from 35% (33/95 places) in 2013 to 32% (35/118 places) in 2017.

Apprenti-e-s et stagiaires, % EPT, Métiers Techniques, 2013-2017



ABBREVIATIONS AND TECHNICAL NOTES

Data

Apart from data on apprentices and managers, data has been provided by the Budget and Planning Officer attached to the Finance Vice-President. Most data are available online under: <https://information.epfl.ch/facts>

Students

Data on students are established approximately seven weeks after the start of the fall semester.

BSc - Bachelor of Science

MSc - Master of Science

PhD - EPFL PhD students

Place of education - refers to the distinction from the Federal Office of Statistics between Swiss students and citizens of another nationality who have been schooled in Switzerland, and foreign students who have been schooled abroad

CH + residents - Swiss students and foreign citizens living in Switzerland and who have been schooled in Switzerland

Non-resident - Foreign students who have been educated abroad

Staff

Staff data are established at the end of the calendar year, on December 31.

FTE - Full time equivalent

PO - Full professors

PA - Associate professors

PATT - Tenure Track Assistant Professors

PB FN - Swiss National Science Foundation-funded Professors.

PTit - Adjunct professors

MER - Senior scientists

Scientific collaborators - Persons hired by EPFL after a PhD or equivalent professional experience, assuming training and research missions.

Technical staff - employees of a unit responsible of technical tasks...

Schools

SB – Basic Sciences

SV – Life Sciences

STI – Engineering

IC – Computer and Communication Sciences

ENAC – Architecture, Civil and Environmental Engineering

CDM – Management of Technology