Number and salaries of full-time teaching staff at Canadian universities (final), 2020/2021

Released at 8:30 a.m. Eastern time in The Daily, Monday, December 13, 2021

Average time to achieve tenure among university academics in Canada: A national overview

The average time to gain tenure for university full-time academics in Canada has increased by roughly a year over the last 30 years, from 4.6 years in 1990/1991 to 5.5 years in 2020/2021. Since 1990/1991, the average time it takes to reach tenure has been about the same for men and women, with women taking, on average, three-and-a-half months more than men. In 2020/2021, women represented just over one-third (37.4%) of academics in tenured positions.

Women in academia: Leaking pipeline

In 2019/2020, close to half (46.5%) of all doctoral degrees granted by Canadian universities were granted to women, according to the Postsecondary Student Information System (PSIS) of 2019. However, in 2020/2021, women academics accounted for 39.9% of full-time leading to tenure and tenured positions and 37.4% of academics in tenured (only) positions, according to the University and College Academic Staff System (UCASS) survey. This is sometimes referred to as the leaking pipeline, where women doctoral graduates choose not to pursue an academic career for various reasons.

It has been suggested that this underrepresentation could be the result of two key factors: career choice related to marriage and family responsibility, and inequity in the academic tenure-track system. In recent years, many universities have implemented more family-friendly and gender-neutral tenure rules to help women, as well as men, balance their family and academic career.

Recent research has suggested that the COVID-19 pandemic may also have implications on gender inequalities for academics, in terms of productivity and the likelihood to obtain tenure. For the first time, UCASS data are being used to estimate the average time for academics to achieve tenure by gender. This analysis serves as an important pre-pandemic baseline for understanding possible gender inequity related to the tenure-track process.

Tenure track for academics

Tenure grants a professor permanent employment at their university and protects them from being fired without cause. The concept is closely tied to academic freedom, as the security of tenure allows professors to research and teach on any topic. The "tenure clock" is a commonly used metaphor for an imaginary meter that counts down the probationary period before a professor becomes tenured. The time to reach a tenure position can range from three to seven years.

In the tenure-track process, an assistant professor becomes an associate professor, then a full professor. After a period of time, the staff on the tenure track are evaluated in three areas: research, teaching and service. This process is rigorous, and if it is considered to be satisfactory, then academic tenure is given. There are occasions where the tenure clock is adjusted (also referred to as "stopping the clock"). The most common reasons for this are leaves associated with extended sick leave, parental leave and family leave. During the COVID-19 pandemic, some universities have negotiated tenure clock extensions with their faculty association.



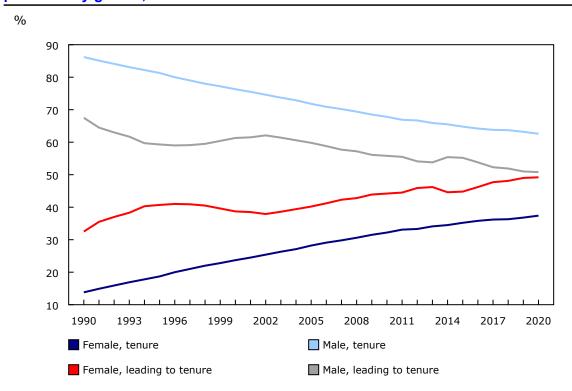


Women drive growth in tenured academic positions

Women have increased their participation in academia over the past three decades. In 2020/2021, they accounted for two-fifth (39.9%) of all tenure-tracked academics in Canadian universities, up from 17.1% in 1990/1991. Furthermore, by 2020/2021, women in leading-to-tenure positions, the direct pipeline into tenure positions, almost reached parity at 49.2%, up from 32.5% in 1990/1991. There has also been an increase in the proportion of women holding tenured positions, with women accounting for 37.4% of academics in 2020/2021, up from 13.8% in 1990/1991.

From 1990/1991 to 2020/2021, the overall number of tenured positions increased by 23.2%, with all of the growth fuelled by women's increased participation (+233.6%). However, the number of men in tenured positions in 2020/2021 was lower (-10.5%) than in 1990/1991.

Chart 1
Proportion of full-time academics in Canadian universities in tenure and leading to tenure positions by gender, 1990/1991 to 2020/2021

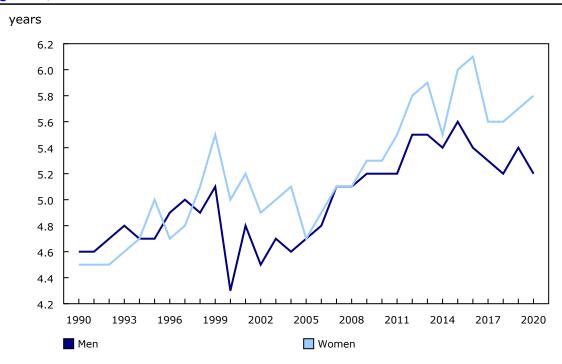


Source(s): Full-time University and College Academic Staff System (FT-UCASS).

Women academics take about the same time as men to reach tenure

There is only a slight difference in the amount of time it takes for men and women in Canadian universities to obtain tenure, with women taking, on average, 3.6 months (0.3 year) more than men over the past 30 years (see the note to readers for more details on the methodology used). For both genders, the time to obtain a tenured position in Canadian universities has increased since 1990/1991. For those who achieved tenure in 2020/2021, it took on average 5.5 years, compared with 4.6 years in 1990/1991.

Chart 2
Average time to obtain tenure for full-time university academics in Canadian universities by gender, 1990/1991 to 2020/2021



Source(s): Full-time University and College Academic Staff System (FT-UCASS).

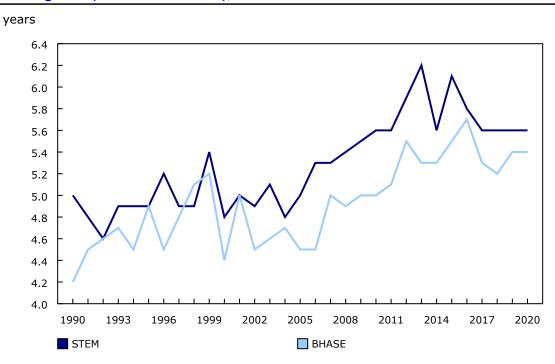
Women are slightly older than men when obtaining a tenure status

From 1990/1991 to 2020/2021, there was a difference in the average age of men and women obtaining tenure, with women being 2.5 years older on average. In 2020/2021, the average age of men achieving tenure was 43.1 years, compared with women at 44.7 years. One factor contributing to this difference could be that women finish their PhDs at a slightly older age and enter the tenure process later—on average, 36.0 years for women and 35.0 years for men (PSIS, 2019). This difference in age may follow them as they start their tenure track and move towards tenured positions.

Academics teaching in STEM programs take slightly longer to reach a tenured position

The time to reach tenure for academics has increased for those teaching in both science, technology, engineering and mathematics (STEM) and BHASE programs since 1990/1991. BHASE programs include business, humanities, health, arts, social science, education, as well as legal studies, trades, services, natural resources and conservation subjects. In 2020/2021, while academics teaching in STEM programs took an average of 5.6 years to achieve tenure status, compared with 5.4 years in the BHASE programs, they were slightly younger when they earned it (43.0 years on average for STEM vs. 44.7 years for BHASE). In 2020/2021, women academics teaching in STEM took longer (0.3 year) to achieve tenure status and were older (2.2 years) than their male counterparts.

Chart 3
Average time to obtain tenure for full-time university academics in Canadian universities by teaching field (STEM and BHASE), 1990/1991 to 2020/2021



Source(s): Full-time University and College Academic Staff System (FT-UCASS).

Note to readers

To estimate indicators of time to tenure, the study used only academics within the same institutions who reached tenure in the year of a survey who are in the ranks of full professors, associate professors and assistant professors. Only academics who could be linked to a previous year's records with a leading-to-tenure date were included to calculate an accurate time to tenure. Records with conflicting tenure-year data in years other than the tenure year were excluded.

For this analysis, University and College Academic Staff System (UCASS) data since 1980/1981 were used to estimate time it took academics to reach tenure, for those who have obtained tenure from 1990/1991 to 2020/2021. The study also excluded academics from Quebec, for which information on appointment type has been inconsistent in some years. This made it too difficult to follow pathways to tenure with consistency.

Available tables: 37-10-0077-01, 37-10-0108-01 and 37-10-0144-01.

Definitions, data sources and methods: survey number 3101.

The interactive data visualization tool "Statistics on full-time academic teaching staff at Canadian universities: Interactive tool" (71-607-X) is available.

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; infostats@statcan.gc.ca) or Media Relations (statcan.mediahotline-ligneinfomedias.statcan@statcan.gc.ca).