Graduates in the Labour Market

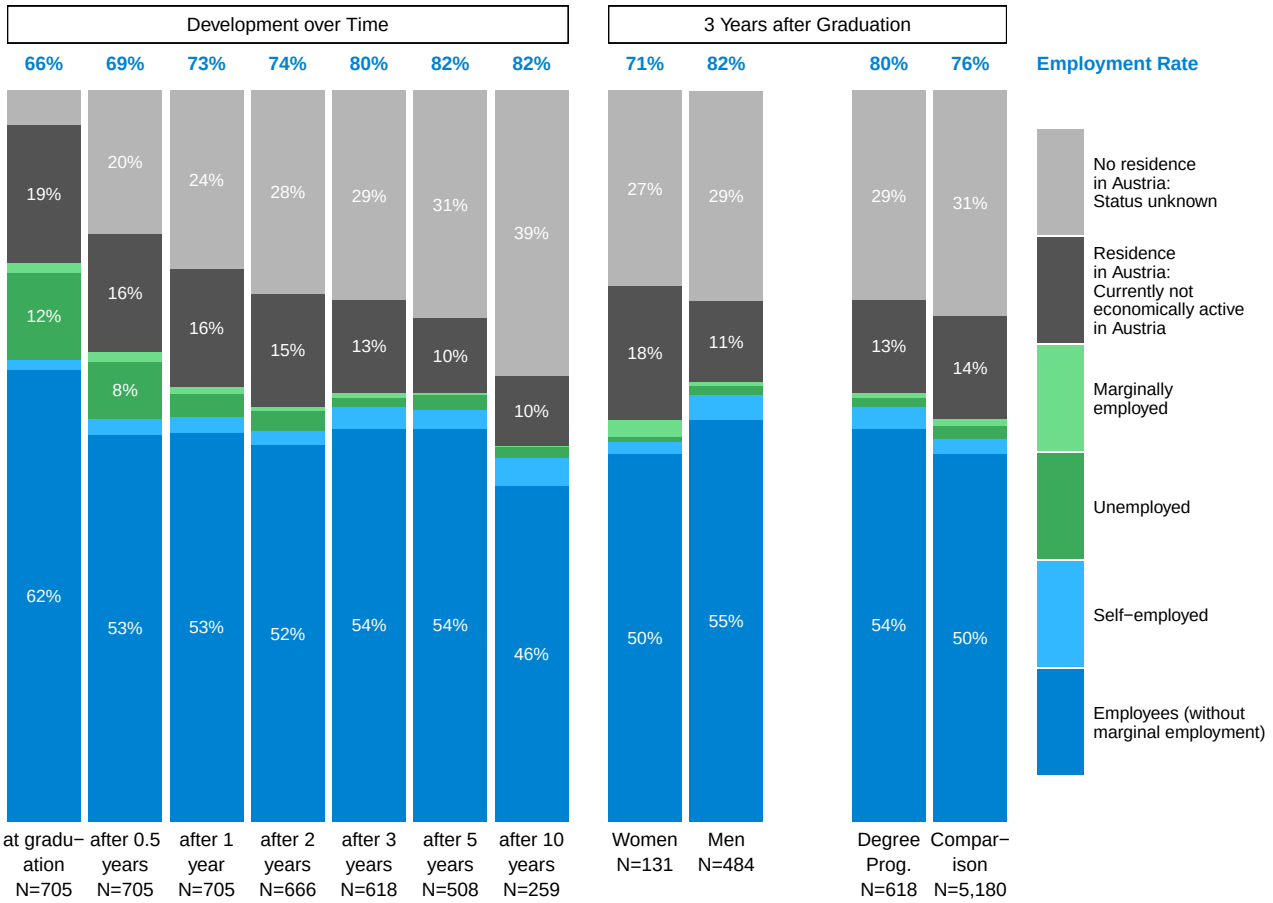
Doctoral Programmes **ISCED-Field of Education 'Natural Sciences, Mathematics and Statistics'** Vienna University of Technology

The Fact Sheet 2025 provides systematic information about the employment status and labour market integration of graduates of the Vienna University of Technology. The analyses focus on the professional careers of graduates up to 10 years after graduation. The underlying information is provided by register-based data from Statistics Austria. **For further information (including definitions of terms and data protection), please see page 4.**

The subsequent diagrams show results from the following sub-areas:

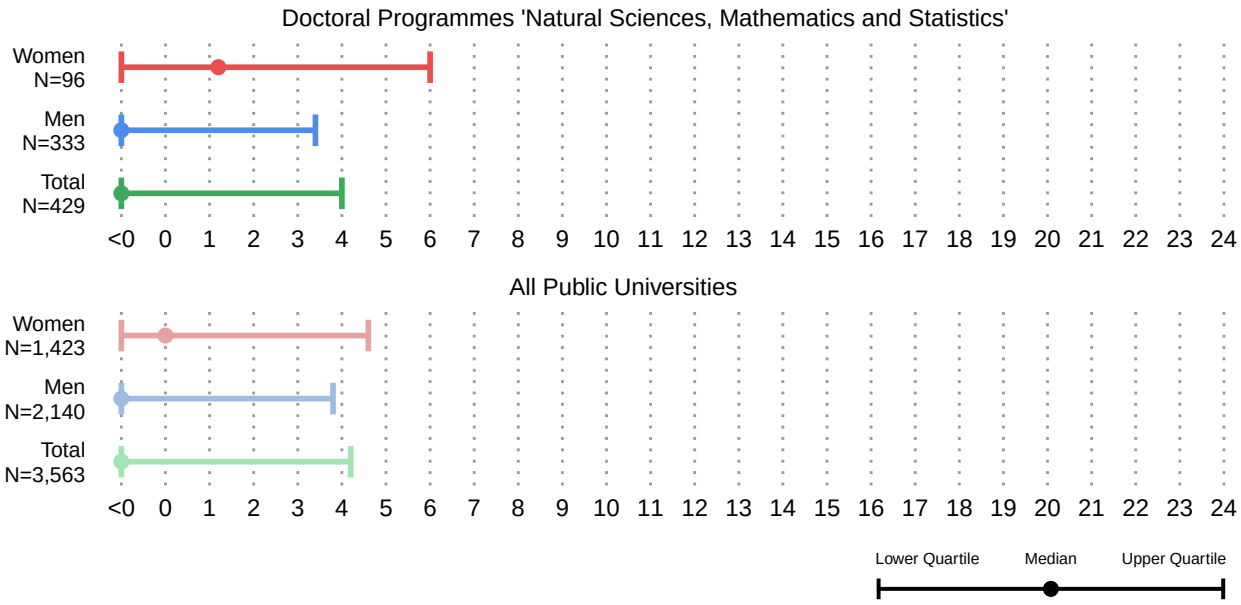
- Labour market status
- Time period until the first employment
- Top-5-sectors
- Gross monthly income for full-time employees

Status in the Austrian Labour Market



54% of the 618 graduates are employees 3 years year(s) after graduating. 3% are self-employed. The employment rate amounts to 80%, it is calculated as the share of employees and persons in self-employment in the entire cohort of graduates, not including the group 'No residence in Austria' (it is unknown if they are economically active outside of Austria). The comparison group consists of all persons who graduate from a Doctoral programme in the 'Natural Sciences, Mathematics and Statistics' ISCED field of education at an Austrian higher education institution.

Time Period until the First Employment in Months

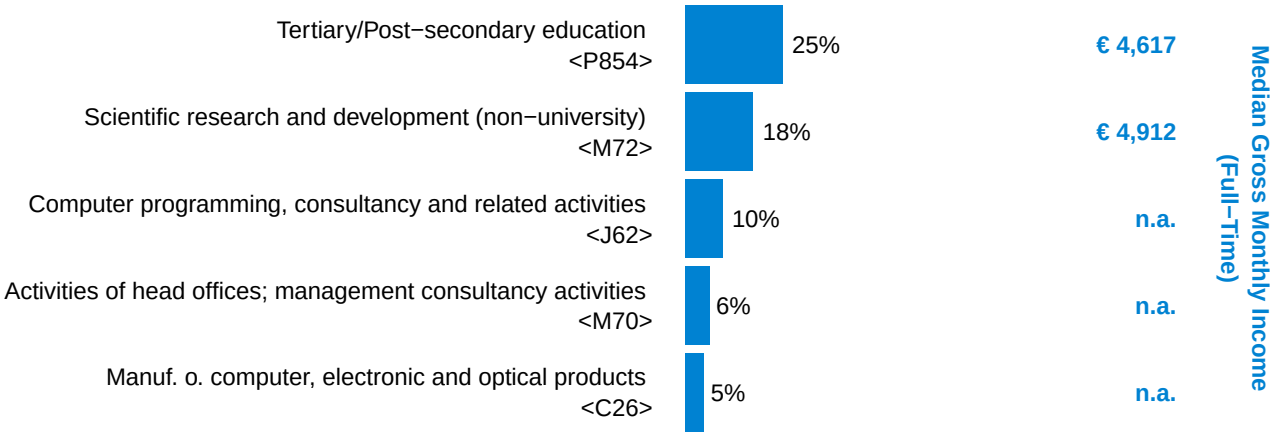


On average (median), the 429 graduates take up their first employment already before graduation (median = '<0'). Therefore, the lower quartile also falls in the time before graduation. The upper quartile is 4 months. Hence, 75% of graduates take up their first employment within this time after graduation.

An employment is counted as the first employment if it is still valid on the reference day 6 months after graduation (or begins after that day but within 2 years) and if it lasts for at least 3 months.

Within the first 3 years after graduation, the graduates are employed by on average 1.2 employers in Austria (Women: 1.3, Men: 1.2).

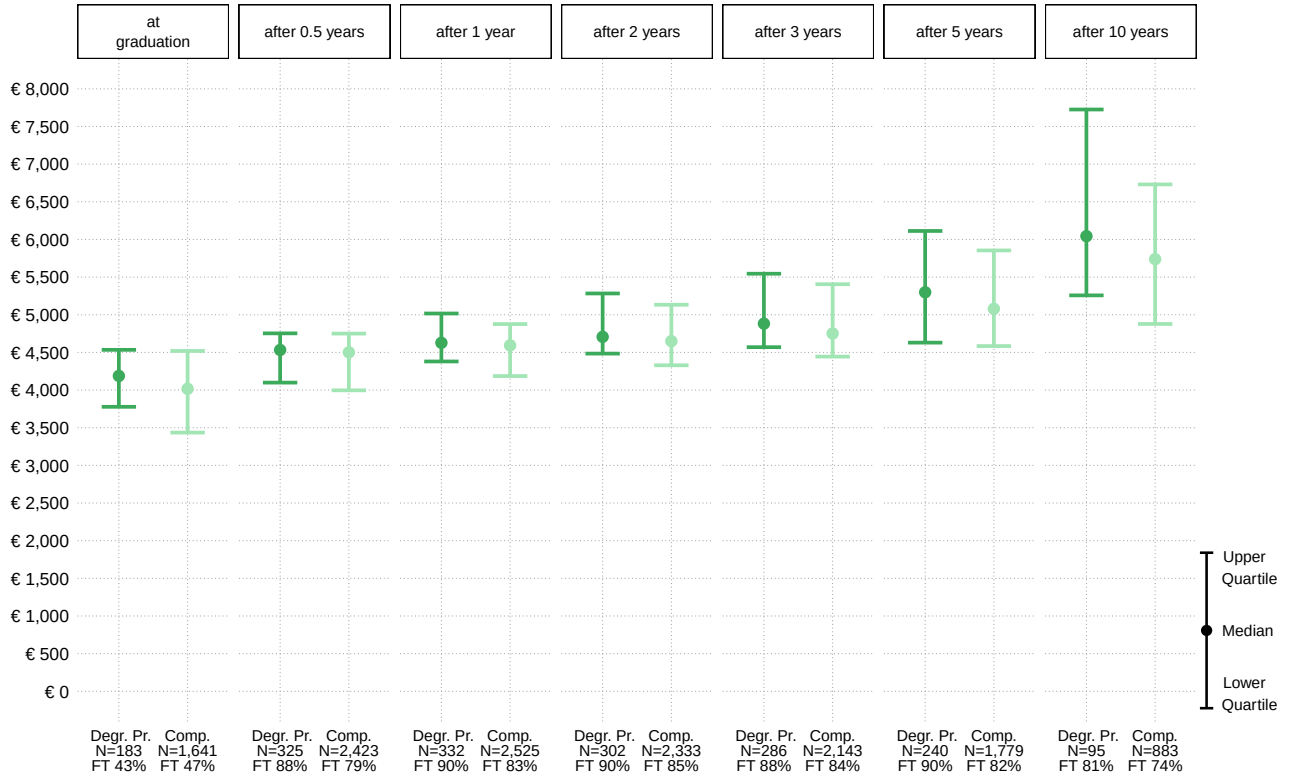
Top−5−Sectors 3 Years after Graduation



In total, 351 graduates are employed 3 years after graduating. 25% of the graduates work in the sector 'Tertiary/Post-secondary education' - their average (median) gross monthly income (in full-time employment) is € 4,617. The classification is based on ÖNACE 2008 and refers to the main economic activity of the local unit of employment, or of the enterprise.

Gross Monthly Income for Full−Time Employees

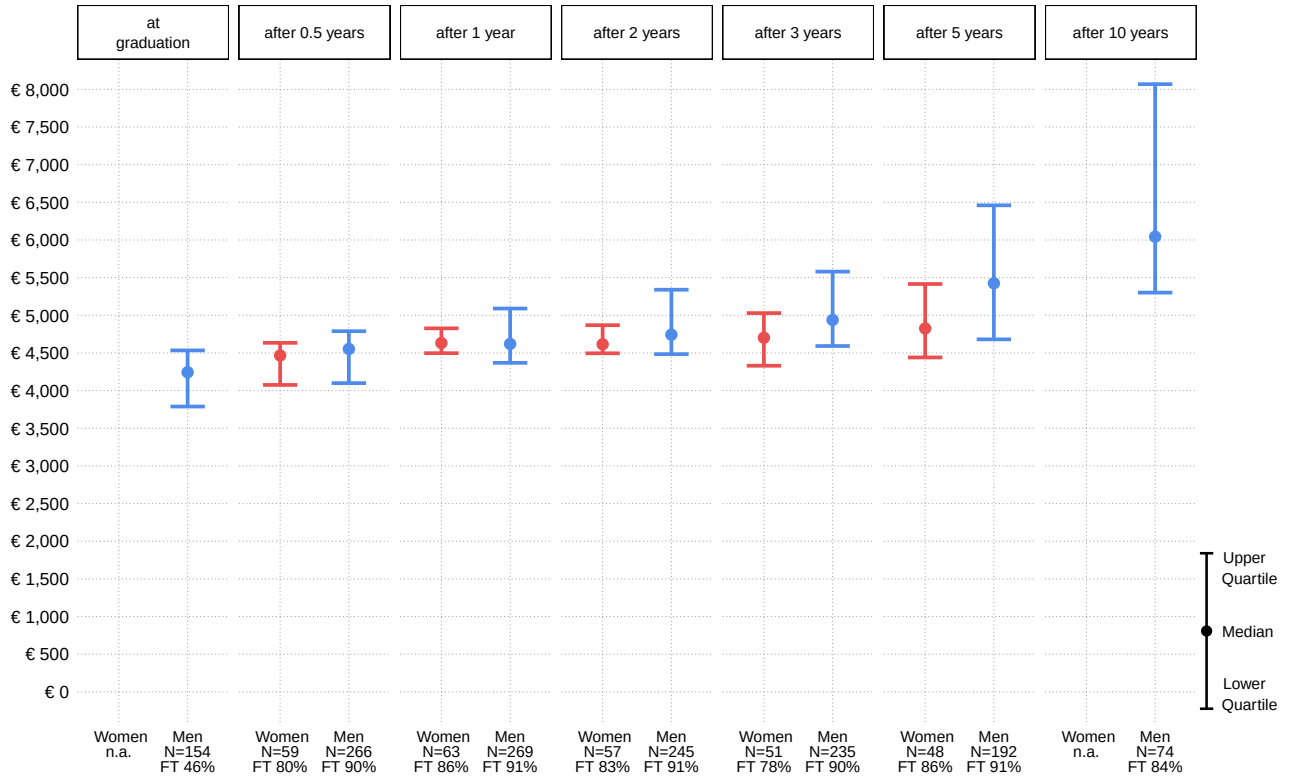
Austria−wide comparison



3 years after graduation, 286 graduates are full-time (FT) employees (group 'Degree Programme') - that is 88% of all employees at that reference date. Their gross monthly income is € 4,882 on average (median). The comparison group consists of all persons who graduate from a Doctoral programme relating to the 'Natural Sciences, Mathematics and Statistics' ISCED field of education at an Austrian higher education institution.

Gross Monthly Income for Full−Time Employees

by gender



3 years after graduation, 51 female graduates are full-time (FT) employees - those are 78% of all female graduates who are employees at that reference date. The gross monthly income of the female graduates is € 4,702 on average (median). In comparison, the gross income of the male graduates is € 4,938 on average.

Explanations

The **population** includes graduates of a Doctoral programme relating to the ISCED field of education 'Natural Sciences, Mathematics and Statistics' at the Vienna University of Technology in the academic years from 2008/09 to 2022/23. Please note that some reference dates for the most recent graduation years still lie ahead. Therefore, the number of graduations covered may vary. Persons who have already obtained an equivalent or higher-level degree or who are enrolled in another degree after graduation are excluded. The comparison group consists of the graduates of a Doctoral programme relating to the ISCED field of education 'Natural Sciences, Mathematics and Statistics' at an Austrian higher education institution.

The **data body** comprises data on formal education, labour market career and income. The data is derived from the register of currently economically active persons, the database for the Register-based Census and the Register-based Labour Market Statistics of Statistics Austria. When linking the registers, full compliance with data protection is ensured. By using the branch-specific personal identification number for official statistics (bPIN-OS), it is not possible to identify individual persons.

Labour Market Status: For building the labour market status, the processed data is linked and rendered free from any overlapping. For each day, an unambiguous labour market status is assigned to each person. Active employment dominates over temporary absences (e.g. maternity, parental or educational leave), followed by marginal employment, unemployment and additional education and training periods. If employments overlap, full-time employment is higher up in the hierarchy than part-time, and if there are several equivalent employments at the same time, the employment with the highest income is considered in the analyses. Compulsory/voluntary military service, temporary absences and marginal employment are not counted as active employments in this project. Persons who are registered at the Public Employment Service Austria (AMS) (i.e. persons registered as unemployed (AL), apprenticeship-seekers (LS), persons in training (SC)) count as unemployed. All persons who are neither employed, nor marginally employed, nor unemployed are considered as 'Currently not economically active persons', that includes compulsory/voluntary military service, temporary absences, persons in education or persons receiving a pension. Persons who are neither employed, unemployed, nor in education or who are not otherwise insured for social security and do not have their main residence in Austria, are assigned the labour market status 'No residence in Austria'. The reference day for the labour market status is calculated from the exact graduation day by adding the correspondent number of years (e.g. labour market status 0.5 years after graduation: day of graduation 2010/06/30 + 0.5 years = 2010/12/30).

Income: The income from employment is calculated from the gross income, not including special payments (such as holiday and Christmas bonuses). This is used to calculate a daily income, which is then multiplied by 365/12 to project the monthly income. To ensure comparability of the income between the years, the income data is weighted using the price level of 2023 of the consumer price index (CPI).

Full-Time: The annual payslip of the year, in which the reference date falls, determines whether an employment was full-time or part-time.

ISCED Fields of Education: The International Standard Classification of Education (ISCED) of the UNESCO classifies different fields of education (ISCED-F 2013). All degree programmes are allocated to one of these fields of education. For further information, please visit the website of STATISTICS AUSTRIA: https://www.statistik.at/KDBWeb/kdb_Einstieg.do?NAV=EN

ÖNACE 2008: The top-5-sectors in this analysis are based on the ÖNACE 2008 - the Austrian version of the international NACE classification of economic activities. For employed persons, the allocation is made according to the local unit of employment, or of the enterprise. For further information, please visit the website of STATISTICS AUSTRIA: https://www.statistik.at/KDBWeb/kdb_Einstieg.do?NAV=EN

Quartiles divide ordered data sets into four equal parts. The median is the value in the middle. In the case of income data, for example, 50% of the persons lie above this median value and 50% below. The lower quartile means that a quarter of the values lies below the quartile value and that three quarters lie above it. Vice versa, three quarters of the values lie below the upper quartile and one quarter lies above it. The median is more resistant to extreme scores that can occur in the case of very uneven spreads.

For data privacy protection reasons, the statistical disclosure control method of 'Record Swapping' has been used. Therefore, in particular for cell values <= 30, no reliable assertions can be made. For sample sizes <=30, the analysis does not list any values (**n.a.**).