Graduates in the Labour Market
Master’s Programme ‘MA Computer Science (F066921)’ TU Graz

The Fact Sheet 2021 provides systematic information about the employment status and labour market integration of graduates of the TU Graz. The analyses focus on the professional careers of graduates up to 5 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 on the Austrian Labour Market

#### Development over Time

<table>
<thead>
<tr>
<th>Time Since Graduation</th>
<th>Employment Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 months after graduation</td>
<td>Women: 62%, Men: 54%</td>
</tr>
<tr>
<td>12 months after graduation</td>
<td>Women: 91%, Men: 80%</td>
</tr>
<tr>
<td>18 months after graduation</td>
<td>Women: 98%, Men: 83%</td>
</tr>
<tr>
<td>24 months after graduation</td>
<td>Women: 96%, Men: 79%</td>
</tr>
<tr>
<td>30 months after graduation</td>
<td>Women: 95%, Men: 75%</td>
</tr>
<tr>
<td>36 months after graduation</td>
<td>Women: 95%, Men: 72%</td>
</tr>
</tbody>
</table>

#### 36 Months after Graduation

- **Employment Rate**
  - No residence in Austria: Status unknown
  - Residence in Austria: Currently not economically active in Austria
  - Marginally employed
  - Unemployed
  - Self-employed
  - Employees (without marginal employment)

73% of the 105 graduates are employees 36 months after graduating. Please note that due to the partly small number of cases, some of the distributions shown in the bars have to be interpreted with caution. The employment rate amounts to 95%, 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 Master’s programme in the ‘Information and Communication Technologies’ ISCED field of education at a public Austrian university.
On average (median), the 102 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 3 month(s). 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 1.3 employers in Austria (Men: 1.4).

In total, 81 graduates are employed 3 years after graduating. 47% of the graduates work in the sector ‘Computer programming, consultancy and related activities’ - their average (median) gross monthly income (in full-time employment) is €3,562. Please note that due to the small number of cases, the distribution has to be interpreted with caution. The classification is based on ÖNACE 2008 and refers to the main economic activity of the local unit of employment, or of the enterprise.
36 months after graduation, 69 graduates are full-time (FT) employees (group 'Degree Programme') - that is 90% of all employees at that reference date. Their gross monthly income is €3,650 on average (median). The comparison group consists of all persons who graduate from a Master’s programme relating to the 'Information and Communication Technologies’ ISCED field of education at a public Austrian university.

36 months after graduation, 55 male graduates are full-time (FT) employees - those are 90% of all male graduates who are employees at that reference date. The gross monthly income of the male graduates is €3,653 on average (median).
Explanations

The population includes graduates of the Master’s programme ‘MA Computer Science (F066921)’ at the TU Graz in the academic years from 2008/09 to 2018/19. Please note that some reference dates for the most recent graduation years still lie ahead. Therefore, the number of graduations covered may vary. The analyses only consider graduads who are under 35 years at the time of graduation. 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 Master’s programme relating to the ISCED field of education ‘Information and Communication Technologies’ at a public Austrian university.

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 months (e.g. labour market status 6 months after graduation: day of graduation 2010/06/30 + 6 months = 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 2019 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: http://www.statistik.at/web_en/classifications/index.html

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: http://www.statistik.at/web_en/classifications/index.html

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 ‘Target 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.).