

# Staying after graduation: Spotlight on technical talent

In December 2023, Nuffic published a research report about the reasons why international alumni stay in the Netherlands, the challenges they face and what helps them find a job and feel at home. [Access full report.](#)

The current report presents additional analyses on the differences between technical and non-technical fields of study. Significant differences were found regarding work-life balance, personal freedom, Dutch language requirements, professional network, and mentoring.

NUF2024/01

March 2024  
If you have any questions, please contact:  
Bregje Wijsenbeek, [bwijisenbeek@nuffic.nl](mailto:bwijisenbeek@nuffic.nl), 06 39 86 54 07



## Definition of technical and non-technical fields of study

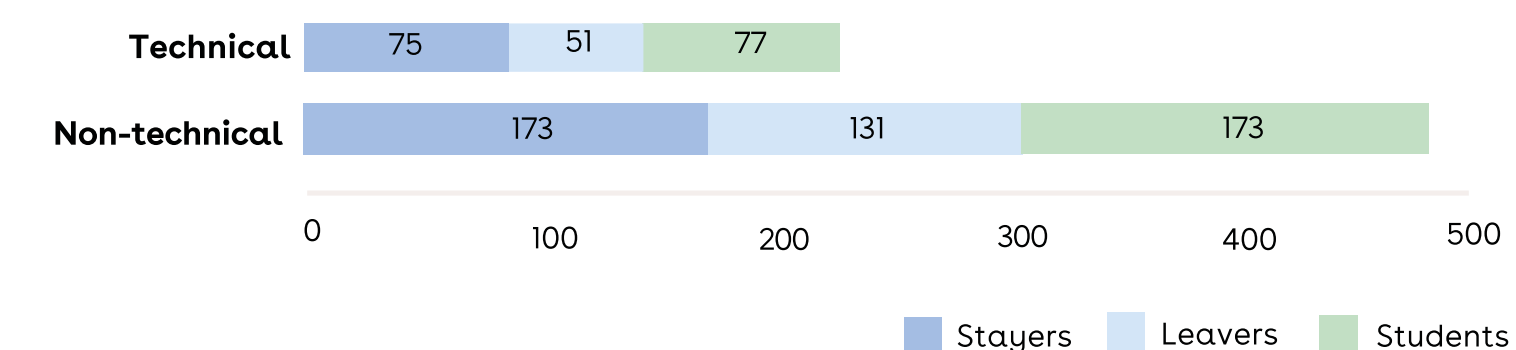
In our survey we asked alumni to indicate their most recently completed field of study, and students to indicate their current field of study. We categorised participants with the following fields of study as technical: 'Engineering', 'Information Technology (IT)', 'Natural Sciences', and 'Agriculture & Natural Environment'.

The following fields of study were categorised as non-technical: 'Behavioural & Social Sciences', 'Education', 'Interdisciplinary', 'Management & Business', 'Law', 'Public administration & international relations', 'Healthcare', 'Communication & Arts', 'Economics', 'Language & Culture', 'Hotel, catering, tourism, & leisure', 'Transport and logistics', 'Sports & Life Sciences', 'Development studies'.

## Description of the survey participants

From the 680 respondents who filled in our survey, 203 (30%) are alumni/ students with a technical field of study and 477 are alumni/students with a non-technical field of study (70%).

**Figure 1** - Numbers of participants with a technical and a non-technical field of study, divided into 3 groups: participants who graduated and stayed in the Netherlands (stayers), participants who graduated and left the Netherlands (leavers), and participants who are currently studying (students).



As shown in Figure 1, from the 203 participants with a technical field of study in our data, 75 are stayers, 51 are leavers and 77 are students. From the 477 participants with non-technical fields of study, 173 are stayers, 131 are leavers and 173 are students.

## Comparing technical versus non-technical fields of study

Our survey included questions about the reasons to stay or leave, challenges, and factors that assist in finding suitable work and feeling at home. We compared the average/mean scores of participants with technical studies with the average/mean scores of participants with non-technical studies. T-tests were performed to check if the differences between mean scores of the two groups (technical versus non-technical) are statistically significant. The results are presented in the following tables. The asterisk (\*) at the end of a t-score means that the difference between groups was statistically significant. No asterisk means no statistically significant differences. The more asterisks are added, the higher the level of significance.

**Nuffic**

## Reasons to stay

### Stayers

We asked alumni who stayed after graduation (stayers) about the reasons they decided to stay. An overview of the reasons is presented in Table 1.

**Work-life balance was more important for stayers with a technical field of study compared to stayers with a non-technical field of study.**

There was a statistically significant difference between the two groups (technical versus non-technical stayers) with regard to work-life balance (see Table 1). In a scale from 1=Not important at all to 5=Extremely important, stayers with a technical field of study scored 4.41, while stayers with a non-technical field of study scored 4.13.

The rest of the factors were equally important for both groups. No statistically significant differences were observed regarding quality of life, career opportunities, safety, international environment, personal freedom, a partner and social network as reasons to stay.

**Table 1** - Mean scores of stayers (total, technical, non-technical) in the question: "To what extent were the following factors important in your decision to stay in the Netherlands? Rate the following statements from '1=Not important at all' to '5=Extremely important'." N=248

Reasons to stay for stayers	Mean total	Mean for technical	Mean for non-technical	t-score (difference between technical and non-technical)
Quality of life	4.37	4.51	4.31	1.686
Career opportunities	4.33	4.50	4.26	1.807
Work-life balance	4.21	4.41	4.13	2.022*
Safety	4.02	4.09	3.99	0.617
International environment	3.77	3.77	3.77	0.001
Personal freedom	3.59	3.67	3.55	0.634
A partner	3.50	3.43	3.53	-0.457
Social network	3.31	3.47	3.24	1.381

\*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001.

## Students

We also asked current students about the reasons that would make them stay in the Netherlands after graduation.

**Personal freedom (sexuality, religion, political) was more important for students with a non-technical field of study compared to students with a technical field of study.**

Students with a technical field of study significantly differed from students with a non-technical field of study regarding the importance of personal freedom (see Table 2). In a scale from 1=Not important at all to 5=Extremely important, students with a technical field of study scored 3.65, while students with a non-technical field of study scored 4.21. This difference was statistically significant. No statistically significant differences were observed regarding quality of life, career opportunities, safety, finding suitable housing, work-life balance, feeling welcome, feeling at home, international environment, visa/legal status, social network and partner/relationship in the Netherlands as potential reasons to stay.

**Table 2** - Mean scores of students (total, technical, non-technical) in the question: "To what extent would the following factors make you stay in the Netherlands after graduation? Rate the following statements from '1=Not important at all' to '5=Extremely important'." N=250

Reasons to stay for students	Mean total	Mean for technical	Mean for non-technical	t-score (difference between technical and non-technical)
Quality of life	4.37	4.34	4.39	-0.365
Career opportunities	4.35	4.32	4.37	-0.431
Safety	4.20	4.13	4.22	-0.695
Finding suitable housing	4.15	4.24	4.11	0.784
Work-life balance	4.13	4.01	4.18	-1.222
Personal freedom	4.04	3.65	4.21	-3.427**
Feeling welcome	4.01	3.97	4.02	-0.352
Feeling at home	3.94	3.76	4.02	-1.846
International environment	3.90	3.87	3.91	-0.256
Visa/legal status	3.64	3.45	3.72	-1.209
Social network	3.50	3.61	3.45	0.993
Partner/relationship in NL	3.44	3.51	3.41	0.551

\*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001.

## Reasons to leave

We asked alumni who left after graduation about the reasons they decided to leave. The most important reasons for all leavers in descending order were: not finding suitable work and housing in the Netherlands, difficulty to finance their life, lack of social network/support, visa issues/legal status, language barriers, not feeling at home and welcome in the Netherlands, physical and mental health problems, and family reasons.

**Regarding the differences between reasons to leave for leavers with a technical field of study and leavers with a non-technical field of study, there were no statistically significant differences between these two groups.**

The exact numbers are not illustrated in a table, but are available upon request.



## Challenges for stayers after graduation

We asked alumni who stayed after graduation which challenges they faced.

**Dutch language requirements when applying for jobs and lack of professional network were more of a challenge for stayers with a non-technical field of study than stayers with a technical field of study.**

There was a statistically significant difference between the two groups regarding Dutch language requirements when applying for jobs. More specifically, 58.7% of the stayers with a technical field of study experienced this challenge and that was 73.4% of the stayers with a non-technical field of study.

As for lack of professional network, 36% of stayers with a technical field of study experienced this challenge, and that was 54.3% for stayers with a non-technical field of study. This difference was statistically significant.

The rest of the challenges were equally important for both groups. No statistically significant differences were observed regarding difficulty finding housing, difficulty finding suitable job, lack of social network/support, financial difficulties, language barriers at work, language barriers outside of the workplace, difficulty with residence/work permit, not feeling at home, discrimination at work/during job interview, physical or mental health problems, discrimination outside of the work place, difficulty with adapting to the Dutch culture.

**Table 3** - Mean scores of stayers (total, technical, non-technical) in the question: "Below you find a list of possible challenges international graduates can face when deciding to stay in the Netherlands. Tick the box if you have experienced this challenge yourself after graduation. You can choose multiple options." N=248

Challenges of stayers after graduation	% total	% technical	% non-technical	z-score (difference between technical and non-technical)
Dutch language requirements when applying for jobs	69.0	58.7	73.4	-2.305*
Difficulty finding housing	60.1	61.3	59.5	0.265
Difficulty finding suitable job	58.9	50.7	62.4	-1.729
Lack of social network/support	58.5	54.7	60.1	-0.800
Lack of professional network	48.8	36.0	54.3	-2.653**
Financial difficulties	39.9	33.3	42.8	-1.394
Language barriers at work	37.1	36.0	37.6	-0.235
Language barriers outside of the workplace	34.7	37.3	33.5	0.579
Difficulty with residence/work permit	33.9	38.7	31.8	1.051
Not feeling at home	33.1	29.3	34.7	-0.822
Discrimination at work/during job interview	29.8	25.3	31.8	-1.021
Physical or mental health problems	28.2	22.7	30.6	-1.281
Discrimination outside of the work place	24.2	21.3	25.4	-0.693
Difficulty with adapting to the Dutch culture	23.0	22.7	23.1	-0.078

\*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001.

## Challenges experienced by students

Regarding challenges for current students, the most important challenges in descending order were: difficulty finding housing, language barriers, financial difficulties, lack of social network/support, physical or mental health problems, difficulty with adapting to the Dutch culture, discrimination, and difficulties with residence permit.

**As for challenges, there were no statistically significant differences between students with a technical field of study and students with a non-technical field of study.** The exact numbers are not illustrated in a table, but are available upon request.

## What helps in finding suitable work

We asked alumni who stayed after graduation what helped them to find a suitable job.

**Having a professional network and having a mentor were more helpful for stayers with a technical field of study than stayers with a non-technical field of study.**

Regarding how helpful it was for stayers to have a professional network in a scale from 1='Not helpful at all' to 5='Extremely helpful', stayers with a technical field of study scored 4.42 and stayers with a non-technical field of study scored 4.04. This difference was statistically significant.

As for how helpful it was to have a mentor, stayers with a technical field of study scored 3.57 and stayers with a non-technical field of study scored 3.20. This difference was statistically significant.

Financial support during the job search period, speaking Dutch, relevant work experience through internships or part-time jobs, having a supportive social network in the Netherlands and career counseling were equally helpful for both groups. There were no statistically significant differences.

**Table 4** - Mean scores of stayers (total, technical, non-technical) to the question: "Below you find a list of factors that can help international graduates find a suitable job after their studies. Based on your own personal experience, to what extent did you find them helpful? Rate the following statements from '1=Not helpful at all' to '5=Extremely helpful'." N=248

Factors that helped stayers find suitable work after graduation	Mean total	Mean for technical	Mean for non-technical	t-score (difference between technical and non-technical)
Financial support during the job search period	4.36	4.50	4.30	1.579
Speaking Dutch	4.18	4.20	4.17	0.210
Professional network	4.16	4.42	4.04	2.710**
Relevant work experience through internships or part-time jobs	4.05	4.26	3.95	1.780
Having a supportive social network in the Netherlands	3.99	4.15	3.92	1.661
Having a mentor	3.32	3.57	3.20	1.998*
Career counseling	3.24	3.48	3.13	1.900

\*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001

## What helps feel at home

Stayers and students also answered a question about what helps them feel at home in the Netherlands. The most important factors in descending order were: pleasant work environment, having a supportive social network (friends and acquaintances) in the Netherlands, having a partner and/or family in the Netherlands, knowledge about practical matters in the Netherlands, participating in social activities (e.g. clubs, interest groups, sports teams) and Dutch language skills.

**Regarding the factors that help people feel at home, there were no statistically significant differences between stayers or students with a technical field of study and stayers or students with a non-technical field of study.** The exact numbers are not illustrated in a table, but are available upon request.