



Maastricht University Graduate Surveys 2022

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Maastricht University Graduate Surveys 2022

As in previous years, this factsheet reports on the employability of Maastricht University (UM) alumni. Are UM alumni well prepared for the labour market? What does the job market situation look like for UM graduates shortly after completing their master's degrees, and what do their career paths look like five and ten years after graduation? How do they reflect on their master's studies at UM? To address these questions, we report a set of key labour market outcomes, such as unemployment rate, income and satisfaction with the master's programme at Maastricht University, for the UM as a whole as well as for the separate faculties. The findings are based on alumni research among three cohorts that participated in a survey in 2021. The first cohort graduated in the academic year 2019-2020 (1.5 years prior to the survey), the second in 2015-2016 (five years prior to the survey) and the third in 2009-2010 (ten years prior to the survey).¹ We also compare the findings of this year to those of earlier years. Moreover, we shed light on the perceived impact of COVID-19 on the transition from education to the labour market and on the future careers of UM graduates.

KPIs of UM graduates

Position in the labour market

Of all Maastricht University alumni who graduated 1.5 years ago, 95% are reported to be part of the labour force. Of those not currently in the labour force, 54% are still studying.² This percentage is smaller than last year. Five and ten years after graduation, almost all alumni are part of the labour force (97% and 98% respectively). Five years after graduation, 51% of those not currently in the labour force are still studying, whereas the percentage of alumni who are still studying ten years after graduation is much lower, namely 25%.

Unemployment

Figure 1 illustrates the trend in the unemployment rate from 2005 to 2021 among UM alumni who graduated

1.5 years prior to the survey.³ The unemployment rate is defined as the proportion of alumni belonging to the labour force who are currently not working but are seeking work. Following the peak in unemployment in 2013, the unemployment rate declined in the years thereafter until 2018, reflecting the recovery from the economic crisis. After a slight increase between 2018 and 2019, the unemployment rate accelerated between 2019 and 2020. This was likely due to the COVID-19 crisis. After all, the alumni survey of 2020 was the first one after the beginning of the COVID-19 crisis. Remarkably, between 2020 and 2021, the unemployment rate has decreased significantly.⁴

More specifically, while the unemployment rate for UM graduates was 7% last year, this year's unemployment rate of 3% is the lowest in 15 years.⁵ Thus, it appears that last year's labour market entrants were particularly affected by the COVID-19 crisis. In comparison, this year's graduating cohort is in a better position, although they also entered the job market when the COVID-19 pandemic was still ongoing. In recent years, it was especially those entering the workforce who had, compared to the other graduation cohorts, higher unemployment rates. This year the unemployment rate of all three cohorts is around 3%. But while the unemployment rate for the cohort that graduated one year ago has dropped significantly compared to the previous year, the unemployment rate for the other cohorts has slightly increased (T5) or remained stable (T10).

1 The response rates for these graduation cohorts are: 22.1% for 2019-2020, 30.2% for 2015-2016, 23.2% for 2010-2011. The response rate for the 2019-2020 cohort is based on completed surveys.

2 Based on the ILO definition of the labour force.

3 The trends five and ten years ago are not shown as they vary little over time. For faculty specific unemployment trends, see Table 5 in the appendix.

4 Among all Dutch universities, the unemployment rate is 3.5%. It is important to note that the NAE changed in 2021. Different questions, answer possibilities and routings might cause a disruption in the trend as well. However, also the graduation survey among applied university graduates reports a sharp decline in this year's unemployment rates of those who graduates 1.5 years ago (HBO-Monitor 2021).

5 See the second part of this factsheet for more information about the (perceived) COVID-19 effects.

FIGURE 01.

Trends in unemployment rates 1.5 years after graduation

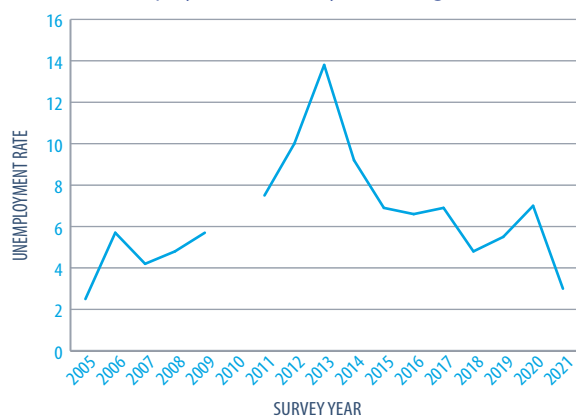


Table 1 shows the graduates' unemployment rates by cohort and faculty. Importantly, unemployment rates vary considerably across faculties.⁶ The highest unemployment rate was found among alumni of FASoS (Faculty of Arts and Social Sciences) 1.5 years after graduation (6%). However, the unemployment rate of recent FASoS graduates has declined sharply compared with last year, by 9 percentage points. Unemployment rates of recent graduates also decreased for all other faculties compared to last year. In particular, the rate declined by 1% for alumni of SBE (School of Business and Economics), by 3% for alumni of FHML (Faculty of Health, Medicine and Life Sciences), by 5% for alumni of FPN (Faculty of Psychology and Neuroscience) and by 6% for LAW alumni.

Among graduates who graduated five years ago, the unemployment rate has slightly increased across all faculties. Similar to last year, the highest unemployment rate is found among graduates of FPN. The percentage of unemployed alumni who graduated ten years ago remained rather stable. Among LAW graduates who graduated ten years ago, the unemployment rate dropped from 3% to 1%.

⁶ The unemployment rate is different within FHML. The unemployment rate for Health and Life Sciences alumni is 1%, 3% and 5% respectively. The unemployment rate among Medicine alumni is 0% for all cohorts.

TABLE 01.

Percentage of alumni who are unemployed

	% unemployed		
	2019-2020	2015-2016	2010-2011
Science and Engineering	X	X	X
Business and Economics	4	2	2
Health, Medicine and Life Sciences	1	2	3
Arts and Social Sciences	6	5	3
Psychology and Neuroscience	4	8	0
Law	3	5	1
Maastricht University	3	3	2

X = insufficient data

Vertical and horizontal match

Yet it is not only important to be in employment, but also to be employed in a job that corresponds to the workers' level and field of education. Ideally, the knowledge and skills acquired during the studies can be applied on the job. A well-matched job is generally associated with higher job satisfaction, better career opportunities and less sick leave than one that does not fit the level and/or field of education.⁷ Moreover, mismatches also turn out to affect long-term career success.⁸

Table 2a indicates the extent to which UM graduates experience a vertical match (i.e. whether they are working in a job that requires a master's degree).⁹ Among the most recent cohort, 77% of the UM graduates are working at a master's level or higher. We find that five and ten years after graduation, 73% and 77% of the UM alumni are working at a job requiring a master's level or higher.

In addition, there are differences between faculties. Similar to previous years, the proportion of graduates

⁷ See e.g. Lee, Y., & Sabharwal, M. (2016). Education-job match, salary, and job satisfaction across the public, non-profit, and for-profit sectors: Survey of recent college graduates. *Public Management Review*, 18(1), 40-64; Ilies, R., Yao, J., Curseu, P. L., & Liang, A. X. (2019). Educated and happy: a four-year study explaining the links between education, job fit, and life satisfaction. *Applied Psychology*, 68(1), 150-176.

⁸ Verbruggen, M., van Emmerik, H., Van Gils, A., Meng, C., & de Grip, A. (2015). Does early-career underemployment impact future career success? A path dependency perspective. *Journal of Vocational Behavior*, 90, 101-110.

⁹ Since 2018, we report the percentage of UM alumni working in a job that requires an HBO-master or university-master.

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with a good vertical match is relatively high among graduates from FHML with 83%. This is mainly due to the fact that nearly all Medicine graduates find a job at master's level.¹⁰ Among the most recently graduated cohort, we see the highest proportions of a vertical match among FPN graduates (86%).

Similar to last year, five and ten years after graduation, the highest percentage of vertical matches is among FPN graduates (86% and 91%, respectively). However, the differences with FHML and LAW are relatively small.

TABLE o2a.

Percentage of alumni with a good vertical match

	% working at master's level or higher		
	2019-2020	2015-2016	2010-2011
Science and Engineering	X	X	X
Business and Economics	75	64	70
Health, Medicine and Life Sciences	83	80	90
Arts and Social Sciences	56	56	66
Psychology and Neuroscience	86	86	91
Law	71	81	81
Maastricht University	77	73	77

X = insufficient data

Table 2b presents the proportion of UM graduates who are currently working in their own or a related field of study (horizontal match). Importantly, horizontally well-matched employees are more satisfied with their jobs and less likely to regret their study programme.¹¹ On average across all cohorts, four out of five alumni succeed in finding a job in a field related to their field of study, with the number increasing for all cohorts compared to the previous year.

Of the cohort that graduated 1.5 years ago, 83% have found a job related to their field of study and can thus be considered horizontally well-matched. This is an increase of 7% UM wide. More specifically, there is a 13% increase for LAW alumni (from 73% to 86%) and a 9% increase for SBE alumni (from 71% to 80%). FPN alumni who

graduated 1.5 years ago have the highest probability of holding a job in their own or related field of study (89%). For the cohorts five and ten years after graduation, the UM wide proportions are 81% and 79%, respectively. This represents an increase of 2% and 3%. Again, we see differences among faculties at UM. For the cohort that graduated ten years ago, the percentage of alumni with a good horizontal match is the highest for FHML alumni. This is again due to the graduates of Medicine, who are educated for a small range of occupations.¹²

TABLE o2b.

Percentage of alumni with a good horizontal match

	% working in own or related field of study		
	2019-2020	2015-2016	2010-2011
Science and Engineering	X	X	X
Business and Economics	80	83	80
Health, Medicine and Life Sciences	88	82	88
Arts and Social Sciences	69	63	57
Psychology and Neuroscience	89	85	78
Law	86	80	81
Maastricht University	83	81	79

X = insufficient data

Income and working hours

Table 3 shows the median gross monthly income and weekly working hours of UM graduates. On average, UM graduates have a median monthly income of €3000 1.5 years after graduation. Five and ten years later, this income increases to an average of €4000 and €5000, respectively. Compared to last year, the median monthly income for the cohorts who graduated 1.5 and five years ago increased by €175 and €200. For the cohort that graduated ten years ago, the UM-wide median has remained the same.

Also, we can see differences in terms of monthly income across faculties. Especially alumni of SBE and FHML¹³ start with a relatively high income of €3080 and €3290 1.5

10 The percentages of Health and Life Sciences alumni with a vertical match are 70%, 72% and 84% respectively. In contrast, Medicine alumni are vertically matched to 100%, 98% and 100% respectively.

11 Somers, M. A., Cabus, S. J., Groot, W., & van den Brink, H. M. (2019). Horizontal mismatch between employment and field of education: Evidence from a systematic literature review. *Journal of Economic Surveys*, 33(2), 567-603.

12 There are differences in horizontal match among FHML alumni. The percentages of Health and Life Sciences alumni with a good horizontal match are 86%, 79% and 82% respectively. Among Medicine alumni, these figures are 92%, 91% and 97%.

13 The median monthly income is different within FHML. Alumni of Health and Life Sciences have a median income of €2850, €3700, €4200 (1.5, five and ten years after graduation). Whereas alumni of Medicine have a median income of €3830, €4352 and €5800.

TABLE 03.

Median monthly income and weekly working hours

	Gross income per month (median)			Regular working hours per week (median)		
	2019-2020	2015-2016	2010-2011	2019-2020	2015-2016	2010-2011
Science and Engineering	X	X	X	X	X	X
Business and Economics	3080	4500	5845	40	40	42
Health, Medicine and Life Sciences	3290	3850	4800	38	40	40
Arts and Social Sciences	2400	3000	4000	40	40	40
Psychology and Neuroscience	2600	3350	4000	38	38	35
Law	2725	4000	5200	40	40	40
Maastricht University	3000	4000	5000	40	40	40

X = insufficient data

years after graduating. In addition, among alumni who graduated five and ten years ago, we see the highest median income among SBE graduates, namely €4500 and €5845. It is important to note that SBE graduates who graduated ten years ago report the highest median hours worked of 42 hours per week. The UM-wide median is 40 hours per week for all cohorts.

Compared to last year, FHML¹⁴ alumni who graduated ten years ago report working more hours per week (increase from 38 to 40 hours). Surprisingly, this goes hand in hand with a lower monthly income (decrease from €5000 to €4800). FPN graduates who graduated ten years ago report working fewer hours per week (decrease from 40 to 35 hours) and, possibly as a consequence, earning €100 less on a monthly basis. LAW alumni who graduated five and ten years ago report a higher monthly median income than last year (€4000 and €5200), while the number of hours worked has remained stable.

The (perceived) role of COVID-19 in the transition from UM education to the labour market

We know from earlier research that every economic crisis affects the transition from education to the labour market.¹⁵ During the COVID-19 crisis, many young labour

14 There are differences in regular working hours per week among FHML alumni. Alumni of Health and Life Sciences have regular working hours of 38, 40 and 38.5 hours per week, respectively. Whereas alumni of Medicine have regular working hours of 38, 40 and 40 hours per week.

15 Belfi et al. (2018) *Schoolverlaters in crisistijd: Gevolgen voor leren en de vroege loopbaan*. ROA-R-2018/7. Salvà-Mut, F., Thomás-Vanrell, C., & Quintana-Murci, E. (2016). School-to-work transitions in times of crisis: the case of Spanish youth without qualifications. *Journal of Youth Studies*, 19(5), 593-611.

market entrants faced a massive decline in vacancies and hiring rates.¹⁶ Those who do find jobs, probably face lower wages.¹⁷ If recent graduates are not able to find jobs during the crisis, they can become unemployed. Alternatively, they might postpone their graduation (by taking extra courses and/or doing an internship), or they may extend their educational career by taking a second (additional) course of study.^{18,19}

Unemployment

We already have seen a relatively small percentage of UM graduates being unemployed 1.5 years after graduation. Similarly, the unemployment rate of applied university graduates (full-time students) has reached its lowest level in the last decade, decreasing from 4.8% to 3.0% between 2019 and 2020.²⁰ Slightly more than 60% of all UM graduates experienced some months of entry unemployment. Even though this percentage is higher than before the COVID-19 outbreak, it is much lower than among the UM graduates of 2018/2019 (89%).

16 Eichhorst, W., Marx, P., & Rinne, U. (2020). Manoeuvring through the crisis: Labour market and social policies during the COVID-19 pandemic. *Intereconomics*, 55(6), 375-380.

17 Oreopoulos, P., Von Wachter, T., & Heisz, A. (2012). The short-and long-term career effects of graduating in a recession. *American Economic Journal: Applied Economics*, 4(1), 1-29.

18 Guo, N. (2018). The effect of an early career recession on schooling and lifetime welfare. *International Economic Review*, 59(3), 1511-1545. Chen, X., & Yur-Austin, J. (2016). College challenge to ensure "timely graduation": Understanding college students' mindsets during the financial crisis. *Journal of Education for Business*, 91(1), 32-37.

19 Due to data availability, we cannot comment on the number of graduates that overcome the crisis period with internships.

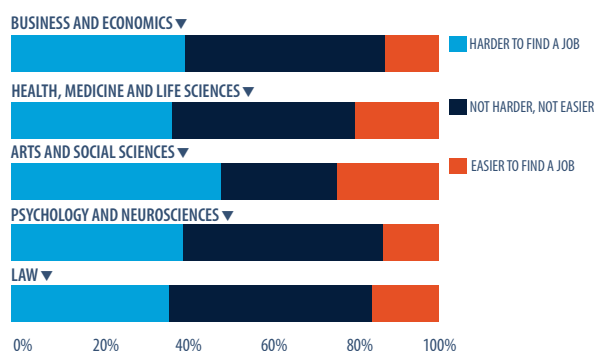
20 HBO-Monitor 2021

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Figure 2²¹ shows the perceived difficulties in finding a job among recent graduates. Despite the relatively low unemployment rate, about 40% of the UM graduates did perceive that the COVID-19 crisis made it harder for them to find work. We observe some differences across faculties. Alumni from FASoS perceive most COVID-19 impact related to finding a job after graduation. Remarkably, FASoS also has the largest percentage of alumni reporting that it was easier for them to find a job due to COVID-19. Alumni from SBE and FPN experience this less. On average, UM graduates perceive a similar impact of COVID-19 on the probability to find a job, as on the probability to find a job that matches their education level or field (not shown in the figure).

FIGURE 02.

Perceived impact of COVID-19 on probability to find a job, 1.5 years after graduation



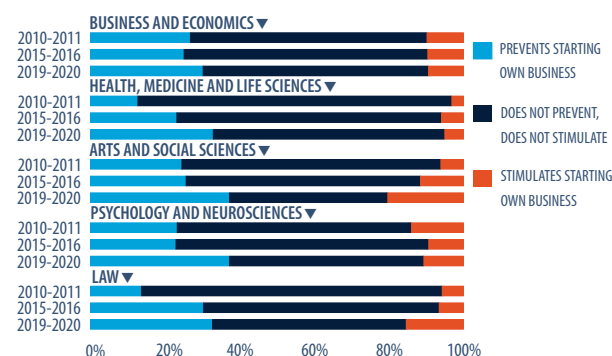
Source: NAE 2021

Self-employment

When there are relatively few vacancies, graduates might also consider self-employment. In 2021, 2% of the recent graduates entered self-employment. This is similar to the years before. Figure 3 shows the extent to which UM graduates from all three cohorts agree with the statement either that the COVID-19 crisis prevented them from starting their own businesses or stimulated them to do so.

FIGURE 03.

Perceived impact of COVID-19 on starting own business



Source: NAE 2021, UM scanner 2021

The figure shows clear differences across cohorts, as well as somewhat less clear differences across faculties. Especially for the most recent cohort, COVID-19 seems to have prevented them from starting their own business. This holds especially for graduates from FASoS and FPN, but to a lesser extent also for graduates of the other faculties. Almost none of the graduates from FHML felt stimulated into self-employment due to COVID-19.

Continuing education

About 30% of UM's recent graduates continued education.²² 20% of those who did continue education mentioned that they did so because of the COVID-19 crisis. An additional 6% of all recent graduates consider continuing education because of the COVID-19 crisis. This percentage is especially high among graduates from FPN, with almost one out of four graduates considering continuing education because of the COVID-19 crisis. Moreover, 6% of those who graduated five years prior to the survey have decided to take part in another university education because of the COVID-19 crisis. An additional 7% are planning to do so. Especially graduates from FASoS tend more to follow-up education.

(Future) Career

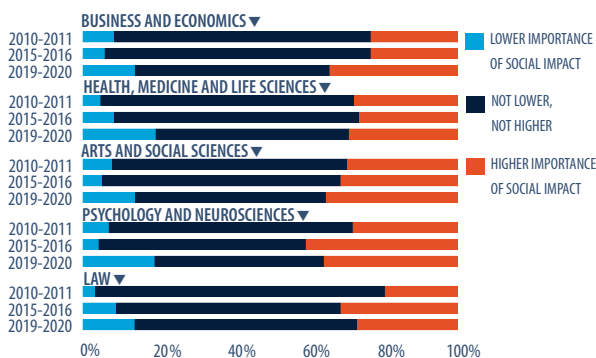
25% of the recent graduates mention that due to the COVID-19 crisis, they discovered new ideas for their careers. Among the older cohorts, this percentage is

21 For all COVID-related data (Fig. 2 – Fig. 5), we are unable to present statistics for the Faculty of Science and Engineering due to limited data availability.

22 Since 2017, this percentage is in the range of 30-34%.

around 35%. Especially among graduates from FASoS, these percentages are high: 42% for recent graduates and 50% for the other cohorts. As illustrated in Figure 4, graduates also seem to attach much more value to a job with societal impact due to COVID-19. Of all faculties, more than 20% of the graduates agree with the statement that they attach more value to jobs with societal impact due to COVID-19. Clear differences across cohorts can be observed for SBE and to a lesser extent for FPN and LAW.

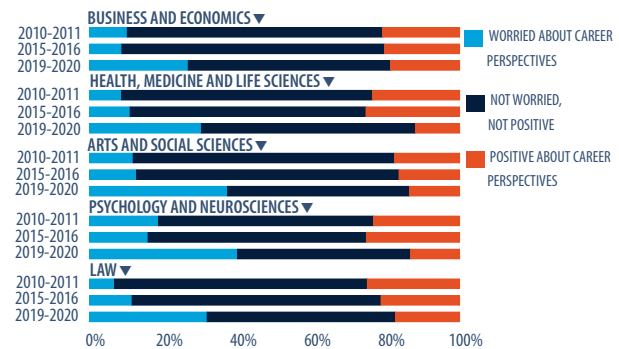
FIGURE 04. Perceived impact of COVID-19 on importance of societal impact



Source: NAE 2021, UM scanner 2021

In Figure 5, the perceived impact of COVID-19 on graduates' future careers is presented. We see clear differences between the cohorts. The most recent cohort reports worrying more about their future careers due to COVID-19. This holds especially for graduates of FPN and FASoS. Graduates who left UM five and ten years ago are less worried. About 20% of all graduates are even positive about their future career perspectives due to COVID-19. This might be a result of governmental policies for those already in employment during the COVID-19 outbreak.

FIGURE 05. Perceived impact of COVID-19 on future career perspectives



Source: NAE 2021, UM scanner 2021

It is important to note that the relatively negative perceptions of COVID-19 on various aspects of graduates' careers are not reflected by actual statistics such as unemployment, job mismatches and wages.

Satisfaction with master's programme at Maastricht University

Table 4 shows the percentage of alumni who would choose the same master's programme at UM again. Among recent graduates, 80% would choose the same master's program at UM again. This represents an overall increase of 7% compared to last year. Importantly, this is despite the fact that classes had to be held online starting halfway through the academic year (March 2020) due to the COVID-19 outbreak. For the recent cohort, LAW graduates stand out at a rate of 89%. For the cohorts graduating five and ten years ago, 75% would choose the same master's programme at UM again.²³ For FHML graduates²⁴, 74% of all 2010-2011 graduates would choose the same master's programme at UM again. This number has decreased by 11 percentage points since last year but is similar to the number in the survey 2 years ago.

²³ This represents a decrease of 3% and 4% (compared to the previous year) for graduates who graduated five and ten years ago, respectively. Compared to the survey two years ago, the figures look similar (2% increase and 1% decrease, respectively).

²⁴ The percentages for Health and Life Sciences alumni are 82%, 72% and 70% (1.5, five and ten years after graduation). The corresponding figures for Medicine alumni are 84%, 85% and 72%, respectively.

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TABLE 04.

Percentage of alumni who would choose the same master's programme at UM again

	% of alumni who would choose the same study at UM again		
	2019-2020	2015-2016	2010-2011
Science and Engineering	X	X	X
Business and Economics	76	77	80
Health, Medicine and Life Sciences	83	76	74
Arts and Social Sciences	67	65	72
Psychology and Neuroscience	77	69	65
Law	89	79	71
Maastricht University	80	75	75

X = insufficient data

TABLE 05.
Unemployment

	2012 T+1 2010-2011	2013 T+1 2011-2012	2014 T+1 2012-2013		2015 T+1 2013-2014	2016 T+1 2014-2015	2017 T+1 2015-2016	2018 T+1 2016-2017	2019 T+1 2017-2018	2020 T+1 2018-2019	2021 T+1 2019-2020
Science and Engineering			13		4	4.7	4.8	6.3	X	X	X
Business and Economics	6	6.3	5.7		3.6	0.0	0	0.8	1.3	5.2	3.7
Health and Life Sciences	8.3	16.4	10.3		9.2	8.0	7.1	2.8	5.2	5.8	1.1
Medicine	1.7	2.5	3.3		2.7	0.0	3.9	0	0	0	0
Arts and Social Sciences	25.5	33.3	13.7		5.9	5.6	22.9	18.6	9.6	15	5.8
Psychology and Neuroscience	16.7	25.6	7.6		10.3	14.1	7.3	8.1	11.7	8.6	4.1
Law	7.1	14.3	16.2		10.3	14.6	7.7	4.4	9.0	9.4	3.0
Maastricht University	10	13.8	9.2		6.9	6.6	6.9	4.8	5.5	7.0	3.0
	2012 T+5 2005-2006	2013 T+5 2006-2007	2014 T+5 2007-2008	2015 spring T+5 2008-2009	2015 autumn T+5 2009-2010	2016 T+5 2010-2011	2017 T+5 2011-2012	2018 T+5 2012-2013	2019 T+5 2013-2014	2020 T+5 2014-2015	2021 T+5 2015-2016
Science and Engineering				0	6	0	7.4	7.5	X	X	X
Business and Economics	1.9	0	0	0.9	1.5	1.3	1.2	2.0	0.8	0.4	1.6
Health and Life Sciences	2.1	3.1	3.5	4.3	5.3	3.3	1.7	6.8	2	2	3.2
Medicine	0	0	1.3	0.0	4.9	0	0	1.1	0	0	0
Arts and Social Sciences	10.1	5.7	4.8	4.4	6.7	1.5	5.7	5.0	1.6	3.7	4.8
Psychology and Neuroscience	4.2	0	4.3	7.5	2.5	4.9	4.4	3.1	6.6	6.3	8
Law	0	6.8	3.8	2.6	1.8	0	1.6	6.5	3.3	1.9	4.5
Maastricht University	2.7	3.2	2.6	2.6	3.4	1.5	2.2	3.9	2.3	2.2	3.4
	2012 T+10 2000-2001	2013 T+10 2001-2002	2014 T+10 2002-2003	2015 spring T+10 2003-2004	2015 autumn T+10 2004-2005	2016 T+10 2005-2006	2017 T+10 2006-2007	2018 T+10 2007-2008	2019 T+10 2008-2009	2020 T+10 2009-2010	2021 T+10 2010-2011
Science and Engineering	X	X	X	X	X	X	X	X	X	X	X
Business and Economics	0.9	0.9	0.7	1.0	0	1.6	1.1	1.1	4.2	1.8	2.5
Health and Life Sciences	1.2	3.1	3.7	0.6	2.6	1.6	1.4	4.5	1.3	2.7	5.3
Medicine	1.8	0	2	3.6	1.5	1.2	0	1.7	3.4	1.2	0
Arts and Social Sciences	X	X	X	4.3	11.5	4.4	4.6	2.0	2.3	4.3	3.3
Psychology and Neuroscience	3.8	0	4.9	2.0	3.1	1.7	3.7	0	0	0	0
Law	6.1	1.6	0	1.4	0	0	6.9	1.7	0	2.9	1.1
Maastricht University	2	2	2.1	1.5	3	1.7	2.6	1.8	2.1	2.4	2.2

X = insufficient data

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