

# TRENDS

## IN MARITIME HIGHER EDUCATION

Volume 21, Number 1

The Class of 2020 in 2022

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### Post-Graduation Pathways of First-Degree Holders

#### Introduction

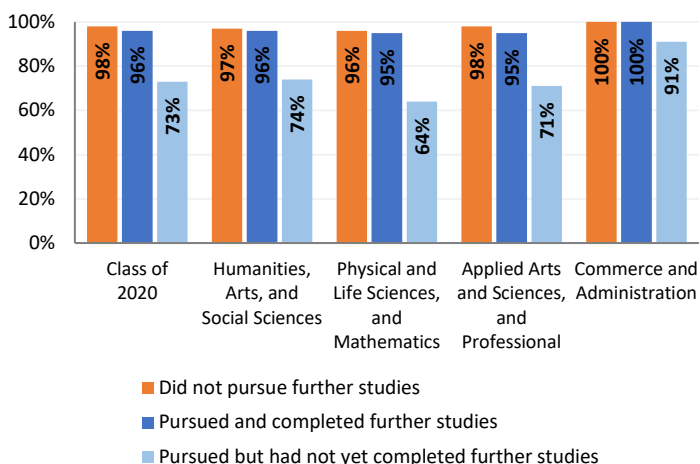
The Commission regularly reports on the employment outcomes of Maritime university first-degree holders (FDH) two and six years after graduation<sup>1,2</sup>. The post-graduation pathways of FDH differ across program orientations and discipline clusters. For some FDH, it may be premature to measure employment outcomes two years after graduation when many graduates have recently completed an additional credential or are still enrolled in a post-secondary program. A series of five infographics presents the educational pathways and employment outcomes of the Class of 2020 Maritime university FDH two years after graduation by discipline cluster. First-degree holders were grouped into one of the following three categories based on their status at the time of the survey: FDH who did not pursue further studies, FDH who had pursued and completed further studies, and FDH who pursued further studies and who had not yet completed the programs they pursued.

Just over half (51%) of the Class of 2020 FDH pursued some form of post-secondary education leading to a degree, diploma, or certificate within two years of graduation, and at the time of the survey, 31% of all FDH had not yet completed the programs they pursued.

#### Labour Force Participation

Figure 1 shows that across discipline clusters, over 95% of FDH who did not pursue further studies or who had pursued and completed further studies were in the labour force two years after graduation. In contrast, 73% of FDH who pursued further studies and who had not yet completed the programs they pursued were in the labour force. The labour force participation of FDH varies across discipline clusters.

**Figure 1. The percentage of FDH in the labour force two years after graduation by discipline cluster of first degree and status at the time of the survey (wN = 1,936)**



#### Liberal Arts and Sciences

The majority (62%) of FDH who completed a degree in the liberal arts and sciences pursued further studies within two years of graduation. A first degree in the liberal arts and sciences often serves as a prerequisite for admission to graduate studies or a professional undergraduate program (e.g., education, law, medicine). For many FDH, obtaining a second or third degree is part of their chosen career path<sup>3</sup>.

Fifty-seven percent of Humanities, Arts, and Social Sciences FDH pursued further studies, and at the time of the survey, 34% of all FDH had not yet completed the programs they pursued. Of those who pursued further studies, 42% pursued a graduate degree (38% a master's degree and 4% a Ph.D.), 15% pursued a college or apprenticeship credential, and 14% pursued a Bachelor of Education. Two years on, 21% of all FDH had completed the programs they pursued, and with median earnings of \$50,000, they were already out-earning FDH who did not pursue further studies (\$44,400).

Seventy percent of Physical and Life Sciences, and Mathematics FDH pursued further studies. At the time of the survey, about half (47%) of FDH had not yet completed the programs they pursued. Of those who pursued further studies, 56% pursued a graduate degree (45% a master's degree and 11% a Ph.D.) and 11% pursued a professional health doctorate. First degree holders who had pursued and completed further studies were nearly twice as likely as those who did not pursue further studies to be employed in a job requiring a university education or in a management position (60% compared to 31%), and they reported higher earnings (\$52,000 compared to \$44,500).

### Applied and Professional Programs

The most common pathway for FDH from applied and professional programs was to forgo further studies and find full-time employment soon after graduation. Nevertheless, 40% pursued another credential within two years of graduation.

Sixty-one percent of FDH from Applied Arts and Sciences, and Professional programs did not pursue further studies. Of this group, 95% were employed, 75% were working in a job requiring a university education or in a management position, and 86% were working in a job related to their degree or using the skills learned during their program. Thirty-nine percent of FDH pursued further studies, with the most common program pursued being a master's degree (45%).

Fifty-seven percent of Commerce and Administration FDH did not pursue further studies, while 43% pursued another credential within two years of graduation. Commerce and Administration FDH who pursued and who had not yet completed further studies were more likely to be in the labour force (91%), to be employed (96%), and to be working full-time (86%) compared to FDH from other discipline clusters. They also reported comparable earnings to other Commerce and Administration FDH who were no longer studying.

### Relationship Between the First Degree and Job

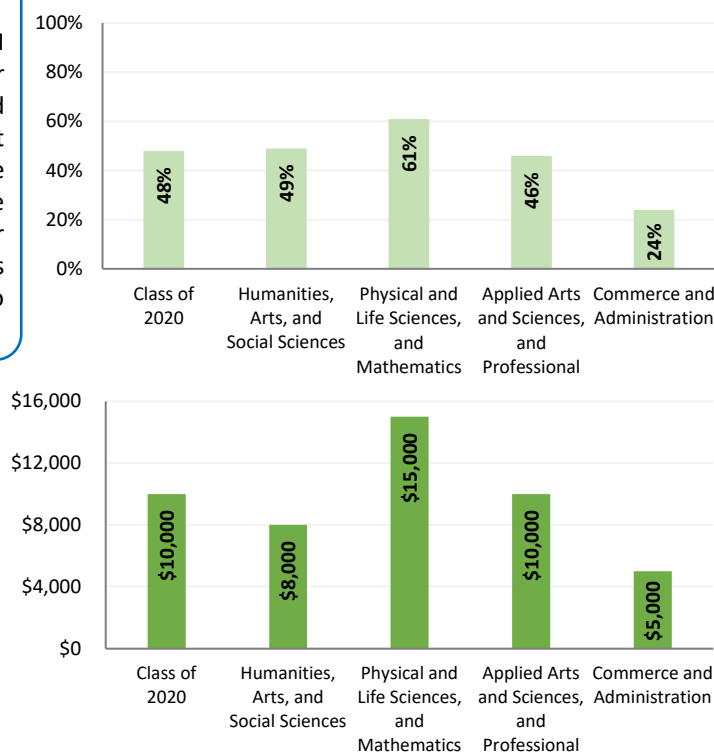
A first degree in the liberal arts and sciences provides generic skills and knowledge in a particular field. Although there may not be a direct link between the field of study and a specific occupation or employment sector, the skills learned can be applied to a variety of different jobs. In contrast, applied and professional programs provide practical training and may have a direct link to a particular profession. To capture the relationship between a degree and a job, the MPHEC combines two variables: the extent to which FDH report that "their job is related to their degree" or that "they are using the skills learned during their program". Two years after graduation, 71% of employed FDH from the liberal arts and sciences programs were working in a job related to their degree or using the skills learned during their program, compared to 86% of FDH from applied and professional programs.

### Financing Further Studies

The type of programs pursued after a first degree and the sources of funding for further studies differ across program orientations and discipline clusters. Liberal arts and sciences graduates are more likely to pursue a graduate program, and those pursuing a graduate degree in a science discipline have greater access to scholarships to fund their degrees.

Physical and Life Sciences, and Mathematics FDH were more likely than FDH from other discipline clusters to have received scholarships, grants, or bursaries to finance their further studies, and they received a higher median amount of scholarships (Figure 2). They were also less likely to seek employment while studying (Figure 1). The majority (95%) of Physical and Life Sciences, and Mathematics FDH who were pursuing further studies were enrolled in their program on a full-time basis, and if they were working, they were more likely to be working part-time (65%), which explains the low median earnings for this group (\$22,200).

**Figure 2. The percentage of FDH who received scholarships, grants, or bursaries to finance their further studies (top panel) and the median amount received (bottom panel) by discipline cluster (wN = 881)**



Commerce and Administration FDH were less likely than graduates from other discipline clusters to report receiving money from scholarships, grants, or bursaries to finance their further studies. In contrast, they were the most likely to cite their employer as a source of funding for the programs pursued after their first degree. The most common types of programs pursued by Commerce and Administration FDH were a professional designation (i.e., Chartered Professional Accountant [C.P.A.]) (39%) or a master's degree (25%). Among those who were still pursuing further studies, almost half (49%) were enrolled in their program on a part-time basis, and the majority of them held full-time employment.

## Post-Graduation Pathway Differences Among Population Groups

Although not explored further in this report, there are variations in post-graduation pathways and employment outcomes among FDH from different population groups. For example, gender differences in the discipline cluster of the first degree can lead to different post-graduation pathways. Sixty percent of women and 39% of men completed their first degree in the liberal arts and sciences in 2020. Women (56%) were more likely than men (45%) to pursue further studies and delay their entry into full-time employment (refer to the methodology section for more information on reporting of non-binary persons).

Similarly, FDH who were originally from Canada were more likely than those from outside Canada to complete their first degree in the liberal arts and sciences (51% of FDH from the Maritimes, and 55% of those from the rest of Canada, compared to 44% of FDH from outside Canada). First-degree holders from Canada were more likely than those who originated from outside the country to pursue further studies within two years of graduation (52% versus 38%).

## Summary and Implications

The program orientation and discipline cluster of the first degree are perhaps the most important factors affecting the post-graduation pathways of graduates. Over half of the Class of 2020 Maritime university FDH pursued further studies within two years of graduation. In the liberal arts and sciences, 62% of FDH pursued further studies, and at the time of the survey, 39% of FDH had not yet completed the programs they pursued. The majority of FDH who were still enrolled in further studies were also part of the labour force, but FDH from liberal arts and science programs who were still studying and working were more likely to be working part-time than FDH from applied and professional programs.

Comparing the employment outcomes of the liberal arts and sciences FDH to those from applied and professional programs at the two-year mark can lead to the conclusion that liberal arts and sciences FDH are less likely to be employed and earn less. What this report highlights, however, is the importance of considering the longer-term trajectories of university graduates to obtain a more comprehensive picture of their employment outcomes. The MPHEC Graduate Outcomes survey cycle also includes six-year-out surveys. The next Class to be surveyed will be the Class of 2018 in 2024.

## References

1. MPHEC. Employment Profile of Maritime University First-Degree Holders. April 2023.
2. MPHEC. Class of 2012 Maritime University Graduates' Employment Profile. June 2019.
3. MPHEC. Trends in Maritime Higher Education. The Class of 2012 Six Years On: Pursuing Education After a First Degree. Volume 17, Number 2. June 2020.

## Methodological Notes

The data for analyses were extracted from the Graduate Outcomes (GO) Survey of the Class of 2020 Maritime university graduates. The survey was conducted between September and December 2022. The data presented are for all first-degree holders (graduates who enrolled in their degree without a prior post-secondary credential and graduated with their first degree in 2020), who provided information on the pursuit of further studies. The overall sample size was 1,988 (weighted sample [wN] was 1,974), with a margin of error of  $\pm 2.2$  percentage points, 19 times out of 20. All statistics have been generated from weighted data; data are weighted based on the university of graduation and gender. Statistics in charts may not sum up to 100% due to rounding.

## Definitions

### Program orientation and discipline cluster

Major fields of study are grouped into two program orientations and four broad clusters for analytical purposes:

Liberal arts and sciences:

- Humanities, arts, and social sciences
- Physical and life sciences, and mathematics

Applied and professional programs:

- Applied arts and sciences, and professional programs
- Commerce and administration

A list of fields of study comprising each discipline cluster can be found [here](#).

Pursuit of further education

Graduates reported on their pursuit of an educational program of three months or more, leading towards a diploma, certificate, or degree after graduating with their first degree in 2020. At the time of the survey, they were asked whether they had completed the programs they pursued or they were still enrolled.

Highest credential attained or pursued

The highest credential attained or pursued by graduates after completing their first degree. For those FDH who had completed or were pursuing two or more programs, the highest credential attained or pursued was considered. Credentials were classified into the following levels:

1. Ph.D./doctorate
2. Master's degree
3. Professional health doctorate
4. Undergraduate law degree (LL.B, J.D.)
5. Bachelor of Education
6. Bachelor's degree (excluding B.Ed.)
7. University diploma/certificate
8. College or apprenticeship diploma or certificate (includes private college or training school diploma or certificate)
9. Professional designation (e.g., Chartered Professional Accountant, dietetics)
10. Other (e.g., any other certificate or diploma). The programs with small sample sizes (unweighted  $n < 5$ ) were also combined and reported as "Other".

Percent employed

Graduates who, during the reference week, did any work for pay or profit, or had a job and were absent from work due to maternity or paternity leave, sick leave, or vacation. This measure is calculated by dividing the number employed by the total number in the labour force.

Percent employed full-time

This measure is calculated by dividing the number employed full-time by the total number employed full- or part-time.

Job requires university education/management

This measure is created from the National Occupation Classification (NOC) code structure. Occupations with skill level A and occupation category 0 are included.

Job related to first degree/program skills used

Graduates who reported either that their job was related to their first degree to a moderate, considerable, or great extent or that they were using the skills they learned during their first degree to a moderate, considerable, or great extent.

Median earnings

Annual wage/salary before taxes and other deductions, and include tips and commissions for job held during the reference week recorded based on the respondent's choice (i.e., hourly, weekly, annually, etc.). Median earnings are calculated for employed graduates who reported their wage/salary information. Earnings are rounded to the closest \$100.

Receipt of scholarships, grants, and bursaries

Graduates reported the receipt of non-repayable money from scholarships, grants, or bursaries to finance the studies pursued after their first degree. Percentages and median amounts are calculated for graduates who reported the amount received from these sources.

Gender

This variable is obtained from the universities' administrative data. Hence, it is possible that sometimes the only information available is "sex at birth" in which case it is used as a proxy for "gender." Also, some institutions include "non-binary person" in the "unknown gender" category for the gender variable provided in their files which makes it impossible to publish data on the non-binary population.

Graduates' origin

Graduates reported their primary region of residence in the 12 months before enrolling in the degree program from which they graduated in 2020. Graduates were grouped into three categories: Maritime provinces, rest of Canada, and outside Canada.

### Maritime Provinces Higher Education Commission

82 Westmorland Street, Suite 401  
P.O. Box 6000  
Fredericton, NB E3B 5H1



Telephone: (506) 453-2844  
Email: [mphec@mphec.ca](mailto:mphec@mphec.ca)

[www.mphec.ca](http://www.mphec.ca)



# The Class of 2020 in 2022

## Post-Graduation Pathways of First-Degree Holders

**All First-Degree Holders (wN = 1,974)**

Over half of the Class of 2020 first-degree holders (FDH) had pursued at least one other post-secondary credential within two years of graduation, and at the time of the survey, **31%** had not yet completed the programs they pursued.

**NO  
FURTHER  
STUDIES**

**49%**

**PURSUED FURTHER  
STUDIES†**

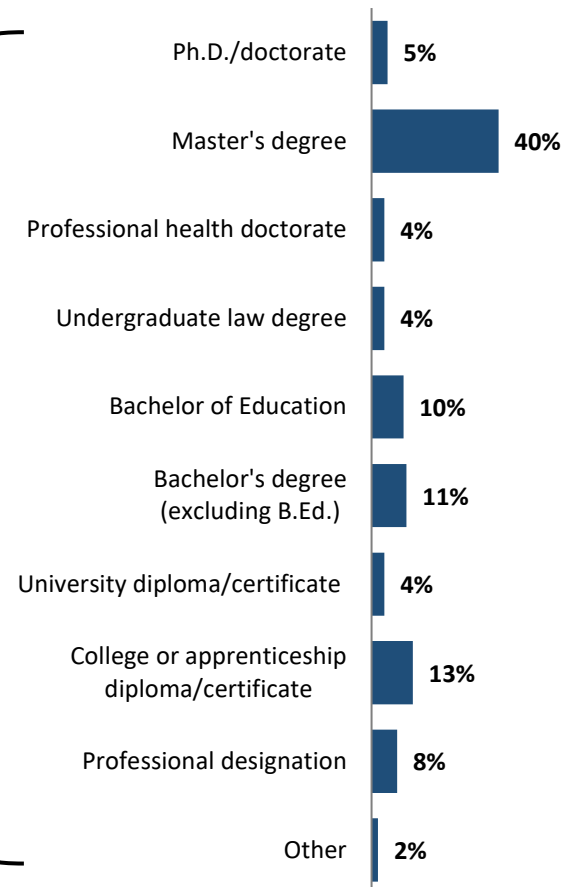
**51%**

**Completed  
further  
studies**

**19%**

**Not  
completed  
or still  
enrolled**

**31%**



OUTCOMES 2 YEARS AFTER COMPLETING FIRST DEGREE			
Percent employed	93%	89%	88%
➡ Percent employed full-time*	91%	83%	53%
Job requires university education/management*	55%	67%	51%
Job related to first degree/program skills used*	79%	79%	77%
Median earnings*	\$55,000	\$52,000	\$36,400
Median full-time earnings*	\$55,100	\$55,000	\$51,000

\* Among employed graduates

† Two percent of all FDH pursued further studies but did not provide any information about their status in the programs pursued.

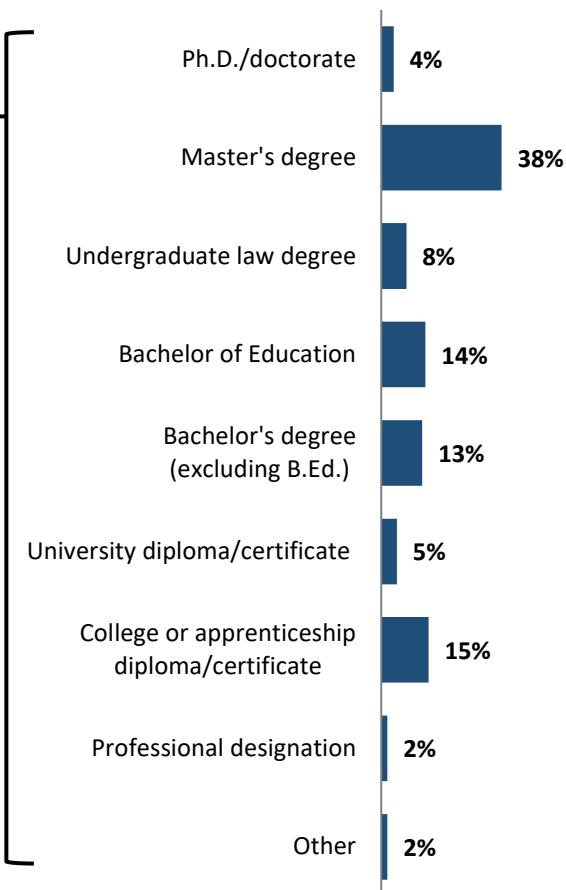
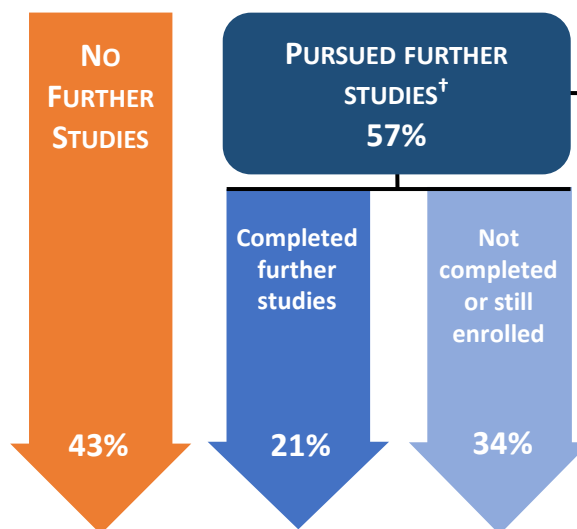


# The Class of 2020 in 2022

## Post-Graduation Pathways of First-Degree Holders

### Humanities, Arts, and Social Sciences (wN = 649)

Within two years of graduation, **57%** of FDH had pursued further studies, and **34%** had not yet completed the programs they pursued. Graduates who had completed further studies were more likely to be working in jobs requiring a university education or in management positions and to be earning more compared to those who did not pursue further studies.



OUTCOMES 2 YEARS AFTER COMPLETING FIRST DEGREE			
Percent employed	90%	90%	88%
➡ Percent employed full-time*	87%	84%	48%
Job requires university education/management*	34%	65%	34%
Job related to first degree/program skills used*	68%	74%	71%
Median earnings*	\$44,400	\$50,000	\$31,200
Median full-time earnings*	\$45,500	\$51,000	\$41,700

\* Among employed graduates

† Two percent of Humanities, Arts, and Social Sciences FDH pursued further studies but did not provide any information about their status in the programs pursued.

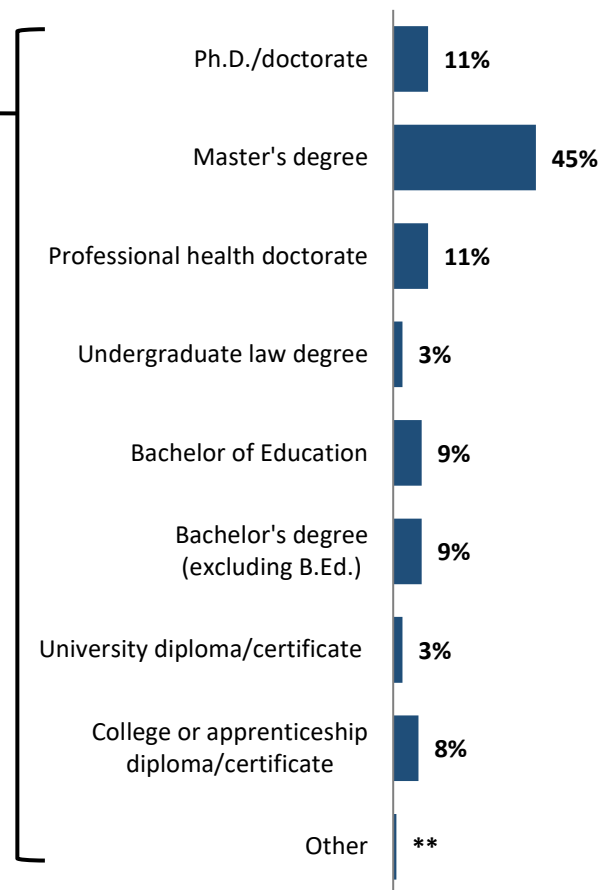
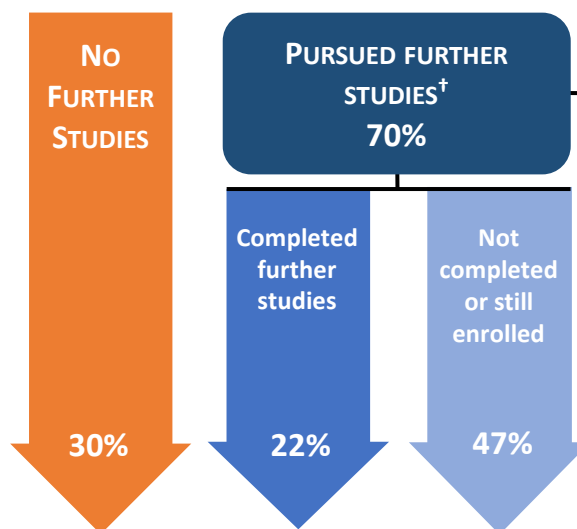


# The Class of 2020 in 2022

## Post-Graduation Pathways of First-Degree Holders

### Physical and Life Sciences, and Mathematics (wN = 359)

Within two years of graduation, **70%** of FDH had pursued further studies, and **47%** had not yet completed the programs they pursued. The majority of graduates who were still pursuing further studies and working were employed part-time.



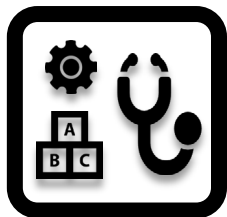
OUTCOMES 2 YEARS AFTER COMPLETING FIRST DEGREE			
Percent employed	89%	84%	85%
➡ Percent employed full-time*	91%	78%	35%
Job requires university education/management*	31%	60%	48%
Job related to first degree/program skills used*	67%	72%	75%
Median earnings*	\$44,500	\$52,000	\$22,200
Median full-time earnings*	\$46,400	\$57,000	\$41,400

\* Among employed graduates

\*\* Data suppressed due to small sub-sample size (unweighted n < 5).

† One percent of Physical and Life Sciences, and Mathematics FDH pursued further studies but did not provide any information about their status in the programs pursued.





# The Class of 2020 in 2022

## Post-Graduation Pathways of First-Degree Holders

### Applied Arts and Sciences, and Professional Programs (wN = 616)

Within two years of graduation, **39%** of FDH had pursued further studies, and **21%** had not yet completed the programs they pursued. Graduates of Applied arts and sciences, and professional programs had the greatest likelihood of being employed in jobs requiring a university education or in management positions and the highest earnings.

**NO  
FURTHER  
STUDIES**

**61%**

**PURSUED FURTHER  
STUDIES<sup>†</sup>**

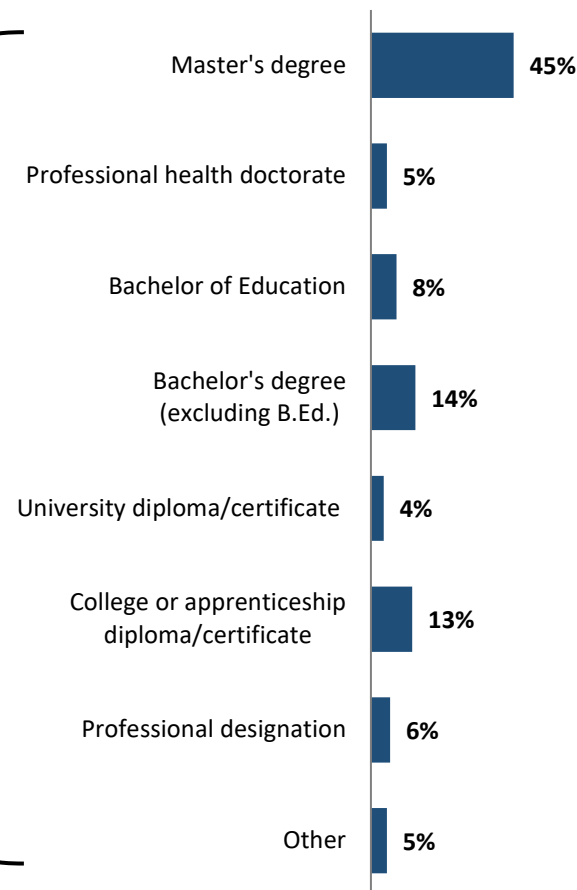
**39%**

**Completed  
further  
studies**

**17%**

**Not completed  
or still  
enrolled**

**21%**



OUTCOMES 2 YEARS AFTER COMPLETING FIRST DEGREE			
Percent employed	95%	89%	85%
➡ Percent employed full-time*	92%	79%	55%
Job requires university education/management*	75%	72%	60%
Job related to first degree/program skills used*	86%	84%	80%
Median earnings*	\$63,000	\$55,500	\$41,600
Median full-time earnings*	\$64,700	\$60,000	\$64,300

\* Among employed graduates

† One percent of Applied Arts and Sciences, and Professional FDH pursued further studies but did not provide any information about their status in the programs pursued.



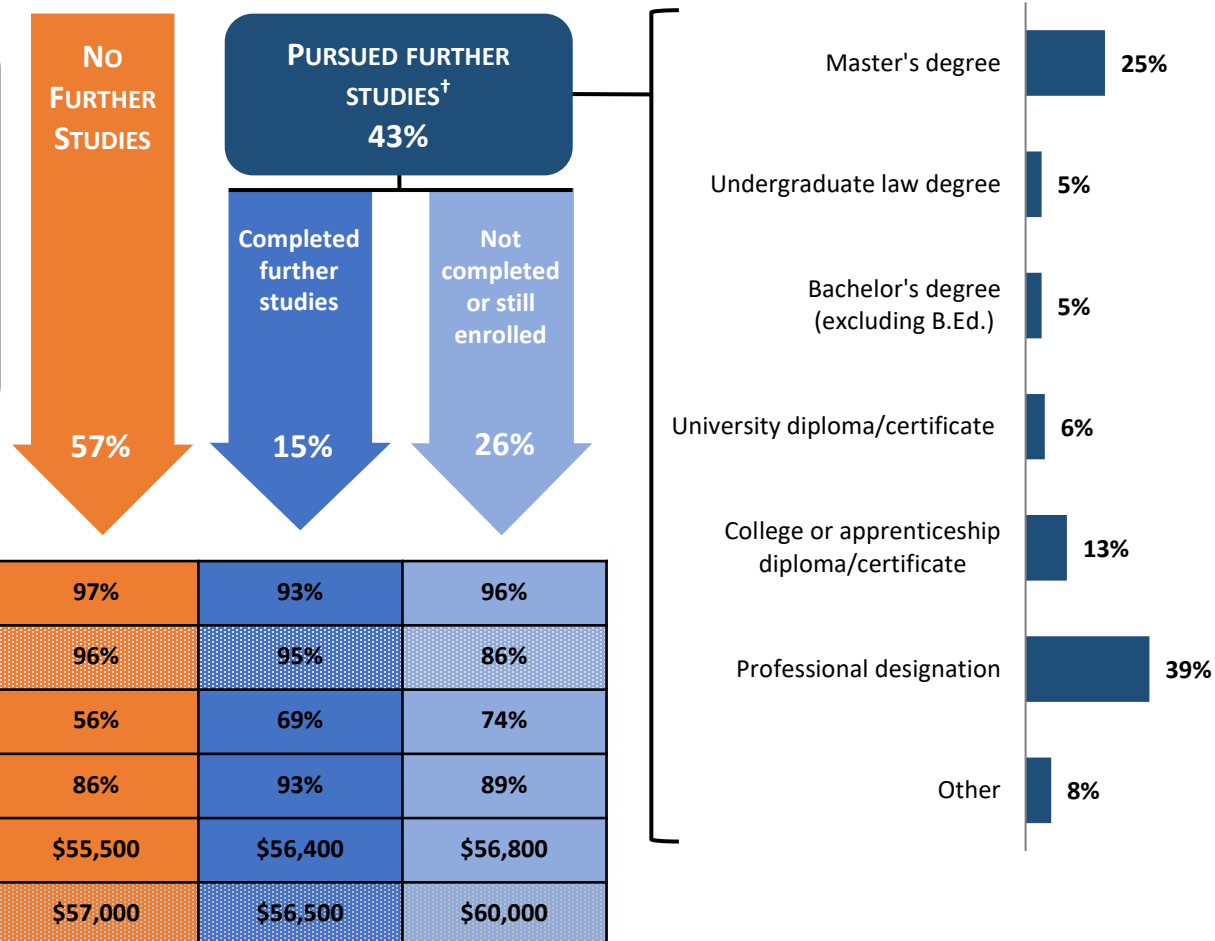


# The Class of 2020 in 2022

## Post-Graduation Pathways of First-Degree Holders

### Commerce and Administration (wN = 350)

Within two years of graduation, **43%** of FDH had pursued further studies, and **26%** had not yet completed the programs they pursued. The majority of graduates who were still pursuing further studies and working were employed full-time and reported comparable earnings to the other two pathway groups.



\* Among employed graduates

<sup>†</sup> Two percent of Commerce and Administration FDH pursued further studies but did not provide any information about their status in the programs pursued.