

44th Statistical Report, 2018

Part I

Canadian Association for Graduate Studies

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1. Graduate enrolments

1.1 Introduction

The objective of this report is to update the information provided in recent Statistical Reports and document the structure and trends in *post-graduate enrolments* and *graduate degrees awarded* in Canada. Information is presented on the number enrolled, and the number of degrees granted for Master's and doctoral programs in Canada, in most cases for the years 1992 to 2015.

Where relevant, details are provided on enrolments and degrees awarded by province, gender, field of study, age, and international student status. Details of Master's and doctoral enrolments and degrees granted, *by university*, are presented in Part II of this Report.

This report will pay particular attention to gender patterns and how they interact with differences and similarities by province, age and international status.

There will also be particular emphasis on trends in the last five years reported: that is, from 2011 to 2015. These years will give an idea of recent trends and will be highlighted in the tables and figures. Where appropriate, they are highlighted in the figures by a boxed area and indicated in the tables by a bold dividing line.

All data in this report are based on tables provided to the Canadian Association for Graduate Studies by Universities Canada (formerly the Association of Universities and Colleges of Canada) under an agreement signed by the two organizations. The Canadian Association for Graduate Studies would like to express its appreciation to Universities Canada and their staff for making these data available.

1.2 Executive summary

• Graduate enrolments

- o In 2015, the most recent year for which we have data, there were 93,929 full-time and 33,090 part-time Master's enrolments in universities in Canada. In the five years from 2011 to 2015, full-time Master's enrolments increased by 10.550, from 83.379, a 13% increase.
- o In 2015, there were 47, 461 full-time and 2,706 part-time doctoral enrolments. In the five years from 2011 to 2015, full-time enrolments increased by 3,066, a 6% increase.
- Ontario, Quebec have had the highest level of full-time graduate enrolments at both the Master's and doctoral level, in every year since 1992 (the first year for



- which we have data for this report). British Columbia and Alberta consistently rank third and fourth in numbers of full-time graduate enrolments.
- The main fields of study with the highest full-time Master's enrolments in recent years (2011-2015) are: Business, management and public administration; Architecture, engineering and related technologies; Social and behavioral sciences and law; and Health and related fields. These fields have also been increasing in recent years.
- O The most numerous main fields of study among full-time doctoral enrolments are: Physical and life sciences and technologies; Social and behavioral sciences and law; Architecture, engineering and related technologies and, to a lesser extent, Humanities. All of these fields except Humanities have also been increasing in recent years.
- o In 2015, 55% of full-time and 60% of part-time Master's enrolments, and 48% of full-time and 54% of part-time doctoral enrolments were by females.
- o Full-time Master's have been more than 50% female since 1997. At no time since 1992 have full-time doctoral enrolments been more than 50% female.
- Among both Master's and doctoral enrolments females tended to dominate in:
 Education; Visual and performing arts and communications technologies; Health and related fields, and Social and behavioural sciences and law, and to a lesser extent, Agriculture, Natural Resources and Conservation.
- Females tended to be underrepresented among both Master's and doctoral enrolments in: Architecture, engineering and related technologies; Mathematics; and Computer and information sciences.
- o In 2015, 27% of full-time Master's and 34% of full-time doctoral enrolments were by international students. From 2011 to 2015, international enrolments increased by 44% (from 17,412 to 23,041) among full-time Master's enrolments and 31% (from 12.648 to 16,557) among full-time doctoral enrolments.
- The percent of females among full-time graduate enrolments by international students has increased in the last five and the last ten years.
- The provinces with the highest percentage of full-time international Master's
 enrolments are: Newfoundland and Labrador, New Brunswick and Saskatchewan.
 For full-time doctoral enrolments, the provinces with the largest percentage of
 international enrolments are: Newfoundland and Labrador, Manitoba, Alberta and
 Saskatchewan.
- Ontario, the province with the highest number of overall graduate enrolments has one of the lowest percentages of international students among these enrolments.



- International enrolments were highest among full-time graduate enrolments in the main fields of: Architecture, engineering and related technologies and Mathematics; Computer and information sciences.
- The largest age group among full-time Master's enrolments is (and has been since 1992) those less than 25 years of age.
- The largest age group among full-time doctoral enrolments is (and has been since 1992) those 25-29 years of age.
- The percent female is highest among the youngest and the oldest age groups, for both Master's and doctoral full-time enrolments.
- The percent international is highest among the 25 to 29-year age group for both Master's and doctoral full-time enrolments. For full-time Master's enrolments the percent international has been increasing in recent years for those less than 25 years of age.
- As was seen earlier Statistical Reports, there has been a shift away from Europe to Asia in terms of the world region from which full-time international graduate enrolments are drawn. In 2015, 13% of Master's and 18% of doctoral full-time international enrolments were from Europe. In 2015, 63% of full-time Master's and 51% of full-time international doctoral enrolments were from Asia.
- More than three quarters (79%) of full-time Master's enrolments by Canadian citizens and permanent residents report the same province of residence as the one in which they are enrolled for a graduate program. The equivalent number for full-time doctoral enrolments is 75%. The percentage of full-time graduate enrolments from other provinces is highest in: New Brunswick, Prince Edward Island and Newfoundland and Labrador.

• Graduate degrees granted

- o In 2015, there were 49,254 Master's degrees granted in Canada (up from 19,434 in 1992), and 7,407 doctoral degrees granted (compared to 3,125 in 1992). The number graduating has been increasing in recent years.
- o In 2015, 56% of the Master's degrees and 46% of the doctoral degrees awarded went to females.
- In 2015, 24% of the Master's degrees and 23% of the doctoral degrees were awarded to international students. The number and percentages of international students among these graduates has increased in recent years.
- Ontario and Quebec have the most graduates.
- o The same fields of study dominated graduates as was true for enrolments.



 In 2015, 12% of Master's degrees and 21% of doctoral degrees granted to international students went to those from Europe. The same year, 67% of Master's degrees and 48% of doctoral degrees granted to international students went to those from Asia.

1.3 Information presented in the report

The information presented in this report is based on Statistics Canada data, provided to the Canadian Association for Graduate Studies by Universities Canada. This information is based on reports submitted by universities to Statistics Canada. No attempt has been made to verify the data sent by Universities Canada.

Much but not all of the information provided in the current report may also be accessed directly from Statistics Canada's socio-economic data base. Information on graduate enrolments can be found in Statistics Canada Tables¹ 37-10-0018-01, 37-10-0011-01 and 37-10-0015-01; that on degrees awarded are in Tables 37-10-0020-01 and 37-10-0087-01. (Some of the data on degrees awarded obtained from Universities Canada for this report were supplemented with data from Table 37-10-0020-01 to extend the time frame to match other tables.)

If graduate programs were added or dropped or changed in some way that affects either enrolment rates or degrees granted, these changes can have a major, unexplained, impact on numbers for the affected institution(s), and provincial totals.

Information in this report is restricted to graduate enrolments and degrees granted in degree programs. That is, omitted are those in graduate diploma or certificate programs, residency programs and those enrolled in non-program courses.

All the data provided are subject to Statistics Canada random rounding procedure (see below). This rounding can have a dramatic effect on those institutions with relatively small numbers with respect to the measure being reported. For this reason, caution should be exercised in interpreting shifts over time when relatively small numbers are involved.

Note that Statistics Canada has revised and updated some information for recent years, so the numbers in this Report for those years do not exactly match those in earlier Statistical Reports, although the differences in the two reports are very minor.

¹ Statistics Canada has recently revised its tables, their format and their labels. The tables referenced here were formerly CANSIM Tables 477-0019, 477-0029, 477-0033, 477-0020, and 477-0034.



The information in the report takes various forms. One involves tables showing numbers, often over a time period. These numbers provide information on the *volume of enrolments or degrees granted*. If one wants to know what the trend in numbers is over time, or how many are enrolled in Master's or doctoral programs, or how many degrees were awarded at any given time, these tables provide the relevant detail.

The tables by field of study can give an indication of how these graduate enrolments are clustered. However, it is important to keep in mind that identifying, for example, which "field of study" has the most enrolments to a large extent reflects how the fields are organized and collapsed. For example, combining "Humanities" and "Social and Behavioural Sciences and Law" would increase the number in that "field". Information about the Classification of Instructional Programs, that forms the basis of the analyses of field of study, can be found at: http://www.statcan.gc.ca/pub/12-590-x/12-590-x2012001-eng.pdf.

In the analysis of detailed field of study, several fields were omitted because they had few, if any graduate enrolments. These include Engineering technology, and Communications technologies and support services which have recently had some graduate enrolments. These omitted fields are included in the totals reported in various figures and tables.

Another type of analysis involves looking specifically at the extent of *change over time*. This procedure sometimes involves looking at the absolute increase over time (how many more or fewer students/graduates); other times the rate of growth (percentage change) over time is examined. Obviously, the percentage change reflects the size of the change relative to the level at the starting point. An increase of 100 individuals is a larger percentage increase if one started at 500 than if the original number were 2,000.

An important limitation to the data over time derives from the fact that there are sometimes missing or inconsistent data for particular institutions. For example, the University of Regina did not provide any data from 2005-2008, affecting both provincial and, sometimes, overall totals. There is an unexplained drop in degrees granted from the University of Saskatchewan from 2011 to 2012. Also, there was an apparent change in the definition of "full-time" versus "part-time" at the University of Montreal in 1998, and at Concordia University in 2005, evident in the decrease in part-time enrolments and an equivalent increase in full-time enrolments. The latter is somewhat less obvious because of the large number of full-time enrolments, so changes at one institution have less of an effect. However, these shifts affect who is included in all of the "full-time enrolments" tables over time.

Charts which complement (or sometimes replace) the detailed tables are used to visually illustrate the relevant changes over time.



There are four key pieces of information presented in this report that will be of interest to readers:

- 1. The *absolute number* of enrolments or degrees granted *in 2015*, the most recent year for which data are available. When these numbers are broken down by province, or gender, or immigration status, they give a portrait of graduate enrolments in Canada.
- 2. The *number of enrolments or degrees granted over time*. For most measures we have data from 1992 to 2015; for some just for 1999-2015, or a shorter time frame. In those sections where one is examining a detailed breakdown (e.g. by province or by field of study), presenting all the data would make a table prohibitively large and complex. In order to clarify the relevant patterns, data are sometimes presented for 1995, 2005 and 2015. (However, as noted above, in most cases more detail can be obtained from the CANSIM tables, listed above.) Further the text and the data highlight the years 2011 to 2015, the most recent years for which we have data.
- 3. The *change in enrolments or degrees granted over time*. Again, for ease of presentation, in most instances these are presented for the years 1995 to 2015 (and sometimes also for changes 1995-2005 and 2005-2015). One or both of the absolute and percentage changes are presented.

1.4 Methodological notes

Notes from Statistics Canada:

- <u>Fall snapshot:</u> Enrolments are based on students enrolled in the postsecondary institutions at the time of the fall snapshot date, that is, a single date chosen by the institution which falls between September 30th and December 1st. Therefore, students who are not enrolled during this time period are excluded and enrolment totals do not represent a full academic year.
- <u>Program counts:</u> It should also be noted, enrolments are based on program counts and not student counts. If a student is enrolled in more than one program as of the snapshot date, then all of their programs are included in the count.
- Random rounding: All counts are randomly rounded to a multiple of 3 using the following procedure: counts which are already a multiple of 3 are not adjusted; counts one greater than a multiple of 3 are adjusted to the next lowest multiple of 3 with a probability of two-thirds and to the next highest multiple of 3 with a probability of one-third. The probabilities are reversed for counts that are one less than a multiple of 3.

Notes from Universities Canada:

• <u>Use of estimates (Imputed institutions):</u> Enrolment and graduate counts for certain institutions are preliminary or based on estimates.



- o University of Ontario Institute of Technology, 2008.
- o University of Victoria 2004-2007.
- <u>Institutions no longer surveyed:</u> Due to a revision of the institutions in the survey, the following are not included as of 2008/2009 for enrolments and 2008 for graduates: in New Brunswick, Bethany Bible College; in Ontario, Institut de pastorale des Dominicains, Tyndale University College and Seminary, Redeemer University College, Royal Military College of Canada; in Alberta, Newman Theological College; in British Columbia, Regent College, Vancouver School of Theology, Trinity Western University, and Seminary of Christ the King.
- <u>Changes in institutional status:</u> The following institutions, previously colleges, changed to university status.
 - As of 2002/2003 reporting year: Ontario College of Art and Design (Ontario);
 - o as of 2004/2005 reporting year: Alberta College of Art and Design (Alberta);
 - o as of 2005/2006 reporting year: University College of the Cariboo and Open Learning Agency (British Columbia);
 - as of 2008/2009 reporting year: Capilano College, Malaspina University College,
 Emily Carr Institute of Art and Design, Kwantlen University College and University
 College of the Fraser Valley (British Columbia);
 - o as of 2009/2010 reporting year: Grant McEwan University and Mount Royal University (Alberta);

• Changes in reporting:

- o in 2013/2014, data for the Nova Scotia Agricultural College are reported by Dalhousie University;
- o in 2013/2014, the Collège Dominicain de philosophie et de théologie became a campus of Carleton University;
- o in 2013/2014, graduate data for Algoma University College are reported by Laurentian University while their enrolment data are reported by Algoma University.
- <u>Changes in registration status:</u> Users of the enrolment data should be aware that many reporting anomalies exist in the institutional time-series. Some institutions have changed the course load requirements to classify students into the full- and part-time categories, causing significant breaks in at least their own institutional time series data
 - O University of Manitoba 1993 to 1994, where to qualify for full-time study the course load requirement fell to 60% in 1994 from 80% in 1993;
 - O Université de Montreal, changes as of 1997;



- For University of Saskatchewan, the definition of full-time and part-time has changed. The registration status for enrolments in 2008/2009 refers to the September to December period. In the previous years, it referred to the September to April period.
- University of British Columbia, changes as of 2009.
- <u>Home province (province of residence)</u>: Under counting is likely due to incomplete reporting of permanent address. Use with caution.
- Classification of Instructional Programs (CIP) Coding: The first Canadian version of this classification (listed in this report as "field of study") appeared in the year 2000. CIP coding in earlier years 1992 to 1999 should be interpreted with caution. This coding is used in the "Main field of study" and "Detailed field of study" tables and charts.
- <u>University of Regina</u>: From 2005 to 2008 enrolments and graduates counts for the University of Regina are not available.
- <u>University of Saskatchewan:</u> residency counts in the health-related programs are not included as of 2008/2009 for enrolments and 2008 for graduates.
- Quebec institutions: The graduate counts for the Quebec institutions up to and including 2008 do not include micro programs and attestations however, as of 2009, these are included.
- <u>University of Winnipeg:</u> A large portion of the graduate programs, (program type = 59) for University of Winnipeg for 2011/12 and 2012/13 are not reported. These are the Theology and Marriage and Family programs. Due to a constraint in their student information system they cannot extract information on these programs.



1.5 Portrait of graduate enrolments in Canada, 2015

Table 1.1 – Profile of full-time Master's and doctoral enrolments in Canada, 2015

		Full-time Master's	Percent in	Full-time	Percent in
			2015	Doctoral	2015
Total Enrolments					
Canada		93,929	100	47 461	100
Gender	Male	41,979	44.7	25,785	52.1
	Female	51,918	55.3	23,670	47.9
International					
enrolments		25,041	26.7	16,557	33.5
Province of study	Newfoundland and Labrador	1,572	1.7	681	1.4
	Prince Edward Island	366	0.4	69	0.1
	Nova Scotia	2,898	3.1	765	1.5
	New Brunswick	930	1.0	429	0.9
	Quebec	25,890	27.6	15,159	30.6
	Ontario	37,905	40.4	19,512	39.4
	Manitoba	2,334	2.5	1,041	2.1
	Saskatchewan	2,499	2.7	1,230	2.5
	Alberta	8,775	9.3	4,809	9.7
	British Columbia	10,758	11.5	5,763	11.7
Age groups	<25 years	93,927	36.4	2,487	5.0
- 		34,230	35.8	19,815	40.1
		33,627	12.9	13,986	28.3
		12,150	14.8	13,167	26.6
		,		·	
Main field of study		3,186	3.4	1,674	3.4
		-,	-	, -	
	Related Technologies	15,585	16.6	9,408	19.0
	Business, Management &				
	Public Administration	18,423	19.6	1,833	3.7
	Education	6,357	6.8	2,751	5.6
	Quebec Ontario Manitoba Saskatchewan Alberta British Columbia <25 years 25-29 years 30-34 years 35 years and over Agriculture, Natural Resources, Conservation Architecture, Engineering & Related Technologies Business, Management & Public Administration Education Health & Related Fields Humanities Mathematics, Computer & Information Sciences Personal, Protective & Transportation Services Physical & Life Sciences & Technologies Social & Behavioral Sciences & Law Visual & Performing Arts &	13,596	14.5	4,122	8.3
		5,244	5.6	4,575	9.2
		5,592	6.0	2,856	5.8
		105	0.1	12	0.0
	Physical & Life Sciences &				
		8,937	9.5	10,149	20.5
		40 =	,	10.000	
		13,512	14.4	10,320	20.9
	•				_
	Communications Tech	2,703	2.9	1,239	2.5
	Other	657	0.7	522	1.1

Source: Statistics Canada

Table 1.1 gives the overall portrait of full-time enrolments in Canada in 2015. At that time there were 93,929 full-time Master's and 47,461 full-time doctoral enrolments. In data not shown, there also 33,090 part-time Master's enrolments and 2,706 part-time doctoral enrolments. For



reasons outlined below, the focus of this Report (and the earlier Statistical Reports) is primarily on full-time enrolments.

Over half (55%) of all full-time Master's enrolments and 48% of full-time doctoral enrolments in 2015 were by females. Twenty-seven percent of full-time Master's enrolments in 2015 were by international students. The corresponding figure for full-time doctoral enrolments was 31%.

The largest concentration of graduate enrolments is in universities in Ontario (40% of full-time Master's and 39% of full-time doctoral enrolments) and Quebec (28% and 31%). However, a third of full-time graduate enrolments in 2015 were outside these two provinces. British Columbia has 12% of full-time Master's and 12% of full-time doctoral enrolments. Alberta follows closely behind with 9% of full-time Master's and 10% of full-time doctoral enrolments in 2015.

Not surprisingly the age distributions of full-time Master's and doctoral enrolments differed. More of the Master's enrolments are concentrated in the younger age groups, while doctoral enrolments tend to be older. So, among full-time Master's enrolments in 2015, 36% were under 25 years of age; 36% were 25-29; 13% were 30-34 and 15% were 35 years of age and over. The equivalent percentages for full-time doctoral enrolments in 2015 were: 5% under 25, 40% 25-29 years of age, 28% 30-35 years of age, and 27% 35 and over.

Slightly different fields of study dominated the Master's and doctoral full-time enrolments. Those with the largest concentrations at the Master's level were: Business, Management and Public Administration (20%), Architecture, Engineering and Related Technologies (17%), Health and Related fields (15%), and Social and Behavioral Sciences and Law (14%).

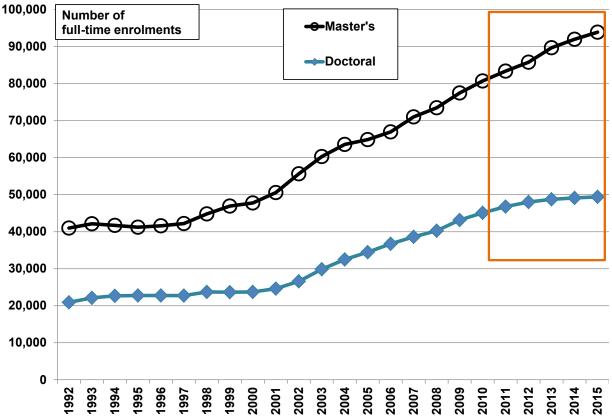
Concentrations in full-time doctoral enrolments are seen in: Physical and Life Sciences and Technologies (21%), Social and Behavioral Sciences and Law (21%), and Architecture, Engineering and Related Technologies (19%).

1.6 Full-time and part-time enrolments at the Master's and doctoral levels

Full-time graduate enrolments have continued to increase, especially since 2002. The increase is more pronounced for full-time Master's than for full-time doctoral enrolments. See Figure 1.1 and Figure 1.2.



Figure 1.1 - Full-time Master's and doctoral enrolments, Canada, 1992-2015



Source: Statistics Canada.



14 Year-to-year percent change in full-time enrolments 12 ■ Master's Doctoral 10 8 6 4 2 0 -2 2005 2006 2004 2007

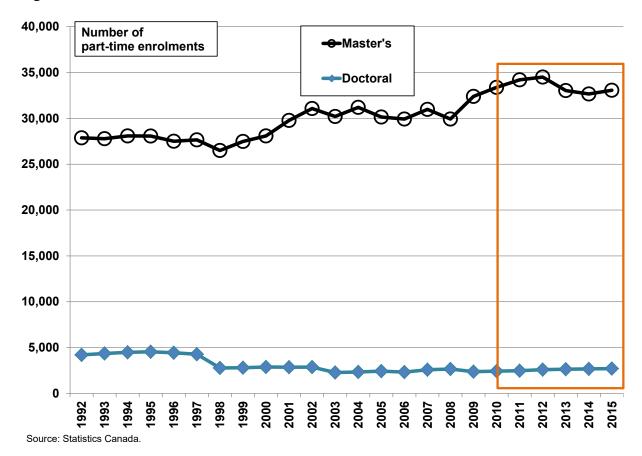
Figure 1.2 – Full-time Master's and doctoral enrolments, percent annual change, 1992-2015

Source: Statistics Canada.

The patterns for part-time enrolments are somewhat different, partially reflecting the fact that universities change their definition of "part-time" over time. While there is some variation in part-time graduate enrolments, it is not large; mostly the levels are fairly stable, especially at the doctoral level. The number (and percentage) of students pursuing doctoral studies part-time are much lower than for Master's. See Figure 1.3 and Figure 1.4



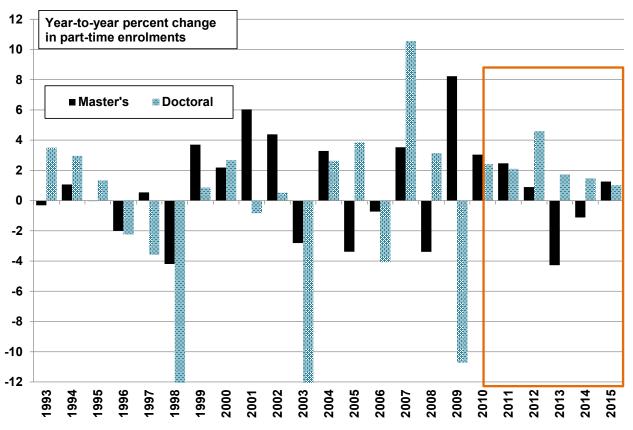
Figure 1.3 - Part-time Master's and doctoral enrolments, Canada, 1992-2015



13



Figure 1.4 - Part-time Master's and doctoral enrolments, percent annual change, 1992-2015



Source: Statistics Canada.



Table 1.2 gives the detailed numbers and annual percent change which are presented graphically in Figure 1.1 to Figure 1.4.

Table 1.2 - Full-time and part-time Master's and doctoral enrolments in Canada, 1992-2015

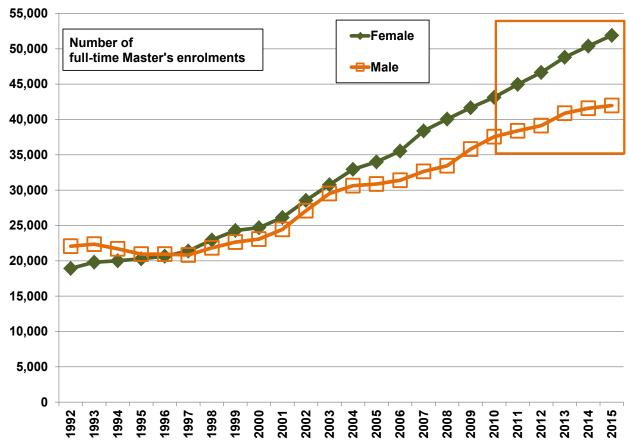
	Full-time	Full-time	Full-time	Full-time	Full-time	Full-time	Part- time	Part- time	Part- time	Part- time	Part- time	Part- time
Year	Master's enrolments - number	Master's enrolments – annual change	Master's enrolments - % annual change	Doctoral enrolments - number	Doctoral enrolments - annual change	Doctoral enrolments - % annual change	Master's enrolments - number	Master's enrolments - annual change	Master's enrolments - % annual change	Doctoral enrolments - number	Doctoral enrolments - annual change	Doctoral enrolments - % annual change
1992	40,989			20,910			27,873			4,203		
1993	42,156	1,167	2.8	22,122	1,212	5.8	27,786	-87	-0.3	4,350	147	3.5
1994	41,700	-456	-1.1	22,665	543	2.5	28,083	297	1.1	4,479	129	3.0
1995	41,223	-477	-1.1	22,764	99	0.4	28,074	-9	0.0	4,539	60	1.3
1996	41,583	360	0.9	22,758	-6	0.0	27,510	-564	-2.0	4,437	-102	-2.2
1997	42,189	606	1.5	22,722	-36	-0.2	27,660	150	0.5	4,278	-159	-3.6
1998	44,796	2,607	6.2	23,724	1,002	4.4	26,499	-1,161	-4.2	2,781	-1,497	-35.0
1999	46,935	2,139	4.8	23,676	-48	-0.2	27,480	981	3.7	2,805	24	0.9
2000	47,760	825	1.8	23,727	51	0.2	28,080	600	2.2	2,880	75	2.7
2001	50,574	2,814	5.9	24,621	894	3.8	29,775	1,695	6.0	2,856	-24	-0.8
2002	55,638	5,064	10.0	26,595	1,974	8.0	31,080	1,305	4.4	2,871	15	0.5
2003	60,297	4,659	8.4	29,874	3,279	12.3	30,207	-873	-2.8	2,280	-591	-20.6
2004	63,591	3,294	5.5	32,511	2,637	8.8	31,200	993	3.3	2,340	60	2.6
2005	64,875	1,284	2.0	34,455	1,944	6.0	30,144	-1,056	-3.4	2,430	90	3.8
2006	66,966	2,091	3.2	36,723	2,268	6.6	29,925	-219	-0.7	2,331	-99	-4.1
2007	71,034	4,068	6.1	38,601	1,878	5.1	30,981	1,056	3.5	2,577	246	10.6
2008	73,494	2,460	3.5	40,260	1,659	4.3	29,931	-1,050	-3.4	2,658	81	3.1
2009	77,484	3,990	5.4	43,158	2,898	7.2	32,394	2,463	8.2	2,373	-285	-10.7
2010	80,715	3,231	4.2	45,102	1,944	4.5	33,378	984	3.0	2,430	57	2.4
2011	83,409	2,694	3.3	46,782	1,680	3.7	34,176	798	2.4	2,481	51	2.1
2012	85,809	2,400	2.9	48,006	1,224	2.6	34,470	294	0.9	2,595	114	4.6
2013	89,733	3,924	4.6	48,726	720	1.5	32,991	-1479	-4.3	2,640	45	1.7
2014	91,986	2,286	2.5	49,131	381	0.8	32,661	-369	-1.1	2,679	39	1.5
2015	93,894	1,908	2.1	49,425	294	0.6	33,072	411	1.3	2,706	27	1.0

Source: Statistics Canada



1.7 Full-time and part-time enrolments by Gender

Figure 1.5 – Full-time Master's enrolments by gender, 1992-2015



Source: Statistics Canada.



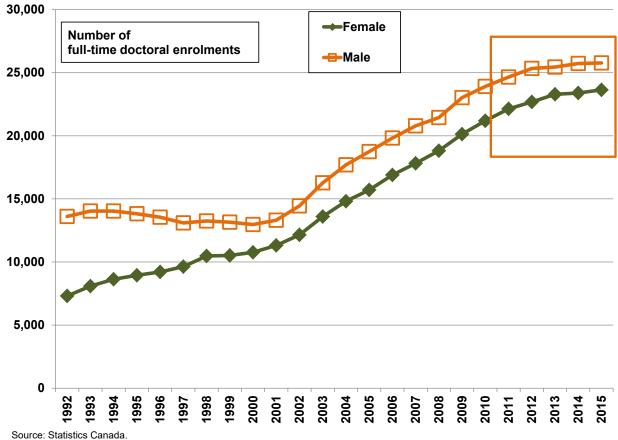


Figure 1.6 – Full-time doctoral enrolments by gender, 1992-2015

Figure 1.5 and

Figure 1.6 show that the number of full-time enrolments by males as well as those by females has been increasing since 1997 (for Master's) or 2001 (for doctoral). The percentage of females versus males among full-time graduate enrolments has hardly varied since 2008.

The percent female is higher among part-time than among full-time Master's and doctoral enrolments in every year from 1992 to 2015. See Table 1.3and Table 1.4.



Table 1.3 – Full-time and part-time Master's and doctoral enrolments by gender, 1992-2015

					_	Γ	_			-	-								0		,		_	_	
	Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Full- time																									
Master's	Male	22,068	22,356	21,693	20,946	20,937	20,817	21,840	22,641	23,070	24,447	27,087	29,514	30,636	30,864	31,404	32,643	33,441	35,805	37,560	38,391	39,129	40,890	41,586	41,970
	Female	18,921	19,803	20,007	20,277	20,649	21,375	22,953	24,294	24,687	26,127	28,551	30,777	32,946	33,993	35,529	38,382	40,044	41,667	43,134	44,991	46,662	48,825	50,385	51,900
Doctoral	Male	13,605	14,037	14,037	13,818	13,548	13,092	13,251	13,158	12,966	13,311	14,445	16,272	17,697	18,750	19,821	20,784	21,444	23,025	23,910	24,651	25,329	25,434	25,734	25,776
	Female	7,308	8,082	8,631	8,949	9,210	9,630	10,473	10,521	10,764	11,310	12,150	13,602	14,814	15,705	16,896	17,817	18,819	20,130	21,186	22,134	22,671	23,286	23,391	23,643
Part- time																									
Master's	Male	12,993	12,852	12,888	12,726	12,357	12,384	12,000	12,597	12,786	13,887	14,301	13,845	14,121	13,257	12,678	13,047	12,294	13,167	13,458	13,845	13,929	13,227	12,963	13,119
	Female	14,880	14,931	15,192	15,351	15,153	15,276	14,496	14,883	15,291	15,879	16,779	16,362	17,070	16,878	17,244	17,931	17,625	19,200	19,908	20,316	20,526	19,749	19,686	19,941
Doctoral	Male	2,412	2,466	2,520	2,502	2,397	2,328	1,491	1,515	1,512	1,494	1,488	1,137	1,188	1,224	1,179	1,335	1,374	1,218	1,284	1,260	1,299	1,323	1,287	1,257
	Female	1,788	1,887	1,962	2,037	2,040	1,953	1,290	1,290	1,365	1,362	1,383	1,143	1,152	1,203	1,155	1,242	1,281	1,152	1,149	1,221	1,293	1,320	1,389	1,452

Source: Statistics Canada



Table 1.4 - Full-time and part-time Master's and doctoral enrolments, percent female, 1992-2015

Percent female	F	ull-time	Pa	rt-time
	Master's	Doctoral	Master's	Doctoral
1992	46.2	34.9	53.4	42.5
1993	47	36.5	53.7	43.4
1994	48	38.1	54.1	43.8
1995	49.2	39.3	54.7	44.9
1996	49.7	40.5	55.1	46
1997	50.7	42.4	55.2	45.7
1998	51.2	44.1	54.7	46.4
1999	51.8	44.4	54.2	46
2000	51.7	45.4	54.5	47.4
2001	51.7	45.9	53.3	47.7
2002	51.3	45.7	54	48.2
2003	51	45.5	54.2	50.1
2004	51.8	45.6	54.7	49.2
2005	52.4	45.6	56	49.5
2006	53.1	46	57.6	49.5
2007	54	46.2	57.9	48.2
2008	54.5	46.7	58.9	48.2
2009	53.8	46.6	59.3	48.5
2010	53.4	47	59.6	47.3
2011	53.9	47.3	59.4	49.2
2012	54.4	47.2	59.5	49.8
2013	54.4	47.8	59.9	50
2014	54.8	47.6	60.3	51.8
2015	55.3	47.8	60.3	53.7

Source: Statistics Canada



1.8 Full-time enrolments by Province

Ontario and Quebec have the largest number of full-time graduate enrolments; Prince Edward Island, the smallest. Master's and doctoral enrolments are continuing to increase in Ontario; doctoral enrolments are also increasing in some of the smaller provinces.

Figure 1.7 – Full-time Master's enrolments by province, 1992-2015

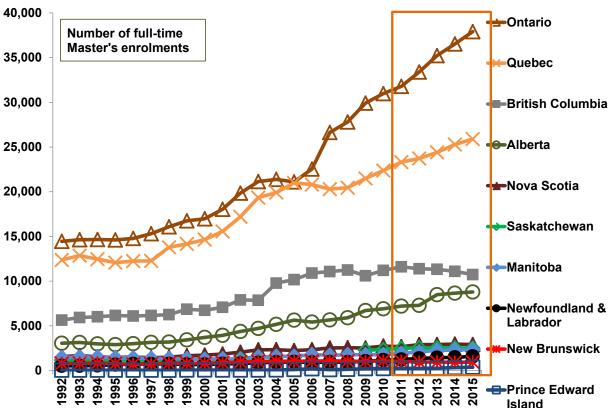




Figure 1.8 – Full-time Master's enrolments by province, six smaller provinces, 1992-2015

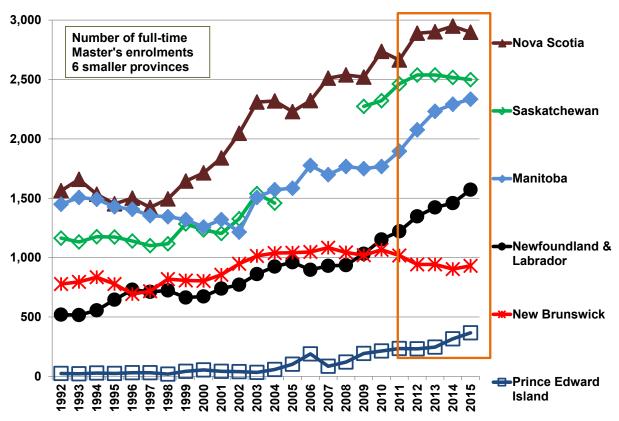




Figure 1.9 – Full-time doctoral enrolments by province, 1992-2015

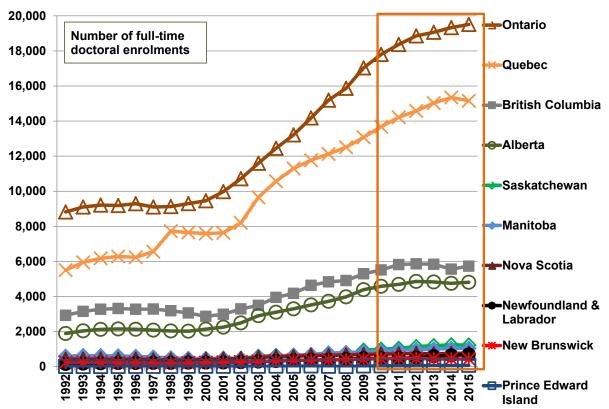
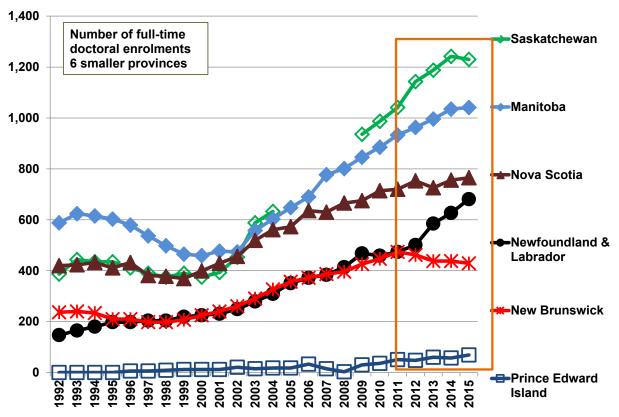




Figure 1.10 - Full-time doctoral enrolments by province, six smaller provinces 1992-2015





1.9 Full-time enrolments by Province and Gender

In almost every province (except Newfoundland and Labrador), there was a larger increase in Master's enrolments from 1995 to 2015 (numerically and percentage increase) for females than males. Among doctoral enrolments; all provinces had a numeric and percentage increase among females greater than among males.

Table 1.5 Full-time Master's enrolments by gender and province, 1995, 2005, 2015

Table 1.5 Ft	ili tililic	Master	3 CHIOH	nents 0	y gende	and p	TOVINCE	, 1773,	2005, 2	2013	
Master's	Gender				% female	% female	% female	Change	% change	Change	% change
	Year	1995	2005	2015	1995	2005	2015	1995-2015	1995-2015	2005-2015	2005-2015
Canada	Male	20,946	30,864	41,970				21,024	100.4	11,106	36.0
	Female	20,277	33,993	51,900	49.2	52.4	55.3	31,623	156.0	17,907	52.7
Newfoundland & Labrador	Male	321	417	822				501	156.1	405	97.1
	Female	324	543	750	50.2	56.6	47.7	426	131.5	207	38.1
Prince Edward Island	Male	12	39	114				102	850.0	75	192.3
	Female	12	66	252	50.0	62.9	68.9	240	2000.0	186	281.8
Nova Scotia	Male	711	1,041	1,272				561	78.9	231	22.2
	Female	741	1,185	1,623	51.0	53.2	56.1	882	119.0	438	37.0
New Brunswick	Male	408	528	480				72	17.6	-48	-9.1
	Female	369	513	453	47.5	49.3	48.6	84	22.8	-60	-11.7
Quebec	Male	6,066	10,254	11,910				5,844	96.3	1,656	16.1
	Female	6,006	10,734	13,977	49.8	51.1	54.0	7,971	132.7	3,243	30.2
Ontario	Male	7,590	9,882	17,100				9,510	125.3	7,218	73.0
	Female	7,017	11,214	20,793	48.0	53.2	54.9	13,776	196.3	9,579	85.4
Manitoba	Male	780	702	1,002				222	28.5	300	42.7
	Female	651	879	1,332	45.5	55.6	57.1	681	104.6	453	51.5
Saskatchewan	Male	663	546	1,107				444	67.0	561	102.7
	Female	510	546	1,389	43.5	50.0	55.6	879	172.4	843	154.4
Alberta	Male	1,383	2,826	3,708				2,325	168.1	882	31.2
	Female	1,509	2,799	5,070	52.2	49.8	57.8	3,561	236.0	2,271	81.1
British Columbia	Male	3,009	4,629	4,452				1,443	48.0	-177	-3.8
	Female	3,138	5,517	6,267	51.0	54.4	58.5	3,129	99.7	750	13.6

Source: Statistics Canada



Table 1.6 Full-time doctoral enrolments by gender and province, 1995, 2005, 2015

14616 1.0 1	un time d	octorar	CIIIOIIII	ems by							
Doctoral	Gender										% change
	Year	1995	2005	2015	1995	2005	2015	1995-2015	1995-2015	2005-2015	2005-2015
Canada	Male	13,818	18,750	25,776				11,958	86.5	7,026	37.5
	Female	8,949	15,705	23,643	39.3	45.6	47.8	14,694	164.2	7,938	50.5
Newfoundland and Labrador	Male	138	183	393				255	184.8	210	114.8
	Female	60	168	288	30.3	47.9	42.3	228	380.0	120	71.4
Prince Edward Island	Male	0	12	30				30		18	150.0
	Female	0	9	36	0.0	42.9	54.5	36		27	300.0
Nova Scotia	Male	249	300	429				180	72.3	129	43.0
	Female	162	270	339	39.4	47.4	44.1	177	109.3	69	25.6
New Brunswick	Male	147	189	222				75	51.0	33	17.5
	Female	66	171	207	31.0	47.5	48.3	141	213.6	36	21.1
Quebec	Male	3,942	6,072	7,764				3,822	97.0	1,692	27.9
	Female	2,331	5,229	7,398	37.2	46.3	48.8	5,067	217.4	0 33 6 36 0 1,692 4 2,169 5 2,928	41.5
Ontario	Male	5,352	7,215	10,143				4,791	89.5	2,928	40.6
	Female	3,831	5,994	9,363	41.7	45.4	48.0	5,532	144.4	3,369	56.2
Manitoba	Male	384	384	552				168	43.8	168	43.8
	Female	219	264	486	36.3	40.7	46.8	267	121.9	222	84.1
Saskatchewan	Male	315	306	663				348	110.5	357	116.7
	Female	117	225	570	27.1	42.4	46.2	453	387.2	345	153.3
Alberta	Male	1,278	1,845	2,580				1,302	101.9	735	39.8
	Female	864	1,446	2,229	40.3	43.9	46.4	1,365	158.0	783	54.1
British Columbia	Male	2,010	2,244	3,000				990	49.3	756	33.7
	Female	1,302	1,932	2,727	39.3	46.3	47.6	1,425	109.4	795	41.1

Source: Statistics Canada



Table 1.7 provides more detailed information on the percent female by province.

Table 1.7 –Full-time Master's and doctoral enrolments by province, percent female, 1992-2015

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Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Master's																								
Canada	46.2	47.0	48.0	49.2	49.7	50.7	51.2	51.8	51.7	51.7	51.3	51.0	51.8	52.4	53.1	54.0	54.5	53.8	53.5	53.9	54.4	54.4	54.8	55.3
Newfound- land & Labrador	44.8	45.6	51.6	50.2	49.8	51.7	55.8	56.4	57.3	55.3	55.5	54.7	55.5	56.6	54.2	53.7	52.1	53.2	53.1	51.0	50.4	49.5	48.9	47.7
Prince Edward Island	44.4	50.0	55.6	50.0	60.0	60.0	83.3	71.4	66.7	71.4	71.4	63.6	63.2	62.9	75.8	70.4	65.9	56.3	56.9	64.1	64.5	65.1	65.7	68.9
Nova Scotia	48.9	50.3	51.9	51.0	51.8	53.3	53.8	56.0	53.1	50.8	51.5	51.2	50.5	53.2	56.5	57.6	57.6	55.2	55.3	55.1	53.3	53.4	55.2	56.1
New Brunswick	42.1	47.0	46.2	47.5	47.4	49.2	50.4	48.9	47.9	47.7	46.5	46.3	47.4	49.3	49.7	47.9	48.6	48.5	47.2	46.4	47.8	45.2	47.7	48.6
Quebec	46.7	46.9	48.9	49.8	50.5	50.9	51.5	52.1	51.6	51.6	50.7	50.4	51.0	51.1	51.9	52.8	52.8	52.0	52.3	52.9	53.3	53.6	54.2	54.0
Ontario	45.5	46.1	46.3	48.0	48.3	48.8	49.4	50.1	50.5	50.6	50.3	50.0	51.6	53.2	53.2	53.9	54.6	53.8	53.3	53.3	53.8	53.5	53.9	54.9
Manitoba	41.0	42.9	44.6	45.5	50.2	51.1	50.7	50.2	51.3	51.8	52.6	54.2	55.4	55.6	58.2	59.5	58.1	57.6	57.6	56.0	57.1	57.1	57.8	57.1
Saskat- chewan	37.5	39.5	42.3	43.5	43.7	46.4	45.0	47.1	49.0	52.6	52.5	52.0	50.5	50.0	50.0	50.0	55.2	55.0	55.6	54.9	55.4	54.4	54.2	55.6
Alberta	48.9	50.5	51.9	52.2	51.8	52.1	52.4	52.5	50.5	49.7	49.1	49.8	50.8	49.8	50.8	53.1	52.8	52.0	51.6	54.5	55.6	56.4	56.2	57.8
British	48.5	49.2	49.1	51.0	50.7	54.1	54.7	54.7	55.4	55.6	56.1	55.6	54.3	54.4	54.8	56.4	57.5	57.7	56.4	57.5	57.9	58.3	58.2	58.5
Doctoral																								
Canada	34.9	36.5	38.1	39.3	40.5	42.4	44.1	44.4	45.4	45.9	45.7	45.5	45.6	45.6	46.0	46.2	46.7	46.6	47.0	47.3	47.2	47.8	47.6	47.8
Newfound- land& Labrador	24.5	25.5	28.3	30.3	31.8	39.7	42.6	40.5	41.3	44.2	44.6	47.3	46.6	47.9	50.0	46.9	44.2	43.2	42.9	44.6	43.1	43.9	42.9	42.3
Prince Edward Island*	0.0	0.0	0.0	0.0	50.0	33.3	25.0	50.0	66.7	50.0	42.9	50.0	57.1	42.9	40.0	40.0	50.0	60.0	61.5	64.7	53.3	55.0	55.0	54.5
Nova Scotia	35.7	37.1	37.5	39.4	40.3	43.7	44.8	42.3	44.7	41.7	42.8	42.2	43.3	47.4	48.1	46.0	45.0	45.3	42.9	43.3	42.9	42.8	45.1	44.1
New Brunswick	26.9	27.5	30.4	31.0	35.2	39.4	43.9	47.1	46.7	48.1	50.6	50.0	46.3	47.5	47.2	47.3	47.4	47.2	47.0	47.5	49.0	49.3	47.9	48.3
Quebec	33.6	35.6	36.3	37.2	38.7	41.4	44.2	45.0	45.5	46.0	45.7	45.7	46.4	46.3	46.5	47.0	47.4	47.6	47.8	48.2	48.0	48.4	48.6	48.8
Ontario	36.4	38.2	40.2	41.7	42.8	43.8	45.2	45.2	45.6	45.9	45.8	45.7	45.4	45.4	46.1	46.3	46.9	46.6	47.2	47.4	47.3	47.6	47.4	48.0
Manitoba	32.1	34.1	35.6	36.3	36.8	37.6	40.4	40.9	41.2	43.4	41.1	40.9	42.5	40.7	39.8	43.2	45.3	47.0	48.0	48.2	48.3	49.7	48.3	46.8
Saskat- chewan	26.2	24.8	23.6	27.1	26.8	31.5	34.1	37.7	40.0	40.5	42.1	42.1	42.2	42.4	42.4	42.4	45.9	44.6	43.5	45.1	47.0	45.2	46.7	46.2
Alberta	34.4	35.9	39.1	40.3	41.5	43.4	43.7	43.4	45.6	46.5	45.0	44.9	43.4	43.9	44.1	44.2	44.8	43.6	44.5	45.1	45.1	46.2	46.5	46.4
British Columbia	36.1	37.4	38.1	39.3	39.7	42.1	43.0	43.3	45.7	47.5	46.9	46.3	46.5	46.3	46.5	45.9	46.8	47.5	47.6	47.5	47.6	49.1	47.4	47.6

Source: Statistics Canada . * Note: there were no doctoral enrolments in Prince Edward Island prior to 1997.



1.10 Full-time enrolments by Main Field of Study

Those fields of study with high numbers in full-time Master's enrolments, especially in the years 2010 to 2015, were:

- Business, Management, and Public Administration,
- Architecture, Engineering and Related Technologies,
- Social and Behavioral Sciences and Law,
- Health and Related Fields, and
- Physical and Life Sciences and Technologies.

The specific fields with the largest *percentage increases* in full-time Master's enrolments from 1995 to 2015 were:

- Health and Related Fields (287%);
- Architecture, Engineering and Related Technologies (174%);
- Personal, Protective & Transportation Services (169%);
- Business, Management and Public Administration (160%) and
- Mathematics, Computer & Information Sciences (152%).



20,000 **Number of full-time** Business, Management & 18,000 Master's enrolments **Public Administration** Architecture, Engineering & Related Technologies 16,000 Social & Behavioural Sciences & Law 14,000 Health & Related Fields 12,000 Physical & Life Sciences & Technologies Education 10,000 **Humanities** 8,000 Mathematics, Computer 6,000 & Information Sciences Agriculture, Natural Resources, Conservation 4,000 Visual & Performing Arts & Communications Tech 2,000 Other Personal, Protective & **Transportation Services**

Figure 1.11 - Full-time Master's enrolments by main field of study, 1992-2015

Source: Statistics Canada.



Table 1.8 – Full-time Master's enrolments by main field of study, numbers and change, 1995, 2005, 2015

Master's				Change	% change	Change	% change
Year	1995	2005	2015	1995-2015	1995-2015	2005-2015	2005-2015
Canada	41,223	64,875	93,894	52,671	127.8	29,019	44.7
Agriculture, Natural Resources, Conservation	1,503	2,562	3,186	1,683	112.0	624	24.4
Architecture, Engineering & Related Technologies	5,685	9,936	15,585	9,900	174.1	5,649	56.9
Business, Management & Public Administration	7,089	12,438	18,423	11,334	159.9	5,985	48.1
Education	3,426	4,065	6,357	2,931	85.6	2,292	56.4
Health & Related Fields	3,513	6,645	13,596	10,083	287.0	6,951	104.6
Humanities	4,695	5,367	5,244	549	11.7	-123	-2.3
Mathematics, Computer & Information Sciences	2,217	4,143	5,592	3,375	152.2	1,449	35.0
Personal, Protective & Transportation Services	39	75	105	66	169.2	30	40.0
Physical & Life Sciences & Technologies	5,115	7,878	8,937	3,822	74.7	1,059	13.4
Social & Behavioral Sciences & Law	6,579	9,489	13,512	6,933	105.4	4,023	42.4
Visual & Performing Arts & Communications Tech	1,227	1,992	2,703	1,476	120.3	711	35.7
Other	138	273	657	519	376.1	384	140.7

Source: Statistics Canada

The main fields of study with the largest number of full-time doctoral enrolments over time (See Figure 1.12.) were:

- Physical and Life Sciences and Technologies,
- Social and Behavioral Sciences and Law,
- Architecture, Engineering and Related Technologies, and
- Humanities.



The main fields of study with the largest percentage increase in full-time doctoral enrolments, from 1995 to 2015 (see Table 1.16) were:

- Visual and Performing Arts and Communications Technologies (407%),
- Health and Related Fields (210%),
- Architecture, Engineering and Related Technologies (181%);
- Business, Management and Public Administration (170%).

Figure 1.12 - Full-time doctoral enrolments by main field of study, 1992-2015

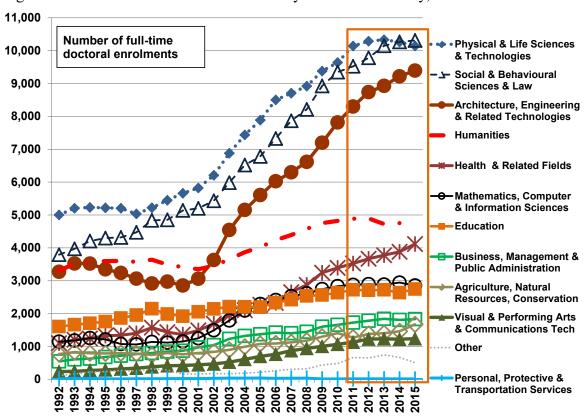




Table 1.9 – Full-time doctoral enrolments by main field of study, numbers and change, 1995, 2005, 2015

Doctoral				Change	% change	Change	% change
Year	1995	2005	2015	1995-2015	1995-2015	2005-2015	2005-2015
Canada	22,764	34,455	49,425	26,661	117.1	14,970	43.4
Agriculture, Natural Resources, Conservation	789	1,077	1,674	885	112.2	597	55.4
Architecture, Engineering & Related Technologies	3,348	5,607	9,396	6,048	180.6	3,789	67.6
Business, Management & Public Administration	678	1,371	1,833	1,155	170.4	462	33.7
Education	1,755	2,196	2,745	990	56.4	549	25.0
Health & Related Fields	1,326	2,268	4,116	2,790	210.4	1,848	81.5
Humanities	3,597	4,023	4,593	996	27.7	570	14.2
Mathematics, Computer & Information Sciences	1,212	2,289	2,856	1,644	135.6	567	24.8
Personal, Protective & Transportation Services	18	39	12	-6	-33.3	-27	-69.2
Physical & Life Sciences & Technologies	5,217	7,887	10,143	4,926	94.4	2,256	28.6
Social & Behavioural Sciences & Law	4,299	6,783	10,311	6,012	139.8	3,528	52.0
Visual & Performing Arts & Communications Tech	285	696	1,236	951	333.7	540	77.6
Other	237	216	507	270	113.9	291	134.7

Source: Statistics Canada

1.11 Full-time enrolments by Field of Study and Gender

Table 1.10 gives the percent female over time in main fields of study. The fields with the highest percent female in full-time graduate enrolments in 2015 were:

- Education;
- Health and Related Fields (doctoral);
- Social and Behavioral Sciences;
- Agriculture, Natural Resources, Conservation (Master's) and
- Visual and Performing Arts and Communications Technology.



Table 1.10 –Full-time Master's and doctoral enrolments by main field of study, percent female, 1995, 2005, 2015

Percent female		Master's			Doctoral	
Year	1995	2005	2015	1995	2005	2015
All fields	49.2	52.4	55.3	39.3	45.6	47.8
Agriculture, Natural Resources, Conservation	49.3	58.1	61.4	30.8	44.0	50.5
Architecture, Engineering & Related Technologies	25.8	28.7	30.1	12.6	19.7	24.7
Business, Management & Public Administration	43.7	44.6	50.7	40.1	44.4	50.6
Education	72.3	75.9	76.7	66.5	70.8	70.2
Health & Related Fields	65.9	74.8	74.6	49.0	60.6	63.2
Humanities	52.7	56.3	58.0	49.5	51.4	48.6
Mathematics, Computer & Information Sciences	40.1	37.2	40.4	19.3	27.4	26.9
Personal, Protective & Transportation Services	23.1	30.8	52.9	33.3	23.1	40.0
Physical & Life Sciences & Technologies	44.1	52.9	52.0	31.6	42.1	45.3
Social & Behavioral Sciences & Law	57.1	62.6	66.0	51.6	59.6	62.1
Visual & Performing Arts & Communications Tech	59.9	61.0	59.4	55.2	55.0	56.3
Other	51.1	56.0	58.2	61.5	65.3	64.7

Source: Statistics Canada

1.12 Full-time enrolments by International student status

International students make up an increasing number of full-time graduate enrolments in Canada, especially in recent years. See Table 1.11,



Figure 1.13 and



Figure 1.14.

All of the increase in full-time doctoral enrolments and most of the increase in full-time Master's enrolments in recent years has come from increases in international enrolments.



Table 1.11 – Full-time Master's and doctoral enrolments, number and percent international students, 1992-2015

Year	Total full-time Master's	•		% International	Total full-time doctoral enrolments		International students	% International
1992	40,989	34,575	6,414	15.6	20,910	15,171	5,739	27.4
1993	42,156	36,222	5,934	14.1	22,122	15,978	6,144	27.8
1994	41,700	36,531	5,169	12.4	22,665	16,851	5,814	25.7
1995	41,223	36,588	4,635	11.2	22,764	17,499	5,265	23.1
1996	41,583	36,777	4,806	11.6	22,758	17,772	4,986	21.9
1997	42,189	37,308	4,881	11.6	22,722	18,165	4,557	20.1
1998	44,796	39,597	5,199	11.6	23,724	19,161	4,563	19.2
1999	46,935	40,965	5,970	12.7	23,676	19,332	4,344	18.3
2000	47,760	41,229	6,531	13.7	23,727	19,311	4,416	18.6
2001	50,574	43,368	7,206	14.2	24,621	19,905	4,716	19.2
2002	55,638	47,355	8,283	14.9	26,595	21,126	5,469	20.6
2003	60,297	50,616	9,681	16.1	29,874	23,193	6,681	22.4
2004	63,591	52,938	10,653	16.8	32,511	25,179	7,332	22.6
2005	64,875	53,646	11,229	17.3	34,455	26,730	7,725	22.4
2006	66,966	55,617	11,349	16.9	36,723	29,010	7,713	21.0
2007	71,034	59,646	11,388	16.0	38,601	30,546	8,055	20.9
2008	73,494	61,629	11,865	16.1	40,260	31,620	8,640	21.5
2009	77,484	63,795	13,689	17.7	43,158	33,057	10,101	23.4
2010	80,715	65,151	15,564	19.3	45,102	33,933	11,169	24.8
2011	83,409	65,994	17,415	20.9	46,782	34,134	12,648	27.0
2012	85,809	66,189	19,620	22.9	48,006	34,242	13,764	28.7
2013	89,733	68,121	21,612	24.1	48,726	33,906	14,820	30.4
2014	91,986	68,220	23,766	25.8	49,131	33,321	15,810	32.2
2015	93,894	68,862	25,032	26.7	49,425	32,880	16,545	33.5



Figure~1.13-Full-time~Master's~enrolments~by~international~student~status,~1992-2015

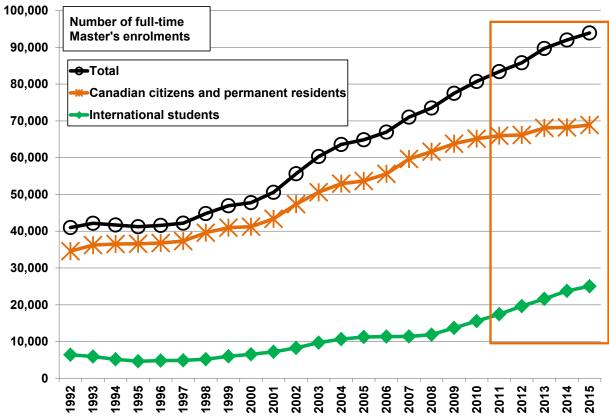




Figure 1.14 – Full-time doctoral enrolments by international student status, 1992-2015



1.13 Full-time enrolments by International student status and Gender

The increasing inclusion of international students has not increased the percentage of females enrolled full-time in Master's or doctoral programs in Canada. The percent female is consistently lower among international graduate students than among other full-time graduate enrolments.

Table 1.12 – Full-time Master's and doctoral enrolments by international student status and gender, 1995, 2005, 2015

Year	1995			2005			2015		
Master's	Total enrolments	International enrolments	Percentage international	Total enrolments	International enrolments	Percentage international	Total enrolments	International enrolments	Percentage international
Male	20,946	2,814	13	30,864	6,588	21	41,970	14,088	33.6
Female	20,277	1,821	9	33,993	4,641	14	51,900	10,941	21.1
% female	49.2	39.3		52.4	41.3		55.3	43.7	
Doctoral	Total enrolments	International enrolments	Percentage international	Total enrolments	International enrolments	Percentage international	Total enrolments	International enrolments	Percentage international
Male	13,818	3,825	28	18,750	5,031	27	25,776	10,179	39.5
Female	8,949	1,440	16	15,705	2,694	17	23,643	6,363	26.9
% female	39.3	27.4		45.6	34.9		47.8	38.5	



1.14 Full-time enrolments by International student status and Province

As of 2015, the provinces with the highest percentage of full-time international enrolments at the Master's level were: Newfoundland and Labrador, Saskatchewan, and New Brunswick. At the doctoral level they were Newfoundland and Labrador, Manitoba, Saskatchewan and Alberta.

Ontario stands out as having the lowest *percentage* of full-time international Master's doctoral enrolments, despite having some of the largest *numbers* of these enrolments. (See Table 1.13 and Table 1.14.)

Table 1.13 – Full-time Master's enrolments by number and percent of international enrolments by province, 1995, 2005, 2015

by province	, 1773, 20	703, 2013			Ī				
Year	1995			2005			2015		
Province	Total enrolments	International enrolments	Percentage international	Total enrolments	Internation al enrolments	Percent age internati onal	Total enrolmen ts	International enrolments	Percentage international
Total Canada	41,223	4,635	11.2	64,875	11,229	17.3	93,894	25,032	26.7
Newfoundland and Labrador	645	117	18.1	960	219	22.8	1,572	702	44.7
Prince Edward Island	24	6	25.0	102	6	5.9	366	69	18.9
Nova Scotia	1,452	165	11.4	2,229	444	19.9	2,898	906	31.3
New Brunswick	777	111	14.3	1,041	222	21.3	930	315	33.9
Quebec	12,072	1,527	12.6	20,988	3,075	14.7	25,890	7,002	27.0
Ontario	14,607	1,176	8.1	21,096	3,012	14.3	37,905	9,015	23.8
Manitoba	1,428	144	10.1	1,584	264	16.7	2,334	666	28.5
Saskatchewan	1,173	192	16.4	1,095	300	27.4	2,499	897	35.9
Alberta	2,895	315	10.9	5,631	1,077	19.1	8,778	2,046	23.3
British Columbia	6,150	882	14.3	10,155	2,613	25.7	10,722	3,411	31.8



Table 1.14 – Full-time doctoral enrolments by number and percent of international enrolments by province, 1995, 2005, 2015

Year	1995	- ,		2005			2015		
Province	Total enrolments	International enrolments	Percentage international	Total enrolments	International enrolments	Percentage international	Total enrolments	International enrolments	Percentage international
TOTAL Canada	22,764	5,265	23.1	34,455	7,725	22.4	49,425	16,545	33.5
Newfoundland and Labrador	198	102	51.5	351	126	35.9	681	366	53.7
Prince Edward Island	0	0	0.0	18	12	66.7	69	18	26.1
Nova Scotia	411	129	31.4	573	126	22.0	765	258	33.7
New Brunswick	210	75	35.7	357	93	26.1	429	156	36.4
Quebec	6,273	1,602	25.5	11,301	2,274	20.1	15,159	5,595	36.9
Ontario	9,183	1,509	16.4	13,212	2,718	20.6	19,512	4,656	23.9
Manitoba	603	150	24.9	648	183	28.2	1,041	441	42.4
Saskatchewan	435	180	41.4	531	192	36.2	1,230	546	44.4
Alberta	2,142	534	24.9	3,291	846	25.7	4,809	2,115	44.0
British Columbia	3,312	987	29.8	4,176	1,155	27.7	5,727	2,394	41.8

Source: Statistics Canada

1.15 Full-time enrolments by International student status and Main Field of Study

Not surprisingly certain fields of study attract more international enrolments than others. Those with the highest percentage of international students among full-time graduate enrolments in 2015 are (see Table 1.15 and Table 1.16):

- Architecture, Engineering and Related Technologies
- Mathematics, Computer and Information Sciences and
- Business, Management and Public Administration (Master's);
- Agriculture, Natural Resources and Conservation (doctoral).



Table 1.15 – Full-time Master's enrolments by number and percent of international enrolments by main field of study, 1995, 2005, 2015

Year	1995	Internation 1	Devent	2005	Internation I	Demont	2015 Total	Internation 1	Percent
Main field of study	Total enrolments	International enrolments	Percent international	Total enrolments	International enrolments	Percent international	enrolments	International enrolments	international
TOTAL, all fields, Canada	41,223	4,635	11.2	77,484	13,689	17.3	93,894	25,032	26.7
Agriculture, Natural Resources and Conservation	1,503	204	13.6	2,676	528	15.9	3,186	822	25.8
Architecture, Engineering and Related Technologies	5,685	906	15.9	11,751	3,621	24.2	15,585	7,941	51.0
Business, Management and Public Administration	7,089	711	10.0	14,790	3,087	25.0	18,423	5,721	31.1
Education	3,426	219	6.4	4,383	405	8.9	6,357	963	15.1
Health and Related Fields	3,513	270	7.7	9,750	612	7.4	13,596	1,002	7.4
Humanities	4,695	483	10.3	5,295	477	12.0	5,244	678	12.9
Mathematics, Computer and Information Sciences	2,217	381	17.2	4,497	1,449	25.5	5,592	2,763	49.4
Personal, Protective and Transportation Services	39	0	0.0	129	3	4.0	105	3	2.9
Physical and Life Sciences, and Technologies	5,115	654	12.8	9,021	1,467	14.6	8,937	1,953	21.9
Social and Behavioral Sciences, and Law	6,579	699	10.6	11,823	1,602	14.3	13,512	2,532	18.7
Visual and Performing Arts, and Communications Technologies	1,227	99	8.1	2,616	354	11.1	2,703	516	19.1
Other	138	3	2.2	753	84	9.9	657	132	20.1



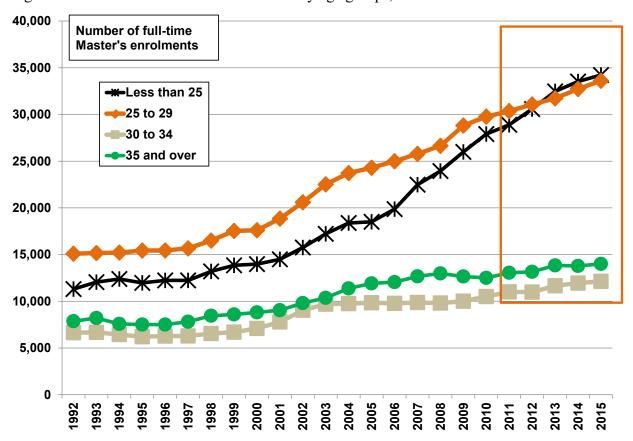
Table 1.16 - Full-time doctoral enrolments by number and percent of international enrolments by main field of study, 1996, 2005, 2015

main heid of study, 1990, 2003, 2013											
Main field of study	1995 Total enrolmen ts	International enrolments	Percent internationa	2005 Total enrolmen ts	International enrolments	Percent internationa	2015 Total enrolmen ts	International enrolments	Percent internationa		
TOTAL	22,764	5,265	23.1	34,455	7,725	22.4	49,425	16,545	33.5		
Agriculture, Natural Resources and Conservation	789	324	41.1	1,077	330	30.6	1,674	816	48.7		
Architecture, Engineering and Related Technologies	3,348	1,191	35.6	5,607	1,878	33.5	9,396	5,163	54.9		
Business, Management and Public Administration	678	174	25.7	1,371	297	21.7	1,833	537	29.3		
Education	1,755	231	13.2	2,196	213	9.7	2,745	405	14.8		
Health and Related Fields	1,326	240	18.1	2,268	342	15.1	4,116	906	22.0		
Humanities	3,597	621	17.3	4,023	726	18.0	4,593	1,014	22.1		
Mathematics, Computer and Information Sciences	1,212	417	34.4	2,289	813	35.5	2,856	1,416	49.6		
Personal, Protective and Transportation Services	18	0	0.0	39	3	7.7	12	3	25.0		
Physical and Life Sciences, and Technologies	5,217	1,230	23.6	7,887	1,794	22.7	10,143	3,879	38.2		
Social and Behavioral Sciences, and Law	4,299	768	17.9	6,783	1,170	17.2	10,311	2,004	19.4		
Visual and Performing Arts, and Communications Technologies	285	39	13.7	696	132	19.0	1,236	312	25.2		
Other	237	33	13.9	216	24	11.1	507	96	18.9		



1.16 Full-time enrolments by Age groups

Figure 1.15 – Full-time Master's enrolments by age groups, 1992-2015





 $Figure \ 1.16-Full-time \ doctoral \ enrolments \ by \ age \ groups, \ 1992-2015$

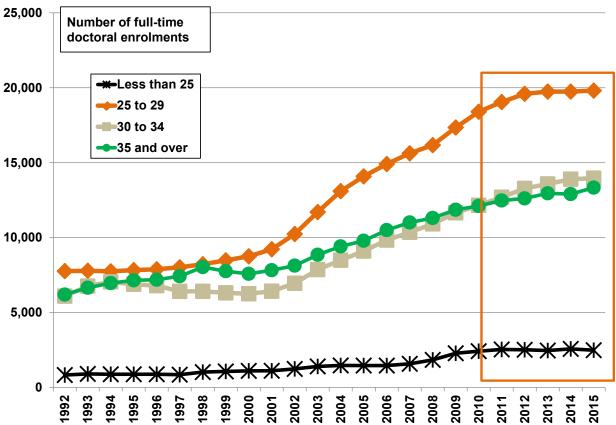




Table 1.17 – Full-time Master's and doctoral enrolments by age groups, 1992-2015

	Master's					Doctoral				
	Total	Less	25-29	30-34	35 years	Total	Less			35 and
Year	number	than 25	years	years	and over	number	than 25	25 to 29	30 to 34	over
1992	40,989	11,310	15,099	6,645	7,878	20,910	837	7,764	6,096	6,201
1993	42,156	12,054	15,171	6,672	8,205	22,122	906	7,791	6,765	6,654
1994	41,700	12,393	15,216	6,450	7,581	22,665	888	7,755	7,047	6,966
1995	41,223	11,976	15,429	6,216	7,512	22,764	882	7,830	6,891	7,152
1996	41,583	12,243	15,444	6,282	7,515	22,758	882	7,887	6,795	7,191
1997	42,189	12,243	15,672	6,291	7,818	22,722	855	8,022	6,414	7,425
1998	44,796	13,203	16,503	6,552	8,460	23,724	1,029	8,226	6,420	8,034
1999	46,935	13,860	17,541	6,699	8,592	23,676	1,077	8,484	6,318	7,758
2000	47,760	13,983	17,604	7,092	8,811	23,727	1,110	8,757	6,255	7,587
2001	50,574	14,490	18,855	7,791	9,051	24,621	1,119	9,225	6,426	7,824
2002	55,638	15,762	20,601	9,048	9,816	26,595	1,239	10,242	6,954	8,133
2003	60,297	17,223	22,521	9,702	10,374	29,874	1,410	11,706	7,869	8,856
2004	63,591	18,384	23,730	9,756	11,379	32,511	1,473	13,104	8,493	9,414
2005	64,875	18,513	24,294	9,849	11,913	34,455	1,464	14,091	9,099	9,789
2006	66,966	19,872	24,990	9,783	12,051	36,723	1,467	14,907	9,834	10,500
2007	71,034	22,482	25,785	9,867	12,675	38,601	1,584	15,627	10,359	11,013
2008	73,494	23,943	26,643	9,810	12,987	40,260	1,845	16,176	10,914	11,310
2009	77,484	25,992	28,815	10,005	12,660	43,158	2,283	17,349	11,658	11,862
2010	80,715	27,909	29,763	10,506	12,513	45,102	2,424	18,402	12,162	12,114
2011	83,409	28,893	30,357	11,016	13,077	46,782	2,538	19,047	12,696	12,477
2012	85,809	30,573	31,065	10,986	13,179	48,006	2,514	19,593	13,278	12,621
2013	89,733	32,466	31,734	11,667	13,854	48,726	2,463	19,734	13,575	12,951
2014	91,986	33,528	32,730	11,946	13,782	49,131	2,574	19,743	13,902	12,909
2015	93,894	34,227	33,612	12,141	14,007	49,425	2,487	19,809	13,968	13,335

Source: Statistics Canada

1.17 Full-time enrolments by Age and Gender

More than half of full-time Master's enrolments in all age categories in recent years are by females; the percentage is highest among the youngest age group (less than 25 years of age).

Just over half of full-time doctoral enrolments in the youngest and oldest age categories are by females. The two middle age groups of full-time doctoral enrolments (which are numerically the largest groups) are slightly less than 50% female.



Table 1.18 – Full-time Master's and doctoral enrolments, percent female by age groups, 1992- 2015

Percent female	Master's				Doctoral			
	Less than	25-29	30-34	35 years	Less than	25-29	30-34	35 years
Year	25 years	years	years	and over	25 years	years	years	and over
1992	47.7	42.7	42.0	54.2	37.1	33.0	30.0	42.1
1993	49.5	44.0	42.3	52.7	42.4	35.2	31.1	42.9
1994	50.8	44.5	43.4	54.3	46.3	37.3	31.6	44.5
1995	51.5	46.3	44.9	55.2	46.3	39.2	32.8	44.7
1996	52.6	47.2	44.2	54.7	47.1	40.5	34.7	45.0
1997	54.4	48.4	46.0	53.9	44.2	43.3	36.0	46.8
1998	54.6	49.8	45.5	53.4	49.9	43.6	39.3	47.9
1999	55.7	50.3	45.9	52.6	49.7	44.3	39.7	47.9
2000	56.1	51.3	44.5	51.3	51.8	45.0	40.9	48.7
2001	56.6	51.2	44.8	51.0	54.0	45.6	41.5	48.8
2002	56.6	51.0	44.2	50.8	53.9	46.3	41.5	47.2
2003	56.5	50.6	44.2	50.5	51.4	46.1	41.5	47.4
2004	57.0	51.6	45.9	49.5	51.6	46.0	41.8	47.4
2005	57.0	53.1	46.3	49.4	55.4	45.5	42.1	47.5
2006	57.7	52.8	47.7	50.6	53.3	46.0	43.0	47.9
2007	58.6	53.6	48.8	51.1	53.2	45.7	43.0	48.7
2008	59.5	53.9	49.3	50.8	54.5	46.5	43.6	48.9
2009	57.5	53.1	49.7	51.0	53.3	46.1	44.2	48.6
2010	56.8	52.6	49.4	51.5	50.3	46.7	44.5	49.2
2011	57.0	52.8	50.8	52.6	50.5	46.8	45.0	49.9
2012	57.2	52.9	52.5	53.0	50.4	46.5	45.1	49.9
2013	56.9	52.9	51.6	54.5	51.3	47.0	46.0	50.3
2014	57.3	52.8	53.1	54.8	50.2	46.7	46.4	49.9
2015	58.2	53.0	53.8	54.9	52.1	46.3	47.1	50.2



1.18 Full-time enrolments by Age and International student status

The number of full-time international students has been increasing most in the two younger age groups among Master's students, and the 25-29 year old age group among doctoral students.

Table 1.19 - Full-time international Master's and doctoral enrolments, number by age groups, 1992-2015

	2013	Master's				Doctoral		
					Less than	25 to 29	30 to 34	35 years
Year	Less than 25 years	25 to 29 years	30 to 34 years	35 years and over	25 years	years	years	and over
1992	1,257	2,742	1,479	927	213	2,046	1,983	1,491
1993	1,194	2,403	1,389	936	192	2,061	2,262	1,629
1994	1,146	2,085	1,134	795	180	1,827	2,172	1,641
1995	1,143	1,884	942	651	165	1,629	1,914	1,557
1996	1,215	1,986	975	615	162	1,599	1,719	1,506
1997	1,158	2,094	930	684	189	1,500	1,524	1,341
1998	1,266	2,184	978	765	213	1,623	1,419	1,299
1999	1,650	2,571	978	747	207	1,647	1,287	1,188
2000	1,884	2,715	1,080	774	237	1,713	1,278	1,179
2001	2,037	3,108	1,122	780	282	1,857	1,374	1,194
2002	2,481	3,534	1,248	768	309	2,307	1,554	1,296
2003	3,048	4,086	1,386	816	390	3,024	1,857	1,398
2004	3,276	4,293	1,542	1,332	402	3,495	1,983	1,440
2005	3,546	4,410	1,614	1,542	435	3,717	2,142	1,425
2006	3,774	4,521	1,557	1,404	417	3,717	2,157	1,404
2007	3,888	4,524	1,506	1,389	474	3,996	2,142	1,434
2008	4,107	4,842	1,503	1,350	477	4,323	2,337	1,482
2009	5,109	5,814	1,554	1,209	630	5,217	2,637	1,617
2010	6,012	6,633	1,749	1,167	750	5,871	2,841	1,701
2011	6,792	7,311	1,977	1,320	810	6,600	3,402	1,833
2012	8,127	8,073	2,031	1,371	846	7,056	3,885	1,974
2013	9,027	8,904	2,298	1,377	810	7,434	4,386	2,187
2014	9,768	9,810	2,646	1,539	846	7,773	4,755	2,436
2015	10,008	10,443	2,886	1,692	828	7,944	5,052	2,712



Figure 1.17– Full-time Master's enrolments, number of International enrolments, by age groups, 1992-2015

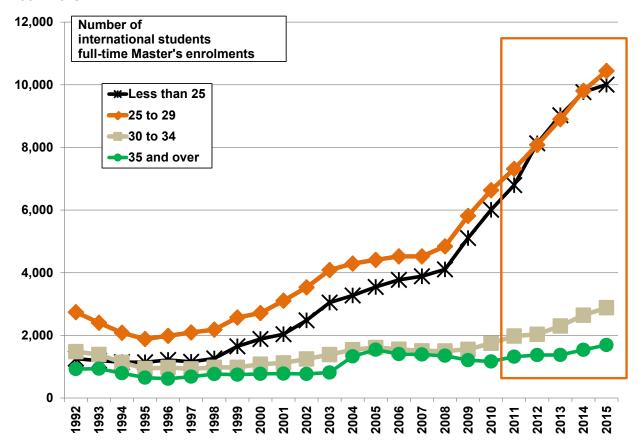




Figure 1.18 - Full-time doctoral enrolments, number of International enrolments, by age groups, 1992-2015

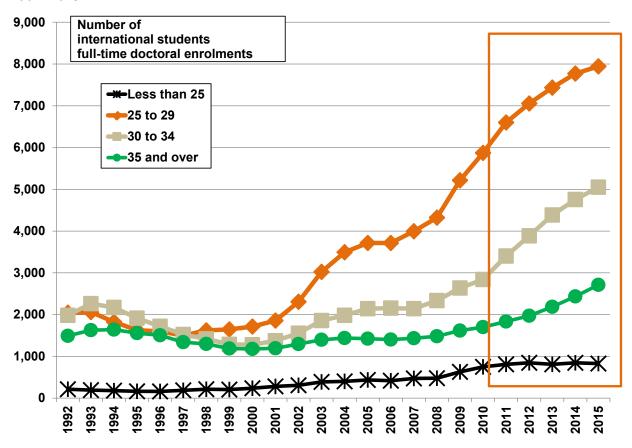
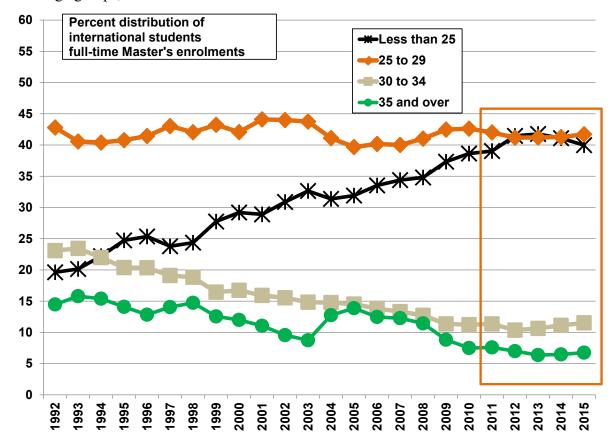




Figure 1.19 - Full-time Master's enrolments, percentage distribution of international enrolments across age groups, 1992-2015





60 Percent distribution of international students 55 full-time doctoral enrolments 50 45 40 35 30 25 Less than 25 20 25 to 29 15 30 to 34 35 and over 10 5 0 2002 2003 2004 2005 2006 2007 2008 2001

Figure 1.20 - Full-time doctoral enrolments, percentage distribution of international enrolments across age groups, 1992-2015

Source: Statistics Canada.

1.19 World region of full-time International student enrolments

The percentage of international enrolments from Europe among full-time Master's enrolments has declined since 2000, but has held at about 13% for the last several years. There has been a corresponding increase in enrolments from Asia.

There is an increase in the percentage of full-time doctoral enrolments from Africa in recent years.



Table 1.20 – Full-time Master's enrolments, world region of international enrolments, percent distribution, 1992-2015

Year	United States	Central America	Caribbean and Bermuda	South America	Europe	Western Europe	Eastern Europe	Northern Europe	United Kingdom	Southern Europe	Africa	Asia	West Central Asia & Middle	Eastern Asia	Southeast Asia	Southern Asia	Oceania
1992	7.2	1.0	2.5	3.6	16.4	7.4	2.2	4.5	2.2	2.2	20.9	45.9	5.7	25.7	6.9	7.6	1.1
1993	7.8	1.1	2.5	3.6	17.6	8.3	2.7	4.2	2.1	2.3	19.9	45.2	5.5	24.7	7.1	7.9	1.2
1994	9.7	1.5	2.0	3.2	19.0	10.0	2.1	4.7	2.1	2.1	18.5	43.0	5.0	23.6	6.1	8.3	1.5
1995	10.7	1.7	2.3	3.3	19.9	10.6	2.3	4.7	2.0	2.3	18.5	40.5	4.0	22.5	6.0	8.1	1.5
1996	11.3	2.2	2.7	3.7	21.7	11.4	3.8	4.9	2.1	1.6	18.1	37.8	2.6	22.1	5.6	7.5	1.2
1997	10.2	2.8	2.5	4.8	23.1	14.1	3.4	4.1	1.4	1.5	17.1	37.1	3.3	21.2	5.7	6.9	1.4
1998	9.5	2.9	2.5	4.2	23.0	14.4	3.3	3.2	1.1	2.1	17.1	36.8	3.2	21.6	5.0	6.9	1.2
1999	9.5	3.2	2.6	5.2	24.3	14.2	4.6	3.1	1.4	2.5	16.1	35.1	3.3	21.0	4.2	6.4	0.9
2000	8.2	3.5	2.3	4.3	23.5	14.0	4.0	2.9	1.4	2.5	16.4	35.2	4.1	20.4	4.1	6.6	1.0
2001	7.5	3.8	2.0	4.5	21.9	13.2	3.9	2.6	1.2	2.2	15.3	38.5	5.2	22.0	3.7	7.6	0.9
2002	8.3	3.9	2.6	3.7	20.0	12.1	3.7	2.3	1.1	1.8	13.5	43.2	6.5	23.8	3.1	9.9	8.0
2003	8.4	3.1	1.8	3.9	17.8	11.2	3.1	1.8	1.0	1.7	12.9	47.6	7.4	25.4	2.9	11.8	0.7
2004	8.6	2.5	1.4	3.8	16.3	10.6	2.5	1.9	1.1	1.3	9.6	54.7	9.6	30.2	2.9	12.0	0.5
2005	9.1	2.4	1.4	3.4	15.6	10.6	2.1	1.6	0.9	1.3	9.2	57.0	11.3	32.0	2.5	11.2	0.5
2006	9.5	2.4	1.2	3.3	15.1	10.4	1.7	1.8	1.0	1.2	9.4	56.4	10.9	31.8	2.4	11.3	0.6
2007	10.0	2.4	1.4	3.1	14.8	10.1	1.8	1.7	0.9	1.1	9.6	55.4	10.2	30.8	2.6	11.7	0.6
2008	9.4	2.3	1.5	3.2	14.2	9.9	1.6	1.6	0.9	1.0	10.5	54.4	10.8	29.5	2.2	11.9	0.5
2009	9.2	2.2	1.6	3.3	14.0	10.0	1.6	1.5	8.0	1.0	9.9	54.4	13.4	24.7	1.8	14.5	0.4
2010	8.8	2.0	1.2	3.4	13.4	9.7	1.5	1.2	8.0	1.0	9.4	59.0	15.7	23.8	2.0	17.6	0.4
2011	8.1	1.8	1.3	2.9	13.8	9.8	1.7	1.2	0.7	1.1	9.8	60.3	16.0	25.3	1.6	17.3	0.3
2012	7.2	1.6	1.2	2.6	13.0	9.5	1.3	1.2	0.7	1.0	10.0	63.0	13.8	29.2	1.5	18.6	0.3
2013	6.5	1.5	1.1	2.3	13.0	9.4	1.4	1.1	8.0	1.0	10.0	65.0	11.6	30.9	1.3	21.1	0.3
2014	5.7	1.4	0.9	2.5	12.9	9.5	1.4	1.0	0.7	0.9	11.3	64.6	9.7	32.1	1.2	21.5	0.4
2015	5.3	1.5	1.0	3.2	13.2	9.8	1.5	1.0	0.7	0.9	12.5	62.8	8.8	30.8	1.5	21.6	0.4

Source: Statistics Canada.

Note: rows do not add to 100% because sub-regions are included.



Table 1.21 – Full-time doctoral enrolments, world region of international enrolments, percent distribution, 1992-2015

Year	United States	Central America	Caribbean and Bermuda	South America	Europe	Western Europe	Eastem Europe	Northem Europe	United Kingdom	Southern Europe	Africa	Asia	West Central Asia & Middle	Eastem Asia	Southeast Asia	Southern Asia	Oceania
1992	9.6	1.7	0.8	4.4	14.1	5.7	2.0	4.1	2.2	2.2	21.8	44.8	8.7	22.0	4.5	9.6	2.2
1993	9.5	1.5	0.9	4.5	14.5	5.9	2.7	4.2	2.3	1.6	20.2	46.5	10.8	22.8	4.2	8.8	1.8
1994	10.5	1.5	8.0	4.9	15.7	6.7	3.1	4.4	2.2	1.7	19.1	44.9	12.8	19.7	4.4	7.9	1.9
1995	11.1	1.7	1.0	4.8	17.9	7.8	3.8	4.6	2.2	1.7	18.1	42.2	13.8	16.8	4.7	7.0	2.3
1996	12.0	1.9	1.1	5.2	19.7	9.0	4.1	4.6	2.0	1.9	16.3	40.7	12.9	17.7	4.0	6.1	2.4
1997	13.0	2.2	1.1	5.4	21.2	9.9	4.3	4.4	1.6	2.4	16.1	37.7	10.9	17.1	3.9	5.8	2.5
1998	12.2	2.8	1.1	5.8	23.5	12.3	4.9	3.8	1.5	2.6	16.0	35.4	9.1	17.4	4.0	4.9	2.1
1999	13.1	3.2	1.2	6.1	25.0	13.9	4.4	4.0	1.7	2.8	14.4	33.4	7.7	16.9	4.0	4.9	1.9
2000	12.0	3.6	1.4	5.9	25.6	13.8	5.2	4.1	1.8	2.5	15.1	33.2	7.3	16.8	3.9	5.1	1.6
2001	11.4	3.6	1.3	5.7	25.3	13.3	5.6	3.6	1.3	2.8	13.7	35.5	7.0	19.0	3.9	5.6	1.4
2002	10.1	3.8	8.0	5.3	24.4	12.8	5.3	3.5	1.5	2.8	12.6	39.1	9.0	20.0	3.7	6.4	1.1
2003	8.6	3.6	0.9	5.3	22.3	11.5	5.5	2.9	1.2	2.4	11.8	43.2	11.0	21.9	3.5	6.9	1.0
2004	9.0	3.4	0.8	5.0	21.8	11.9	4.9	2.6	1.3	2.4	11.0	44.9	12.5	21.6	3.4	7.3	0.9
2005	9.3	3.7	8.0	5.0	22.1	12.5	4.5	2.7	1.3	2.3	11.0	45.2	14.2	20.1	3.1	7.8	0.8
2006	10.3	3.9	8.0	4.9	21.9	13.1	4.0	2.5	1.3	2.3	11.5	44.1	14.4	18.9	3.2	7.5	0.9
2007	11.0	3.5	0.9	4.7	21.6	13.3	3.5	2.4	1.2	2.3	11.5	44.6	16.0	18.2	3.0	7.4	0.9
2008	10.7	3.3	0.8	4.6	20.2	12.8	3.0	2.2	1.3	2.2	11.0	44.9	18.6	16.5	2.6	7.3	0.8
2009	10.4	2.8	0.7	4.0	18.4	11.9	2.4	2.2	1.3	1.9	10.3	47.4	20.6	16.4	2.8	7.7	0.7
2010	10.4	2.7	8.0	4.1	18.3	12.0	2.3	2.1	1.3	1.9	9.9	50.3	22.0	17.3	2.7	8.3	0.6
2011	10.1	2.4	0.8	4.1	17.9	11.5	2.3	2.0	1.3	2.1	9.9	52.2	22.8	18.0	2.6	8.8	0.5
2012	9.8	2.2	0.7	4.4	18.3	11.6	2.4	1.9	1.2	2.4	10.4	52.7	22.9	18.9	2.4	8.5	0.5
2013	9.5	2.2	0.7	4.3	18.3	11.5	2.3	1.9	1.3	2.6	10.8	52.9	22.0	20.0	2.2	8.8	0.5
2014	9.0	2.1	8.0	4.6	18.3	11.5	2.1	1.7	1.2	2.9	11.8	52.4	21.5	20.1	2.1	8.8	0.5
2015	8.4	2.2	8.0	4.8	18.4	11.7	2.0	1.8	1.2	3.0	12.9	51.7	20.5	20.3	2.2	8.8	0.5

Source: Statistics Canada

Note: rows do not add to 100% because sub-regions are included.



1.20 Province of Permanent Residence for full-time enrollments of Canadian citizens and permanent residents

Table 1.22 shows the province of origin of Canadian citizens and permanent residents. Note the high percentages for both Master's and doctoral enrolments from the "same province" in Ontario and Quebec, the provinces with the highest number of enrolments. Also notable are the *low* percentages of graduate enrolments from the "same province" in Prince Edward Island, New Brunswick and Newfoundland and Labrador. This pattern could be seen as a reflecting an ability to attract out of province students.

Table 1.22 – Full-time Master's and doctoral enrolments, Canadian citizens and permanent residents by province of study, ranked by percent from the same province, 2015

residents by province of study, ranked by percent from the same province, 2013										
Province of study, ranked	Total number of full-time	Number of full-time	% full-time enrolments	Number of Canadian						
by percentage from the	enrolments, Canadian	enrolments, Canadian	from same province,	citizens and						
same province, 2015	citizens and permanent	citizens and permanent	Canadian citizens and	permanent residents						
	residents	residents from same	permanent residents	with "unknown"						
		province		permanent residence						
TOTAL – Master's	68,865	54,648	79.4	2,058						
Quebec	17,568	16,233	92.4	783						
Ontario	26,796	23,610	88.1	564						
Nova Scotia	1,047	879	84.0	3						
Saskatchewan	1,686	1,269	75.3	36						
British Columbia	7,896	5,901	74.7	120						
Alberta	5,802	4,275	73.7	507						
Manitoba	1,794	1,293	72.1	54						
Newfoundland and										
Labrador	834	546	65.5	0						
Prince Edward Island	375	192	51.2	0						
New Brunswick	1,491	450	30.2	0						
TOTAL - Doctoral	32,877	24,570	74.7	1,917						
Quebec	8,004	7,119	88.9	1,032						
Ontario	13,023	11,571	88.9	84						
British Columbia	3,849	2,937	76.3	69						
Saskatchewan	777	546	70.3	21						
Alberta	1,932	1,332	68.9	594						
Manitoba	651	378	58.1	114						
Nova Scotia	510	285	55.9	0						
Newfoundland and										
Labrador	336	174	51.8	0						
Prince Edward Island	93	30	32.3	0						
New Brunswick	624	198	31.7	0						



2 Degrees awarded

2.1 Portrait of graduate degrees awarded in Canada, 2015

The next part of this report examines graduate degrees awarded in Canada. For some tables, the time frame for which data are available is more limited, but in others the range of years from 1992 to 2015 is shown. First, an overall portrait of degrees awarded.

Table 2.1 – Profile of Master's and doctoral degrees awarded, Canada, 2015

Degrees awarded 2015		Master's	Percentage of total in 2015	Doctoral	Percentage of total in 2015
Total Degrees Awarded, Canada		49,254	100	7,407	100
Gender	Male	21,726	44.1	3,972	53.6
	Female	27,528	55.9	3,432	46.4
International enrolments		11,562	23.5	1,725	23.3
Province of study	Newfoundland and Labrador	819	1.7	66	0.8
	Prince Edward Island	51	0.1	9	0.1
	Nova Scotia	2,049	4.2	111	1.5
	New Brunswick	633	1.3	81	1.1
	Quebec	13,212	26.8	12,229	30.1
	Ontario	21,261	43.2	3,066	41.3
	Manitoba	945	1.9	147	2.0
	Saskatchewan	1,185	2.4	174	2.3
	Alberta	3,951	8.0	777	10.5
	British Columbia	5,145	10.4	759	10.2
Age groups	Less than 25 years of age	7,215	14.6	0	0
	25-29 years	21,543	43.7	1,407	19.0
	30-34 years	8,583	17.4	3,183	43.0
	35 and over	12,000	24.4	2,853	38.5



Overall, there were 49,254 Master's degrees and 7,407 doctoral degrees awarded in Canada in 2015. Fifty-six percent of the Master's degrees and 46% of the doctoral degrees were awarded to females in that year. International students received 24% of the Master's and 23% of the doctoral degrees.

As was true for enrolments, degrees awarded were concentrated in particular provinces, with Ontario and Quebec accounting for 43% and 27% of the Master's degrees, and 41% and 30% of the doctoral degrees, respectively.

Table 2.1 also shows the age distribution of recipients of graduate degrees in 2015. The 25-29-year old bracket accounted for the lion's share of Master's degrees granted (44%). For doctoral degrees, the largest percentage (43%) was from the 30-35-year-old age group. Not surprisingly, there were no doctoral degrees awarded to those under 25 years of age.

The profile of graduate degrees is continued in Table 2.2 which lists these degrees by main field of study. Master's degrees were most likely to be awarded in certain fields:

- Business, Management and Public Administration (27%),
- Architecture, Engineering and Related Technologies (15%),
- Social and Behavioral Sciences and Law (13%) and
- Health and Related Fields (12%).

The profile of doctoral degrees awarded in 2015 was somewhat similar to that for Master's degrees but there are some important differences. The most common doctoral degrees awarded in 2015 were in:

- Physical and Life Sciences and Technologies (24%);
- Architecture, Engineering and Related Technologies (21%).
- Social and Behavioral Sciences and Law (18%).



Table 2.2 – Profile of Master's and doctoral degrees awarded, Canada, 2015, 2continued – Main field of study

Degrees awarded 2015	·	Master's	Percent in 2015	Doctoral	Percent in 2015
Total Degrees Awarded,		49,257	100	7,407	100
Canada Main field of		·			
study	Education	5,085	10.3	402	5.4
	Visual & Performing Arts & Communications Tech.	1,098	2.2	153	2.1
	Humanities	2,277	4.6	553	7.5
	Social & Behavioral Sciences & Law	6,519	13.2	1,335	18.0
	Business, Management & Public Administration	13,287	27.0	234	3.2
	Physical & Life Sciences & Technologies	3,012	6.1	1,791	24.2
	Mathematics, Computer & Information Sciences	2,571	5.2	435	5.9
	Architecture, Engineering & Related Technologies	7,170	14.6	1,557	21.0
	Agriculture, Natural Resources & Conservation	1,377	2.8	234	3.2
	Health & Related Fields	6,390	13.0	618	8.3
	Personal, Protective & Transportation Services	105	0.2	0	0.0
	Other	360	0.7	93	1.3

Source: Statistics Canada

2.2 Master's and doctoral degrees awarded

Since the number of graduate enrolments have been increasing over time, it is not surprising that the number of degrees awarded has also increased over the years 1992 to 2015. This trend is shown in different ways in Table 2.3, Figure 2.1 and



Figure 2.2.

There was a spike in the number of Master's degrees awarded in Canada in 2003. The number of Master's degrees awarded then stayed high and continued to increase, reaching a high of 49.254 degrees in 2015. This compares to 19,434 awarded in 1992. As we see in the bottom five rows of Table 2.3, there has been a 5% to 6% increase in Master's degrees awarded almost every year from 2012 to 2015.

As one would expect, the numbers for doctoral degrees awarded are lower than for Master's. There were 3,135 doctoral degrees awarded in 1992, and 7,407 in 2015. There is less of a spike in the number of doctoral degrees awarded, although there was an increase of 13% from 2006 to 2007. From 1999 to 2001 there was a year to year decline in doctoral degrees awarded. Numbers of doctoral degrees have remained relatively high in recent years, increasing every year from 2011 to 2015; indeed, increasing every year from 2006 to 2015.



Table 2.3 – Number of Master's and doctoral degrees awarded, Canada, change and percent change per year, 1992-2015

Year	Master's - Number	Annual change Master's - number	Annual change Master's - percent	Doctoral - Number	Annual change doctoral - number	Annual change doctoral - percent
1992	19,434			3,135		
1993	20,817	1,383	7.1	3,357	222	7.1
1994	21,291	474	2.3	3,552	195	5.8
1995	21,357	66	0.3	3,717	165	4.6
1996	21,558	201	0.9	3,927	210	5.6
1997	21,318	-240	-1.1	3,966	39	1.0
1998	22,026	708	3.3	3,978	12	0.3
1999	23,271	1,245	5.7	3,966	-12	-0.3
2000	24,228	957	4.1	3,861	-105	-2.6
2001	24,927	699	2.9	3,705	-156	-4.0
2002	26,343	1,416	5.7	3,723	18	0.5
2003	29,031	2,688	10.2	3,858	135	3.6
2004	32,511	3,480	12.0	4,245	387	10.0
2005	32,745	234	0.7	4,185	-60	-1.4
2006	33,948	1,203	3.7	4,437	252	6.0
2007	34,821	873	2.6	4,998	561	12.6
2008	35,961	1,140	3.3	5,367	369	7.4
2009	38,364	2,403	6.7	5,673	306	5.7
2010	40,872	2,508	6.5	5,934	261	4.6
2011	42,150	1,278	3.1	6,228	294	5.0
2012	44,154	2,004	4.8	6,393	165	2.6
2013	46,698	2,424	5.5	7,059	633	9.9
2014	47,154	702	1.5	7,086	24	0.3
2015	49,257	2,103	4.5	7,407	321	4.5



Figure 2.1 – Master's and doctoral degrees awarded, Canada, 1992-2015

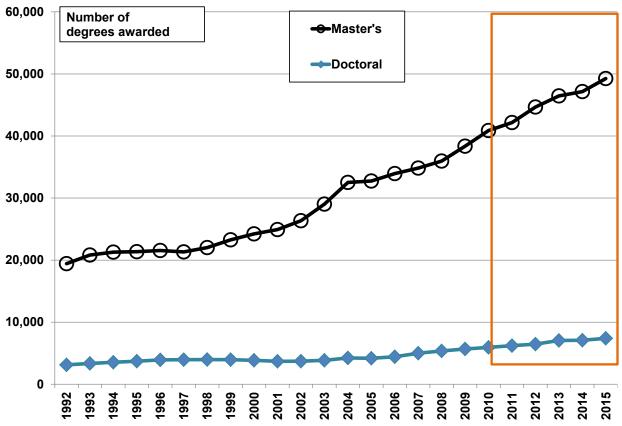
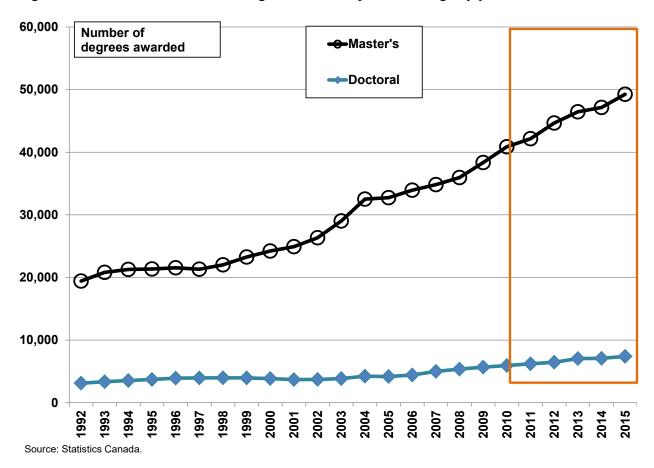




Figure 2.2 – Master's and doctoral degrees awarded, percent change by year, Canada, 1992-2015

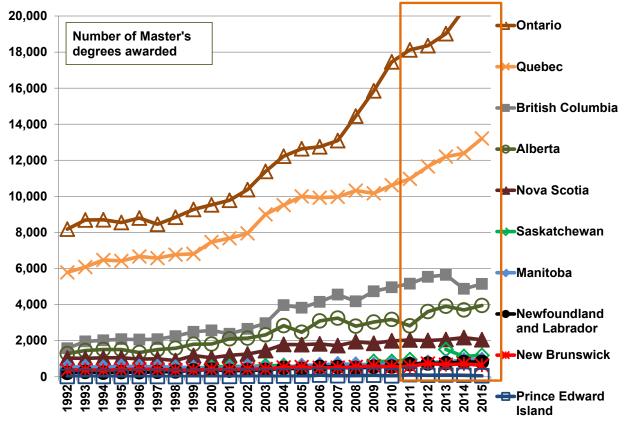




2.3 Graduate degrees awarded by Province

The provinces with the high numbers of Master's degrees awarded, and the steepest increases in recent years, are Ontario and Quebec.

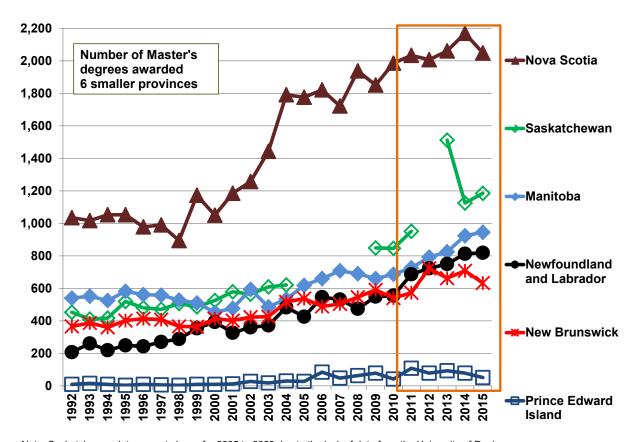
Figure 2.3 – Master's degrees awarded by province, 1992-2015



Note: Saskatchewan data are not shown for 2005 to 2008 due to the lack of data from the University of Regina. Source: Statistics Canada.



Figure 2.4 – Master's degrees awarded by province, six smaller provinces, 1992-2015

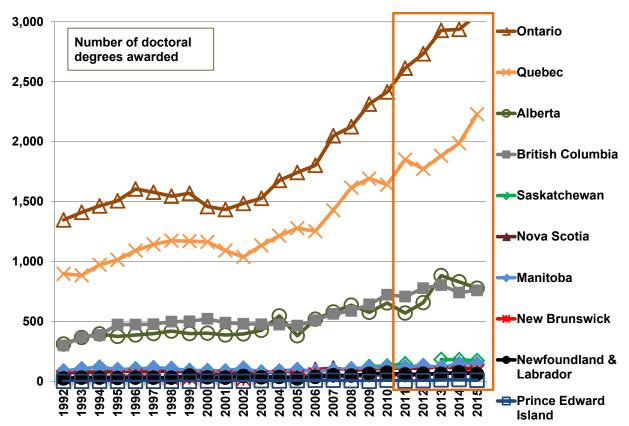


Note: Saskatchewan data are not shown for 2005 to 2008 due to the lack of data from the University of Regina. Source: Statistics Canada.



The provinces with the highest numbers of doctoral degrees awarded were Ontario and Quebec. Those that have increased most in the years 20011 to 2015 are Ontario and Alberta.

Figure 2.5 – Doctoral degrees awarded by province, 1992-2015



Note: Saskatchewan data are not shown for 2005 to 2008 due to the lack of data from the University of Regina. Source: Statistics Canada.



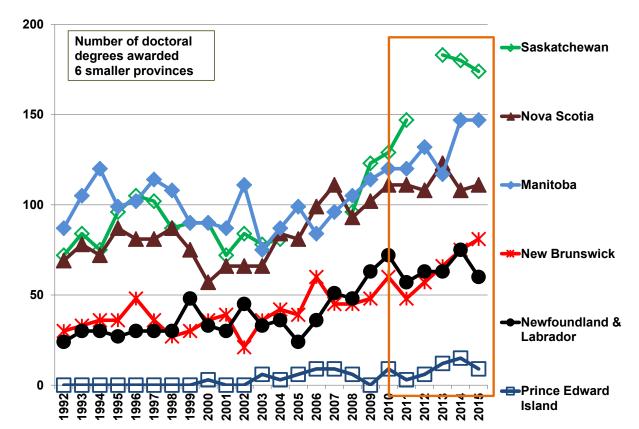


Figure 2.6 – Doctoral degrees awarded by province, six smaller provinces, 1992-2015

Note: Saskatchewan data are not shown for 2005 to 2008 due to the lack of data from the University of Regina. Source: Statistics Canada.

2.4 Graduate degrees awarded by Gender

More females than males have received Master's degrees in Canada since 1995. (Figure 1.5, above, shows that more females than males were enrolled full-time in Maser's programs since 1997.) Again, it is important to note that while there are more females than males graduating with a Master's degree, this does not mean that the number of males graduating has decreased. It has not. The number of males awarded a Master's degree in Canada has increased every year since 1997, reaching a high of 21,726 in 2015. The number of females has increased virtually every year since 1992 (with a very minor decline from 1995 to 1996). There were 27,528 Master's degrees awarded to females in 2015.



In recent years, from 2011 to 2015, the number of degrees awarded to both males and females has increased, with the rate of increase being somewhat higher for females.

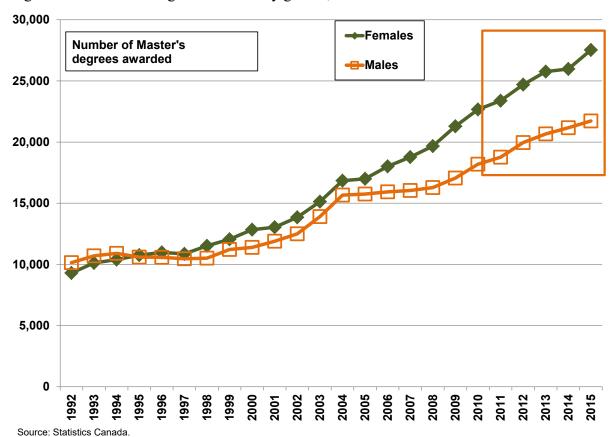


Figure 2.7 – Master's degrees awarded by gender, 1992-2015

Looking at number of doctoral degrees awarded (Figure 2.8) we see a different pattern. Notably, as was evident with enrolments, females are in a minority. Nevertheless, the number of doctoral degrees awarded to females has risen consistently every year from 1992 to 2015. The number of doctoral degrees awarded to males took a downturn from 1996 to 2001. Despite these patterns and despite the ongoing increase in Master's degrees awarded to females, shown in Figure 2.7, females do not reach the number of *doctoral* degrees awarded to males in any of the years examined.



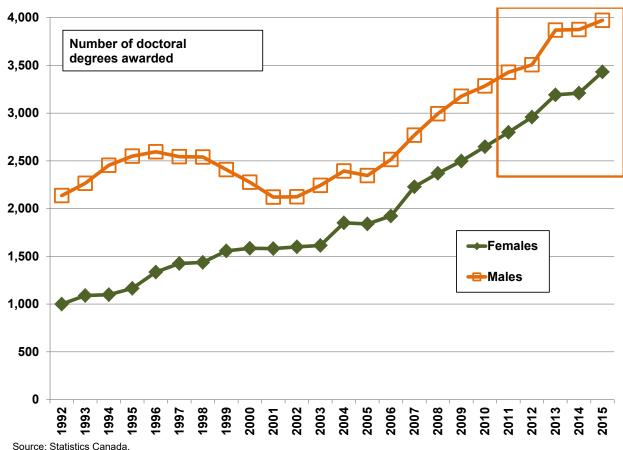


Figure 2.8 – Doctoral degrees awarded by gender, 1992-2015

As Table 2.4 shows the percent female among doctoral degrees awarded reached about 45% in 2010. It has been at that rate from that time through to 2015, the latest date for which we have data.



Table 2.4 – Master's and doctoral degrees awarded by percent female, 1992-2015

Percent female	1992	1003	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
icitiaic	1002	1555	1337	1555	1330	1001	1330	1000	2000	2001	2002	2000	2007	2000	2000	2001	2000	2003	2010	2011	2012	2010	2017	2010
Master's	47.8	48.6	48.8	50.4	50.9	50.9	52.3	51.8	53.0	52.3	52.6	52.1	51.8	51.9	53.1	53.9	54.7	55.5	55.5	55.5	55.2	55.5	55.1	55.9
Doctoral	31.9	32.5	30.9	31.3	34.0	35.9	36.1	39.3	41.0	42.7	42.9	41.8	43.6	43.9	43.3	44.6	44.2	44.0	44.6	44.9	45.7	45.1	45.3	46.4

Source: Statistics Canada

Table 2.5 and Table 2.6 give the numbers, by gender, of degrees awarded by province, from 1992 to 2015. The numbers give a more accurate picture here than percent female since the numbers are very small in some provinces (notably in Prince Edward Island) and so percentages can be unstable and misleading.

Focusing on the two provinces with the largest numbers of graduate degrees awarded, Ontario and Quebec, we see that females outnumbered males in Master's degrees awarded Ontario from 1998 to 2015, and in Quebec from 1995 to 2002, and 2007 to 2015.



Table 2.5 – Master's degrees awarded by gender and province, 1992-2015

Table 2.3	, 1,	Tast	CI D	uc	gree	sav	varc	icu	U y ¿	SCIIC	ici c	mu	pro	V IIIC	\sim , 1	JJZ	-20	13							
Master's	Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	7007	2008	2009	2010	2011	2012	2013	2014	2015
Nfl'd & Labrador	М	120	132	117	108	123	129	135	156	174	135	162	168	219	186	240	231	198	237	222	276	288	303	360	357
	F	87	132	105	141	120	141	156	195	219	192	201	207	264	240	306	300	279	309	336	408	435	447	453	465
PEI	M	3	6	6	0	3	6	3	3	6	0	12	3	9	6	33	12	18	12	12	36	30	33	27	15
	F	6	9	3	3	6	0	3	6	6	15	15	15	21	18	51	33	45	66	30	72	48	60	51	33
Nova Scotia	М	462	450	477	447	420	429	399	513	408	444	498	603	729	750	711	621	690	633	720	741	711	789	864	795
	F	570	564	576	609	558	558	495	663	645	741	759	840	1,059	1,023	1,104	1,101	1,248	1,218	1,260	1,293	1,296	1,269	1,305	1,254
New Brunswick	M	189	195	198	186	210	201	165	168	198	192	207	216	261	288	225	210	246	264	243	258	351	300	339	300
	F	174	192	165	213	207	204	201	195	213	210	213	213	258	249	264	294	297	327	294	315	375	366	369	333
Quebec	M	3,012	3,117	3,240	3,174	3,279	3,240	3,255	3,294	3,618	3,756	3,969	4,635	4,929	5,172	5,172	4,899	5,103	4,878	5,064	5,169	5,412	5,727	5,910	6,009
	F	2,775	2,964	3,234	3,246	3,387	3,333	3,513	3,519	3,852	3,918	3,975	4,368	4,587	4,830	4,752	5,076	5,220	5,292	5,556	5,805	6,240	6,480	6,474	7,203
Ontario	M	4,311	4,488	4,572	4,341	4,383	4,254	4,278	4,590	4,575	4,797	4,938	5,442	5,793	6,024	5,790	5,928	6,447	7,053	7,854	8,019	8,418	8,652	9,210	9,657
	F	3,870	4,200	4,131	4,209	4,419	4,203	4,569	4,683	4,956	4,992	5,439	5,940	6,432	6,615	6,954	7,164	8,001	8,802	9,597	10,092	10,032	10,362	11,160	11,601
Manitoba	M	318	327	303	309	303	279	240	237	207	228	288	225	249	279	273	315	267	267	267	282	330	321	375	384
	F	222	228	219	276	261	279	285	270	246	249	306	264	285	339	387	393	423	393	423	459	477	507	552	564
Saskat-																									
chewan	M	258	231	249	297	258	264	267	258	276	294	270	285	279	195	195	195	222	372	363	429	288	597	498	513
	F	198	177	168	219	222	210	240	228	246	285	294	321	342	240	240	240	270	477	483	522	378	912	624	672
Alberta	M	660	741	738	684	639	648	705	816	831	1,020	1,041	1,098	1,350	1,098	1,389	1,473	1,224	1,290	1,377	1,281	1,569	1,665	1,518	1,599
	F	621	714	774	819	702	858	873	984	981	1,083	1,101	1,224	1,479	1,365	1,701	1,773	1,581	1,740	1,797	1,533	2,046	2,241	2,187	2,352
British Columbia	M	807	1,017	1,002	1,047	957	1,008	1,071	1,182	1,095	1,026	1,107	1,230	1,851	1,746	1,896	2,166	1,872	2,055	2,067	2,271	2,403	2,367	2,067	2,091
	F	774		_					1,308	1,476	1,353	1,548	1,737	2,115	2,076	2,250	2,391	2,304	2,676	2,889	2,886	3,132	3,282	2,805	3,051

Source: Statistics Canada. Note: M=Male; F=Female.



Table 2.6 – Doctoral degrees awarded by gender and province, 1992-2015

F 12 9 9 6 6 6 6 6 6 6 12 15 15 12 18 9 12 21 21 24 39 27 21 PEI M 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	20 20 20 20 20 20 20 20 20 20 20 20 20 2
Labrador M 12 21 21 21 24 27 21 39 21 18 30 21 21 18 24 30 24 39 33 30 39 PEI M 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	33 27 : 6 6 6 9 9 9 59 69 6 64 36 4
PEI M 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6 6 9 9 9 69 69 64 36 64 36 64 36 64 36 64 36 64 36 64 64 64 64 64 64 64 64 64 64 64 64 64
F 0 0 0 0 0 0 0 0 0 0 0 3 0 0 3 0 0 3 6 3 0 3 0	9 9 69 69 6 64 36 4 12 30 :
Nova Scotia M	69 69 6 64 36 4 12 30 3
F 21 21 27 27 30 27 33 33 24 33 24 27 33 27 39 51 42 45 57 42 39 New Brunswick M 18 27 30 33 39 30 21 21 24 27 12 21 24 21 33 30 27 30 33 27 30 F 9 6 6 6 12 9 6 6 12 15 9 15 15 18 24 18 21 21 27 21 24	54 36 4 12 30 3
F 21 21 27 27 30 27 33 33 24 33 24 27 33 27 39 51 42 45 57 42 39 New Brunswick M 18 27 30 33 39 30 21 21 24 27 12 21 24 21 33 30 27 30 33 27 30 F 9 6 6 6 12 9 6 6 12 15 9 15 15 18 24 18 21 21 27 21 24	54 36 4 12 30 3
New Brunswick M 18 27 30 33 39 30 21 21 24 27 12 21 24 21 33 30 27 30 33 27 30 F 9 6 6 6 12 9 6 6 12 15 9 15 15 18 24 18 21 21 27 21 24	12 30
F 9 6 6 6 12 9 6 6 12 15 9 15 15 18 24 18 21 21 27 21 24	
Quebec M 624 606 669 693 738 753 759 717 675 627 570 666 696 726 723 789 876 942 879 1.002 945 1.0	1,074 1,19
	34 909 1,0
Ontario M 885 933 1.008 1.014 1.017 1.005 981 897 831 810 834 894 927 972 1.011 1.146 1.239 1.281 1.329 1.437 1.494 1.5	7 1.611 1.6
F 462 477 459 492 588 573 567 675 630 621 651 630 750 768 792 906 888 1,032 1,086 1,173 1,272 1,3	
Manitoba M 63 84 81 72 66 75 72 54 54 57 63 48 51 57 48 63 57 72 69 72 75	69 72
	18 72
	96 105
F 18 18 18 24 21 21 27 21 30 27 21 18 33 30 30 30 51 54 57 60 39	34 75
	22 489 42
	60 342 3
British	32 372 4
F 96 129 123 144 147 189 183 186 189 195 201 225 204 213 237 258 273 282 312 306 348 3	366 3

Source: Statistics Canada. Note: M=Male; F=Female.



We saw earlier that a consistently lower number of females as compared to males were awarded doctoral degrees in the years 1992 to 2015 in Canada as a whole. There are essentially no exceptions to this statement when one examines provincial level data (Table 2.6). There are a few instances where the numbers of females and males are the same (Nova Scotia in 2001 and 2010, Newfoundland and Labrador in 2013). There are two years when the number of females reported to have been awarded doctoral degrees is slightly higher (Newfoundland and Labrador in 2010 and Saskatchewan in 2008). However, the numbers are sufficiently close that they are subject to rounding errors. Nevertheless, it is clear that in some provinces, especially some of the smaller provinces the gender balance in doctoral degrees awarded is close to 50% at times.

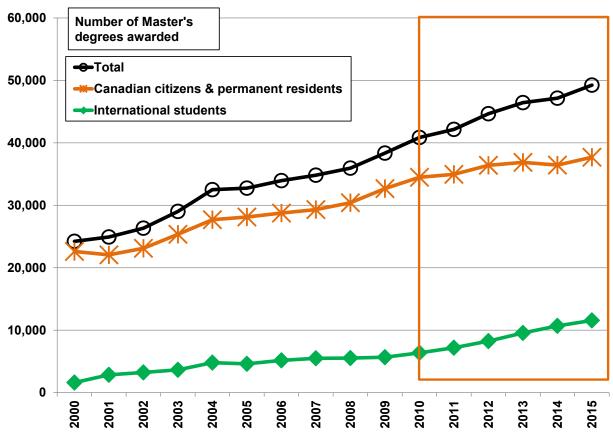
2.5 Graduate degrees awarded by International student status

The pattern of degrees granted to international students parallels the pattern of graduate enrolments of these students. Figure 2.9 to Figure 2.12 show the relevant results.

Looking first at Master's degrees awarded (Figure 2.9 and Figure 2.11), there has been an increase in the number of Master's degrees awarded to international students since 2008, with the size of that increase getting larger every year until 2015. During the same time period, the number of Master's degrees awarded to Canadian citizens and permanent residents also increased, but less consistently.



Figure 2.9 – Master's degrees awarded by international student status, 2000-2015



Source: Statistics Canada.

The absolute number of doctoral degrees awarded to international students is quite low; only since 2012 did that number exceed 1,000 degrees. That said, the rate of increase in the number of doctoral degrees awarded to international students has been greater than the rate of increase for Canadian citizens and permanent residents every year from 2010 to 2015. Figure 2.10 and Figure 2.12 provide the relevant details.



Figure 2.10 -Doctoral degrees awarded by international student status, 2000-2015

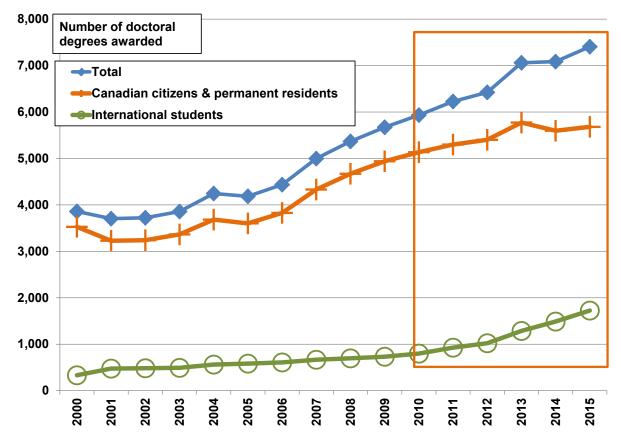




Figure 2.11 – Master's degrees granted per year, annual percent change by international student status, 2000-2015

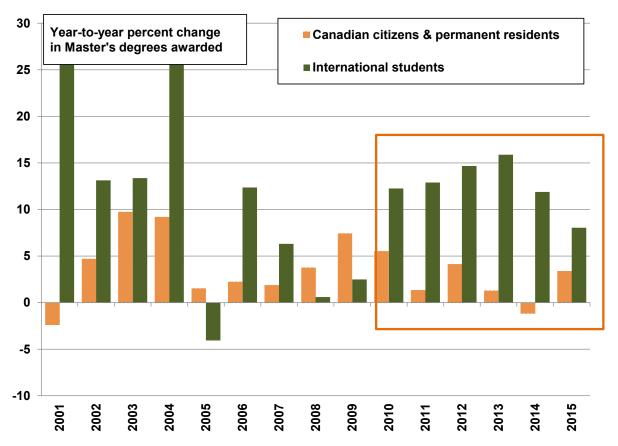
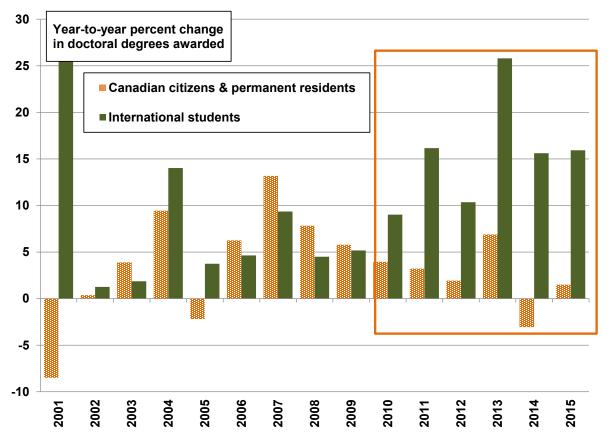




Figure 2.12 - Doctoral degrees granted per year, annual percent change by international student status, 2000-2015





2.6 Graduate degrees awarded by International student status and Gender

If we look at the gender split among degrees granted by international student status, we get the results in Table 2.7.

There are a few points to note from this table. First, as was true of graduate enrolments, the percent female among international students to whom graduate degrees were awarded is consistently lower than among Canadian citizens and permanent residents, and hence among the total graduate degrees awarded.

Secondly note that the percent female varies little from 2000 to 2015, the years for which this information is available from Universities Canada. For Master's degrees, 52% to 56% of all degrees granted went to females, every year from 2000 to 2015. The percent female among degrees granted to international students was consistently between 39% to 43% during those years. For doctoral degrees granted, the comparable numbers were: percent female among *all* degrees granted ranged from 41% to 46% in all years 2000 to 2015. The percent female among doctoral degrees granted to international students ranged between 30% and 36%.

Any pattern of an increase in the percent female is seen only for the "total" figures. There is little increase in the percent female for international students who were awarded graduate degrees, if one compares the year 2000 to the year 2015.

Table 2.7 – Master's and doctoral degrees awarded by international student status, percent female, 2000-2015

10111a1c, 2000-20	1 5															
% female	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Master's																
Total	53.0	52.3	52.6	52.1	51.8	51.9	53.1	53.9	54.7	55.5	55.4	55.5	55.2	55.5	55.2	55.9
International students	43.2	40.4	41.7	41.0	40.4	40.6	39.0	40.2	40.4	40.2	41.7	40.4	39.4	42.1	41.6	41.8
Doctoral																
Total	41.0	42.7	42.9	41.8	43.6	43.9	43.3	44.6	44.2	44.1	44.6	44.9	45.8	45.1	45.2	46.3
International students	32.4	33.3	30.4	34.8	29.9	30.4	31.0	31.1	33.6	32.0	33.8	34.3	34.6	33.3	34.9	35.5



2.7 Graduate degrees awarded by Main field of study

The fields with a high number of Master's degrees granted are, not surprisingly, mostly the same ones for which we saw high levels of enrolments (see Figure 1.11, above and Figure 2.13). That is:

- Business, Management, and Public Administration;
- Architecture, Engineering and Related Technologies,
- Social and Behavioral Sciences and Law and
- Health and Related Fields.

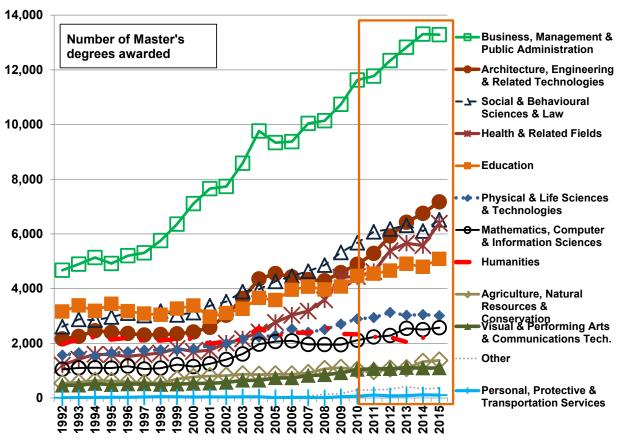
The number of Master's degrees awarded was also high in Education. See Figure 2.13.

Looking in more detail at the most recent five years for which we have data (the boxed area in the graph), it is clear that the number of degrees awarded in Business, Management, and Public Administration is not only high, it continues to increase. In 2009, 10,740 Master's degrees were awarded to those in this general field; by 2015 that number had risen to 13,287 – 27% of all Master's degrees granted in Canada that year.

Below Business, Management, and Public Administration in numbers of Master's degrees awarded is a cluster of four fields: Architecture, Engineering and Related Technologies; Social and Behavioural Sciences and Law; Health and Related Fields; and Education. Focusing on the years from 2011 to 2015, there is an increase in Architecture, Engineering and Related Technologies (from 5,216 to 7,170) and Health and Related Fields (from 4,626 to 6,390). The other two fields (Social and Behavioural Sciences and Law, and Education) had slight increases that from 2011 to 2015 (going from 6,078 to 6,519, and from 4,545 to 5,085 respectively).



Figure 2.13 – Master's degrees awarded by main field of study, 1992-2015



Source: Statistics Canada.

There is a somewhat different pattern for numbers of doctoral degrees granted over time. See Figure 2.14.



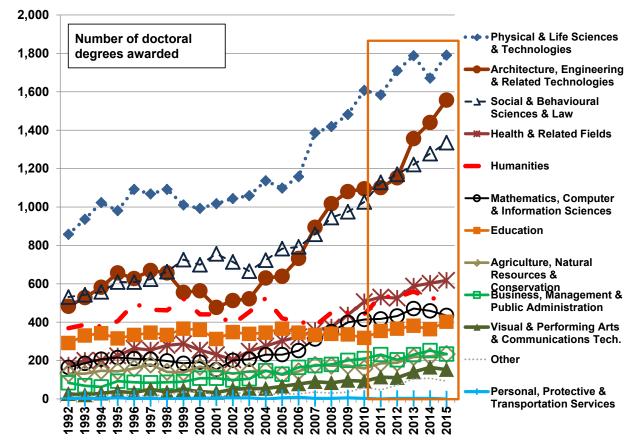


Figure 2.14 – Doctoral degrees awarded by main field of study, 1992-2015

Source: Statistics Canada.

For doctoral degrees granted, the largest field of study since 1992, in terms of number of degrees granted, has been Physical and Life Sciences and Technologies. This dominance continued in the most recent five-year period we are considering, from 2011 to 2015. During that period this field went from 1,584 degrees awarded to 1,791.

The fields of study with the next most numerous degrees awarded during that five-year time period are: Architecture, Engineering and Related Technologies, and Social and Behavioral Sciences and Law. The first of these went from 1,101 degrees awarded in 2011 to 1,557 in 2015. The corresponding numbers for Social and Behavioral Sciences and Law are: 1,128 in 2011 to 1,335 in 2015.



The lines in Figure 2.14 show that there was a slight increase from 2011 to 2015 in the number of doctoral degrees granted in virtually all fields, including some with relatively small numbers of graduates.

2.8 Graduate degrees awarded by Main field of study and Gender

Continuing the focus on gender patterns, the next step is to look at how the degrees awarded to males and females differ by main field of study. Table 2.8 and Table 2.9 give the relevant results. These tables are arranged so those fields of study with the highest percent female in 2015 are at the top.

As we saw in Table 2.4, 56% of Master's degrees granted in 2015 were awarded to females. Table 2.8 shows those fields with a higher percent female than this in Master's degrees awarded in 2015 are:

- Health and related fields (77%),
- Education (75%),
- Social and behavioral sciences and law (66%),
- Other instructional programs (66%),
- Visual and performing arts, and communications technologies (64%) and
- Agriculture, natural resources and conservation (60%).

Those with a lower percent female than the Canadian average for all fields are:

- Architecture, engineering and related technologies (29%),
- Personal, protective and transportation services (34%),
- Mathematics, computer and information sciences (41%) and
- Business, management and public administration (51%).

What is more, the relative order of these fields over time is quite consistent. There are few reversals in the order of which has the higher or lower percent female, except for the fields "Other instructional programs" – which is hard to interpret, and Personal, protective and transportation services which has very small numbers and so unstable percentages.



Table 2.8 – Master's degrees awarded by percent female, in each main field of study, 1992-2015

Table 2.	0 .	ivias	ici	s ac	gic	cs a	war	icu	Uy j	JCIC	CIII	ICII	iaic,	111 (Jacii	IIIa	111 1	iciu	01 3	stuu	у, 1)) <u>L</u>	201	
Percent female	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
All fields	48	49	49	50	51	51	52	52	53	52	53	52	52	52	53	54	55	56	55	55	55	55	55	56
All fields	48	49	49	50	51	51	52	52	53	52	53	52	52	52	53	54	55	56	55	55	55	55	55	56
Education	69	70	71	72	74	72	74	72	73	74	74	74	74	71	72	76	75	77	75	75	77	75	75	75
Visual & performing arts, & communications technologies	59	60	59	63	59	64	60	63	62	66	63	66	58	61	61	63	66	62	64	61	60	61	62	64
_																								
Humanities Social	52	53	53	54	54	53	56	55	58	58	57	58	57	58	59	56	57	58	58	58	59	58	58	54
behavioral sciences & law	52	52	54	53	56	56	58	59	60	61	61	62	63	63	63	63	64	64	64	65	64	65	65	66
Business, management & public administration	40	40	40			43	44	43	44	43	43			42	44	44	45	46	47	47	47	48	49	51
Physical & life sciences & technologies	39	40	43					47	48		54	52				55		55	55		52	55	52	53
Mathematics, computer & information sciences	46	47	45	45	47	44	46	41	43	43	43	45	44	40	42	40	44	42	42	44	41	43	43	41
Architecture, engineering & related technologies	18	18	21	23	24	25	26	26	29	28	27	27	28	28	28	30	28	28	29	28	28	29	28	29
Agriculture, natural resources & conservation	42	42	38	45	46	45	53	54	54	51	55	56	57	55	57	61	59	62	60	59	59	61	61	60
Health & related fields	69	69	69	72	70	70	72	72	73	75	76	76	76	78	78	78	81	80	79	79	79	78	77	77
Personal, protective and transportation services	33	0	50	50	0	25	17	30	11	75	33	100	200	25	60	22	0	33	22	47	30	31	35	34

Source: Statistics Canada * Note that the numbers for Personal, protective and transportation services are very small, so the percent female is unstable.



Table 2.9 – Doctoral degrees awarded by percent female, in each main field of study, 1992-2015

Percent female	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
All fields	32	32	31	31	34	36	36	39	41	43	43	42	44	44	43	45	44	44	45	45	46	45	45	46
Education	56	57	56	56	61	63	64	64	71	69	71	66	70	66	71	70	68	69	66	72	70	73	70	69
Visual & performing arts, & communicati ons technologies	56		40	38	45	47	42	56		64			61	55			46	53					53	
Ü	37									53														
Humanities Social behavioural sciences & law	46		39 46	40	44	46 53		53	50				60	48 61	59			63					48 62	
Business, management & public administratio n	39	30	33	32	28	36	41	37	42	42	42	37	45	40	45	43	52	45	46	44	47	42	51	47
Physical & life sciences & technologies	27	27	27	27	30	29	30	33	34	35	38	36	39	40	40	44	42	41	43	42	43	44	43	46
Mathematics , computer & information sciences	15		14	19				19		22			26										27	
Architecture, engineering & related technologies	11	9	7	10	11	10	11	14		15	19	16	16		16	17	22	19	20			19	21	
Agriculture, natural resources & conservation	20	25	16	27	23	28	28	37	36	34	27	40	35	43	40	41	48	45	42	44	46	51	47	
Health &	37		45	36	4.4	55		10	10	48	56	E2			57	61	EO			62	59	60	61	
related fields Personal, protective and transportatio n services	0			30	0								57	53			58						0	
Other instructional programs	50	40	50	50	33	40	63	75	64	60		63	67	50			60	67	57	56		66	67	58



Table 2.9 shows the equivalent pattern for doctoral degrees granted by main field of study. For doctoral programs, the main field with the highest percent female among degree recipients in 2015 was Education (69% compared to 46% for all fields). This is followed by Social and behavioral sciences and law (64%), Health and related fields (64%), Other instructional programs (58%), Humanities (51%), and Visual and performing arts, and communications technologies (49%)

Two fields of study showing a percent female less than the Canadian average for all fields in 2015 (46%) were the same for doctoral degrees awarded as for Master's degrees awarded. That is: Architecture, engineering and related technologies (23%), and Mathematics, computer and information sciences (24%).

In other words, while females make up more than half of all Master's graduates, and 46% of doctoral graduates, there are still some persisting and persistent gender differences in fields of study of these graduates.

2.9 Graduate degrees awarded by Age groups

The next section examines the distribution of degrees awarded by age groups. See Figure 2.15 and Figure 2.16.

We first consider master's degrees awarded by age group. While the youngest age groups dominated Master's level *enrolments* (see Figure 1.15, above), it is a slightly older age group (those 25 to 29 years of age) who dominate the numbers of Master's degrees awarded. Next is the oldest age group, those 35 years of age and over. In any given year, fewer of those in the youngest age group (those under 25 years of age) are awarded Master's degrees, compared to the other age groups.

Nonetheless, all four age groups show an increase in the years 2011 to 2015.



22,000 Number of Master's degrees awarded 20,000 18,000 ₩-Less than 25 25 to 29 16,000 30 to 34 14,000 ◆35 and over 12,000 10,000 8,000 6,000 4,000 2,000 0 2005

Figure 2.15 – Master's degrees awarded by age groups, 1999-2015



The picture is again different for doctoral degrees awarded. Virtually no degrees were awarded to those in the youngest age group (those under the age of 25). The two oldest age groups (those 30 to 34 years of age, and those 35 years of age and over) tend to dominate the numbers of doctoral degrees awarded. See Figure 2.16. As of 2005 those aged 30 to 35 were the most numerous among those awarded doctoral degrees. We saw earlier that the number of doctoral degrees awarded has been increasing over the recent period, 2011 to 2015 (see Figure 2.1). This increase is reflected in the upward trajectory of all the lines in Figure 2.16 representing the three older age groups which are represented among these degree recipients.

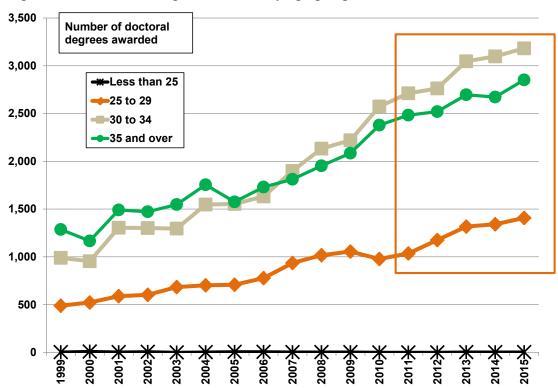


Figure 2.16 – Doctoral degrees awarded by age groups, 1999-2015



2.10 Graduate degrees awarded by Age groups and Gender

Table 2.10 - Number of Master's and doctoral degrees awarded by gender and age groups, 1999-2015

		Master's				Doctoral			
		Less than	25 to 29	30 to 34	35 years &	Less than	25 to 29	30 to 34	35 years &
Year	Gender	25 years	years	years	over	25 years	years	years	over
1999	Male	783	3,174	1,686	2,199		297	633	756
	Female	978	3,456	1,470	2,544		192	357	537
2000	Male	750	3,231	1,650	2,025		333	606	651
	Female	1,119	3,621	1,500	2,469		189	348	519
2001	Male	885	4,347	2,454	3,288		360	771	807
	Female	1,281	5,061	2,193	3,639		225	531	687
2002	Male	942	4,503	2,622	3,546		360	786	792
	Female	1,395	5,496	2,298	3,744		243	516	687
2003	Male	966	4,983	3,054	3,996		429	762	864
	Female	1,383	6,087	2,760	3,945		252	531	684
2004	Male	1,047	5,685	3,741	4,578		414	888	963
	Female	1,542	6,585	3,273	4,824		291	663	792
2005	Male	1,134	5,718	3,447	4,764		393	903	870
	Female	1,713	6,879	3,039	4,602	-	315	651	702
2006	Male	1,143	5,811	3,462	4,881	-	426	999	939
	Female	1,731	7,269	3,264	4,962	-	354	633	789
2007	Male	1,281	6,063	3,249	4,860	-	486	1,098	1,005
	Female	1,905	7,554	3,342	5,259	-	450	801	798
2008	Male	1,518	6,267	3,126	5,019	-	561	1,233	1,050
	Female	2,424	8,058	3,291	5,376		456	900	909
2009	Male	1,905	6,462	3,213	5,034		582	1,299	1,131
	Female	3,138	8,619	3,429	5,574		474	918	960
2010	Male	1,878	7,377	3,411	5,517		522	1,455	1,311
	Female	2,982	9,855	3,855	5,964		459	1,122	1,074
2011	Male	2,145	7,986	3,579	5,025		567	1,584	1,281
	Female	3,399	9,801	4,038	6,129		465	1,128	1,209
2012	Male	2,289	8,379	3,795	5,268		606	1,521	1,335
	Female	3,603	10,248	4,191	6,312		564	1,203	1,158
2013	Male	2,421	8,883	3,864	5,583		714	1,725	1,434
	Female	3,897	10,923	4,485	6,615		600	1,326	1,254
2014	Male	2,607	9,273	4,032	5,301		729	1,782	1,371
	Female	3,828	11,085	4,557	6,537		615	1,317	1,299
2015	Male	2,880	9,669	3,882	5,322		747	1,785	1,461
	Female	4,332	11,874	4,698	6,669		660	1,398	1,395

Source: Statistics Canada

Note: There were no doctoral degrees awarded to anyone 25 and under



The age group patterns evident in Figure 2.15 and Figure 2.16 are repeated for both males and females. As Table 2.11 shows, Master's degree recipients among the two younger age groups have been more than 50% female in all years reported. Degree recipients among the two older age groups were 50% female since 2007 (for those 30-34 years of age) and since 2006 (for those 35 years of age and over).

As we saw in Figure 2.8, at no point, and for no age group, were doctoral degree recipients fifty percent female or more.

Table 2.11 –Master's and Doctoral degrees awarded, percent female by age groups, 1999-2015

Percent female	1 -Waster	Master's	5	,		Doctoral		
Year	Less than 25 years	25 to 29 years	30 to 34 years	35 years and over	Less than 25 years*	25 to 29 years	30 to 34 years	35 years and over
1999	55.5	52.1	46.6	53.6		39.3	36.1	41.5
2000	59.9	52.8	47.6	54.9		36.2	36.5	44.4
2001	59.1	53.8	47.2	52.5		38.5	40.8	46.0
2002	59.7	55.0	46.7	51.4		40.3	39.6	46.5
2003	58.9	55.0	47.5	49.7		37.0	41.1	44.2
2004	59.6	53.7	46.7	51.3		41.3	42.7	45.1
2005	60.2	54.6	46.9	49.1		44.5	41.9	44.7
2006	60.2	55.6	48.5	50.4		45.4	38.8	45.7
2007	59.8	55.5	50.7	52.0		48.1	42.2	44.3
2008	61.5	56.3	51.3	51.7		44.8	42.2	46.4
2009	62.2	57.2	51.6	52.5		44.9	41.4	45.9
2010	61.4	57.2	53.1	51.9		46.8	43.5	45.0
2011	61.3	55.1	53.0	54.9	-	45.1	41.6	48.6
2012	61.2	55.0	52.5	54.5		48.2	44.2	46.5
2013	61.7	55.1	53.7	54.2	-	45.7	43.5	46.7
2014	59.5	54.5	53.1	55.2	-	45.8	42.5	48.7
2015	60.1	55.1	54.8	55.6		46.9	43.9	48.8

Source: Statistics Canada * Note: There were no doctoral degrees awarded to anyone 25 and under

2.11 Graduate degrees awarded by Age groups and International student status

The next section looks at the age distribution of international students to whom degrees were awarded in Canada, in the years 1999 to 2015. Figure 2.17 shows the pattern for Master's degrees granted and Figure 2.18 for doctoral degrees granted.



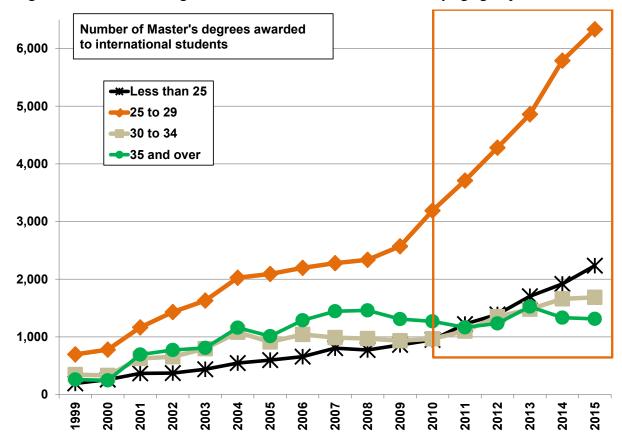


Figure 2.17 – Master's degrees awarded to international students by age groups, 1999-2015

Source: Statistics Canada.

Looking first at Master's degrees awarded, it is clear that the numbers granted to international students in all age groups has increased since 1999. Focusing on the most recent five-year period, 2011 to 2015, there is an increase for all age groups except the oldest, aged 35 years and over. Most dramatic is the increase in this five-year time period is the number of Master's degrees awarded to international students aged 25 to 29 years. The number of degrees awarded went from 2,571 in 2009 to 6,333 in 2015.



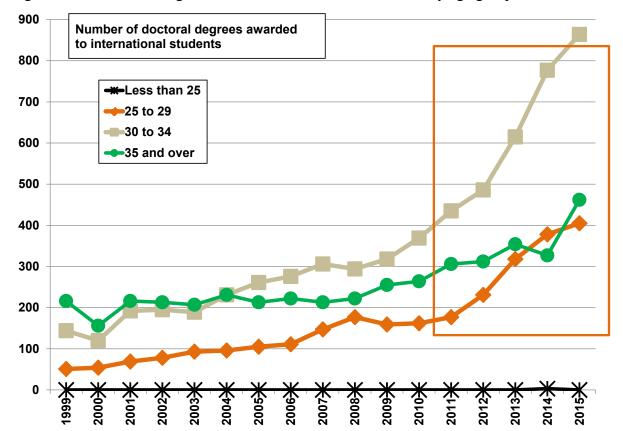


Figure 2.18 – Doctoral degrees awarded to international students by age groups, 1999-2015

Source: Statistics Canada.

Among doctoral degrees awarded (Figure 2.18), the second oldest group (aged 30 to 34 years) is the age group with the largest number of degrees awarded to international students since 2004. Note that, as indicated elsewhere, there were no doctoral degrees awarded to anyone 25 and under. Numbers of degrees awarded to international students in the other three age groups have all been increasing, especially in the most recent five years, 2011 to 2015.

This same information is presented in a somewhat different format in Table 2.12, which gives the percent of the degrees awarded in each age group which were awarded to international students. The percentage of Master's degrees awarded to international students has increased in all age groups since 1999. However, if we focus on trends in the most recent years, 2011 to 2015, we see it is the two youngest age groups in which the percentage of degrees awarded to



international students has increased the most. For the youngest age group, those under 25 years of age, 31% of the Master's degrees awarded in 2015 went to international students. This number compares to 22% in 2011. For those who were 25 to 29 years of age, the percentage of Master's degrees awarded to international students went from 21% in 2011 to 29% in 2015. There has been little change, from 2011 to 2015, in the percentage of Master's degrees awarded to those in the highest age group.

Table 2.12 – Master's and doctoral degrees awarded, percent to international students by age group, 1999-2015

Dorsont	, 201																
Percent international	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Master's																	
Less than 25	10.9	13.8	16.9	15.9	18.6	21.1	21.0	22.9	25.2	19.6	17.1	19.5	22.0	23.4	27.1	29.8	31.0
25 to 29	10.5	11.3	12.4	14.3	14.7	16.5	16.6	16.8	16.7	16.3	17.0	18.5	20.9	22.7	24.6	28.4	29.4
30 to 34	10.9	10.5	13.4	13.3	13.7	15.4	14.1	15.5	15.0	15.1	14.1	13.3	14.4	16.7	17.7	19.3	19.6
35& over	5.5	5.5	10.0	10.6	10.2	12.3	10.8	13.1	14.3	14.0	12.3	11.0	10.4	10.6	12.5	11.3	10.9
Doctoral																	
Less than 25		-	-		-	-	-	-	-				-		-		
25 to 29	10.4	10.3	11.7	12.9	13.6	13.7	14.8	14.3	15.7	17.4	15.1	16.6	17.1	19.7	24.2	28.2	28.8
30 to 34	14.5	12.6	14.7	15.0	14.6	14.9	16.8	16.9	16.1	13.8	14.3	14.3	16.0	17.3	20.4	25.1	27.1
35 & over	16.8	13.4	14.5	14.5	13.4	13.2	13.5	12.8	11.8	11.4	12.2	11.1	12.3	12.5	13.3	12.2	16.2

Source: Statistics Canada

Note: There were no doctoral degrees awarded to anyone 25 and under

For doctoral degrees granted, the change in the percent international in the five years from 2011 to 2015 is more concentrated than for Master's degrees awarded. While the percent international went from 17% in 2011 to 29% in 2015 for those 25 to 29 years of age, there was virtually no increase in the percent international in this time period for the oldest age group, until 2015. Doctoral degrees granted to those 30 to 35 years of age went from 16% international in 2011 to 27% international in 2015.



2.12 World region of Degrees awarded to International students

Finally, Table 2.13 shows the percentage distribution of world regions for international students receiving graduate degrees in Canada from 2009-2015. (Information on world region is only available for this limited time period.) Note that the percentages in any year do not add to 100% because sub-areas (for example the sub-areas in Asia) are included as well as the total for the whole area (e.g. Asia).



Table 2.13 -World region of degrees awarded to international students, percentage distribution, 2009-2015

	Master's							Doctoral						
Year	2009	2010	2011	2012	2013	2014	2015	2009	2010	2011	2012	2013	2014	2015
North America	7.8	8.0	7.3	6.9	6.1	5.4	5.0	11.5	13.5	12.9	12.6	10.4	10.7	11.3
Central America	2.2	2.3	1.9	1.6	1.6	1.3	1.2	3.7	4.5	3.9	3.8	3.0	2.6	2.6
Caribbean and Bermuda	2.8	2.3	1.9	2.2	1.5	1.6	1.4	0.4	0.4	0.6	0.6	0.7	0.4	0.9
South America	3.2	3.2	3.3	2.5	3.4	2.8	3.1	7.0	5.6	5.5	4.1	3.9	4.4	4.3
Europe	13.9	13.6	13.6	13.7	12.2	12.9	12.2	25.8	24.4	23.3	25.2	21.5	22.0	21.2
Western Europe	9.6	9.7	9.6	9.7	9.0	9.4	8.9	16.4	16.9	14.9	17.6	14.1	14.1	13.4
Eastern Europe	2.3	1.6	1.8	1.9	1.4	1.6	1.4	3.7	3.4	2.9	2.1	2.5	2.6	2.4
Northern Europe	1.4	1.3	1.3	1.0	1.0	1.0	1.0	2.9	2.3	3.9	2.3	2.3	2.4	2.3
United Kingdom	0.8	0.8	0.9	0.6	0.6	0.6	0.6	1.2	1.5	2.3	1.2	1.4	1.6	1.6
Southern Europe	0.6	1.0	0.9	1.1	0.8	1.0	0.9	2.9	2.3	1.9	3.2	2.1	2.8	2.8
Africa	9.9	9.6	9.1	9.4	8.6	9.4	9.8	7.4	9.4	8.4	7.3	8.3	7.1	9.9
Asia	55.6	57.3	60.3	57.9	65.5	65.7	66.8	39.8	35.3	37.9	40.5	47.0	50.0	48.3
West Central Asia and the Middle East	8.8	9.8	12.1	12.7	12.8	10.7	8.7	13.5	10.9	12.3	14.1	16.7	19.0	18.8
Eastern Asia	34.4	33.3	30.0	26.3	33.8	34.5	36.4	15.6	14.3	16.5	15.8	18.8	20.0	19.8
Southeast Asia	1.9	1.9	2.2	1.5	1.5	1.3	1.5	4.1	3.8	2.9	3.5	3.5	3.4	2.3
Southern Asia	10.5	12.2	16.0	17.5	17.4	19.2	20.3	6.6	6.8	6.1	7.0	8.2	7.7	7.5
Oceanic	0.4	0.4	0.4	0.3	0.3	0.4	0.3	1.2	0.8	1.9	1.5	0.9	0.8	0.7

Source: Statistics Canada Note: percentages do not add to 100% because sub-regions are included.



It is clear that Asia dominates the degrees awarded to international students in all years shown, especially among doctoral degrees awarded. Students from Asia were awarded more than half of all Master's degrees awarded to international students in Canada, from 2007 to 2015, the years for which we have data. The largest sub-group within these graduates is the one from Eastern Asia.

Also, of note is that international students from Europe account for 12% or more of the Master's degrees awarded in those years, although the percentage has decreased somewhat in recent years. In 2009, 14% of the Master's degrees awarded to international students were awarded to students from Europe. This had decreased slightly to 12% in 2015.

Europe is more prominent in the percentage of degrees awarded to international *doctoral* students, 2009 to 2015, although again there is a decline. In 2009, 26% of the degrees awarded to international students went to those from Europe; this had declined to 21% in 2015.

There was a corresponding rise in the percentage of doctoral degrees awarded to international students which went to students from Asia. In 2009, 40% of all these degrees were awarded to students from Asia. By 2015 this percentage had increased to 48%.

Note: no data are available on the permanent province of Canadian citizens and permanent residents to whom graduate degrees have been awarded.

2.13 Enrolments and degrees by university

Detailed information on enrolments and degrees awarded by university is presented in Part II of this Report.