B.C. Baccalaureate Outcomes
2022 Survey of 2020 Baccalaureate Graduates

Detailed Summary of Survey Results
All Institutions
14.1901: Mechanical engineering

BCStudent Outcomes
Shaping Post-Secondary Education

SYSTEM	
14.1901	

RESPONSE RATE

Survey Response Rate:	14.1901		SYSTEM	
Baccalaureate Graduates Survey Cohort	324	100%	24,752	100%
Survey Respondents and Response Rate	123	38%	9,423	38%

Response Rate
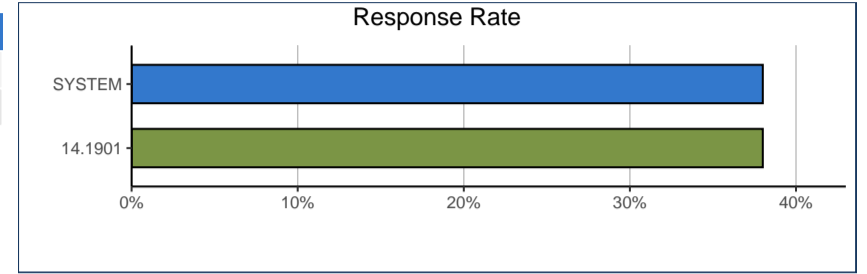
DEMOGRAPHIC INFORMATION

Self–Reporting Subgroups:	14.1901		SYSTEM	
Disabled	~	~	1,082	12%
International	17	14%	1,205	13%
Aboriginal	~	~	357	4%
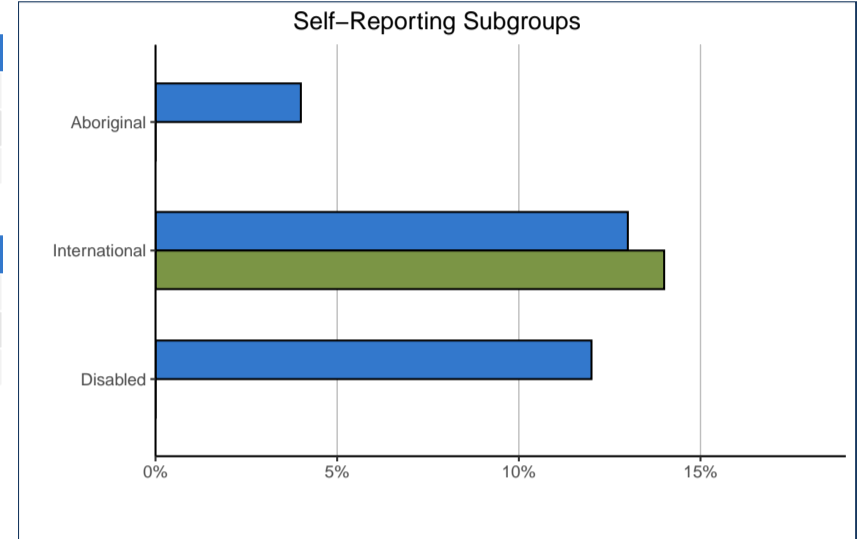
Gender:*	14.1901		SYSTEM	
Male	96	78%	3,744	40%
Female	27	22%	5,675	60%
Total	123	100%	9,419	100%

*Due to zero or low counts, institution–reported "Non–binary" demographic data are not included.

Self–Reporting Subgroups

Age (at time of survey):	14.1901		SYSTEM	
< 25	~	~	1,496	16%
25 to 29	95	77%	5,860	62%
30 to 34	14	11%	1,035	11%
35 to 39	~	~	421	4%
40 to 49	0	0%	397	4%
50 to 64	0	0%	186	2%
> 64	0	0%	22	0%
Total	123	100%	9,417	100%
Median Age	26		26	
Average (mean) Age	27		28	

Age Distribution
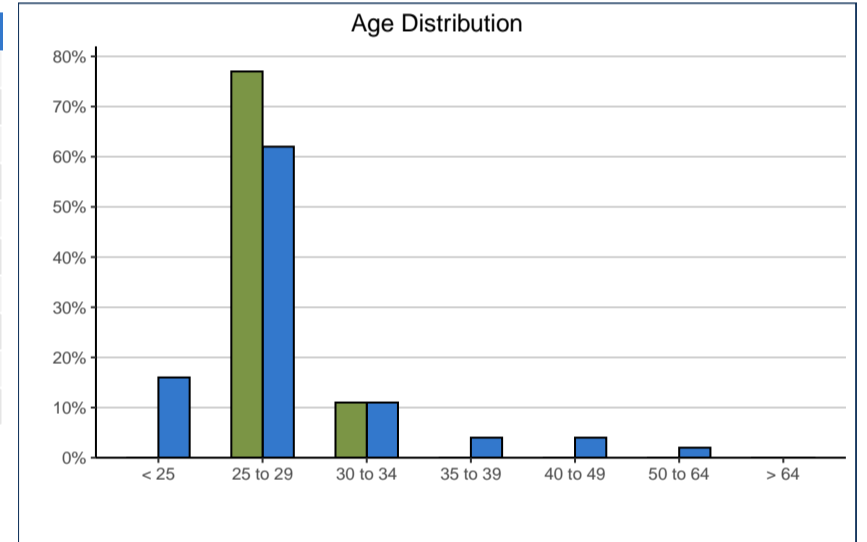
Place of Residence (at time of survey):	14.1901		SYSTEM	
BC – Mainland/Southwest	55	50%	5,472	65%
BC – Vancouver Island/Coast	~	~	1,112	13%
BC – Northern B.C.	~	~	270	3%
BC – Interior/Kootenays	22	20%	672	8%
BC Subtotal	95	86%	7,526	90%
Canada – Alberta	11	10%	343	4%
Canada – Ontario	~	~	280	3%
Canada – Other	~	~	176	2%
U.S.A.	~	~	80	1%
Non–BC Subtotal	16	14%	879	10%
Total	111	100%	8,405	100%

Place of Residence

Within BC

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All Institutions
14.1901: Mechanical engineering
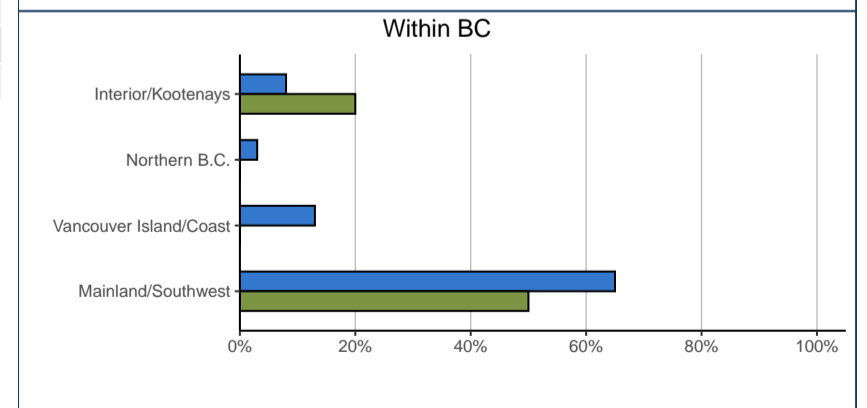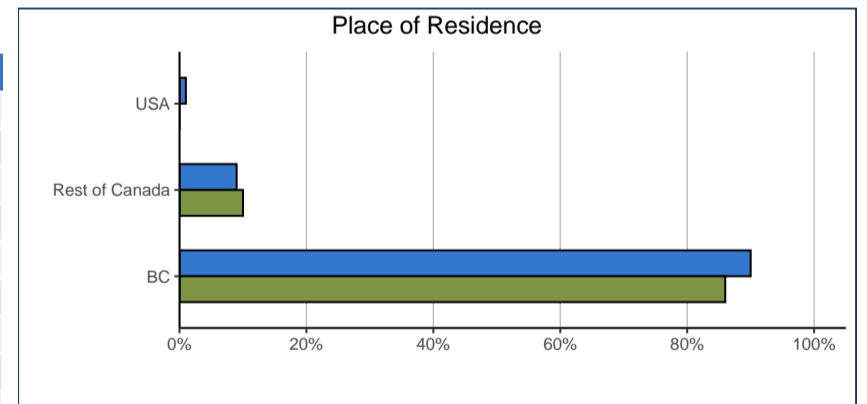
SYSTEM
14.1901

EDUCATION EVALUATION AND SKILL DEVELOPMENT

Program Satisfaction:	14.1901		SYSTEM	
Very Satisfied	17	14%	2,332	25%
Satisfied	93	76%	5,914	64%
Dissatisfied	10	8%	831	9%
Very Dissatisfied	3	2%	188	2%
Total	123	100%	9,265	100%

Usefulness of Knowledge, Skills, and Abilities Acquired during Program in Work:	14.1901		SYSTEM	
Very Useful	34	33%	3,011	38%
Somewhat Useful	51	49%	3,664	47%
Not Very Useful	13	13%	886	11%
Not at All Useful	6	6%	283	4%
Total	104	100%	7,844	100%

Took upgrading, access, bridging, or other preparatory courses during or prior to studies:	14.1901		SYSTEM	
Yes	10	9%	902	10%
No	105	91%	8,298	90%

Would select the same program again:	14.1901		SYSTEM	
Yes	74	69%	5,963	72%
No	33	31%	2,334	28%

Quality of Instruction:	14.1901		SYSTEM	
Very Good	10	8%	2,498	27%
Good	97	80%	6,007	64%
Poor	13	11%	685	7%
Very Poor	2	2%	131	1%
Total	122	100%	9,321	100%

Comprehensiveness of Core Courses:	14.1901		SYSTEM	
Very Good	14	11%	2,303	25%
Good	94	77%	5,649	61%
Poor	14	11%	1,073	12%
Very Poor	0	0%	172	2%
Total	122	100%	9,197	100%

Course Availability:	14.1901		SYSTEM	
Encountered course availability problems	49	40%	4,485	49%

| Financial Constraints:	14.1901		SYSTEM	
Had to interrupt studies for financial reasons	9	7%	987	11%
Had to take program part–time for financial reasons	8	7%	1,629	18%

Program Satisfaction

Legend: Very Satisfied / Satisfied

Program Quality

* "Very Good" or "Good"

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14.1901: Mechanical engineering

SYSTEM
14.1901
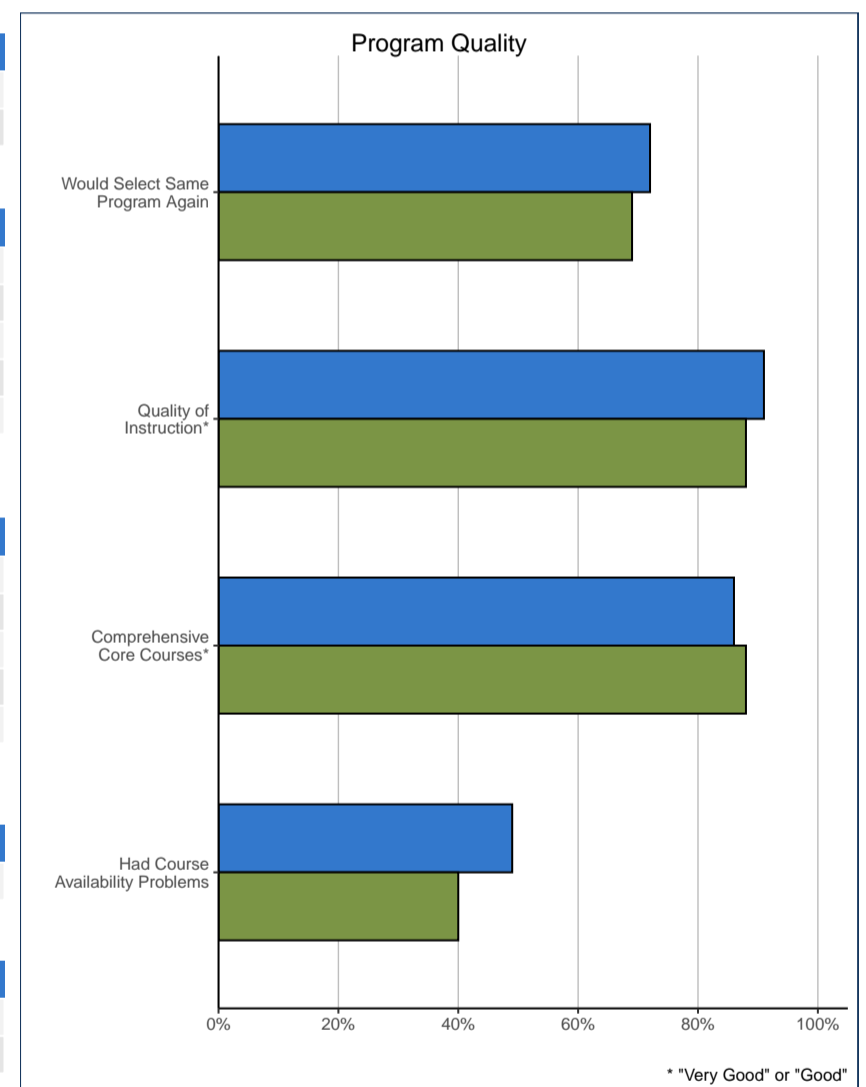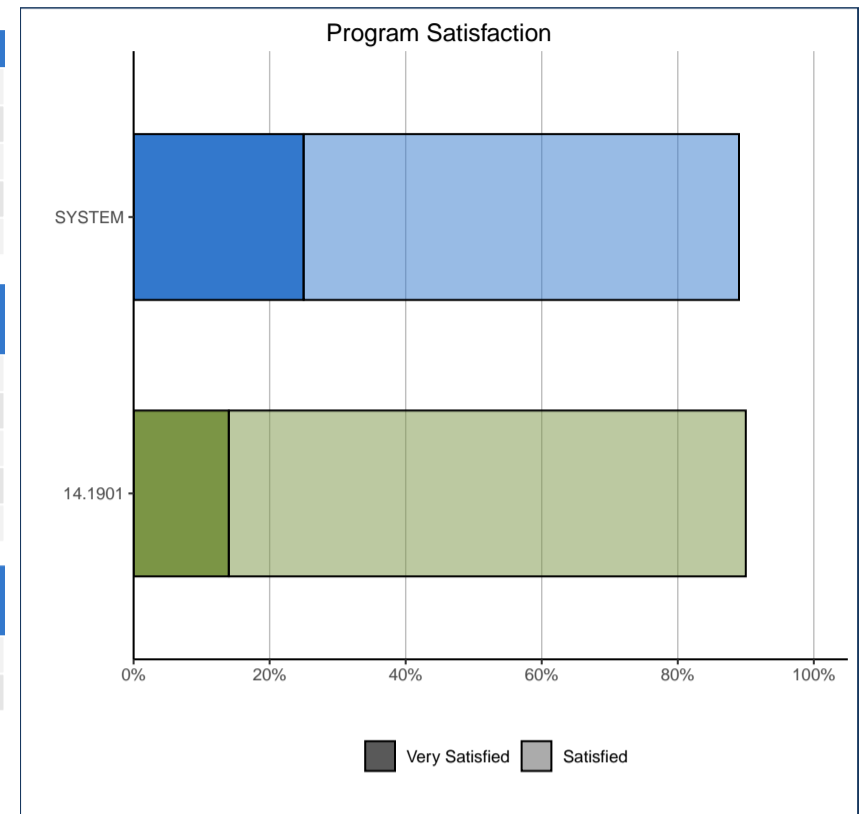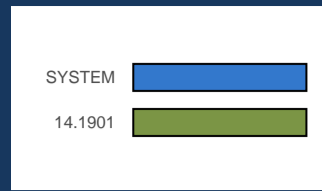
SKILL DEVELOPMENT

Skill Development: How helpful was institution?	14.1901				
	Very Helpful	Helpful	Not Very Helpful	Not at All Helpful	# Resp.
Written Communication	15%	60%	20%	5%	116
Oral Communication	13%	56%	27%	4%	119
Reading and Comprehension	18%	60%	18%	4%	119
Group Collaboration	25%	61%	13%	1%	123
Critical Anlysis	39%	52%	8%	1%	122
Problem Resolution	25%	58%	14%	3%	122
Use of Mathematics	52%	46%	2%	0%	123
Conducting Research	21%	50%	29%	0%	121
Learning on Your Own	38%	49%	10%	3%	123

Skill Development: How helpful was institution?	SYSTEM				
	Very Helpful	Helpful	Not Very Helpful	Not at All Helpful	# Resp.
Written Communication	27%	57%	14%	3%	9,025
Oral Communication	24%	57%	17%	3%	9,114
Reading and Comprehension	28%	57%	13%	2%	9,119
Group Collaboration	28%	53%	17%	3%	9,187
Critical Anlysis	41%	50%	8%	2%	9,297
Problem Resolution	23%	56%	17%	3%	9,057
Use of Mathematics	20%	47%	25%	9%	7,165
Conducting Research	30%	50%	17%	4%	8,871
Learning on Your Own	38%	50%	10%	2%	9,189

Helpful with Skill Development
"Very Helpful" or "Helpful"
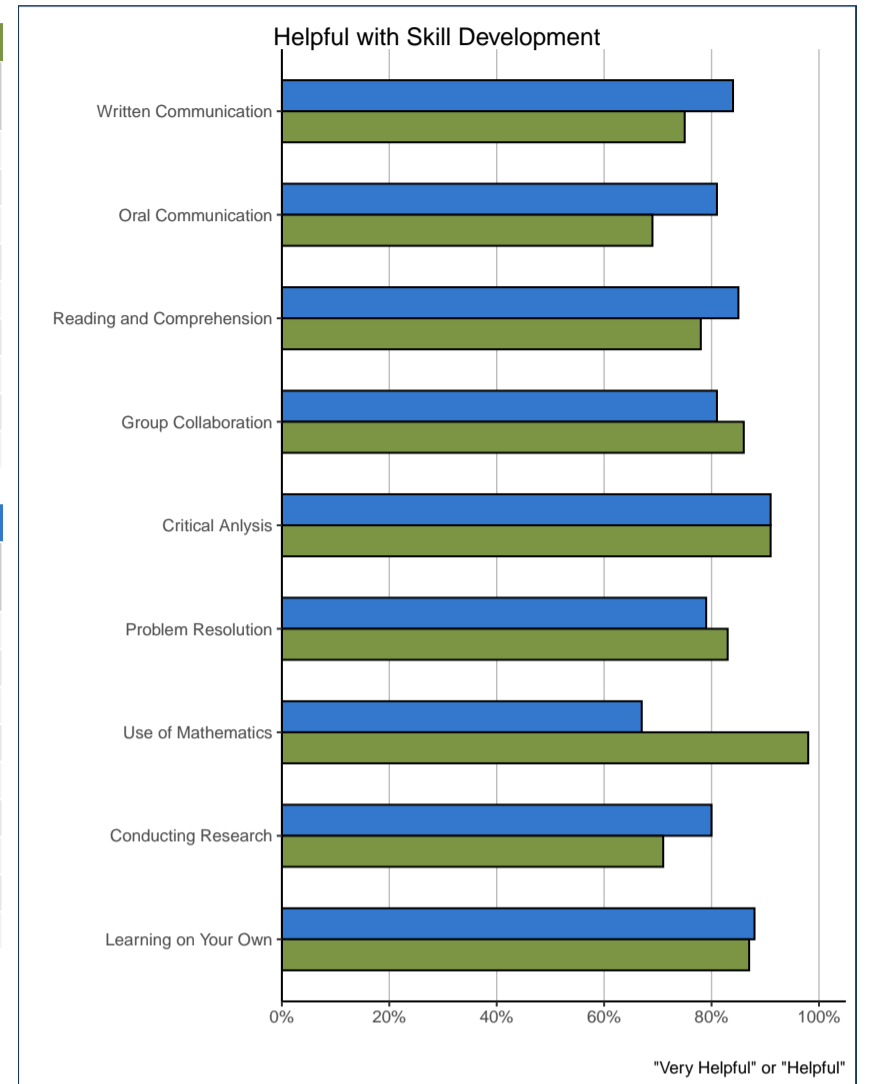
FURTHER EDUCATION

Took further education since 2020 graduation:	14.1901		SYSTEM	
Yes	39	32%	4,119	44%
Not currently enrolled	19	16%	1,831	20%
Currently enrolled full–time	17	14%	1,602	17%
Currently enrolled part–time	3	2%	637	7%
No	83	68%	5,244	56%
Total	122	100%	9,363	100%

Have you taken further education since graduation?

Yes – Currently enrolled part–time
Yes – Currently enrolled full–time
Yes – Not currently enrolled
No
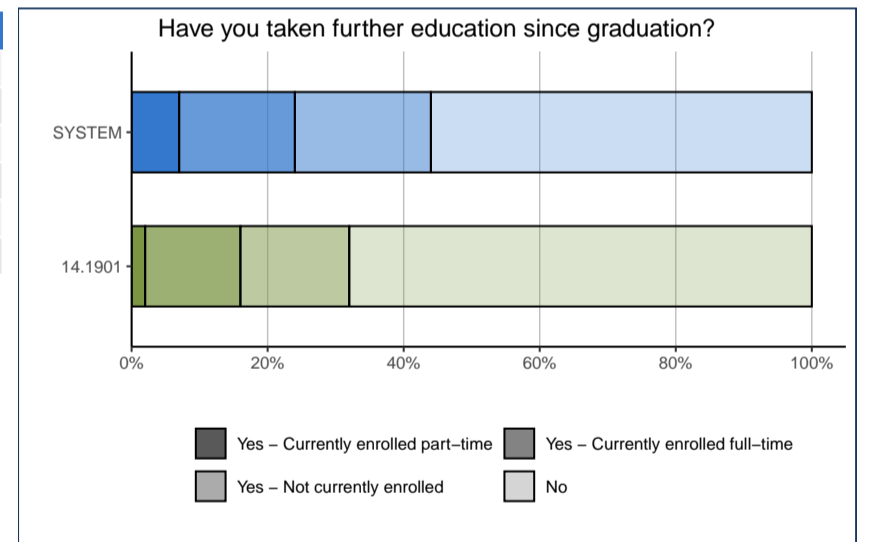
Type of Formal Post–Secondary Education:	14.1901		SYSTEM	
Masters Degree	21	55%	1,307	32%
Doctoral Degree	2	5%	167	4%
Another Undergraduate Degree	6	16%	789	19%
Certificate or Diploma below Bachelor level	2	5%	527	13%
Professional Association Certification	4	11%	603	15%
Postgraduate Certificate or Diploma	0	0%	431	11%
Other	3	8%	236	6%
Total	38	100%	4,060	100%

Further Education/Training Type

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Detailed Summary of Survey Results
All Institutions
14.1901: Mechanical engineering
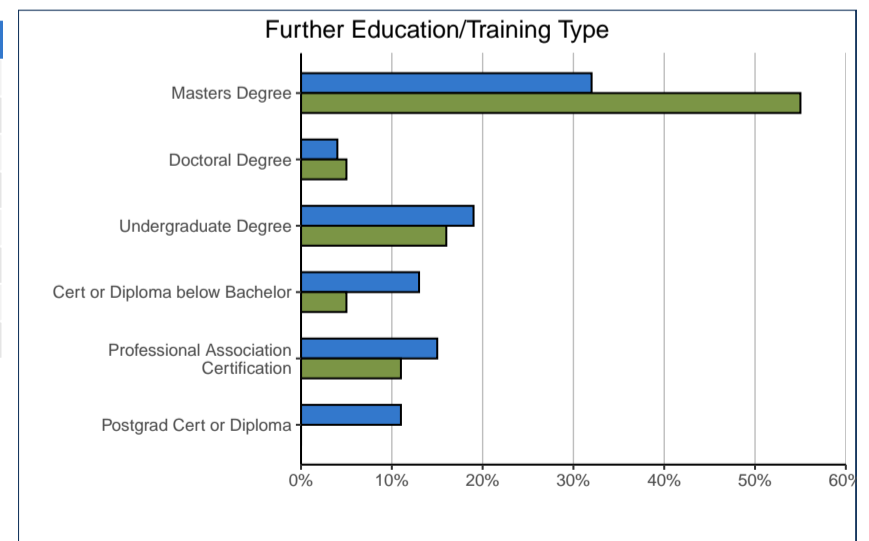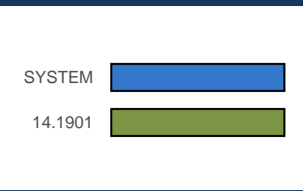
	SYSTEM
14.1901	

EMPLOYMENT

Labour Fource Status:	14.1901		SYSTEM	
In Labour Force (working or seeking work)	110	90%	8,412	91%
Not in Labour Force	12	10%	857	9%
Total	122	100%	9,269	100%

Employment:	14.1901		SYSTEM	
Employment Rate*	105	85%	7,900	84%
Unemployment Rate**	5	4.5%	512	6.1%

*Percent = Total employed divided by total number of respondents
**Percent = Total unemployed divided by total number in Labour Force
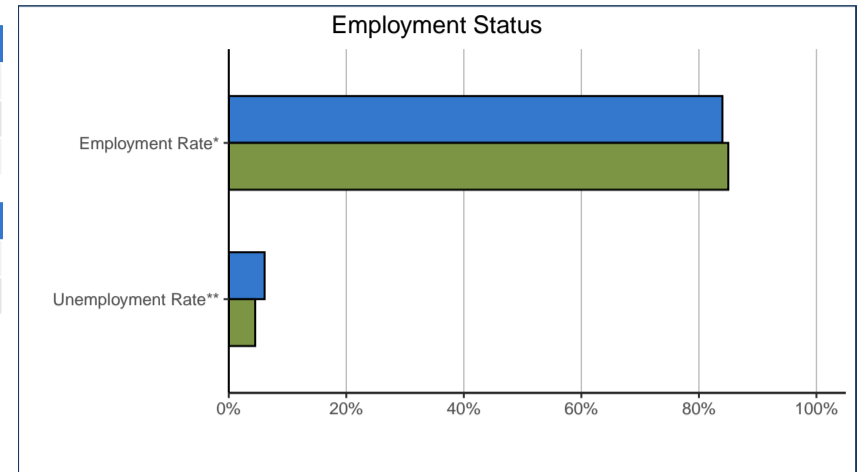
Employment Status

Status of Graduates NOT in Labour Force:	14.1901		SYSTEM	
Attending School FT	11	92%	597	70%
Attending School PT	0	0%	23	3%
Other	1	8%	237	28%
Total NOT in Labour Force	12	100%	857	100%

Primary Employment Type:	14.1901		SYSTEM	
Paid worker	103	98%	7,394	94%
Self–employed	2	2%	493	6%
Total	105	100%	7,887	100%

Job Characteristics:	14.1901		SYSTEM	
I hold more than one job*	12	11%	1,463	19%
My main job is full–time (>= 30 hours per week)**	99	96%	6,655	89%

*Of total Employed
**Of those who provided data on hours/week worked

"Under–Employment" Assessment
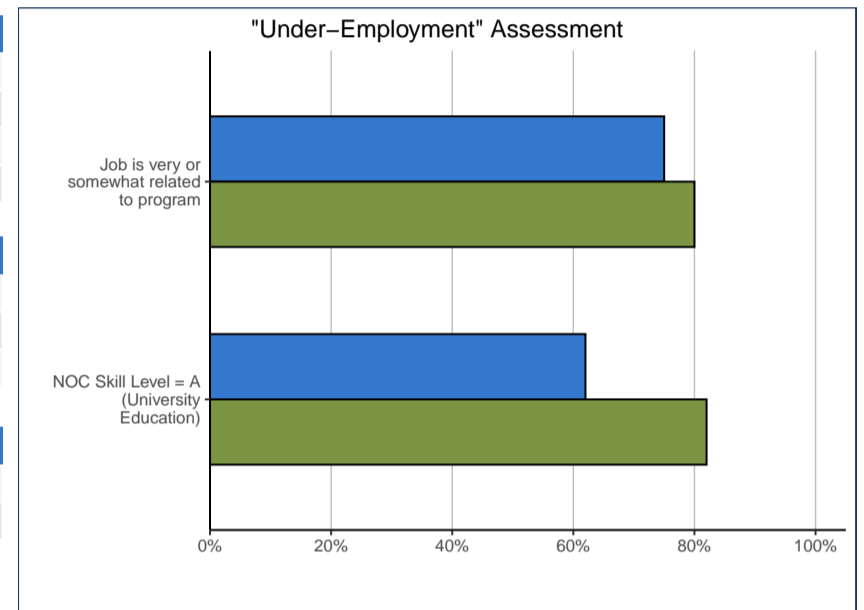
How related is your main job to your program?	14.1901		SYSTEM	
Very Related	35	33%	3,386	43%
Somewhat Related	49	47%	2,530	32%
Not Very Related	14	13%	1,013	13%
Not at All Related	7	7%	954	12%
Total	105	100%	7,883	100%

"Under–employment" Assessment:	14.1901		SYSTEM	
Job is very or somewhat related to program	84	80%	5,916	75%
NOC Skill Level = A (University Education)*	82	82%	4,631	62%

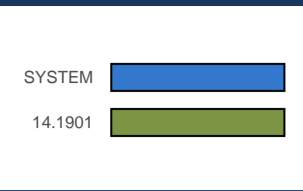*Of total valid responses

Gross Annual Income from Main Job:*	14.1901		SYSTEM	
Less than $20,000	~	~	328	6%
$20,000 to $39,999	~	~	725	12%
$40,000 to $59,999	13	15%	1,773	30%
$60,000 to $79,999	34	39%	1,673	28%
$80,000 to $99,999	21	24%	799	13%
$100,000 and Above	13	15%	659	11%
Total	87	100%	5,957	100%
Median Annual Income (full–time) ($)	73,750		63,000	
Average Annual Income (full–time) ($)	83,153		70,455	

*Where data provided

Gross Annual FT Income From Main Job ($,000)
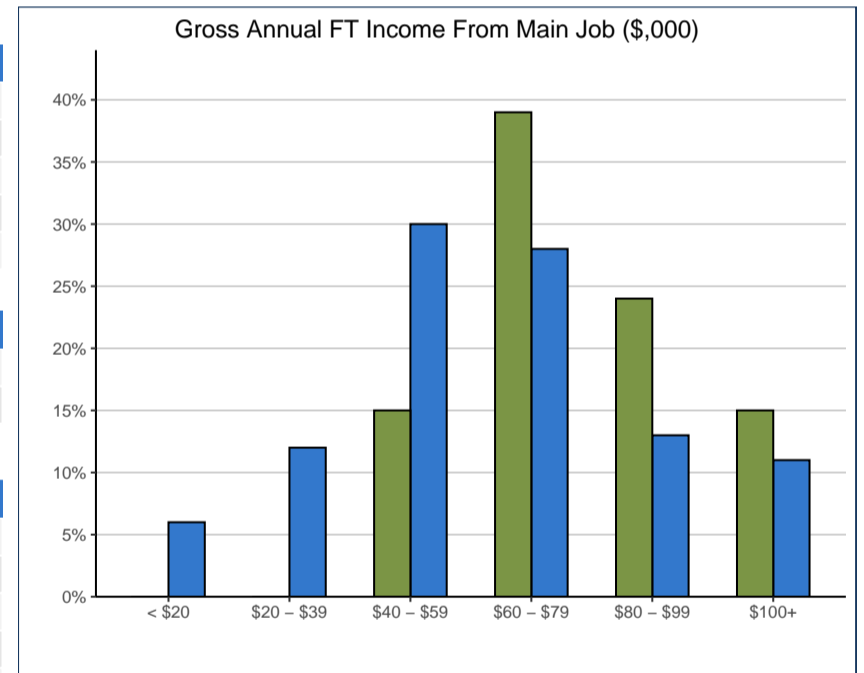
NOC Skill Type of Main Job:	14.1901		SYSTEM	
Business, finance & administration	3	3%	1,844	25%
Natural & applied sciences & related	85	85%	1,422	19%
Health	1	1%	933	13%
Education, law and social, community & government	5	5%	1,946	26%
Art, culture, recreation & sport	0	0%	438	6%
Sales & service	3	3%	658	9%
Trades, transport & equipment operators & related	0	0%	104	1%
Natural resources, agriculture & related production	2	2%	42	1%
Manufacturing & utilities	1	1%	39	1%
Total	100	100%	7,426	100%

Employed Graduates by NOC Skill Type

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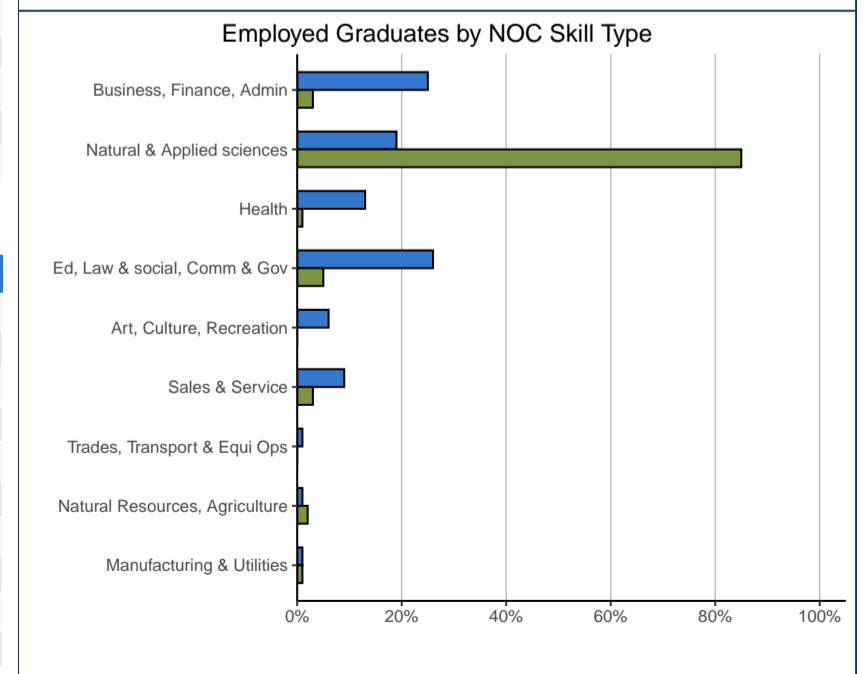
SYSTEM
14.1901

EMPLOYMENT, continued

NOC Skill Level of Main Job:	14.1901		SYSTEM	
A. University education	82	82%	4,631	62%
B. College education/trade apprenticeship	15	15%	2,082	28%
C. Secondary school + job–specific training	3	3%	647	9%
D. No formal education	0	0%	86	1%
Total	100	100%	7,446	100%
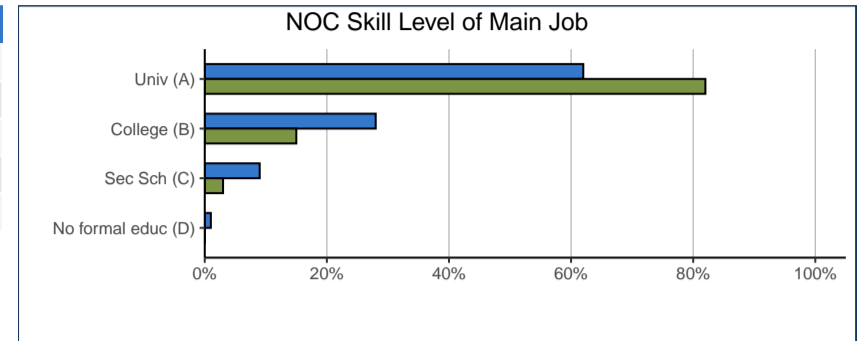
NOC Skill Level of Main Job

	14.1901				
How useful are the following skills and abilities in doing your main job?	Very Useful	Somewhat Useful	Not Very Useful	Not at All Useful	# Resp.
Written Communication	68%	25%	6%	2%	105
Oral Communication	77%	18%	2%	3%	105
Reading and Comprehension	73%	23%	3%	1%	105
Group Collaboration	80%	17%	0%	3%	105
Critical Anlysis	81%	16%	0%	3%	105
Problem Resolution	80%	17%	2%	1%	105
Use of Mathematics	30%	46%	19%	6%	105
Conducting Research	35%	35%	19%	10%	105
Learning on Your Own	67%	27%	4%	3%	105
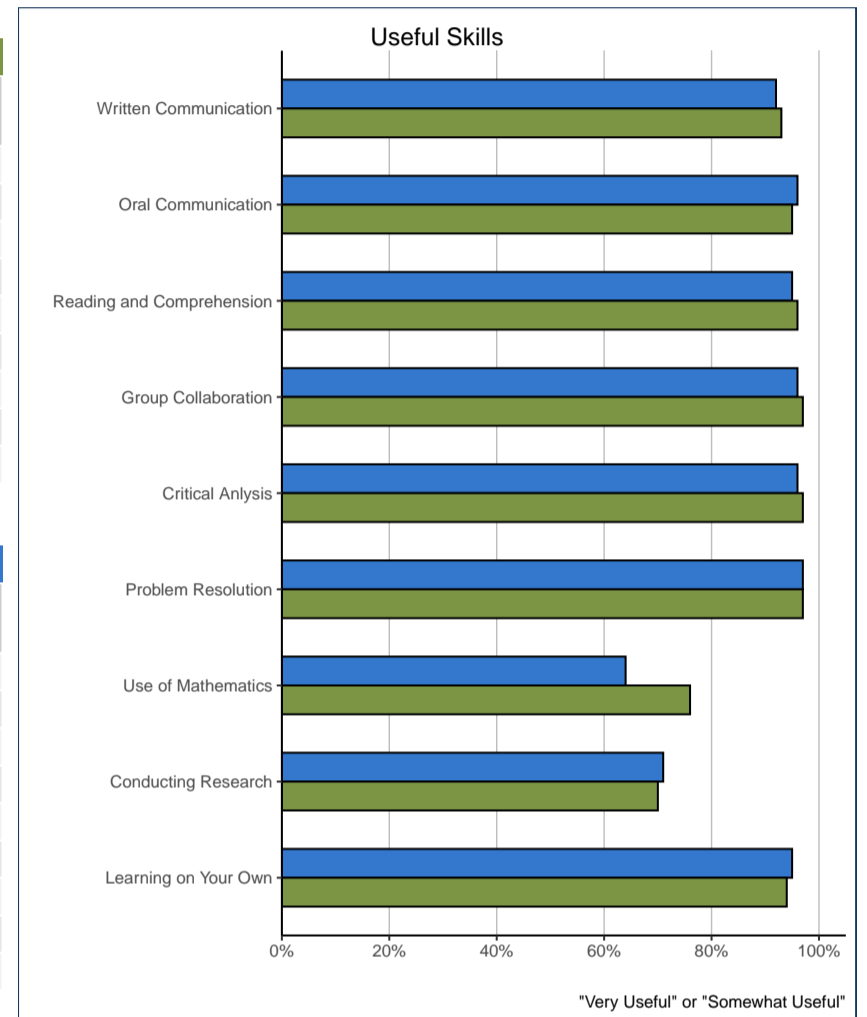
	SYSTEM				
How useful are the following skills and abilities in doing your main job?	Very Useful	Somewhat Useful	Not Very Useful	Not at All Useful	# Resp.
Written Communication	67%	25%	5%	3%	7,839
Oral Communication	75%	21%	3%	1%	7,837
Reading and Comprehension	70%	25%	4%	1%	7,836
Group Collaboration	76%	20%	3%	1%	7,841
Critical Anlysis	74%	22%	3%	1%	7,838
Problem Resolution	77%	20%	2%	1%	7,833
Use of Mathematics	28%	36%	21%	15%	7,634
Conducting Research	36%	35%	17%	12%	7,717
Learning on Your Own	68%	27%	3%	2%	7,819

Useful Skills

"Very Useful" or "Somewhat Useful"

Top 10 Full–time Occupations of 14.1901 Graduates:			14.1901
NOC	NOC Skill Level	Description	% Employed FT in this Occ.**
2132	A	Mechanical engineers	55%
2141	A	Industrial and manufacturing engineers	5%
XXXX	O	Unclassified occupations	5%
*			
*			
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* Data not displayed where n < 5
** Percentages cited are of those employed

Top 10 Full–time Occupations of SYSTEM Graduates:			SYSTEM
NOC	NOC Skill Level	Description	% Employed FT in this Occ.**
3012	A	Registered nurses and registered psychiatric nurses	6%
1111	A	Financial auditors and accountants	4%
XXXX	O	Unclassified occupations	3%
2173	A	Software engineers and designers	3%
4032	A	Elementary school and kindergarten teachers	3%
1123	A	Professional occupations in advertising, marketing and public relations	3%
4212	B	Social and community service workers	3%
2174	A	Computer programmers and interactive media developers	2%
4031	A	Secondary school teachers	2%
1221	B	Administrative officers	2%

* Data not displayed where n < 5
** Percentages cited are of those employed

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	SYSTEM	
	14.1901	

EDUCATION FINANCING

Funding Sources (3 sources allowed):*	14.1901		SYSTEM	
Personal savings, investments	43	36%	2,849	31%
Employment while studying	43	36%	4,716	51%
Family/Friends	75	62%	5,423	59%
Personal bank loans	6	5%	600	7%
Government student loans	52	43%	3,008	33%
Scholarships/Bursaries/Grants	45	37%	2,803	31%
Other	50	41%	1,997	22%
Total	121		9,180	

* Percentage of respondents who identified this source

Education Funding Sources

Financial Debt Incurred to Finance Bac. Ed.:*	14.1901		SYSTEM	
Incurred any form of financial debt	62	51%	4,031	44%
Incurred government–sponsored student loan debt	58	48%	3,331	36%

* Percentage of respondents who provided data

Financial Debt Amount:*	14.1901		SYSTEM	
< $1,000	0	0%	3	0%
$1,000 to $4,999	1	2%	106	3%
$5,000 to $9,999	1	2%	240	7%
$10,000 to $14,999	2	4%	332	10%
$15,000 to $19,999	3	5%	258	8%
$20,000 to $29,999	11	20%	644	20%
$30,000 to $39,999	11	20%	568	17%
$40,000 or More	27	48%	1,121	34%
Total	56	100%	3,272	100%
Median Financial Debt ($)	37,000		30,000	

* Includes only cases where financial debt was incurred

Financial Debt Incurred ($,000)

Gov't–Sponsored Student Loan Debt Amount:*	14.1901		SYSTEM	
< $1,000	0	0%	4	0%
$1,000 to $4,999	1	2%	78	3%
$5,000 to $9,999	1	2%	176	7%
$10,000 to $14,999	1	2%	239	10%
$15,000 to $19,999	3	6%	236	10%
$20,000 to $29,999	13	25%	514	21%
$30,000 to $39,999	11	22%	462	19%
$40,000 or More	21	41%	724	30%
Total	51	100%	2,433	100%
Median Gov't–Sponsored Loan Debt ($)	30,000		28,000	

* Includes only cases where government–sponsored debt was incurred

Government–Sponsored Debt Incurred ($,000)

Gov't–Sponsored Loan Debt Outstanding:*	14.1901		SYSTEM	
None – Loan repaid in full	10	19%	754	27%
< $1,000	0	0%	7	0%
$1,000 to $4,999	1	2%	120	4%
$5,000 to $9,999	1	2%	202	7%
$10,000 to $14,999	6	11%	216	8%
$15,000 to $19,999	10	19%	221	8%
$20,000 to $29,999	6	11%	432	16%
$30,000 to $39,999	6	11%	338	12%
$40,000 or More	14	26%	459	17%
Total	54	100%	2,749	100%
Median Gov't–Sponsored Loan Debt Outstanding** ($)	23,500		25,000	

* Includes only cases where government–sponsored debt was incurred, and valid "amount remaining" was provided
** Median amounts shown are based on those who had remaining government student loan debt

Outstanding Government–Sponsored Debt ($,000)