

2015 Final Year Engineering Student Survey – Ontario Report

Conducted by Ipsos Reid on behalf of Engineers Canada



August 2015

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Research Objectives

- The primary objective of this research is to understand the reasons why graduates of CEAB accredited engineering programs at Ontario higher education institutions do or do not intend to apply for their licence.
- In order to achieve this objective, the research seeks to understand the following:
 - The future career and/or education plans of final year engineering students;
 - Motivations for pursuing their undergraduate degree in engineering;
 - The percentage of final year engineering students who intend to pursue a career in engineering and the percentage who intend to apply for their P.Eng. licence.

Methodology

- The online survey was conducted between February 24 to April 3, 2015 with final year Bachelor's level engineering students.
- All higher education institutions' Faculties of Engineering with CEAB accredited programs were invited to participate in the study and were asked to send the online survey to all final year engineering students registered in their engineering program.
- The link to the online survey was sent to the deans of faculties and each school was requested to send the survey link to all qualified students.
- The survey was offered in both English and French.
- A total of 35 higher education institutions participated in the research and 2,010 students completed the survey. Within Ontario, 15 schools participated and a total of n=968 students completed the survey.
- The margin of error for this study on the overall data (n=2,010) is $\pm 2.2\%$, 19 times out of 20.
- Statistically significant differences year or year are identified with arrows ▲ ▼, while statistically significant differences between subgroups are identified with letters (the letter(s) identify the subgroup the % is different from)

Key Highlights

- While the vast majority of students intend on pursuing a career in engineering (88%) and intend to apply for licensure (74%), attitudes have softened and we observe declines on both measures year over year.
- While the vast majority of students continue to report they are likely (definitely/ probably) to pursue a career in engineering (88% vs. 91% in 2014) this figure is statistically lower than last year after remaining consistent for several years. Attention will have to be paid to whether a trend develops on this measure over time.
- Similarly, while three quarters of all students indicate they are likely (definitely/ probably) to apply for licensure (74% vs. 78% in 2014), this is also lower than last year, while a greater proportion probably won't (13% vs. 10% in 2014).
- However, those who intend to apply for licensure intend on doing so more quickly than in the past as we see an increase in those who intend to pursue their license within six months of graduation (41% vs. 35% in 2014), while fewer plan to apply after a year (9% vs. 29% in 2014). A greater proportion are also undecided than were last year (32% vs. 18% in 2014).
- At seven in ten (71%), the vast majority of final year engineering students say they intend to go into the workforce after graduating with their Bachelor's degree in engineering, consistent with 2014 (72%), while two in ten (21%) intend to pursue more education after their undergraduate degree is complete. Overall, nearly four in ten students have already been offered a job in the engineering field (38%).

Key Highlights (cont'd)

We continue to observe some positive shifts in students' knowledge about certain aspects of the engineering profession as well as a few areas where knowledge has declined:

- Nearly nine in ten students know that a licence is not required to perform engineering work under the supervision of a P.Eng. (87%), statistically higher than in 2014 (82%).
- In terms of organizational responsibility, students are more likely to know that CEAB (Engineers Canada) is the organization that accredits higher education institutions' engineering programs compared to previous years (89% vs. 74% in 2014).
- However, one in ten (10%) incorrectly identify that Engineers Canada is the body that licenses professional engineers, statistically higher than last year (6%), although the vast majority know it is PEO (88%).
- Further, a higher proportion of students think that Engineers Canada licenses companies offering engineering services than they did last year (33% vs. 28% in 2014).

Executive Summary

Undergraduate Program Motivations and Experience

- The most common reason students provided for choosing to study engineering was that it was related to their interests (66%), followed closely by the application of science and math (62%). Other common mentions include the practical, applied nature of the discipline (56%), followed by job security (42%) the challenge (40%) and financial security (39%).
- The vast majority of students indicate they choose to study engineering while in high school (76%), while fewer than one in ten decided when they were a small child (9%), during first year (6%) or while working (4%).
- Students' feel that by far the most important support for students during their engineering studies were family and friends (87%), followed by four in ten who say faculty (39%) and one third who mention individuals from a co-op/ internship (33%). Around one in ten mention off campus work (13%), engineering clubs (13%) or athletics (11%).
- In terms of extracurricular participation, around half of students (45%) indicate having worked off campus during their degree program, followed by three in ten (29%) who worked on campus and two in ten who participated in a discipline specific engineering organizations (22%) or other off campus organizations (19%).
- Students are equally as likely to feel that school life balance (31%) or the workload of courses (30%) are the single greatest barrier to completing their engineering degree. Closer to one in ten indicate paying tuition (13%), followed by working and attending school simultaneously (6%) or completing first year (6%).

Executive Summary (continued)

Future Intentions: Continuing Education Versus Entering Workforce

- Seven in ten (71%) final year engineering students say they intend to go into the workforce after graduating with their Bachelor's degree in engineering, consistent with last year, while two in ten (21%) intend to pursue more education.
- Of those who plan to pursue more education, the vast majority (71%) intend to get their Master's degree in engineering, while one in ten plan to pursue a Master's degree in another area (9%). Fewer intend to pursue their PhD in engineering (6%) or another professional degree (5%).
- Among those students who intend to pursue a career in engineering, nearly half intend to in the province they are attending school (47%), followed by closer to two in ten who indicate elsewhere in Canada (16%) and fewer than one in ten who plan to work in the US (8%) or elsewhere in the world (6%)
- Four in ten students have already been offered a job in the engineering field (38%), of which the majority have been offered one job (60%), while one quarter have been offered two (24%) and one in ten (10%) three jobs.

Future Intentions: Engineering Career

- Nine in ten (88%) students say they are likely to pursue a career in engineering, of which around half *definitely* will (55%) while one third *probably* will (34%), statistically lower than in 2014 (91% likely). Fewer than one in ten students *probably* (5%) –or- *definitely* (1%) *will not* pursue a career in engineering.
- The top reason for not pursuing a career in engineering are that they never intended on doing so, that engineering is not what they thought it would be, that there are better employment opportunities elsewhere and that they are interested in other things.

Executive Summary (continued)

Future Intentions: Pursue Licensure

- Four in ten of all students (42%) indicate that they *definitely* intend to apply for licensure, while one third (33%) *probably* will. Around two in ten *probably/ definitely won't* apply (16%) while one in ten don't know (10%). Compared to 2014, students are statistically less likely to definitely or probably intend on applying for licensure (74% vs. 78%) and more likely to probably not apply (13% vs. 10%).
- Among those who do not intend on applying for licensure, the most commonly cited reasons are that it is not necessary for their career plans, followed by a lack of interest, plans to work outside the country or the feeling that it will provide limited benefit.
- Once told that a licence is required to legally refer to yourself as an engineer and practice as an engineer, one quarter of students (24%) who originally did not plan or were unsure of their intentions now indicate they are definitely (9%) or probably likely (15%) to apply for licensure. More than seven in ten (72%) however still indicate that they do not intend to apply, while 4% are unsure.
- Of those who intend to pursue their licence, six in ten plan to do so within one year (59%), of which four in ten will do so within six months (41%), higher than in 2014 (35%). One in ten plan to apply after a year (9%), lower than in 2014 (29%), while one third remain undecided (32%), higher than last year (18%).
- Once told that the fee for the first year of the Engineering-in-Training [EIT] program can be waived if they apply within six months of graduation, more than eight in ten (82%) students who originally intended on waiting more than six months to apply are *very* (46%) or *somewhat likely* (36%) to do so within that timeframe. Compared to 2014, fewer students are very likely to apply within 6 months even though the program fee can be waived (46% vs. 56% in 2014).

Executive Summary (continued)

Knowledge of Engineering Profession

- Nearly nine in ten students know that a licence is not required to perform engineering work under the supervision of a P.Eng. (87%), statistically higher than in 2014 (82%), while closer to eight in ten know that a licence is required to perform engineering work independently (82%) and nearly three quarters that a licence is required to use the title 'Engineer' (73%).
- Nine in ten students are able to correctly identify that PEO is responsible for licensing engineers (88%) or that Engineers Canada is the organization that accredits higher education institutions' engineering programs (89%). Closer to eight in ten know that PEO regulates the practice of professional engineers (78%), while seven in ten feel they also promote the interests of professional engineers (69%) compared to four in ten who indicate Engineers Canada (37%).
- Students remain less certain about which organization licenses companies offering engineering services, half believe it is PEO (51%), while one third think it is Engineers Canada (33%).
 - Compared to 2014, students are more likely to know that Engineers Canada accredits higher education institutions' engineering programs (89% vs. 74%) and to think Engineers Canada licenses engineers (10% vs. 6%) or licenses companies offering engineering services (33% vs. 28%). They are also more likely to think that PEO promotes the interests of professional engineers (69% vs. 62%) and less likely to think Engineers Canada does so (37% vs. 46%).

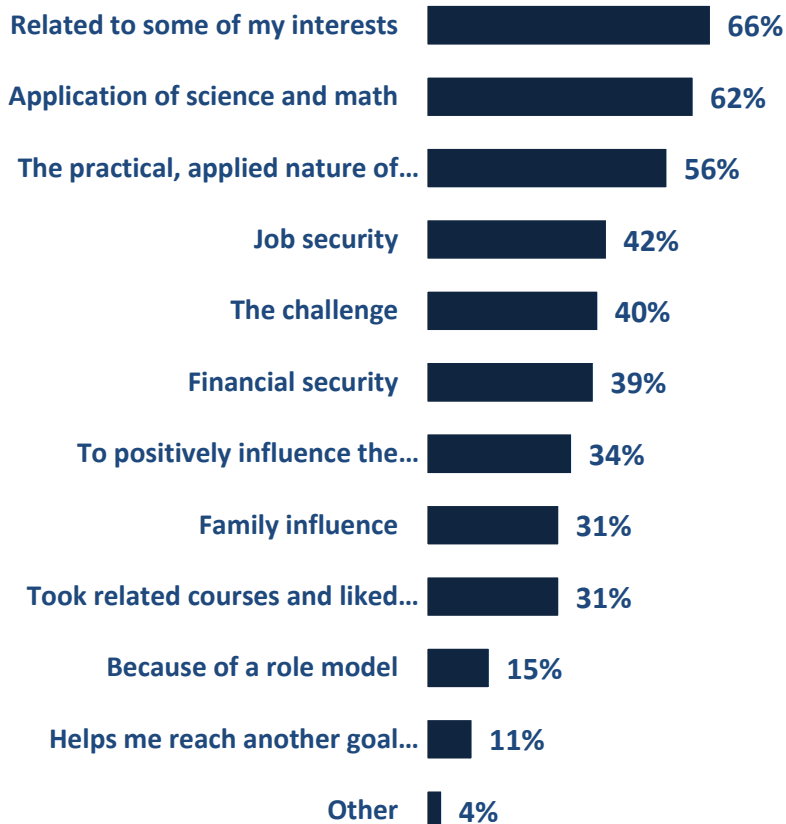
Undergraduate Motivations and Experience



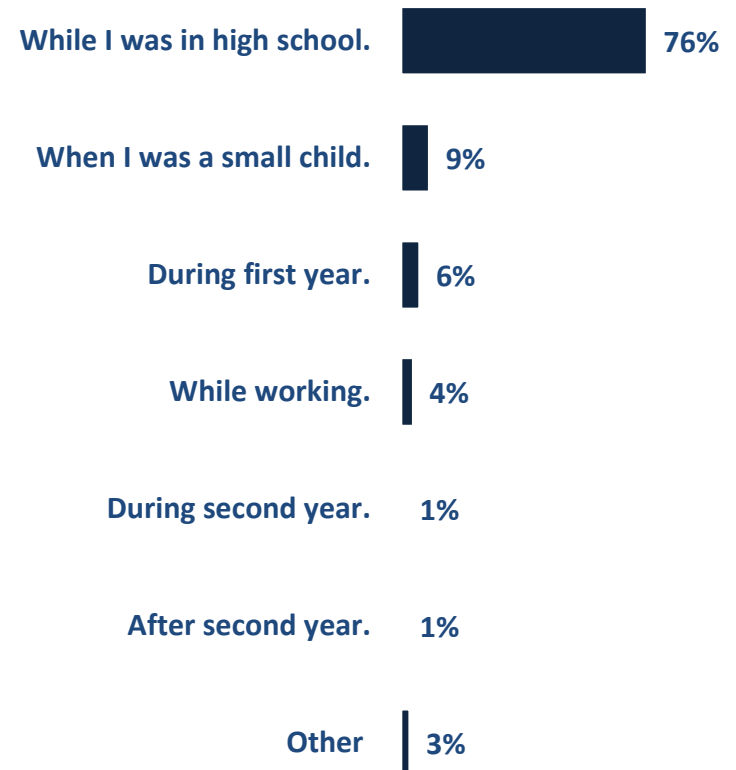
Main Reason(s) and Timing of Decision to Study Engineering

- At two-thirds, the most common reason students provided for choosing to study engineering is that it was related to their interests, followed closely by the application of science and math and the practical, applied nature of the discipline. Other common mentions include the job security, the challenge and the financial security.
- At three quarters, the vast majority choose to study engineering while in high school.

Main Reason(s) for studying engineering



When did you make your decision?



Q4a. Thinking back to when you decided to pursue engineering, what was the main reason you choose to study this discipline? Please select all that apply

Q4b. When did you make your decision to pursue the discipline of engineering? Please select the one option which applies most to your situation.

Base: All respondents, 2015 (n=968)

Main Reason(s) and Timing of Decision to Study Engineering

- Continued

- Younger students are more likely to have taken engineering because of the application of science and math or because of family influence.
- Male students are more likely to have decided to study engineering because it is related to their interest, because of the practical, applied nature of the discipline or because of the financial security, while female students are more likely to have done so because of the application of science and math, due to family influence or because of a role model.

Main Reason(s) for studying engineering

| | Total | Age | | | Gender | |
|--|---------|----------|---------|---------|---------|---------|
| | | Under 23 | 24-26 | 27+ | Male | Female |
| | | G | H | I | J | K |
| Base: All Respondents | (n=968) | (n=659) | (n=238) | (n=71*) | (n=723) | (n=245) |
| Related to some of my interests | 66% | 66% | 66% | 62% | 69% K | 56% |
| Application of science and math | 62% | 66% HI | 56% | 47% | 60% | 69% J |
| The practical, applied nature of engineering | 56% | 56% | 58% | 51% | 58% K | 49% |
| Job security | 42% | 42% | 41% | 37% | 42% | 40% |
| The challenge | 40% | 42% | 36% | 38% | 40% | 40% |
| Financial security | 39% | 39% | 37% | 44% | 42% K | 31% |
| To positively influence the world/my community | 34% | 33% | 37% | 32% | 34% | 35% |
| Family influence | 31% | 33% H | 27% | 28% | 29% | 37% J |
| Took related courses and liked them | 31% | 31% | 30% | 28% | 30% | 34% |
| Because of a role model | 15% | 14% | 19% | 16% | 14% | 20% J |
| Helps me reach another goal (e.g. becoming a doctor, etc.) | 11% | 11% | 8% | 13% | 11% | 11% |
| Other | 4% | 4% | 3% | 7% | 4% | 4% |

*small base size

Main Reason(s) and Timing of Decision to Study Engineering - Continued

- Younger students are more likely to have decided to study engineering while in high school, while older students are more likely to have made their decision while working or after second year.
- Male students are more likely to have decided to study engineering when they were a small child or while working.

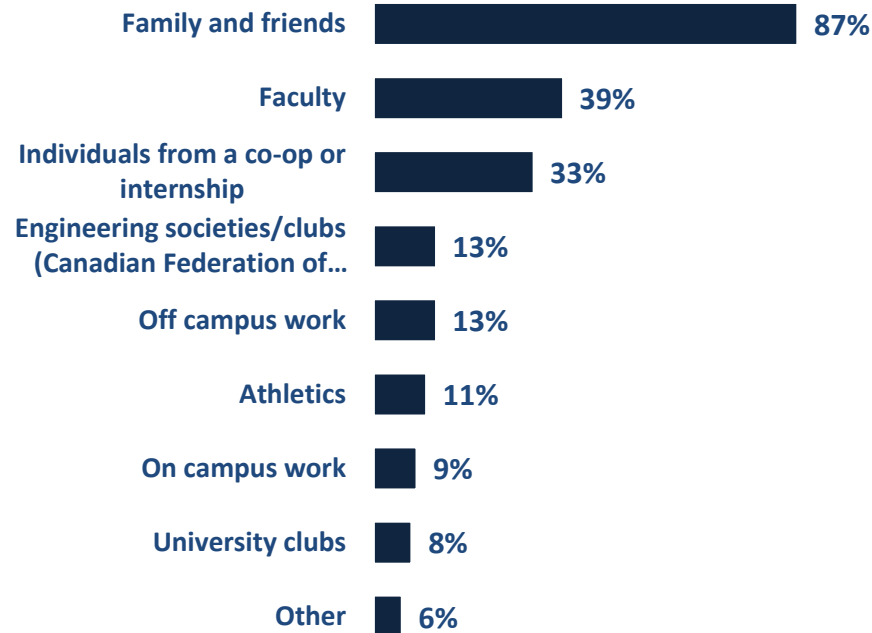
When did you make your decision?

| | | Age | | | Gender | |
|-----------------------------|---------|----------|---------|---------|---------|---------|
| | Total | Under 23 | 24-26 | 27+ | Male | Female |
| | | G | H | I | J | K |
| Base: All Respondents | (n=968) | (n=659) | (n=238) | (n=71*) | (n=723) | (n=245) |
| While I was in high school. | 76% | 83% HI | 71% I | 34% | 75% | 80% |
| When I was a small child. | 9% | 8% | 11% | 14% | 10% K | 6% |
| During first year. | 6% | 5% | 8% | 4% | 5% | 6% |
| While working. | 4% | 1% | 4% G | 32% GH | 5% K | 1% |
| During second year. | 1% | 1% | 2% | 3% | 1% | 2% |
| After second year. | 1% | 1% | 1% | 6% GH | 1% | 2% |
| Other | 3% | 2% | 4% G | 7% G | 3% | 3% |

*small base size

Most Important Support During Engineering Studies

- At nearly nine in ten, by far the most important support for students during their engineering studies were family and friends, followed by four in ten who say faculty and one third who mention individuals from a co-op/ internship. Around one in ten mention off campus work, engineering clubs or athletics followed by on campus work and university clubs.
- Older students place more importance on off campus work and faculty. Males students are more likely to feel individuals from a co-op or internship were most important, while female students are more likely to reference family and friends or engineering clubs.

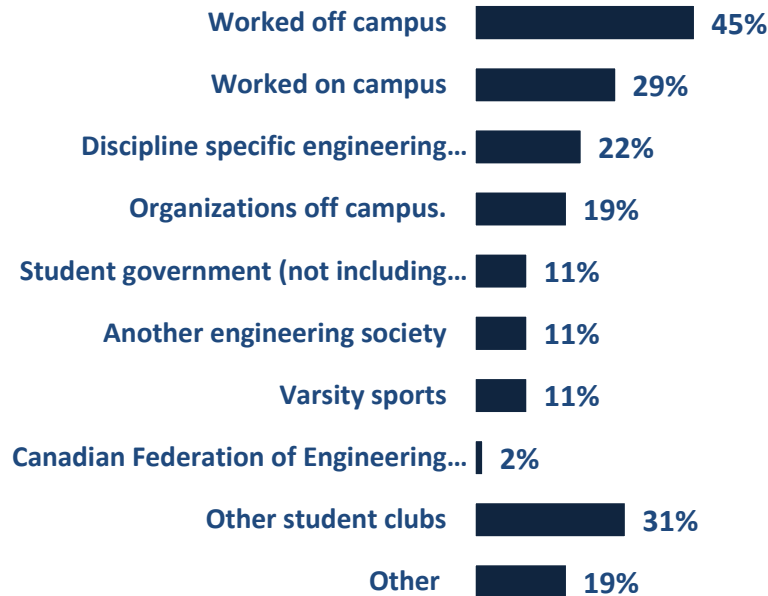


| Age | | | Gender | |
|----------|---------|---------|---------|---------|
| Under 23 | 24-26 | 27+ | Male | Female |
| G | H | I | J | K |
| (n=659) | (n=238) | (n=71*) | (n=723) | (n=245) |
| 87% | 85% | 85% | 85% | 91% J |
| 39% | 35% | 51% H | 39% | 39% |
| 32% | 36% | 25% | 35% K | 27% |
| 14% | 11% | 10% | 11% | 20% J |
| 11% | 13% | 24%GH | 13% | 11% |
| 11% | 11% | 6% | 11% | 10% |
| 9% | 8% | 10% | 9% | 8% |
| 9% | 8% | 3% | 7% | 10% |
| 5% | 6% | 10% | 6% | 5% |

*small base size

Extracurricular Participation During Degree Program

- At around half, students are most likely to indicate having participated in off campus work during their degree program, followed by three in ten who worked on campus and two in ten who participated in a discipline specific engineering organizations or other off campus organizations.
- Younger students are more likely to have worked on campus or to be involved in discipline specific organizations or other student clubs, while older students are more likely to have worked off campus. Female students are more likely to have worked on campus or to have been involved in discipline specific engineering organizations or other student clubs.

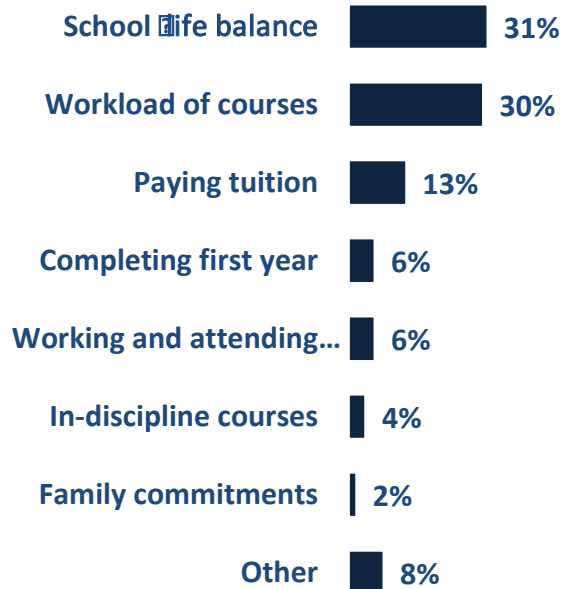


| Age | | | Gender | |
|----------|---------|---------|---------|---------|
| Under 23 | 24-26 | 27+ | Male | Female |
| G | H | I | J | K |
| (n=659) | (n=238) | (n=71*) | (n=723) | (n=245) |
| 41% | 51% G | 59% G | 46% | 42% |
| 32% I | 26% | 17% | 27% | 38% J |
| 23% I | 21% | 11% | 18% | 32% J |
| 18% | 22% | 17% | 19% | 18% |
| 12% | 8% | 6% | 9% | 16% |
| 11% | 10% | 18% H | 10% | 13% |
| 11% | 11% | 6% | 11% | 11% |
| 2% | 2% | 4% | 2% | 3% |
| 34% I | 28% I | 13% | 27% | 44% J |
| 19% | 18% | 17% | 20% | 17% |

*small base size

Single Greatest Barrier to Completing Engineering Degree

- At three in ten, students are equally as likely to feel that school life balance or the workload of courses are the single greatest barrier to completing their engineering degree. Closer to one in ten indicate paying tuition, followed by working and attending school simultaneously or completing first year.
- Younger students are more likely to feel the school life balance is the greatest barrier to completing their degree, while older students are more likely to reference working and attending school simultaneously or family commitments. Male students are more likely to feel that paying tuition is the single greatest barrier to completion, while female students are more likely to indicate the workload of courses or working and attending school at the same time.



| Age | | | Gender | |
|---------|---------|---------|---------|---------|
| 21-23 | 24-26 | 27+ | Male | Female |
| G | H | I | J | K |
| (n=659) | (n=238) | (n=71*) | (n=723) | (n=245) |
| 35% HI | 24% | 14% | 31% | 30% |
| 31% | 29% | 27% | 28% | 37% J |
| 13% | 13% | 18% | 14% K | 9% |
| 6% | 6% | 3% | 6% | 5% |
| 4% | 9% G | 16% G | 28% | 37% J |
| 4% | 4% | 4% | 4% | 5% |
| 1% | 2% | 17% GH | 3% | 1% |
| 7% | 13% GI | 1% | 8% | 8% |

*small base size

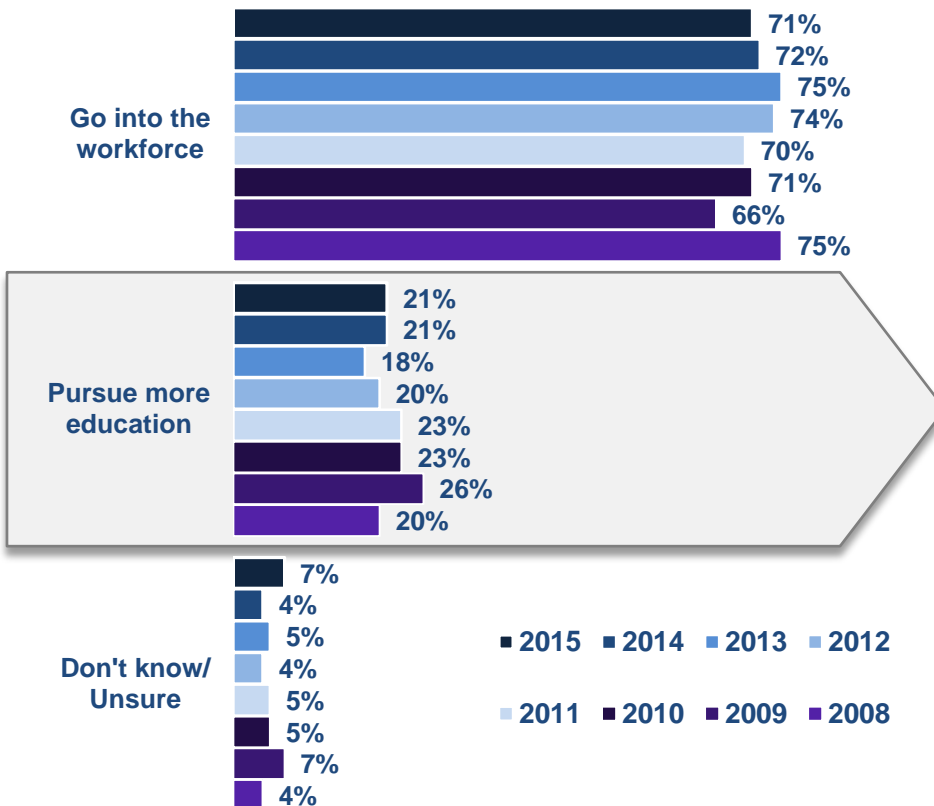
Future Plans



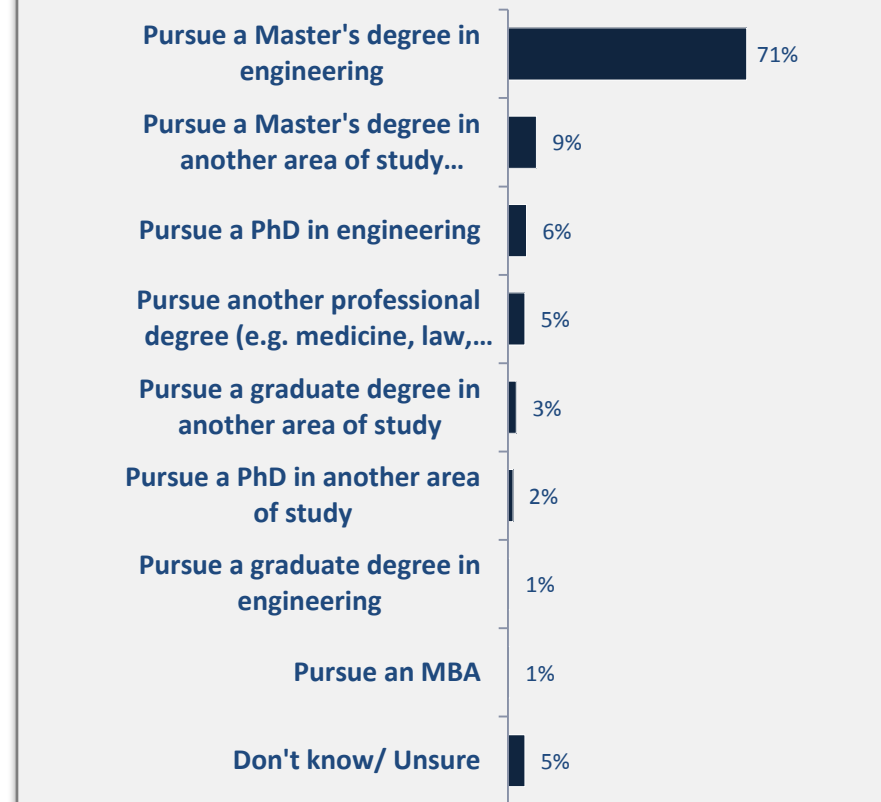
Plans After Graduation

- At seven in ten, the vast majority of students continue to indicate a desire to enter the workforce after graduation, while two in ten plan to pursue more education.
- Among those who plan to further their education, seven in ten plan to pursue a master's degree in engineering, while one in ten plan to pursue a master's degree in another area. Fewer intend to pursue their PhD in engineering or another professional degree.

Current Plans After Graduation



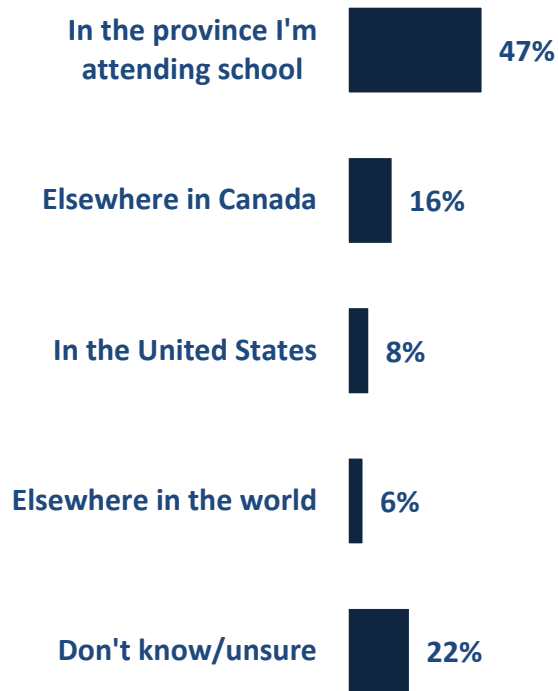
Educational Intentions



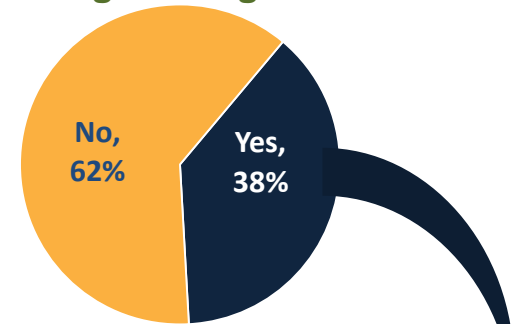
Plans for Work After Graduation

- At nearly half, students are most likely to intend on working in the province they are attending school, followed by closer to two in ten who indicate elsewhere in Canada.
- Four in ten students have already been offered a job in the engineering field, of which six in ten indicate they have been offered one job, while one quarter have been offered two jobs and one in ten have been offered three.

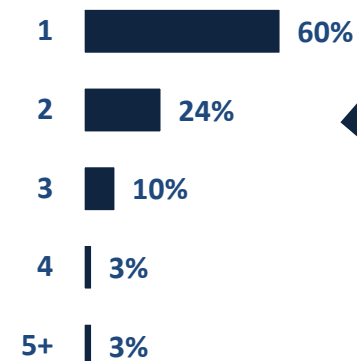
Where do you plan to work?



Have you already been offered a job(s) in the engineering?

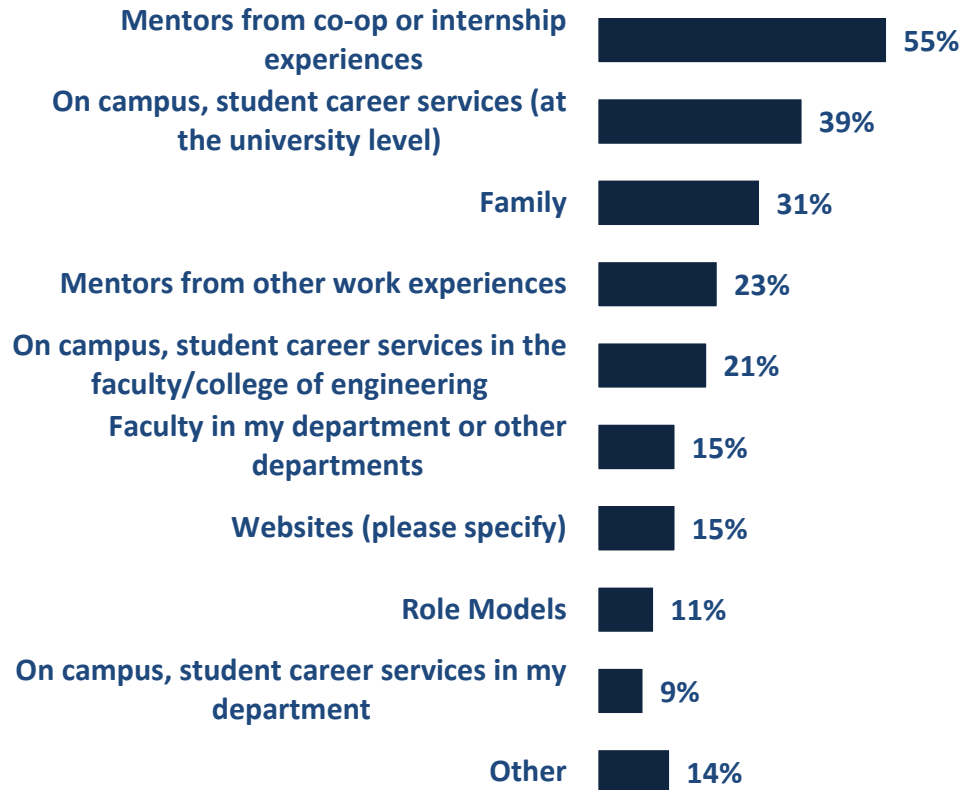


How many jobs?



Useful Resources in Finding Engineering Work

- Those who have been offered a job in the engineering field are by far most likely to feel that mentors from co-op/ internship experiences were most useful to finding work. Other common mentions include on campus student career services (university level), family, mentors from other work experiences or on campus student career services.



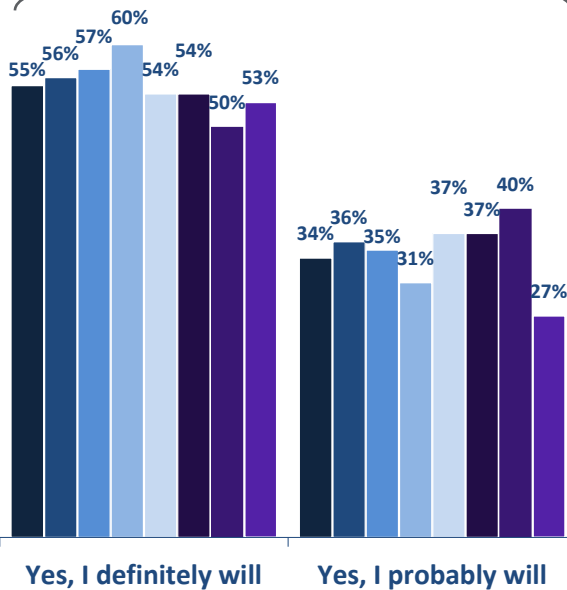
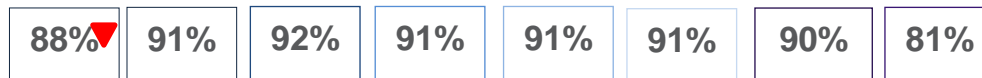
Intention to Pursue Engineering Career

- Unchanged from 2014, nine in ten (91%) students say they definitely or probably will pursue a career in engineering. One in ten (9%) probably or definitely won't.

Do You Plan to Pursue a Career in the Engineering Field?

■ 2015 ■ 2014 ■ 2013 ■ 2012 ■ 2011 ■ 2010 ■ 2009 ■ 2008

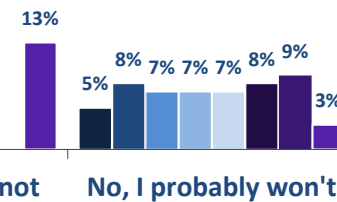
Yes
(Top 2 Box)



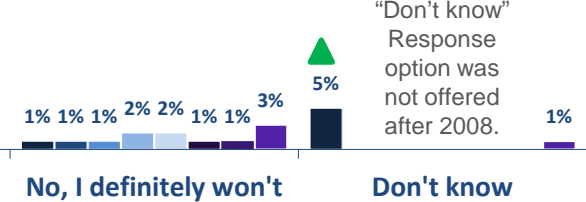
No
(Low 2 Box)



"Might or Might Not" Response option was not offered after 2008.



"Don't know" Response option was not offered after 2008.



*The increase in intention to apply between 2008 and 2009 was likely caused by a change in the response options (for example students were not provided the option to say might or might after 2008) and the greater-cross section of universities involved in the study.

Intention to Pursue Engineering Career (cont'd)

- Older students and males are more likely to definitely intend on pursuing a career in engineering.

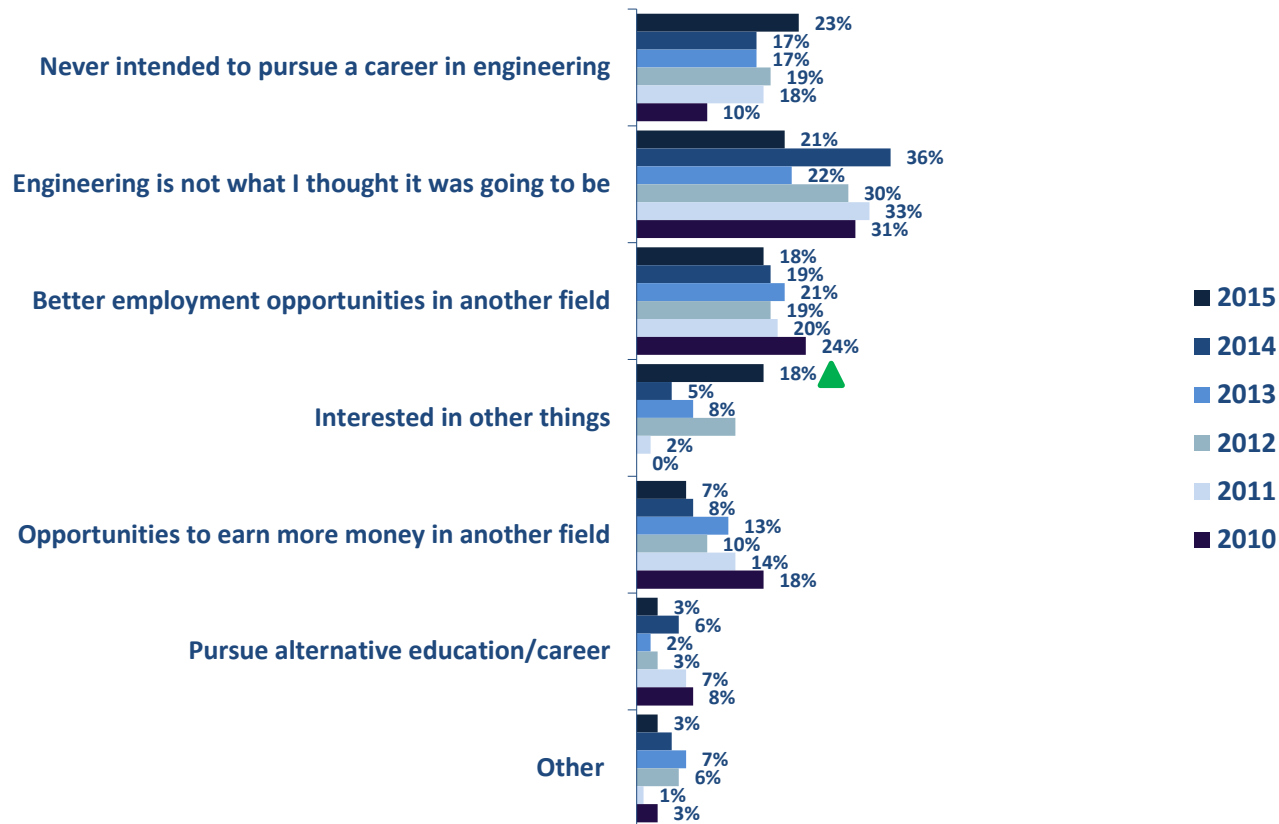
| | Total | Age | | | Gender | | Resident Status | | |
|------------------------|---------|----------|---------|---------|---------|---------|--------------------|--|-----------------------|
| | | Under 23 | 24-26 | 27+ | Male | Female | Permanent resident | Permanent resident of another province | International student |
| | | G | H | I | J | K | N | O | P |
| Base: All Respondents | (n=968) | (n=659) | (n=238) | (n=71*) | (n=723) | (n=245) | (n=797) | (n=100) | (n=71*) |
| Yes, I definitely will | 55% | 50% | 62% G | 73% G | 58% K | 46% | 55% | 47% | 59% |
| Yes, I probably will | 34% | 37% HI | 29% | 21% | 32% | 40% J | 34% | 39% | 27% |
| No, I probably won't | 5% | 6% | 4% | 1% | 4% | 9% J | 5% | 10% N | 6% |
| No, I definitely won't | 1% | 1% | 0% | - | 1% | - | 1% | - | 1% |

*small base size

Reasons for Not Pursuing Engineering

- The top reasons for not pursuing a career in engineering are that they never intended on doing so, that engineering is not what they thought it would be, that there are better employment opportunities elsewhere and that they are interested in other things.
- Compared to 2014, students are more likely to indicate that they are interested in other things.

Reasons for Not Pursuing Engineering

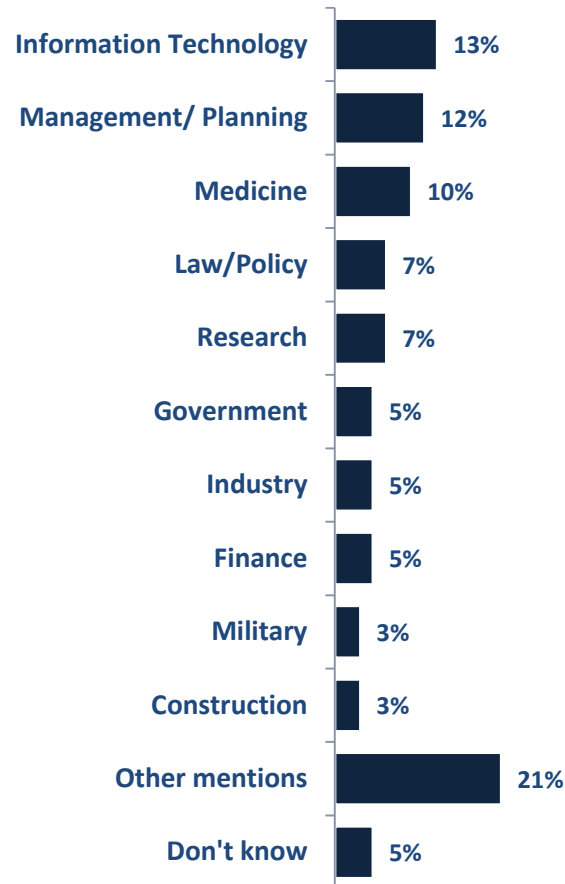


*small base size

Intended Career Outside of Engineering

- Among those who do not intend to pursue a career in engineering, the most common career options include IT, management/ planning and medicine.

Intended Career Outside of Engineering (Does Not Plan to Pursue Engineering Career)



*small base size

Application Intentions for Professional Engineering Licensure



Intention to Apply for Licensure

- At three quarters, the vast majority of students definitely or probably will apply for licensure, of which more than four in ten (42%) definitely intend to apply for licensure, while a further one third (33%) probably will. Nearly two in ten probably or definitely won't apply (16%).
- Compared to 2014, students are statistically less likely to definitely or probably intend on applying for licensure and more likely to probably not apply.

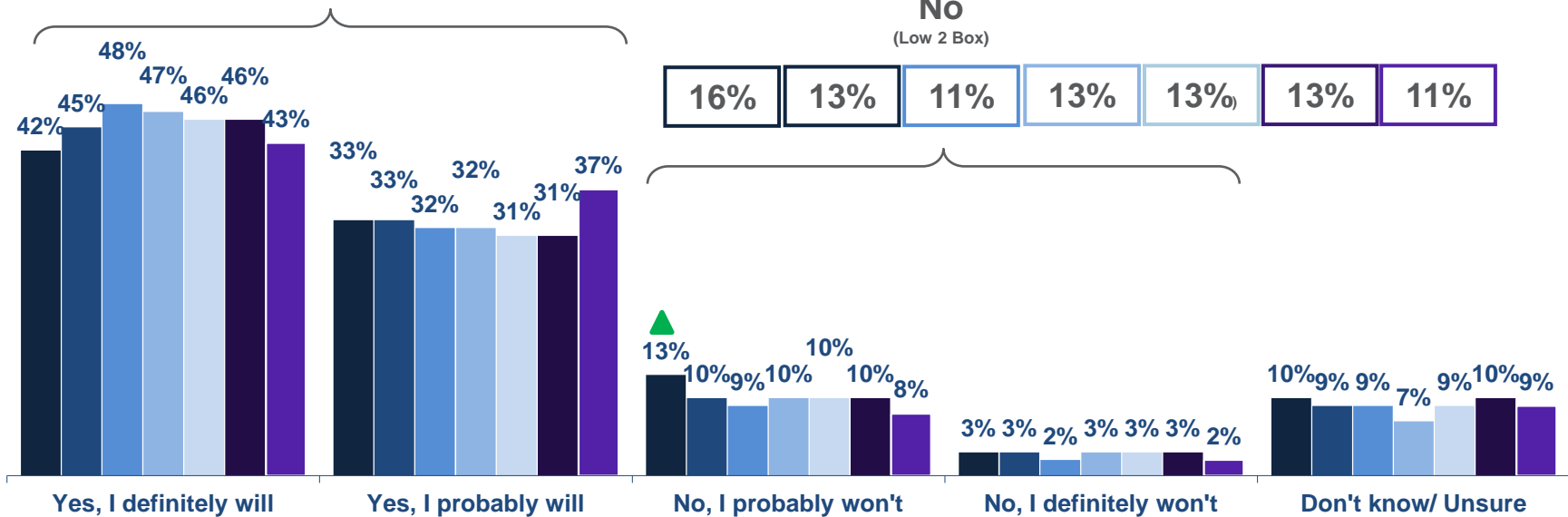
Do You Intend To Apply for Licensure?

■ 2015 ■ 2014 ■ 2013 ■ 2012 ■ 2011 ■ 2010 ■ 2009

Yes
(Top 2 Box)



No
(Low 2 Box)



Q21. Do you intend to apply for licensure as a Professional Engineer (P.Eng.)? Base: All respondents 2015 n=968; 2014 n=958; 2013 n=1168; 2012 n=1250; 2011 n=955, 2010, n=883; 2009, n=907; - tracking on following slide

Intention to Apply for Licensure

- Older students, males and permanent residents of the province they are studying are more likely to definitely intend on pursuing their licence.

| | Total | Age | | | Gender | | Resident Status | | |
|------------------------|---------|----------|---------|---------|---------|---------|--------------------|--|-----------------------|
| | | Under 23 | 24-26 | 27+ | Male | Female | Permanent resident | Permanent resident of another province | International student |
| | | G | H | I | J | K | N | O | P |
| Base: All Respondents | (n=968) | (n=659) | (n=238) | (n=71*) | (n=723) | (n=245) | (n=797) | (n=100) | (n=71*) |
| Yes, I definitely will | 42% | 40% | 42% | 56% GH | 43% | 36% | 45% OP | 24% | 31% |
| Yes, I probably will | 33% | 33% | 35% | 28% | 32% | 36% | 34% | 26% | 27% |
| No, I probably won't | 13% | 15% HI | 10% | 4% | 13% | 14% | 11% | 27% N | 18% |
| No, I definitely won't | 3% | 3% | 3% | 6% | 3% | 2% | 2% | 7% N | 3% |
| Don't know/ Unsure | 10% | 10% | 11% | 6% | 9% | 12% | 8% | 16% N | 21% |

*small base size

Intention to Apply for Licensure: Pursuing Engineer Career (Tracking)

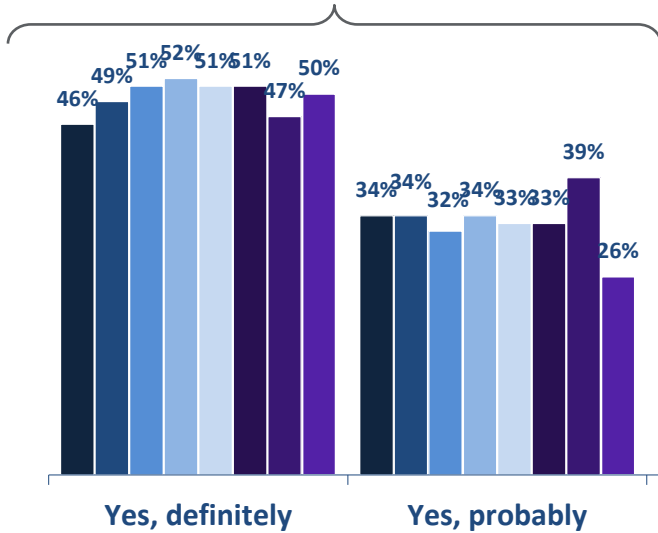
- Among those students who intend to pursue a career in engineering, eight in ten intend to apply for licensure (definitely or probably), directionally lower than in 2014. Around one in ten of this group do not intend to apply for licensure, statistically higher than last year.

Do You Intend To Apply for Licensure?

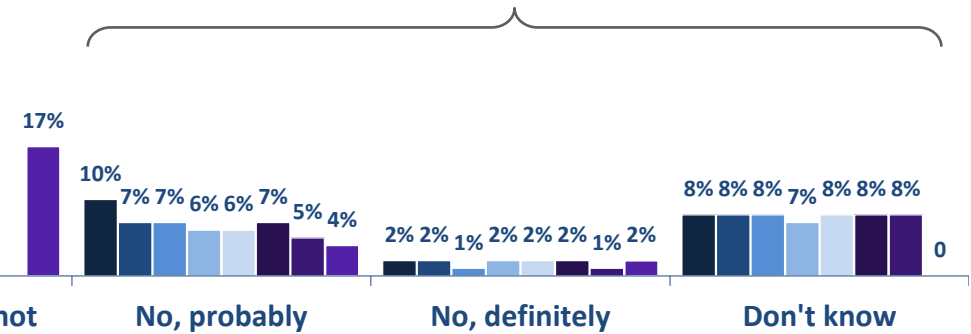
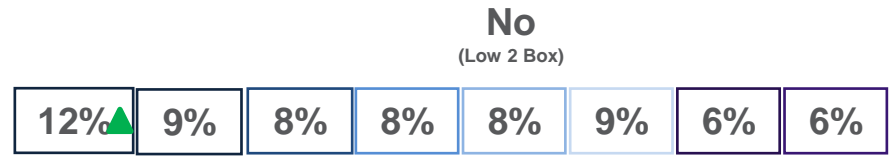
■ 2014 ■ 2014 ■ 2013 ■ 2012 ■ 2011 ■ 2010 ■ 2009 ■ 2008

Yes

(Top 2 Box)



"Might or Might Not" Response option was not offered after 2008.



***Note on comparability – the response options for 2008 and 2009 are different thus significance testing has not been done.

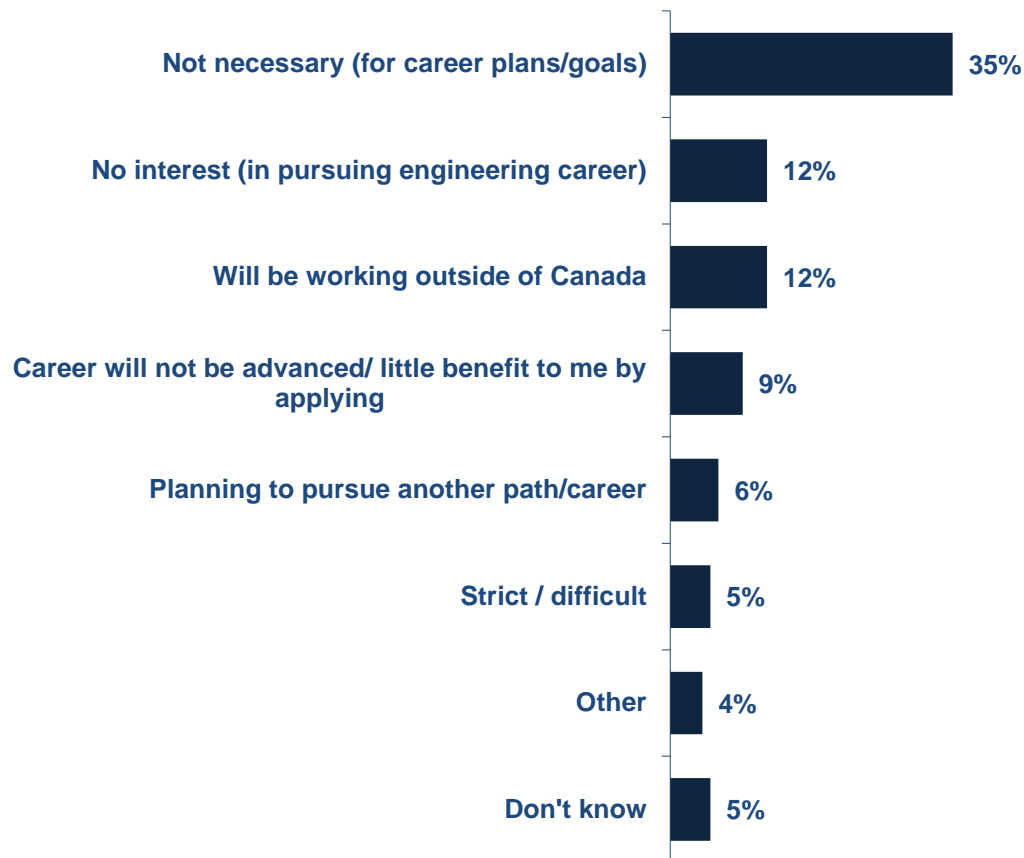
Q21. Do you intend to apply for licensure as a Professional Engineer (P.Eng.)?

Base: Respondents who intend to pursue a career in the engineering field, 2015 n=856; 2014 (n=875); 2013 n=1078; 2012 n=1142, 2011 n=868, 2010, n=883; 2009, n=815; 2008, n=481*** (Q15).

Reasons for Not Applying for Licensure

- Among those who do not intend on applying for licensure, the most cited reasons are that it is not necessary for their career plans, followed by a lack of interest, plans to work outside the country or the feeling that it will provide limited benefit.

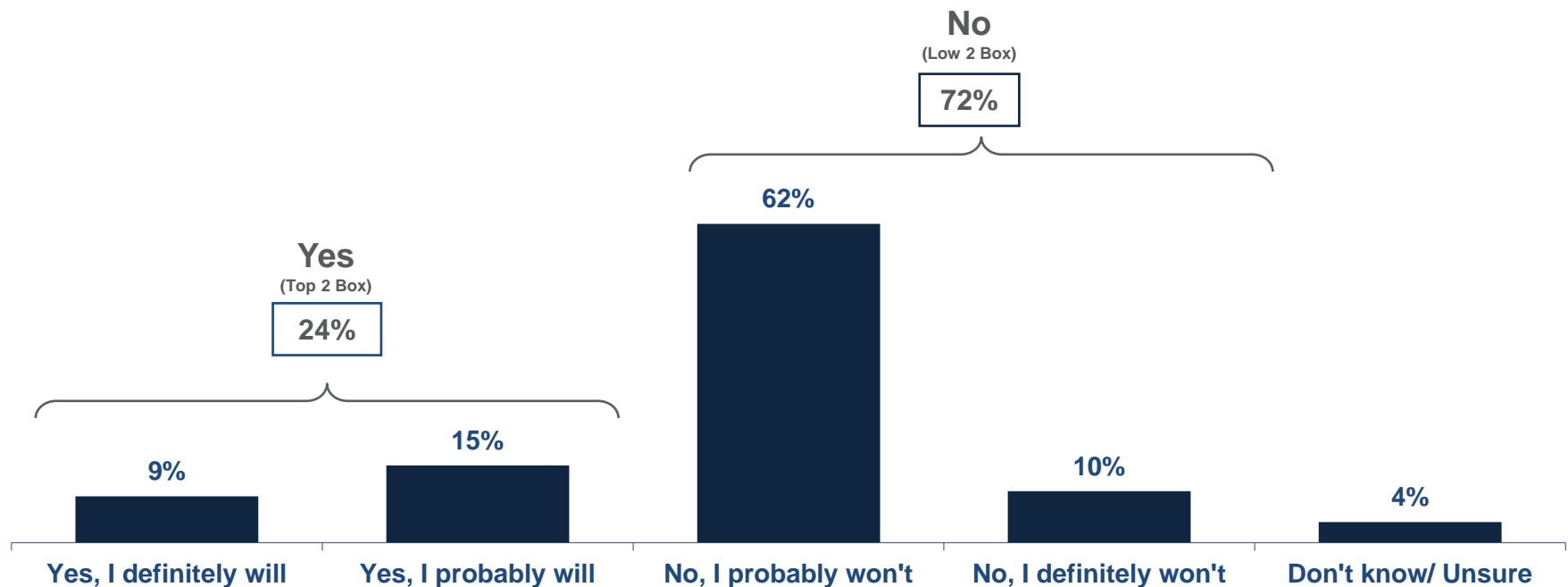
Why do you not intend to pursue the P.Eng. Licence?



Interest Once Told P.Eng. Licence is Required to Practice

- Once told that a licence is required to legally refer to yourself as an engineer and practice as an engineer, one quarter of students who originally did not plan or were unsure of their intentions now indicate they are definitely or probably likely to apply for licensure. More than seven in ten (72%) however still indicate that they do not intend to apply, while 4% are unsure.

Given that a Licence is Required to Practice Engineering, Do You Intend to Apply?



Interest Once Told P.Eng. Licence is Required to Practice

- After being told that a P.Eng. is required to practice engineering, permanent residents of another province than that they are studying are much more likely to definitely or probably intend on pursuing their licensure.

| | Total | Age | | | Gender | | Resident Status | | |
|------------------------|---------|----------|----------|---------|---------|---------|--------------------|--|-----------------------|
| | | Under 23 | 24-26 | 27+ | Male | Female | Permanent resident | Permanent resident of another province | International student |
| | | G | H | I | J | K | N | O | P |
| Base: All Respondents | (n=153) | (n=117) | (n=29**) | (n=7**) | (n=114) | (n=39*) | (n=104) | (n=34*) | (n=15**) |
| Yes, I definitely will | 9% | 7% | 10% | 43% | 9% | 10% | 5% | 27% N | - |
| Yes, I probably will | 15% | 15% | 17% | - | 12% | 23% | 8% | 27% N | 40% |
| No, I probably won't | 62% | 66% | 52% | 43% | 62% | 62% | 71% O | 41% | 47% |
| No, I definitely won't | 10% | 8% | 17% | 14% | 11% | 5% | 11% | 6% | 13% |
| Don't know/ Unsure | 4% | 4% | 3% | - | 5% | - | 6% | - | - |

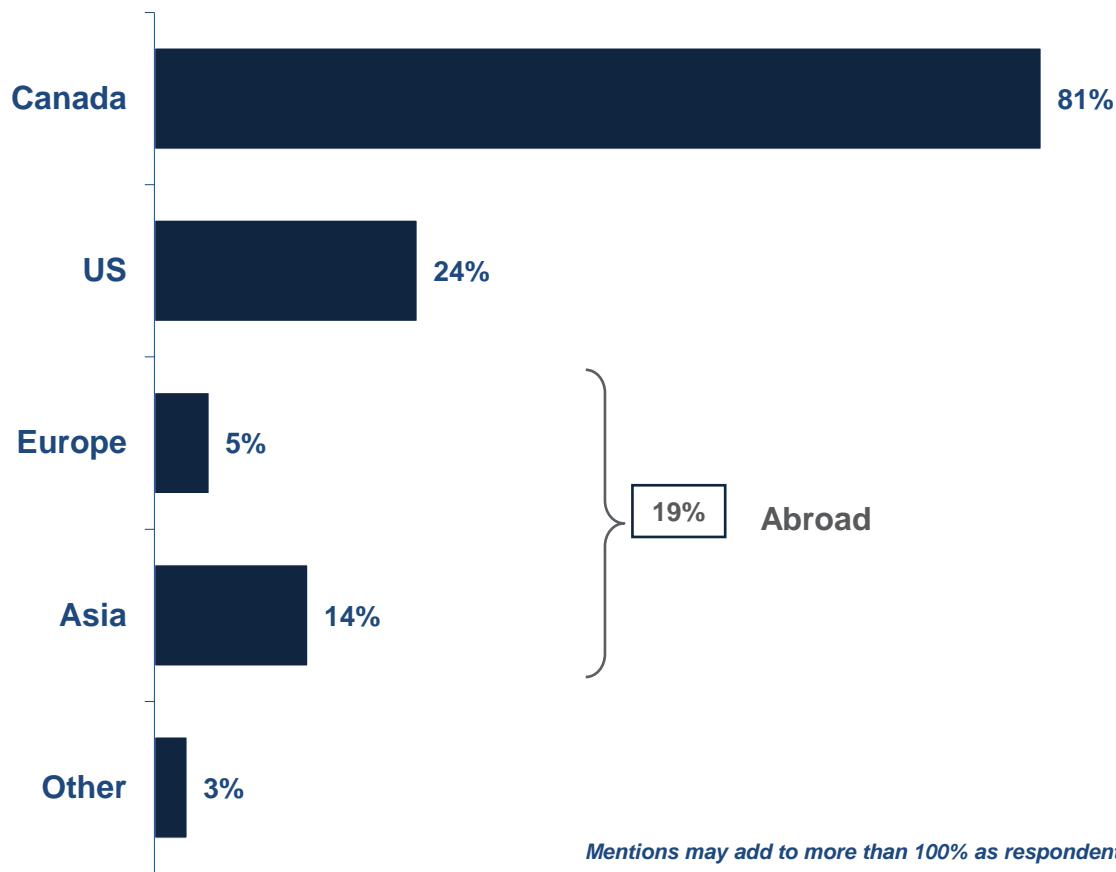
*small base size **very small base size

Intended Country of Application

- Among those who intend on applying because it is required to practice

- Among those students who intend on applying for licensure after being told it is required to practice, the vast majority intend on doing so in Canada, while one quarter plan to apply in the US and slightly fewer abroad.

Where Do You Intend to Apply for Licensure?



Mentions may add to more than 100% as respondents were able to select more than one response

*small base size

Application Timeframe

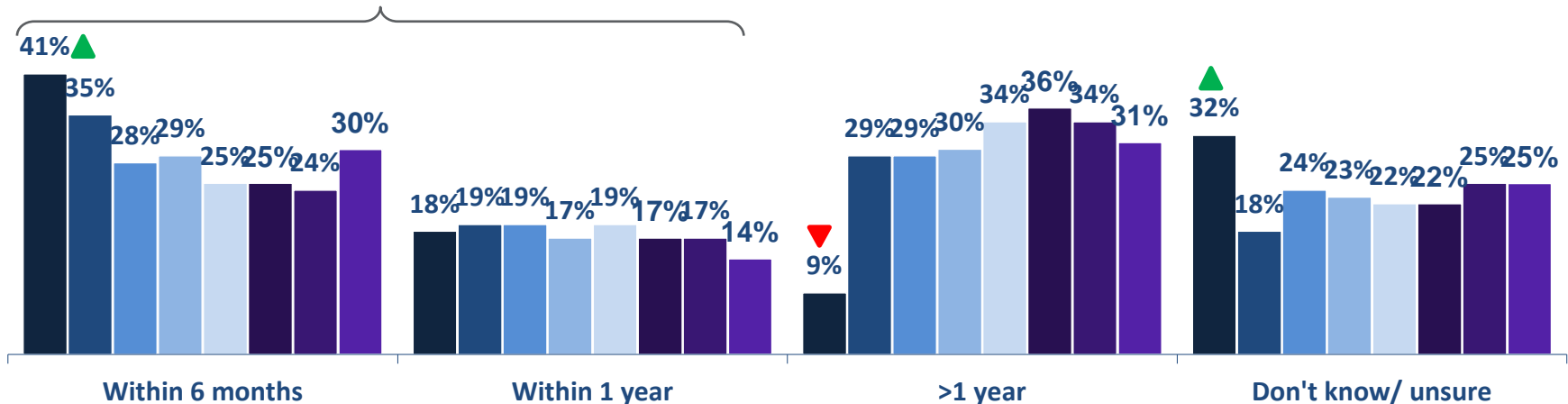
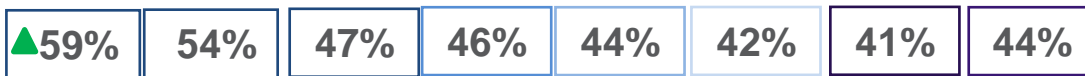
- At six in ten, the majority of students who intend to apply for licensure plan to do so within one year (59%). One in ten plan to apply after a year (9%), while one third (32%) remain undecided.
- Compared to 2014, students are more likely to indicate they plan to apply within six months and less likely to intend to apply after one year. Students are also more likely to be uncertain about when they will apply.

When Do You Plan to Apply for Licensure?

■ 2015 ■ 2014 ■ 2013 ■ 2012 ■ 2011 ■ 2010 ■ 2009 ■ 2008

Apply Within 1 Year

(Top 2 Box)



Application Timeframe

- Students over 27 years old and permanent residents of Canada are more likely to plan on applying for licensure within six months of graduation. Younger students are more likely to be unsure, while international students are more likely to intend on applying within a year of graduation.

| | | Age | | | Gender | | Resident Status | | |
|---|---------|----------|---------|---------|---------|---------|--------------------|--|-----------------------|
| | Total | Under 23 | 24-26 | 27+ | Male | Female | Permanent resident | Permanent resident of another province | International student |
| | | G | H | I | J | K | N | O | P |
| Base: Respondents who plan to apply for licensure | (n=852) | (n=568) | (n=217) | (n=67*) | (n=633) | (n=219) | (n=706) | (n=84*) | (n=62*) |
| Within six months after graduation | 41% | 40% | 36% | 63% GH | 41% | 39% | 41% P | 48% P | 26% |
| Within a year after graduation | 18% | 19% | 18% | 12% | 18% | 19% | 17% | 17% | 29% N |
| More than a year after graduation | 9% | 10% | 8% | 6% | 9% | 9% | 9% | 7% | 7% |
| Don't know/ unsure | 32% | 32% I | 38% I | 19% | 32% | 33% | 32% | 29% | 39% |

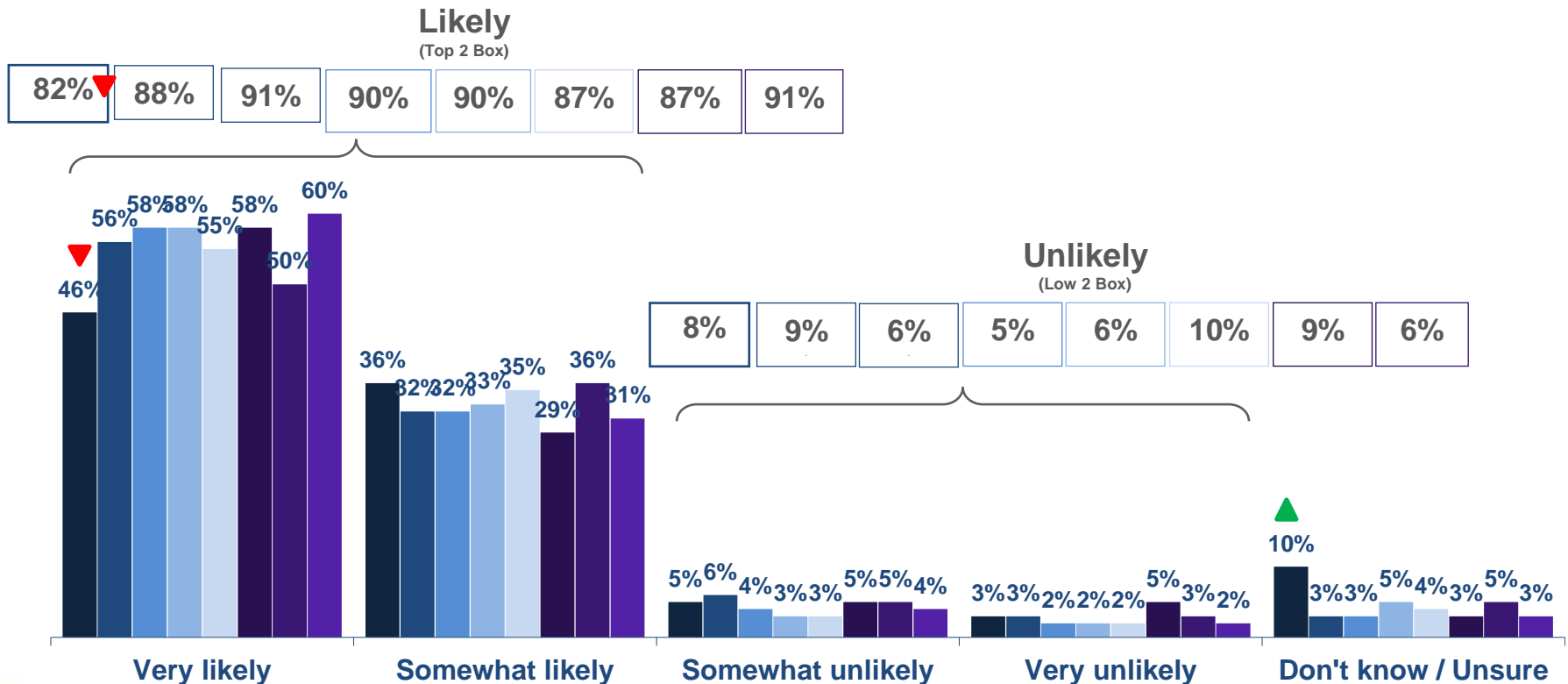
*small base size

Impact of Waiving EIT Fees on Likelihood to Apply within Six Months

- Once learning that they could be eligible to have their first year EIT fees waived, nearly half of students (46%) who intend to apply for licensure in Ontario more than a year after graduation say that they are very likely to apply within six months. Nearly four in ten (36%) are somewhat likely to apply within six months, while only one in ten (8%) are unlikely to apply in that timeframe or don't know (10%).
- Compared to 2014, students are less likely to be very likely to apply within six months and more likely to indicate they don't know.

Would you Apply Within 6 Month if Eligible to Have 1st Year EIT Fees Waived?

■ 2015 ■ 2014 ■ 2013 ■ 2012 ■ 2011 ■ 2010 ■ 2009 ■ 2008



Q29. If you knew that by applying for licensure in Ontario within 6 months of graduation you could be eligible to have the application and first year EIT program fees waived, how likely would you be to apply for licensure within that time frame? Base: Respondents who do not know or intend to apply for licensure in Ontario >6mths after graduation, 2015 n=505; 2014 n=536; 2013 n=745; 2012 n=763; 2011 n=614, 2010, n=561; 2009, n=543; 2008, n=265 (Q21).

Licensing Knowledge

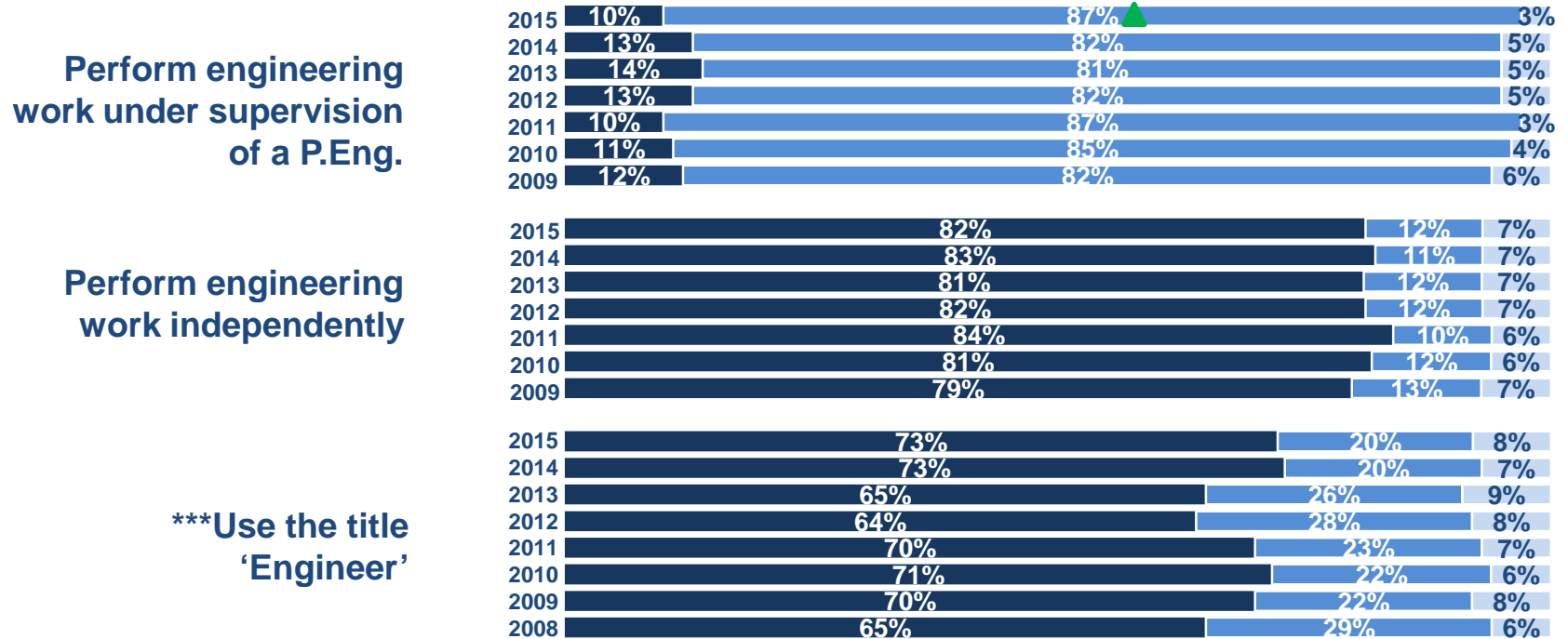


Licensing for Roles within Engineering

- Nearly nine in ten students know that a licence is not required to perform engineering work under the supervision of a P.Eng. (87%), statistically higher than in 2014, while closer to eight in ten know that a licence is required to perform engineering work independently (82%) and nearly three quarters that a licence is required to use the title 'Engineer' (73%).

Is a Licence Required Before Being Able to Do the Following?

■ Yes ■ No ■ Don't Know / Unsure



***In 2008, statement read "Call yourself an engineer"

Licensing for Roles within Engineering

- Younger students and specifically those under 23 are more likely to know that a license is not required to practice engineering work under supervision of a P.Eng., while International students are less likely. Permanent residents of a province other than the one they are studying are more likely to know it is required to use the title 'Engineer'.

| | | Age | | | Gender | | Resident Status | | |
|---|---------|----------|---------|---------|---------|---------|--------------------|--|-----------------------|
| Yes % Summary | Total | Under 23 | 24-26 | 27+ | Male | Female | Permanent resident | Permanent resident of another province | International student |
| | | G | H | I | J | K | N | O | P |
| Base: All Respondents | (n=968) | (n=659) | (n=238) | (n=71*) | (n=723) | (n=245) | (n=797) | (n=100) | (n=71*) |
| Use the title 'Engineer' | 73% | 74% | 71% | 65% | 72% | 74% | 73% | 79% P | 65% |
| Practice engineering work independently | 82% | 81% | 82% | 83% | 82% | 80% | 82% | 79% | 82% |
| Practice engineering work under the supervision of a P.Eng. | 10% | 9% | 13% G | 17% G | 10% | 11% | 9% | 14% | 24% N |

*small base size

Knowledge of Licensing and Roles

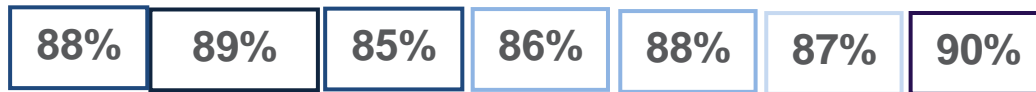
- Nine in ten final year engineering students have either a moderate (32%) or high (56%) level of knowledge of when a licence is required to legally perform actions/ duties within the engineering profession, consistent with last year, however statistically fewer have a moderate level of knowledge and directionally more have a high level of knowledge (correct on all three questions in Q8).

Knowledge Level of Engineering Practices Requiring a Licence

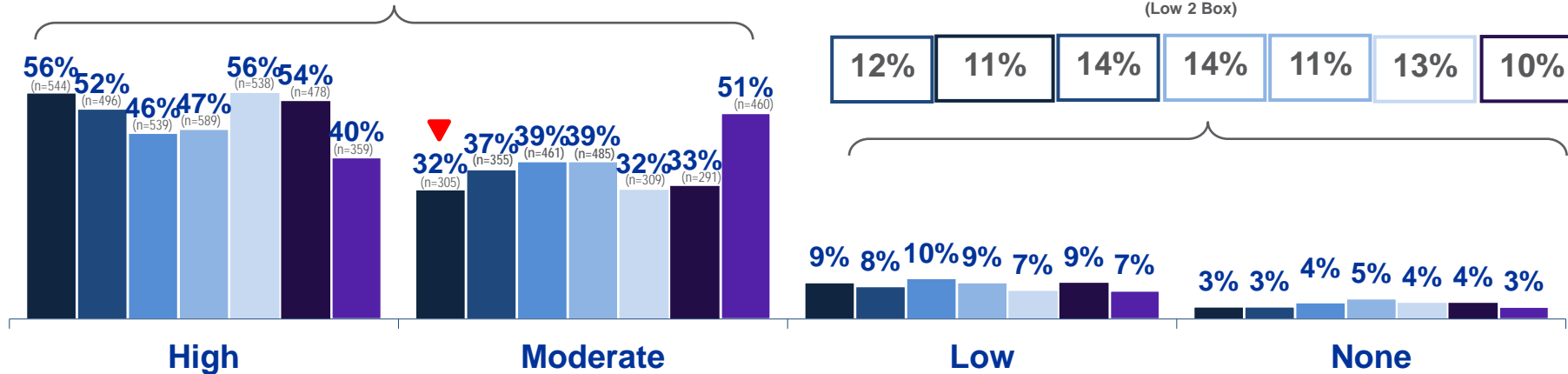
■ 2015 ■ 2014 ■ 2013 ■ 2012 ■ 2011 ■ 2010 ■ 2009

***Knowledge Levels Defined**
High: All Correct (3) in Q8
Moderate: 2 Correct in Q8
Low: 1 Correct in Q8
None: Zero (0) Correct in Q8

High/Moderate
 (Top 2 Box)



Little/None
 (Low 2 Box)

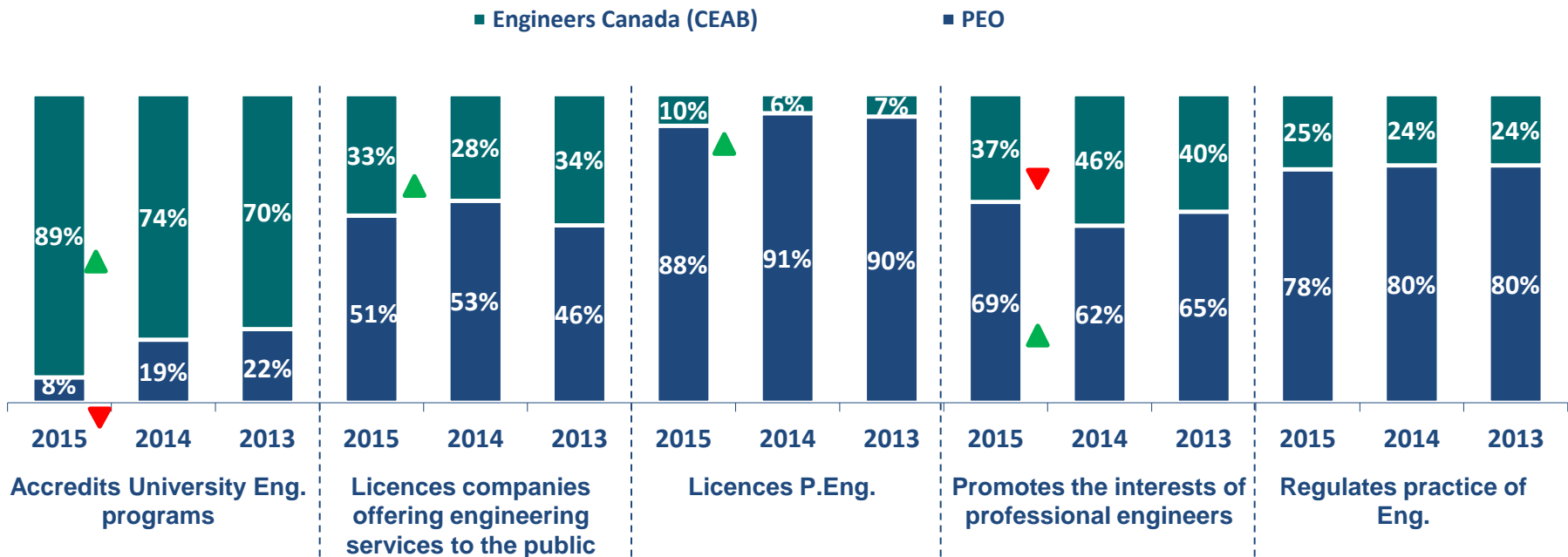


Note that in 2012-2010 the question was asked with one less option for levels of engineering practices – compare 2009 with caution*.

Organizational Responsibilities

- At nine in ten, the vast majority of students are able to correctly identify that PEO is the organization responsible for licensing engineers or that Engineers Canada accredits higher education institutions' engineering programs. Closer to eight in ten know that PEO regulates the practice of professional engineers, while seven in ten feel they also promote the interests of professional engineers compared to four in ten who indicate Engineers Canada.
- Students remain less certain about which organization licenses companies offering engineering services, half believe it is PEO, while one third think it is Engineers Canada.
- Compared to 2014, students are more likely to respond that Engineers Canada accredits higher education institutions' engineering programs, licenses engineers or license companies offering engineering services. They are also more likely to think that PEO promotes the interests of professional engineers and less likely to think Engineers Canada does so.

Which Organization is Responsible for Each of the Follow Activities?



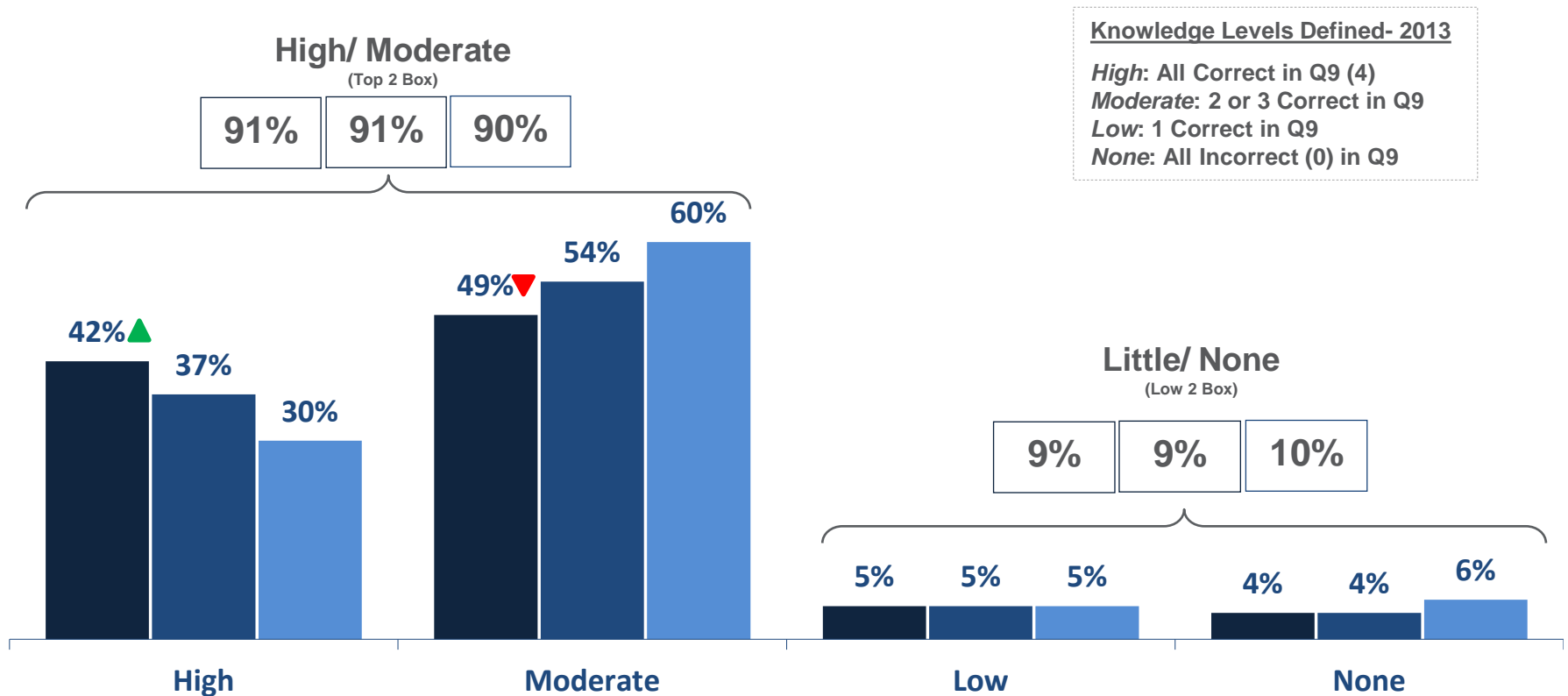
Mentions may add to more than 100% as respondents were able to select more than one response

Knowledge of Organizational Responsibility- 2015-2013

- Nine in ten have either a high (42%) or moderate (49%) level of knowledge concerning organizational responsibilities of activities/ procedures relating to the engineering profession, consistent with last year.
- Compared to 2014, students are statistically more likely to have a high level of knowledge and less likely to have a moderate level of knowledge.

Knowledge Level of Organizational Responsibility within the Engineering Profession

■ 2015 ■ 2014 ■ 2013



Knowledge Levels Defined- 2013

High: All Correct in Q9 (4)
Moderate: 2 or 3 Correct in Q9
Low: 1 Correct in Q9
None: All Incorrect (0) in Q9

Note that in 2012-2009 Knowledge Levels were defined as follows: High: All Correct in Q9 (5)
 Moderate: 3 or 4 Correct in Q9, Low: 1 or 2 Correct in Q9, None: All Incorrect (0) in Q9

Q9. Please indicate the organization responsible for each of the activities/ procedures listed below.

Base: All respondents 2015 n=968; 2014 n=958; 2013 n=1168; 2012 n=1250; 2011 n=955; 2010, n=883; 2009, n=907; not asked in 2008

Impact of Student Membership Program



SMP Association & Intention to Pursue Engineering Career - Tracking

- Students who are currently a member of PEO's Student Membership Program and those who are interested in becoming a member continue to be significantly more likely to say that they definitely intend to pursue a career in the engineering field than those who are not interested or have never heard of the program.
- Compared to 2014, those not interested/never heard of SMP are less likely to intention on pursuing a career in engineering.

| | MEMBER | | | | | | | INTERESTED | | | | | | | NOT INTERESTED / NEVER HEARD OF | | | | | | |
|------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------|-----------------------------------|--|--|---|--|----------------------------------|-----------------------------------|--|
| | A | | | | | | | B | | | | | | | C | | | | | | |
| | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 |
| Yes, Definitely | (n=147) 61%_C | (n=156) 63%_C | (n=215) 71%_C | (n=223) 66%_C | (n=126) 57%_C | (n=140) 63% | (n=140) 52%_C | (n=140) 59%_C | (n=133) 60%_C | (n=180) 63%_C | (n=200) 66%_C | (n=162) 64%_C | (n=148) 58% | (n=113) 59%_C | (n=242) 49% | (n=244) 50% | (n=275) 47% | (n=326) 54% | (n=230) 48% | (n=189) 47% | (n=196) 44% |
| Yes, Probably | (n=84) 35% | (n=74) 30% | (n=69) 23% | (n=96) 28% | (n=81) 37% | (n=72) 32% | (n=109) 41% | (n=78) 33% | (n=76) 34% | (n=92) 32%_A | (n=88) 29% | (n=81) 32% | (n=99) 39% | (n=70) 36% | (n=165) 34% | (n=192) 39%_A | (n=247) 43%_A B | (n=209) 34% | (n=188) 39% | (n=155) 38% | (n=187) 42% |
| No, Probably | (n=3) 1% | (n=14) 6% | (n=17) 6% | (n=17) 5% | (n=13) 6% | (n=10) 4% | (n=14) 5% | (n=5) 2% | (n=12) 5% | (n=12) 4% | (n=12) 4% | (n=8) 3% | (n=8) 3% | (n=10) 5% | (n=44) 9%_{AB} | (n=48) 10% | (n=47) 8%_B | (n=58) 10%_A B | (n=50) 10%_B | (n=49) 12%_{AB} | (n=56) 13%_{AB} |
| No, Definitely | (n=3) 1% | (n=2) 1% | (n=1) 0% | (n=3) 1% | (n=0) 0% | (n=1) 0% | (n=5) 2% | (n=1) 0% | (n=0) - | (n=3) 1% | (n=2) 1% | (n=1) 0% | (n=0) - | - - | (n=5) 1% | (n=7) 1% | (n=10) 2% | (n=16) 3%_B | (n=11) 3%_{AB} | (n=16) 3% | (n=7) 2% |
| Top 2 Box Yes | (n=231) 96%_C | (n=230) 94%_C | (n=264) 94%_C | (n=319) 94% | (n=207) 94% | (n=212) 95% | (n=249) 93% | 218 92%_C | (n=209) 95%_C | (n=272) 95%_C | (n=288) 95% | (n=243) 96% | (n=247) 97% | (n=183) 95% | (n=407) 83% | (n=436) 89% | (n=522) 90% | (n=535) 88% | (n=418) 87% | (n=344) 85% | (n=383) 86% |
| Low 2 Box No | (n=6) 3% | (n=16) 7% | (n=18) 6% | (n=20) 6% | (n=13) 6% | (n=10) 4% | (n=19) 7% | (n=6) 3% | (n=12) 5% | (n=15) 5% | (n=14) 5% | (n=9) 4% | (n=8) 3% | (n=10) 5% | (n=49) 10%_A B | (n=55) 11%_A B | (n=57) 10%_A B | (n=74) 13% | (n=61) 13% | (n=65) 15% | (n=63) 14%_A B |

Intentions to Pursue Career within the Engineering Field

SMP Association & Intention to Apply for Licensure - Tracking

- Similarly, students who are currently a SMP member or are interested in the SMP are more likely to intend on applying for licensure than those who are not interested/have not heard of the program.
- Compared to 2014, those not interested/never heard of SMP are less likely to intention on pursuing licensure and more likely to indicate that they probably will not.

| | MEMBER | | | | | | | INTERESTED | | | | | | | NOT INTERESTED/ NEVER HEARD OF | | | | | | |
|------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|----------------|-----------------------------|----------------------------------|-----------------------------|-----------------------------|----------------------------------|----------------------------------|----------------|----------------------------------|-----------------------------------|---------------------------------|---------------------------------|----------------------------------|---------------------------------|---------------------------------|---------------------------------|
| | A | | | | | | | B | | | | | | | C | | | | | | |
| | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 |
| Yes, Definitely | (n=135) 56% ^C | (n=142) 58% ^C | (n=186) 62% ^C | (n=194) 57% ^C | (n=120) 55% ^C | (n=116) 52% | (n=118) 44% | (n=120) 51% ^C | (n=129) 58% ^C | (n=156) 54% ^C | (n=178) 59% ^C | (n=151) 60% ^C | (n=148) 58% | (n=114) 59% ^A C | (n=147) 30% | (n=159) 32% | (n=220) 38% | (n=221) 36% | (n=173) 36% | (n=144) 36% | (n=158) 35% |
| Yes, Probably | (n=67) 28% | (n=70) 29% | (n=77) 25% | (n=97) 29% | (n=66) 30% | (n=64) 29% | (n=104) 39% | (n=95) 40% ^A AC | (n=72) 33% | (n=103) 36% ^A | (n=99) 33% | (n=78) 31% | (n=77) 30% | (n=62) 32% | (n=156) 32% | (n=178) 36% ^A | (n=188) 32% ^A | (n=207) 34% | (n=155) 32% | (n=130) 32% | (n=170) 38% |
| No, Probably | (n=16) 7% | (n=17) 7% ^C | (n=23) 8% | (n=26) 8% | (n=15) 7% | (n=16) 7% | (n=19) 7% | (n=8) 3% | (n=5) 2% | (n=11) 4% | (n=6) 2% | (n=8) 3% | (n=12) 5% | (n=3) 2% | (n=102) 21% ^A AB | (n=72) 15% ^A B | (n=73) 13% ^A B | (n=90) 15% ^A B | (n=72) 15% ^A B | (n=64) 16% ^A B | (n=54) 12% ^A B |
| No, Definitely | (n=8) 3% ^B | (n=5) 2% ^C | (n=5) 2% | (n=6) 2% | (n=4) 2% | (n=5) 2% | (n=6) 2% | (n=0) - | (n=0) - | (n=0) - | (n=1) 0% | (n=2) 1% | (n=1) 0% | (n=1) 1% | (n=19) 4% ^B | (n=23) 5% ^B | (n=19) 3% | (n=33) 5% ^{AB} | (n=26) 5% ^{AB} | (n=20) 5% ^B | (n=15) 3% |
| DK/ Unsure | (n=14) 6% | (n=12) 5% | (n=11) 4% | (n=16) 5% | (n=15) 7% | (n=22) 10% | (n=21) 8% | (n=13) 6% | (n=15) 7% | (n=17) 6% | (n=18) 6% | (n=13) 5% | (n=17) 7% | (n=13) 7% | (n=68) 14% ^A B | (n=59) 12% ^A B | (n=79) 14% ^A B | (n=58) 10% ^A | (n=57) 12% ^A B | (n=47) 12% ^B | (n=49) 11% |
| Top 2 Box Yes | (n=202) 84% ^C | (n=212) 86% ^C | (n=263) 87% ^C | (n=291) 86% ^C | (n=186) 85% ^C | (n=180) 81% | (n=222) 83% ^C | (n=215) 91% ^A C | (n=201) 91% ^C | (n=259) 90% ^C | (n=277) 92% ^A C | (n=229) 91% ^A C | (n=225) 88% | (n=176) 91% ^A C | (n=303) 62% | (n=337) 69% | (n=408) 70% | (n=428) 70% | (n=328) 68% | (n=274) 68% | (n=328) 74% |
| Low 2 Box No | (n=24) 10% ^B | (n=22) 9% ^B | (n=28) 9% | (n=32) 9% ^B | (n=19) 9% ^B | (n=21) 9% | (n=25) 9% | (n=8) 3% | (n=5) 2% | (n=11) 4% | (n=7) 2% | (n=10) 4% | (n=13) 5% | (n=4) 2% | (n=121) 25% ^A B | (n=95) 19% ^A B | (n=92) 16% ^A B | (n=123) 20% ^A B | (n=98) 20% ^A B | (n=84) 21% ^A B | (n=69) 15% ^A B |

Intention to Apply for the Professional Engineers Licensure

Impact of Knowledge of Licensing and Roles



Knowledge of Licensing and Roles & Intention to Pursue Engineering Career - Tracking

- Consistent with previous years, knowledge in terms of roles and licensing requirements does not influence intent to pursue a career in the engineering field.
- Compared to 2014, those with a low level of knowledge are less likely to probably pursue a career in engineering and directionally more likely to definitely intend on doing so.

| | HIGH KNOWLEDGE | | | | | | | MODERATE KNOWLEDGE | | | | | | | LOW KNOWLEDGE | | | | | | | NO KNOWLEDGE | | | | | | |
|------------------------|----------------|------|------|------|------|------|------|--------------------|------|------|------|------|------|------|---------------|------|------|------|------|------|------|--------------|------|------|------|------|------|--------|
| | A | | | | | | | B | | | | | | | C | | | | | | | D | | | | | | |
| | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 |
| Yes, Definitely | 55% | 57% | 58% | 62% | 57% | 54% | 50% | 54% | 56% | 59% | 60% | 51% | 54% | 50% | 59% | 46% | 52% | 54% | 51% | 56% | 50% | 52% | 59% | 50% | 53% | 50% | 47% | 29% |
| Yes, Probably | 35% | 35% | 35% | 29% | 33% | 37% | 42% | 33% | 34% | 33% | 33% | 41% | 37% | 39% | 27% | 46% | 41% | 37% | 34% | 36% | 39% | 45% | 37% | 44% | 34% | 48% | 41% | 46% |
| No, Probably | 5% | 7% | 5% | 8% | 7% | 7% | 7% | 7% | 9% | 8% | 5% | 7% | 8% | 9% | 5% | 8% | 8% | 8% | 13% | 6% | 11% | 3% | 4% | 6% | 14% | 3% | 12% | 25% AB |
| No, Definitely | 1% | 1% | 1% | 2% | 2% | 1% | 1% | 1% | 1% | 1% | 2% | 1% | 1% | 2% | 2% | - | - | 2% | 1% | 1% | - | - | - | - | - | 0% | 0% | - |
| Top 2 Box Yes | 90% | 92% | 93% | 91% | 90% | 91% | 92% | 86% | 90% | 92% | 93% | 92% | 91% | 89% | 86% | 93% | 93% | 91% | 85% | 92% | 89% | 97% | 96% | 94% | 87% | 98% | 88% | 75% |
| Low 2 Box No | 5% | 8% | 6% | 10% | 9% | 8% | 8% | 8% | 10% | 9% | 7% | 8% | 9% | 11% | 7% | 8% | 8% | 10% | 14% | 7% | 11% | 3% | 4% | 6% | 14% | 3% | 12% | 25% AB |

Intentions to Pursue Career within the Engineering Field

Knowledge of Licensing and Roles & Intention to Apply for Licensure - Tracking

- Students with a high level of knowledge of roles and licensing requirements are statistically more likely to intend on applying for licensure than those with less knowledge.
- Compared to 2014, those with a moderate level of knowledge are less likely to definitely intend on applying for licensure while those with no knowledge are more likely to probably not apply.

| | | HIGH KNOWLEDGE | | | | | | | MODERATE KNOWLEDGE | | | | | | | LOW KNOWLEDGE | | | | | | | NO KNOWLEDGE | | | | | | |
|-----------------|--|----------------|----------|----------|----------|---------|---------|---------|--------------------|----------|---------|----------|---------|---------|---------|---------------|----------|--------|----------|--------|--------|--------|--------------|--------|--------|---------------|--------|--------|--------|
| | | A | | | | | | | B | | | | | | | C | | | | | | | D | | | | | | |
| | | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 |
| Yes, Definitely | | (n=256) | (n=234) | (n=278) | (n=305) | (n=267) | (n=230) | (n=158) | (n=107) ▼ | (n=156) | (n=218) | (n=227) | (n=136) | (n=131) | (n=200) | (n=30) | (n=31) | (n=45) | (n=41) | (n=23) | (n=31) | (n=23) | (n=9) | (n=11) | (n=21) | (n=20) | (n=18) | (n=17) | (n=9) |
| | | 47% BC | 47% | 52% c | 52% c | 50% | 48% | 44% | 35% | 44% | 47% | 47% c | 44% | 45% | 43% | 34% | 39% | 38% | 35% | 34% | 39% | 36% | 29% | 41% | 44% | 34% A B | 45% | 47% | 38% |
| Yes, Probably | | (n=174) | (n=156) | (n=159) | (n=173) | (n=160) | (n=138) | (n=139) | (n=111) | (n=130) | (n=152) | (n=172) | (n=103) | (n=99) | (n=162) | (n=27) | (n=23) | (n=43) | (n=36) | (n=26) | (n=27) | (n=26) | (n=6) | (n=11) | (n=14) | (n=22) | (n=10) | (n=7) | (n=9) |
| | | 32% | 32% | 29% | 29% | 30% | 29% | 39% | 36% | 37% | 33% | 35% | 33% | 34% | 35% | 31% | 29% | 36% | 31% | 38% | 34% | 41% | 19% | 41% | 29% | 37% | 25% | 21% | 38% |
| No, Probably | | (n=55) | (n=53) | (n=46) | (n=54) | (n=60) | (n=43) | (n=26) | (n=46) | (n=26) | (n=41) | (n=42) | (n=25) | (n=28) | (n=42) | (n=15) | (n=14) | (n=14) | (n=20) | (n=5) | (n=16) | (n=6) | (n=10) ▲ | (n=1) | (n=6) | (n=6) | (n=5) | (n=5) | (n=2) |
| | | 10% | 11% | 9% | 9% | 11% | 9% | 7% | 15% A | 7% | 9% | 9% | 8% | 10% | 9% | 17% | 18% B | 12% | 17% A | 7% | 20% | 9% | 32% AB | 4% | 13% | 10% | 13% | 15% | 8% |
| No, Definitely | | (n=12) | (n=16) | (n=15) | (n=20) | (n=18) | (n=18) | (n=8) | (n=9) | (n=10) | (n=3) | (n=12) | (n=11) | (n=5) | (n=11) | (n=5) | (n=2) | (n=6) | (n=4) | (n=3) | (n=2) | (n=2) | (n=1) | (n=0) | - | (n=4) | (n=0) | (n=1) | (n=1) |
| | | 2% | 3% | 3% | 3% | 3% | 4% | 2% | 3% | 3% | 1% | 2% | 4% | 2% | 2% | 6% | 3% | 5% | 3% | 4% | 3% | 3% | 3% | - | - | 7% | 0% | 3% | 4% |
| DK/Unsure | | (n=47) | (n=39) | (n=41) | (n=37) | (n=33) | (n=49) | (n=28) | (n=32) | (n=33) | (n=47) | (n=32) | (n=34) | (n=28) | (n=45) | (n=11) | (n=10) | (n=12) | (n=16) | (n=11) | (n=4) | (n=7) | (n=5) | (n=4) | (n=7) | (n=7) | (n=7) | (n=5) | (n=3) |
| | | 9% | 8% | 8% | 6% | 6% | 10% | 8% | 11% | 9% | 10% | 7% | 11% | 10% | 10% | 13% | 13% | 10% | 14% A | 16% | 15% | 11% | 16% | 15% | 15% | 12% | 18% | 15% | 13% |
| Top 2 Box Yes | | (n=430) | (n=388) | (n=437) | (n=478) | (n=427) | (n=368) | (n=297) | (n=218) ▼ | (n=286) | (n=370) | (n=399) | (n=239) | (n=230) | (n=362) | (n=57) | (n=54) | (n=88) | (n=77) | (n=49) | (n=58) | (n=49) | (n=15) | (n=22) | (n=35) | (n=42) | (n=28) | (n=23) | (n=18) |
| | | 79% BCD | 78% C | 81% | 81% C | 79% | 77% | 83% | 72% D | 81% C | 80% | 82% | 77% | 79% | 79% | 65% | 68% | 74% | 66% | 72% | 68% | 77% | 48% | 82% | 73% | 71% | 70% | 68% | 75% |
| Low 2 Box No | | (n=67) | (n=69) | (n=61) | (n=74) | (n=78) | (n=61) | (n=34) | (n=55) | (n=36) | (n=44) | (n=54) | (n=36) | (n=33) | (n=53) | (n=20) | (n=16) | (n=20) | (n=24) | (n=8) | (n=18) | (n=8) | (n=11) | (n=1) | (n=6) | (n=10) | (n=5) | (n=6) | (n=3) |
| | | 12% | 14% | 12% | 12% | 14% | 13% | 9% | 18% A | 10% | 10% | 11% | 12% | 11% | 12% | 23% A | 20% B | 17% | 20% | 12% | 18% | 13% | 36% AB | 4% | 13% | 17% | 13% | 18% | 13% |

Intention to Apply for the Professional Engineers Licensure

Impact of Knowledge of Organizational Responsibility



Knowledge of Organizational Responsibility & Intention to Pursue Engineering Career - Tracking

- Knowledge of organizational responsibility has no significant impact on intention to pursue an engineering career this year.
- Compared to 2014, students with a moderate level of knowledge are less likely to intend on pursuing a career in engineering.

| | HIGH KNOWLEDGE | | | | | MODERATE KNOWLEDGE | | | | | | LOW KNOWLEDGE | | | | | | NO KNOWLEDGE | | | | | | | | |
|------------------------|----------------|----------------|----------------|----------------|----------------|--------------------|----------------|----------------|----------------|---------------------|----------------|----------------------|---------------|---------------|---------------|----------------|----------------|----------------|---------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|----------------------|
| | A | | | | | B | | | | | | C | | | | | | D | | | | | | | | |
| | 2015 | 2014 | 2013 | 2012 | 2011 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 |
| Yes, Definitely | (n=235) 58% | (n=207) 58% | (n=204) 59% | (n=172) 62% | (n=116) 56% | (n=251) 53% | (n=282) 55% | (n=405) 58% | (n=353) 59% | (n=257) 56% D | (n=233) 56% | (n=219) 53% D | (n=23) 50% | (n=29) 56% | (n=26) 47% | (n=169) 60% | (n=110) 53% | (n=95) 54% | (n=159) 50% D | (n=20) 48% | (n=15) 42% | (n=35) 54% | (n=55) 58% | (n=35) 43% | (n=22) 42% | (n=36) 34% |
| Yes, Probably | (n=132) 32% | (n=113) 32% | (n=116) 33% | (n=84) 30% | (n=78) 37% | (n=161) 34% | (n=194) 38% | (n=240) 34% | (n=191) 32% | (n=158) 35% | (n=149) 36% | (n=162) 39% | (n=18) 39% | (n=17) 33% | (n=24) 44% | (n=87) 31% | (n=78) 38% | (n=65) 37% | (n=123) 38% | (n=16) 38% | (n=18) 50% A | (n=28) 43% | (n=31) 33% | (n=36) 44% | (n=26) 49% | (n=49) 46% |
| No, Probably | (n=21) 5% | (n=33) 9% | (n=21) 6% | (n=15) 5% | (n=10) 5% | (n=27) 6% | (n=34) 7% | (n=49) 7% | (n=44) 7% | (n=32) 7% | (n=30) 7% | (n=25) 6% | (n=1) 2% | (n=5) 10% | (n=4) 7% | (n=20) 7% | (n=18) 9% | (n=13) 7% | (n=33) 10% B | (n=3) 7% | (n=2) 6% | (n=2) 3% | (n=8) 8% | (n=10) 12% A | (n=5) 9% | (n=19) 18% ABC |
| No, Definitely | (n=4) 1% | (n=2) 1% | (n=7) 2% | (n=7) 3% | (n=5) 2% | (n=5) 1% | (n=5) 1% | (n=6) 1% | (n=7) 9% | (n=9) 2% | (n=4) 1% | (n=5) 1% | (n=0) - | (n=1) 2% | (n=1) 2% | (n=4) 1% | (n=2) 1% | (n=4) 2% | (n=5) 2% | (n=0) - | (n=1) 3% | (n=0) - | (n=1) 1% | (n=1) 1% | - | (n=2) 2% |
| Top 2 Box Yes | (n=367) 90% | (n=320) 90% | (n=320) 92% | (n=256) 92% | (n=194) 93% | (n=412) 88% | (n=476) 92% | (n=645) 92% | (n=544) 91% | (n=415) 91% | (n=382) 92% | (n=381) 93% CD | (n=41) 89% | (n=46) 89% | (n=50) 91% | (n=256) 91% | (n=188) 91% | (n=160) 91% | (n=282) 88% D | (n=36) 86% | (n=33) 92% | (n=63) 97% | (n=86) 91% | (n=71) 87% | (n=48) 91% | (n=85) 80% |
| Low 2 Box No | (n=25) 6% | (n=35) 10% | (n=28) 8% | (n=22) 8% | (n=15) 7% | (n=32) 7% | (n=39) 8% | (n=55) 8% | (n=53) 9% | (n=41) 9% | (n=34) 8% | (n=30) 7% | (n=1) 2% | (n=6) 12% | (n=5) 9% | (n=24) 8% | (n=20) 10% | (n=17) 9% | (n=38) 12% A | (n=3) 7% | (n=3) 8% | (n=2) 3% | (n=9) 9% | (n=11) 13% | (n=5) 9% | (n=21) 25% ABC |

Intentions to Pursue Career within the Engineering Field

Knowledge of Organizational Responsibility & Intention to Apply for Licensure - Tracking

- Students with a high or moderate level of knowledge of organizational responsibility are more likely to intend on applying for licensure.
- Compared to 2014, students with a moderate level of knowledge are less likely to be definitely likely to apply for licensure.

| | HIGH KNOWLEDGE | | | | | | | MODERATE KNOWLEDGE | | | | | | | LOW KNOWLEDGE | | | | | | | NO KNOWLEDGE | | | | | | |
|------------------------|----------------------|----------------------|----------------|----------------|----------------|----------------|--------------------|---------------------|----------------------|----------------|----------------|---------------------|----------------|----------------------|---------------------|-------------------|---------------|----------------|----------------|----------------|---------------------|--------------------|---------------|---------------|---------------|---------------|---------------|----------------------|
| | A | | | | | | | B | | | | | | | C | | | | | | | D | | | | | | |
| | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 |
| Yes, Definitely | (n=194) 47% BD | (n=166) 47% CD | (n=167) 48% | (n=126) 49% | (n=95) 45% | (n=113) 48% | (n=35) 50% D | (n=183) 39% A | (n=239) 46% CD | (n=343) 49% | (n=304) 54% | (n=221) 48% D | (n=197) 47% | (n=219) 53% D | (n=15) 33% | (n=15) 29% | (n=21) 38% | (n=128) 49% | (n=99) 48% | (n=78) 44% | (n=159) 50% D | (n=10) 24% | (n=10) 28% | (n=31) 48% | (n=35) 43% | (n=29) 35% | (n=20) 38% | (n=36) 34% |
| Yes, Probably | (n=129) 32% | (n=119) 34% | (n=113) 32% | (n=92) 36% | (n=74) 35% | (n=64) 27% | (n=32) 46% | (n=163) 35% | (n=163) 32% | (n=217) 31% | (n=185) 33% | (n=132) 29% | (n=130) 31% | (n=162) 39% | (n=11) 24% | (n=21) 40% | (n=20) 36% | (n=96) 37% | (n=63) 30% | (n=64) 36% | (n=123) 38% | (n=15) 36% | (n=17) 47% | (n=18) 28% | (n=30) 37% | (n=30) 37% | (n=13) 25% | (n=49) 46% |
| No, Probably | (n=48) 12% | (n=34) 10% | (n=36) 10% | (n=31) 12% | (n=20) 10% | (n=27) 11% | (n=3) 4% | (n=62) 13% | (n=45) 9% | (n=62) 9% | (n=55) 10% | (n=43) 9% | (n=36) 9% | (n=25) 6% | (n=9) 20% | (n=9) 17% B | (n=5) 9% | (n=25) 10% | (n=26) 13% | (n=19) 11% | (n=33) 10% B | (n=7) 7% | (n=6) 17% | (n=4) 6% | (n=11) 14% | (n=6) 7% | (n=10) 19% | (n=19) 18% ABC |
| No, Definitely | (n=6) 2% | (n=10) 3% | (n=9) 3% | (n=10) 4% | (n=8) 4% | (n=8) 3% | - | (n=14) 3% | (n=16) 3% | (n=13) 2% | (n=15) 3% | (n=18) 4% | (n=12) 3% | (n=5) 1% | (n=4) 9% AB | (n=2) 4% | (n=1) 2% | (n=10) 4% | (n=4) 2% | (n=5) 3% | (n=5) 2% | (n=3) 3% A | (n=0) - | (n=1) 2% | (n=5) 6% | (n=2) 2% | (n=1) 2% | (n=2) 2% |
| Top 2 Box Yes | (n=323) 79% CD | (n=285) 80% | (n=280) 80% | (n=218) 85% | (n=169) 81% | (n=177) 75% | (n=67) 96% D | (n=346) 74% C | (n=402) 78% | (n=560) 80% | (n=489) 87% | (n=353) 77% | (n=327) 79% | (n=381) 93% CD | (n=26) 57% | (n=36) 69% | (n=41) 75% | (n=224) 86% | (n=162) 78% | (n=142) 80% | (n=282) 88% D | (n=25) 60% | (n=27) 75% | (n=49) 75% | (n=65) 80% | (n=59) 72% | (n=33) 62% | (n=85) 80% |
| Low 2 Box No | (n=54) 13% | (n=44) 12% | (n=45) 13% | (n=41) 16% | (n=28) 13% | (n=35) 15% | (n=3) 4% | (n=76) 16% | (n=61) 12% | (n=75) 11% | (n=70) 13% | (n=61) 13% | (n=48) 12% | (n=30) 7% | (n=13) 28% AB | (n=11) 21% | (n=6) 11% | (n=35) 14% | (n=30) 14% | (n=24) 14% | (n=38) 12% A | (n=10) 24% A | (n=6) 17% | (n=5) 8% | (n=16) 20% | (n=8) 10% | (n=11) 21% | (n=21) 25% ABC |

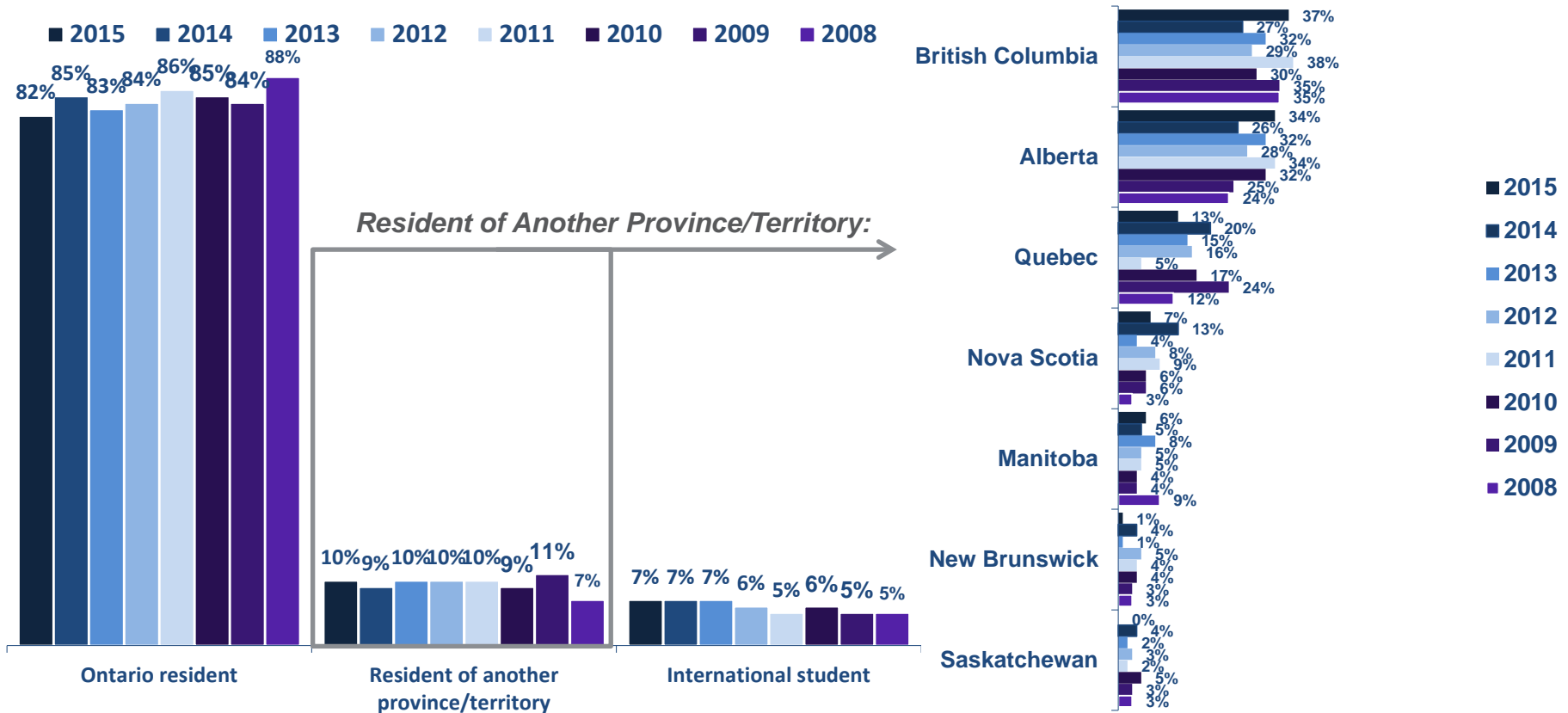
Intention to Apply for the Professional Engineers Licensure

Demographics



Permanent Residency

- At eight in ten, the vast majority of final year engineering students in the province are permanent residents of Ontario, consistent with 2014. Of those who are attending school in Ontario but are a permanent resident of another province, most are from British Columbia (37%) or Alberta (34%), followed by Quebec (13%), Nova Scotia (7%) and Manitoba (6%).



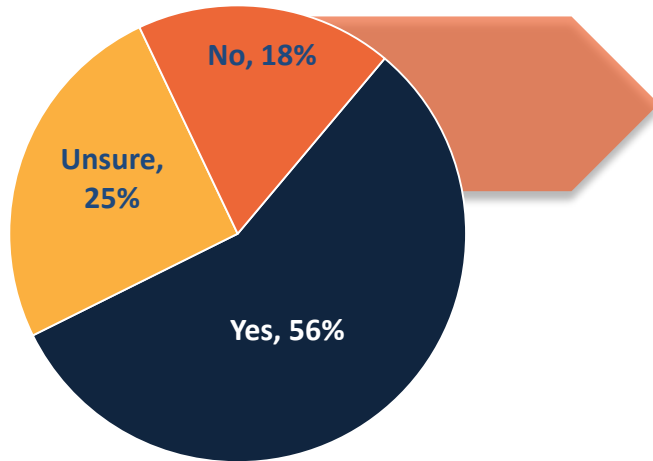
Mentions <2% are not shown
 *** NOTE: Don't know/ Unsure was an option in 2008

Q34. For statistical purposes, we would like to know the location of your permanent residence. Please select the statement that most appropriately describes your current residency status: ? Base: All respondents, 2015 n=968; 2014 n=958; 2013 n=1168; 2012 n=1250; 2011 n=955, 2010, n=883; 2009, n=907; 2008, n=513 (Q34). Q35. You indicated that you are attending university in Ontario but are a permanent resident of another province/territory. Please select the province or territory in which you are a permanent resident. Base: Respondents who are not permanent residents of Ontario, 2015 n=100; 2014 n=84; 2013 n=114; 2012 n=130; 2011 n=92, 2010, n=81; 2009, n=102; 2008, n=34

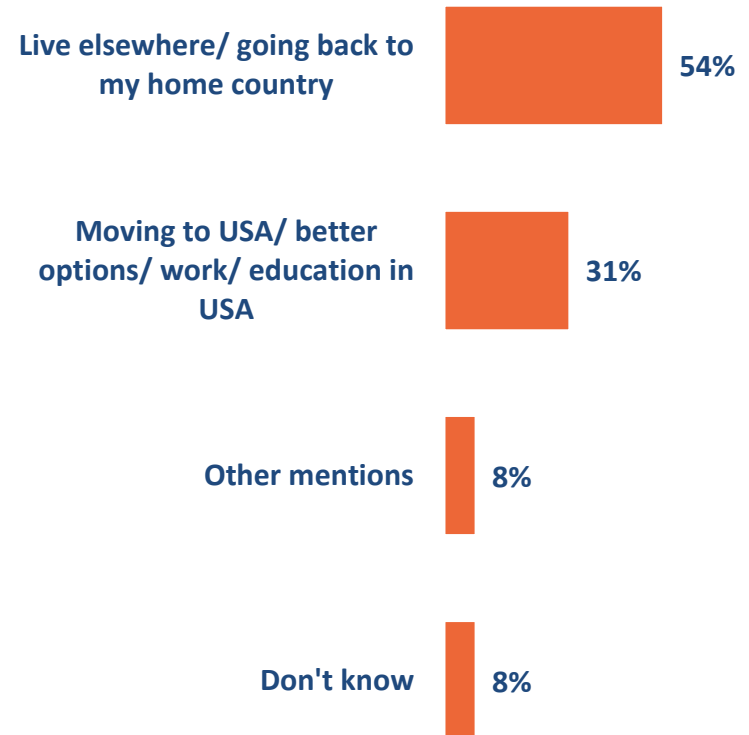
International Students' Plans After Graduation

- Nearly six in ten international students plan on staying in Canada after graduation, while one quarter are unsure and two in ten do not plan on staying.
- Among those who do not plan on staying in Canada, the most common reason is to go back to their home country, followed by plans to move to the US for better education/ work options.

Do you plan on staying in Canada after your bachelor's degree is complete?



Why do you not intend on staying in Canada?



*small base size **very small base size

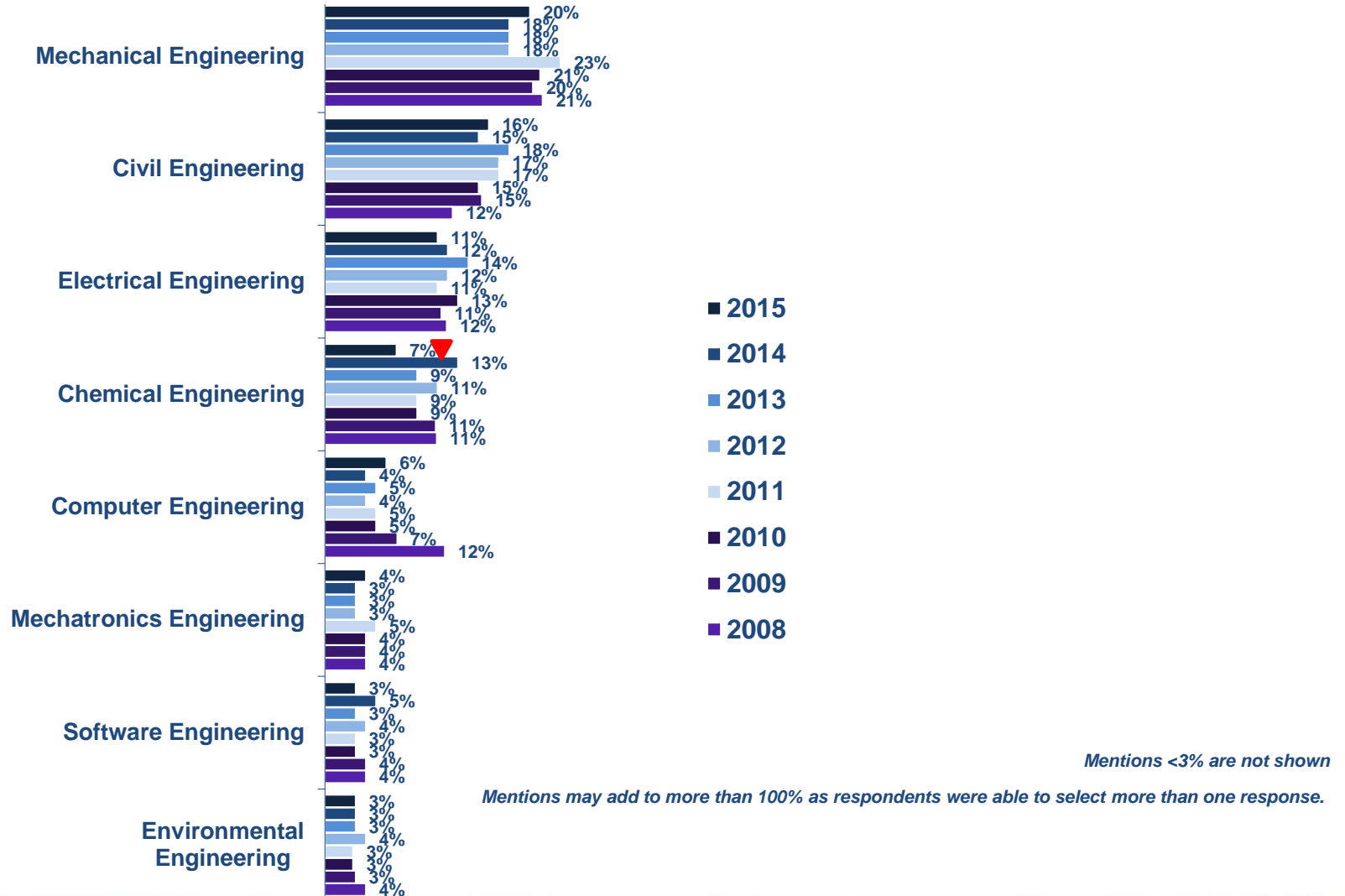
Q36a. Do you plan on staying in Canada after your bachelor's degree is complete? Base: International students (n=71*)

Q36b. Why do you not intend on staying in Canada?

Base: All respondents, 2015 (n=13**)

Engineering Disciplines

- The most popular disciplines mentioned by final year engineering students are mechanical engineering (20%) and civil engineering (16%), followed by electrical (11%) and chemical (7%). Compared to 2013, fewer students mention chemical engineering.



Engineering Disciplines

- Older students and males are more likely to indicate studying electrical engineering, while female students are more likely to be studying chemical or environmental engineering. Males are also more likely to indicate studying mechatronics or software engineering.

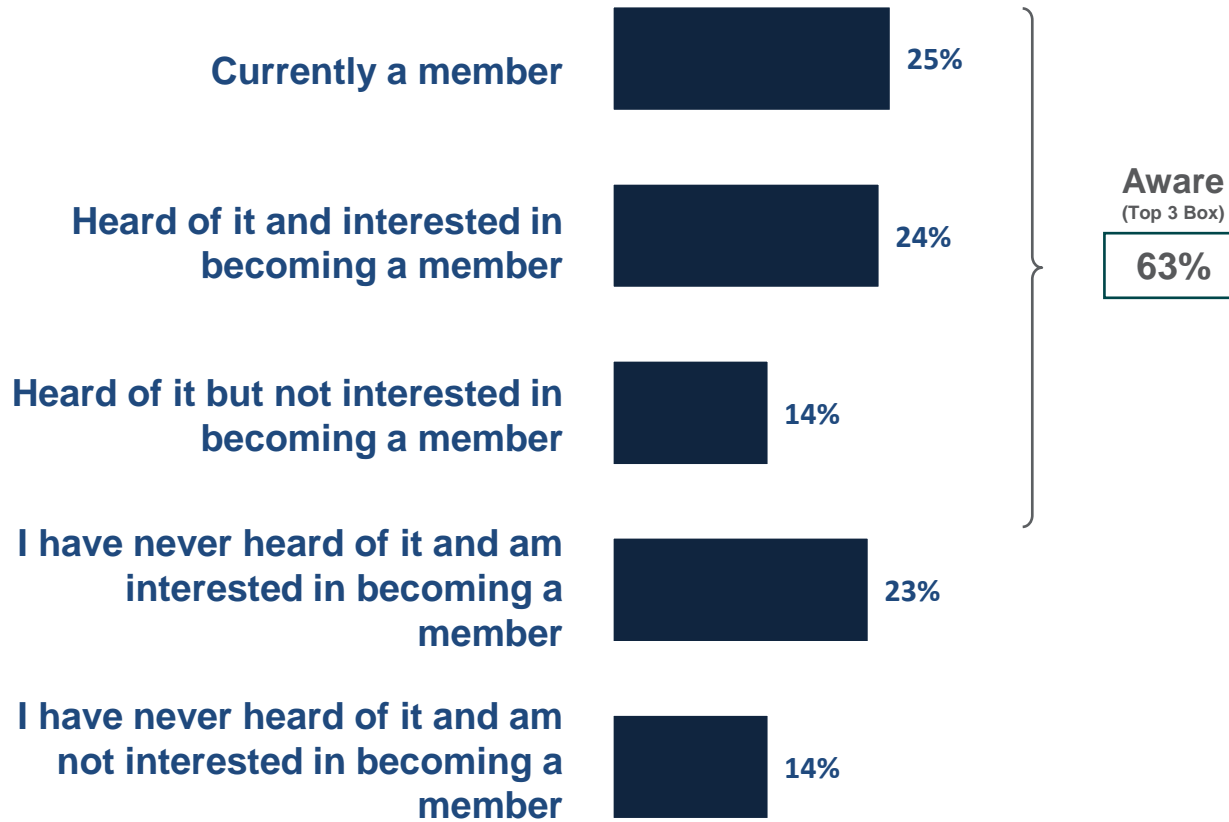
| | | Age | | | Gender | | Resident Status | | |
|---------------------------|---------|----------|---------|---------|---------|---------|--------------------|--|-----------------------|
| | Total | Under 23 | 24-26 | 27+ | Male | Female | Permanent resident | Permanent resident of another province | International student |
| | | G | H | I | J | K | N | O | P |
| Base: All Respondents | (n=968) | (n=659) | (n=238) | (n=71*) | (n=723) | (n=245) | (n=797) | (n=100) | (n=71*) |
| Mechanical Engineering | 20% | 20% | 21% | 16% | 21% | 16% | 20% | 15% | 23% |
| Civil Engineering | 16% | 16% | 17% | 16% | 17% | 16% | 16% | 17% | 16% |
| Electrical Engineering | 11% | 10% | 14% | 20% G | 13% K | 8% | 11% | 12% | 17% |
| Chemical Engineering | 7% | 7% | 6% | 6% | 5% | 11% J | 6% | 8% | 7% |
| Computer Engineering | 6% | 6% | 7% | 11% | 7% | 5% | 6% | 5% | 6% |
| Mechatronics Engineering | 4% | 4% | 2% | 3% | 4% K | 1% | 4% | 2% | 1% |
| Software Engineering | 3% | 4% | 3% | 3% | 4% K | 1% | 3% | 4% | 4% |
| Environmental Engineering | 3% | 3% | 3% | 6% | 2% | 7% J | 3% | 2% | 4% |

Mentions <3% are not shown

*small base size

Association with PEO's SMP

- The majority of students are aware of provincial engineering association Student Membership Programs (SMP), of which one quarter are current members or heard of it and are interested in becoming a member while around one in ten have heard of it but are not interested. Further, nearly one quarter have never heard of Student Membership Programs but are interested in becoming a member while around one in ten have never heard of the programs and are not interested in becoming a member.



Demographics- Gender, Age

- The following describes the gender and age distribution of survey participants.

| Gender | |
|--------|-----|
| Male | 75% |
| Female | 25% |

| Age | |
|----------|-----|
| Under 23 | 68% |
| 24-26 | 25% |
| 27+ | 7% |

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