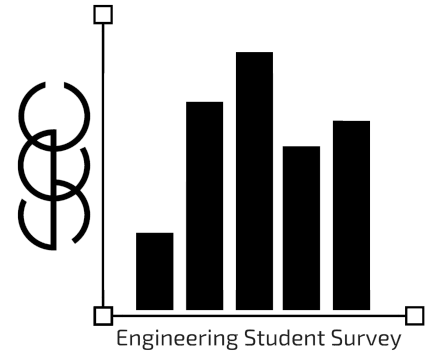
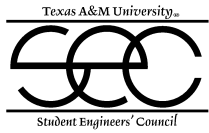


FIRST-YEAR STUDENT SURVEY

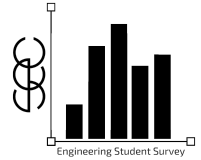


Results Presentation

April 28, 2021

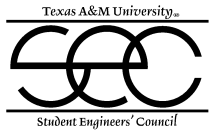


Survey Executive Summary

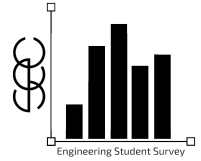


Mission

A primary mission of the Student Engineers' Council is to serve as the representative voice for the students within the College of Engineering. This survey seeks to communicate the student perspective to College of Engineering administration.



Survey Question Breakdown



Demographics – 3

Overall First-Year Experience – 14

Academic Experience – 9

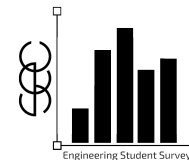
Industry Nights & DI Saturday – 13

Choosing a Major – 7

Summer Plans – 4

Extra-Curricular Activities/Programs – 6

Survey Response Summary



Part I: Entry Survey

2-Week Survey Period

October 7 – October 21, 2020

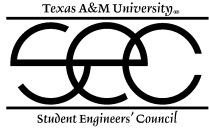
832 Total Responses

Part II: Exit Survey

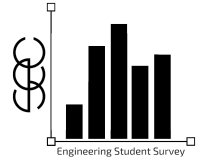
2-Week Survey Period

March 23 – April 6, 2018

226 Total Responses



Special Thanks



Dr. Andrea Ogilvie, *Assistant Dean for Student Success*

Kyle Beck, *SEC President*

Kendall McGinnis, *SEC Vice President Internal*

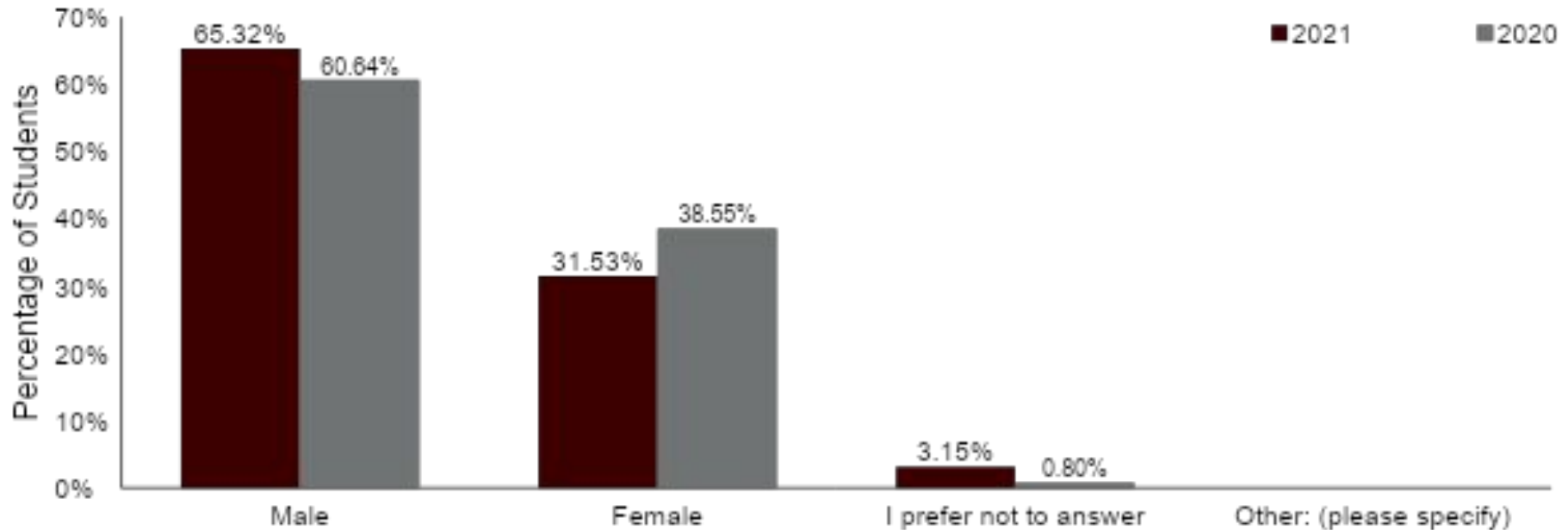
Demographic Questions

Asked to all students



Responses: 222

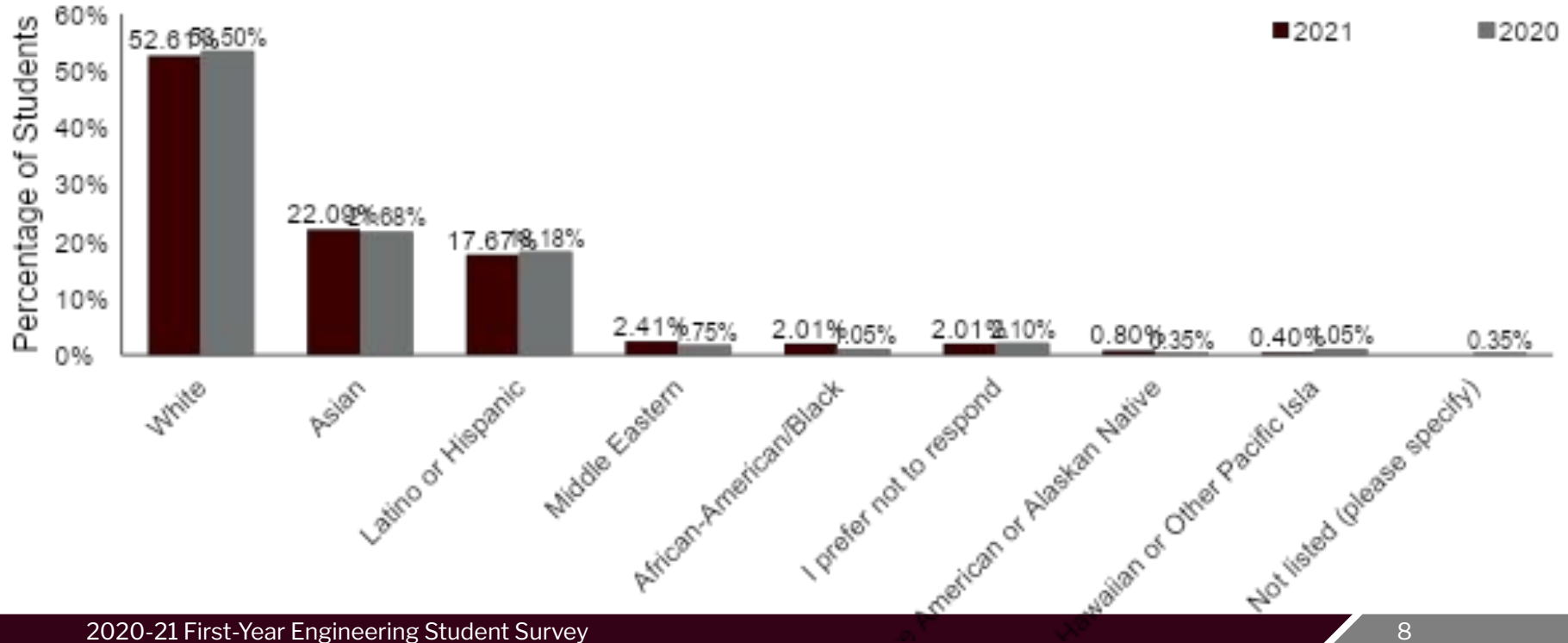
Sex/Gender





Responses: 249

Race/Ethnic Identification (select all that apply)

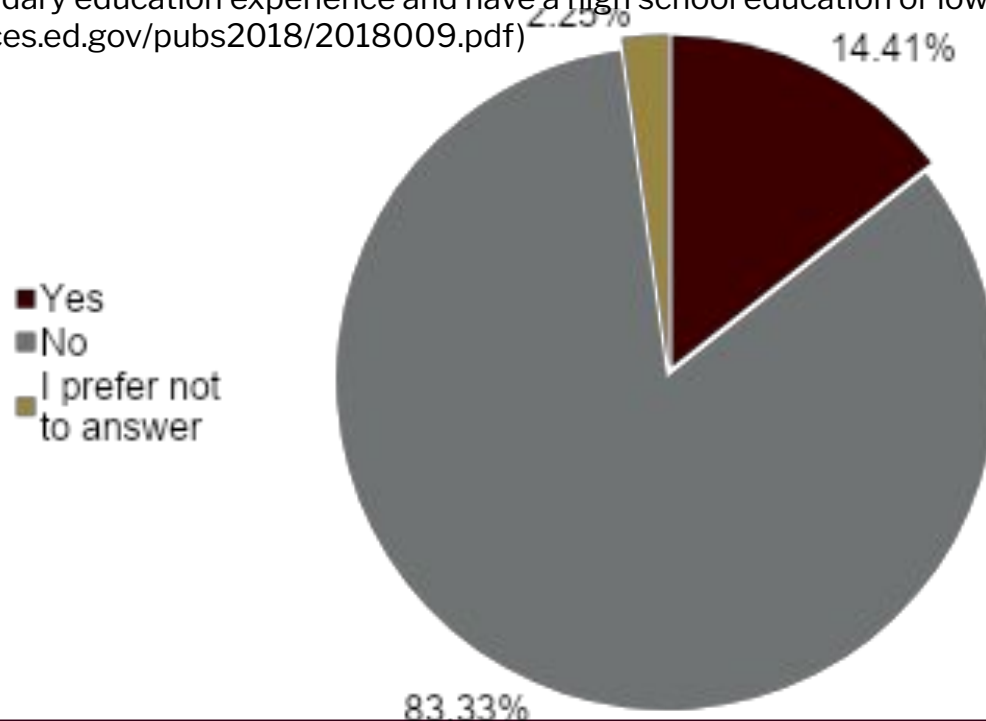




Responses: 222

Are you a first-generation college student?*

*The U.S. Department of Education defines a first-generation college student as a person “whose parents both have had no postsecondary education experience and have a high school education or lower level of educational attainment.” (<https://nces.ed.gov/pubs2018/2018009.pdf>)



Overall First-Year Experience in Engineering

Asked to all first-year students

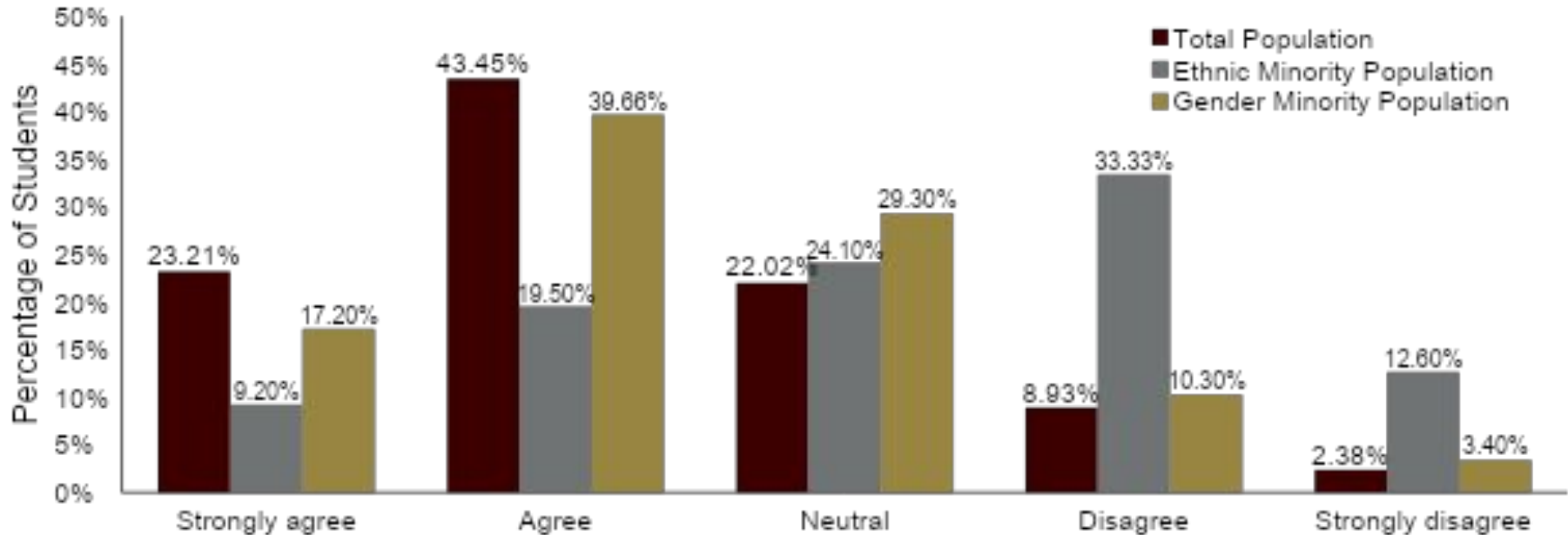
Total Responses: 168

Ethnic Minority Responses: 87

Gender Minority Responses: 58



I feel a sense of belonging within the College of Engineering.



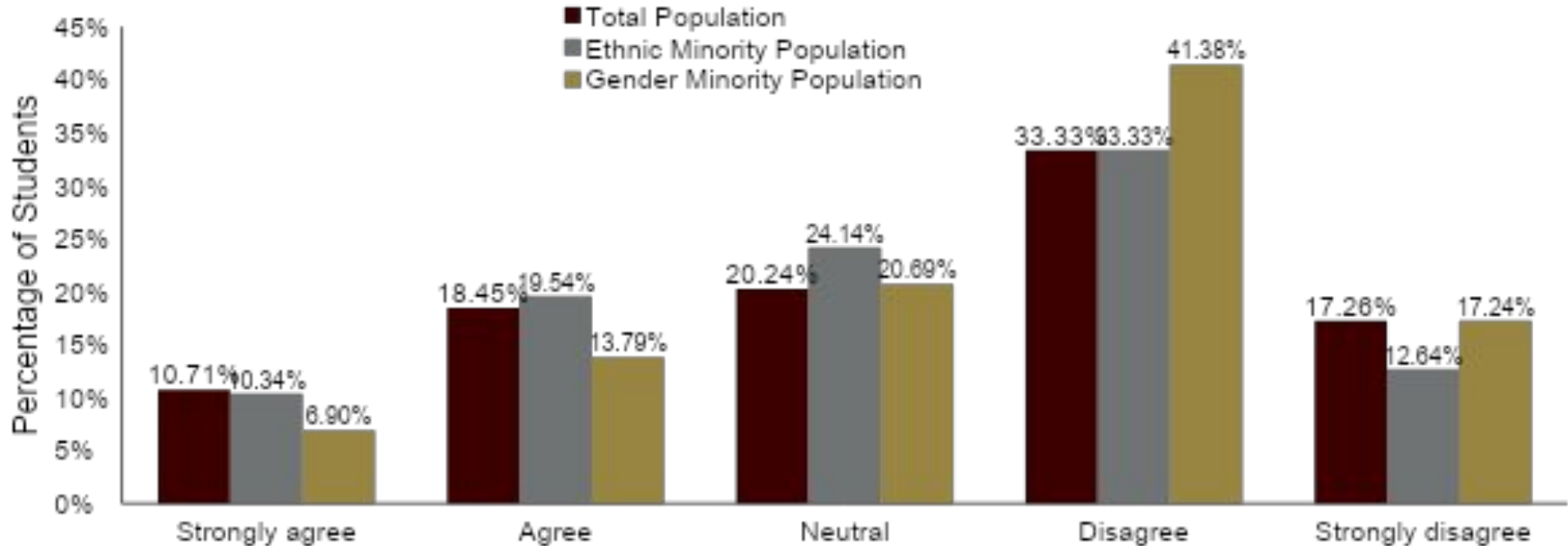
Total Responses: 168

Ethnic Minority Responses: 87

Gender Minority Responses: 58



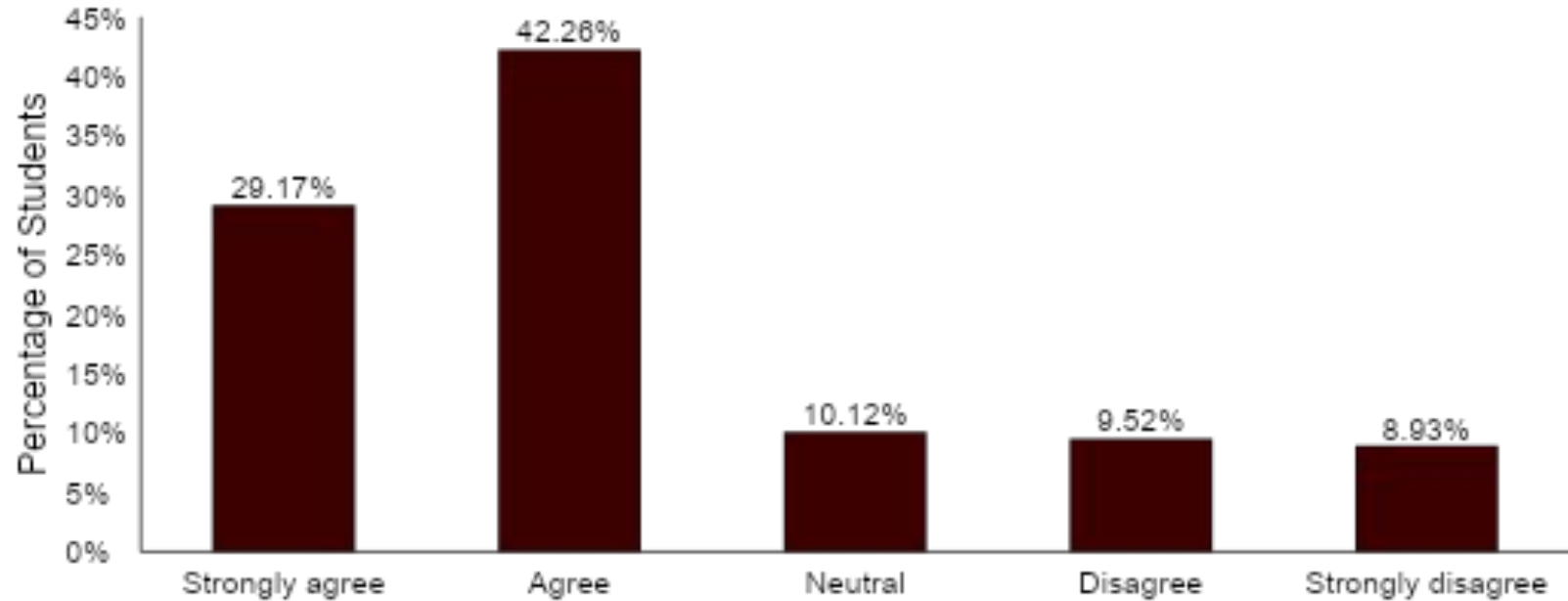
I am meeting as many people and making as many friends as I want in the College of Engineering at Texas A&M.





Responses: 168

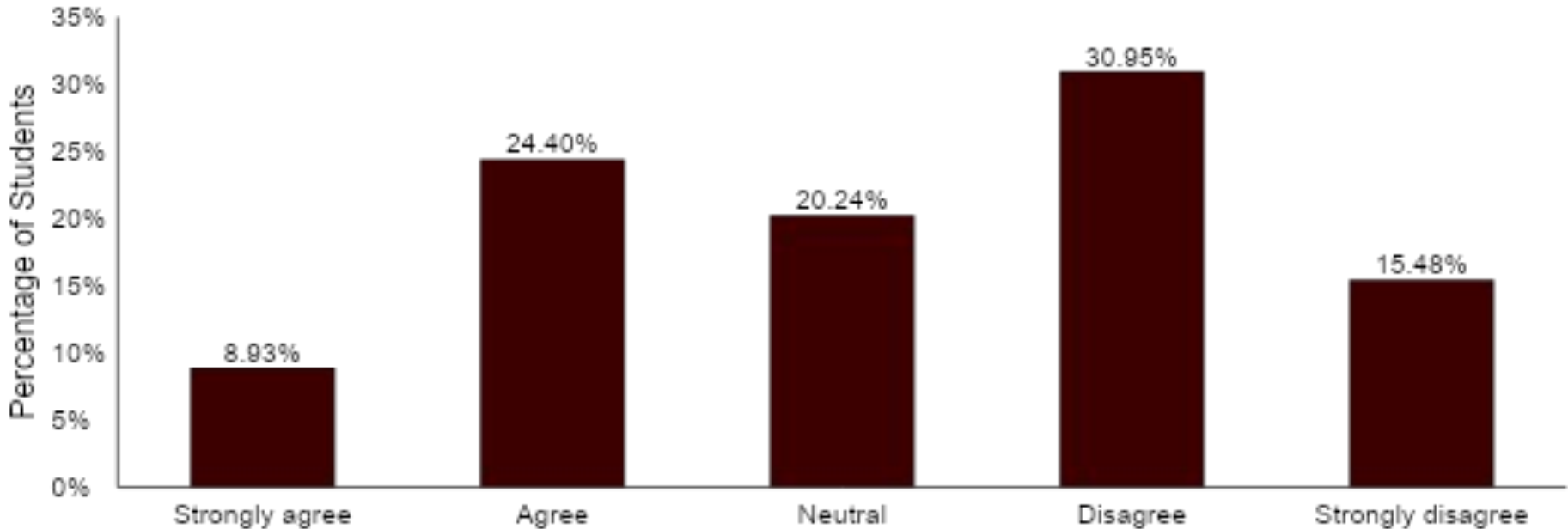
I have a close friend or classmate whom I can turn to if I need support.





Responses: 168

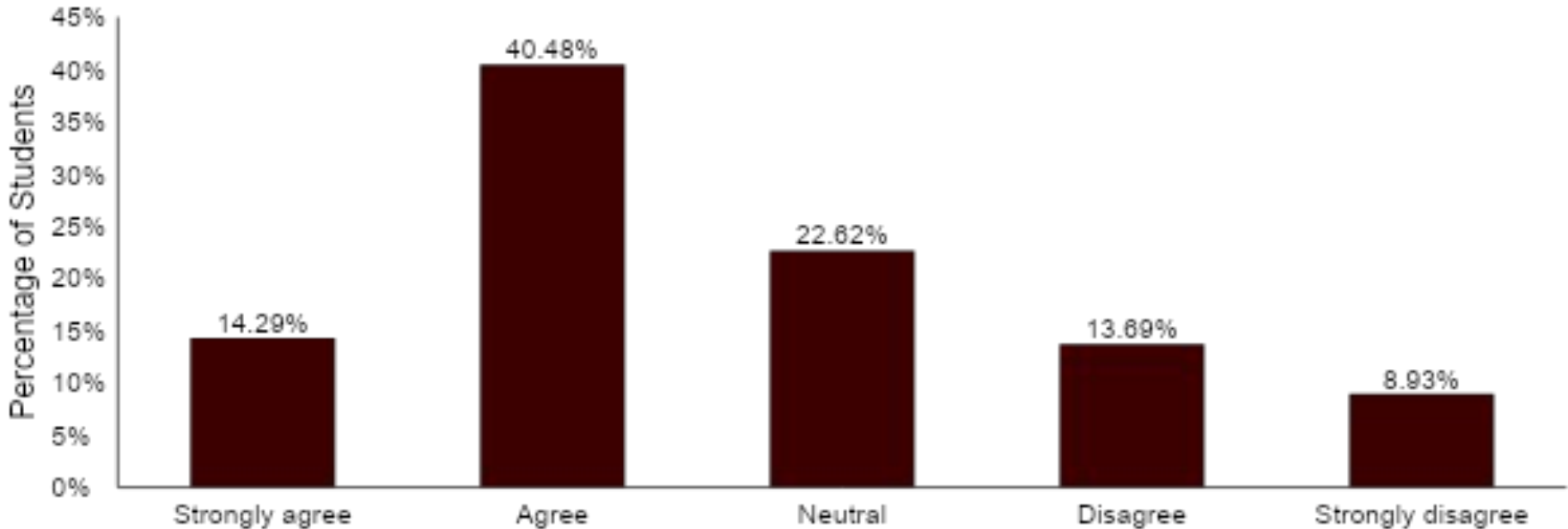
I have a peer in each class that I can reach out to for help.





Responses: 168

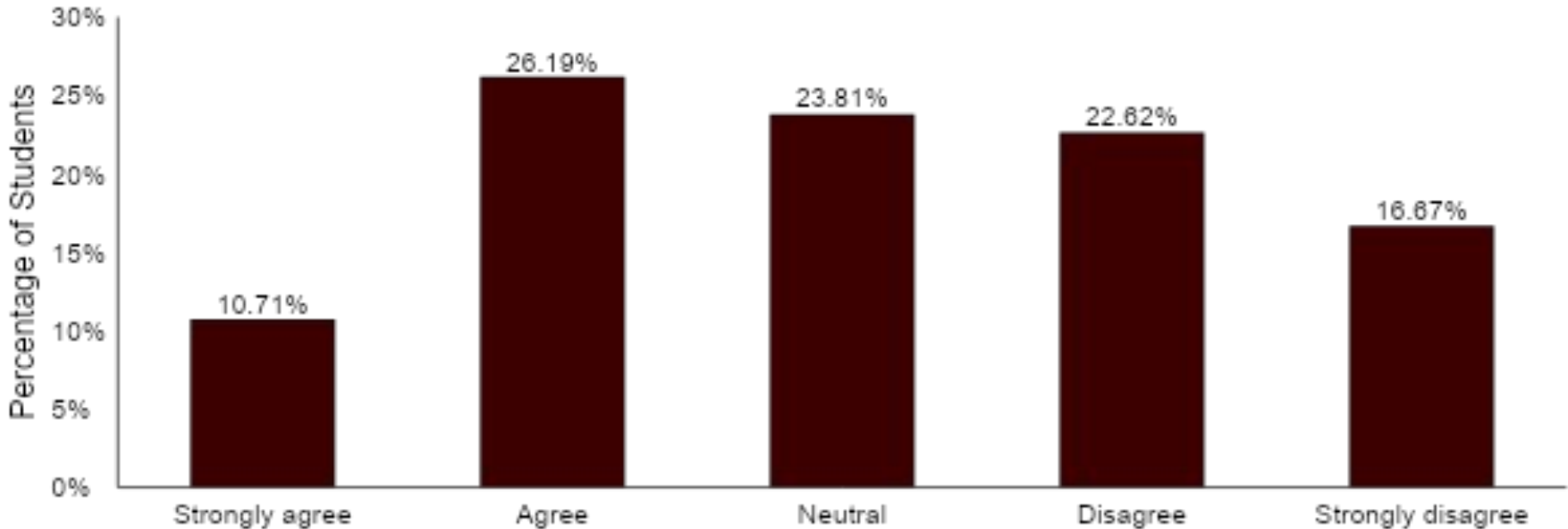
I feel comfortable approaching my ENGR professor(s) regarding the course or extra opportunities to learn.





Responses: 168

My first-year experience was a collaborative environment where my peers and I supported each other in our academic goals.





Responses: 1

Open-Ended: Please share your recommendations on ways ENGR Professors and ENGR Peer Teachers can be more approachable.

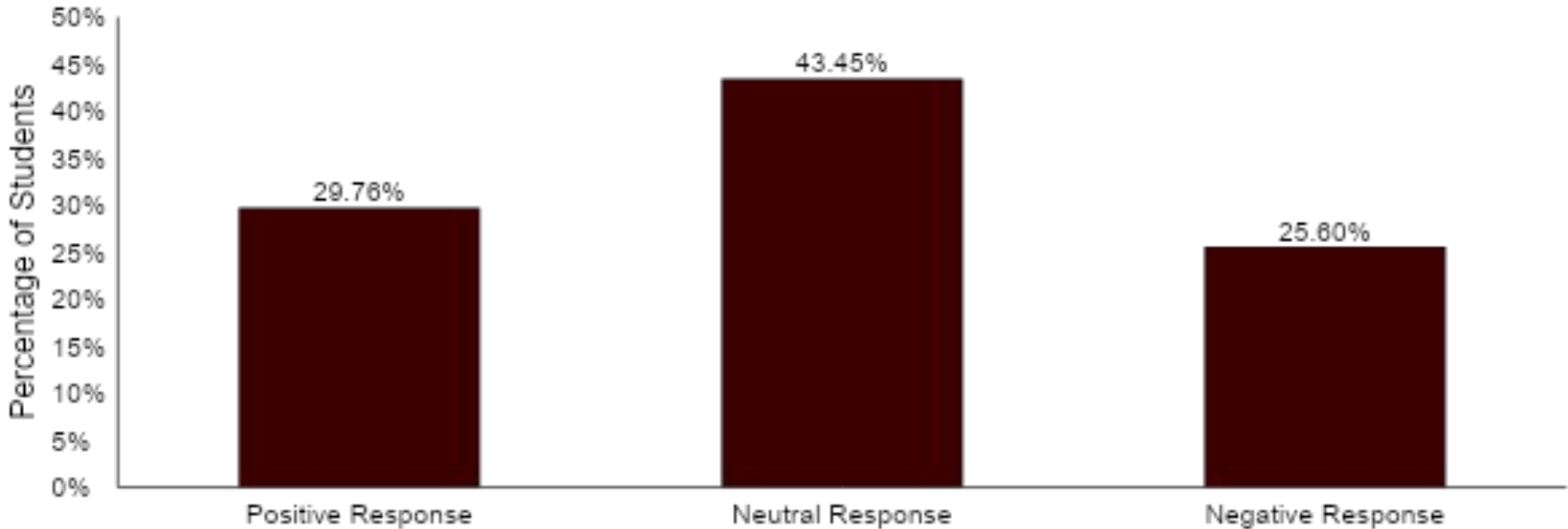
Professor Engagement and Communication with Students

- "My ENGR 216 professor rarely interacts with their students and most of their lectures are them going through a slideshow. [...] Also, the class rarely helps us with the HW and quizzes given. The lectures go through the basics while we're left stranded on higher level home works. The professor also needs to reply to emails."

Entry Responses: 659
Exit Responses: 168



How likely would you be to recommend Texas A&M Engineering to a prospective student?

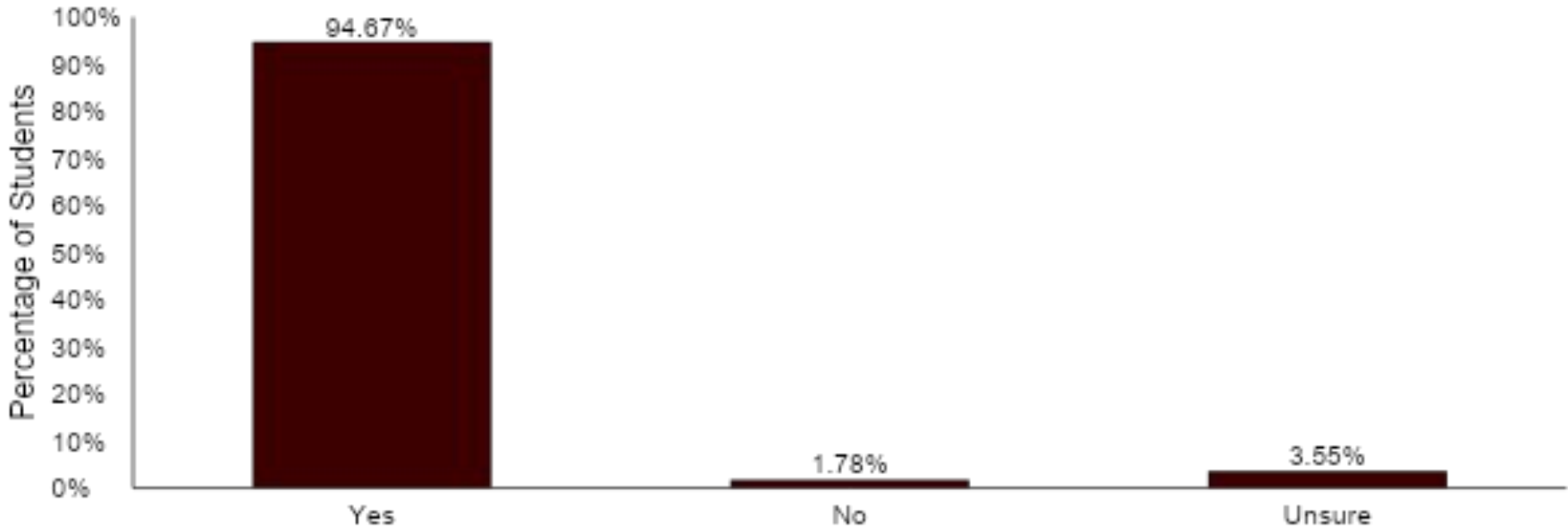


Entry Responses: 659
Exit Responses: 168



ENGINEERING
TEXAS A&M UNIVERSITY

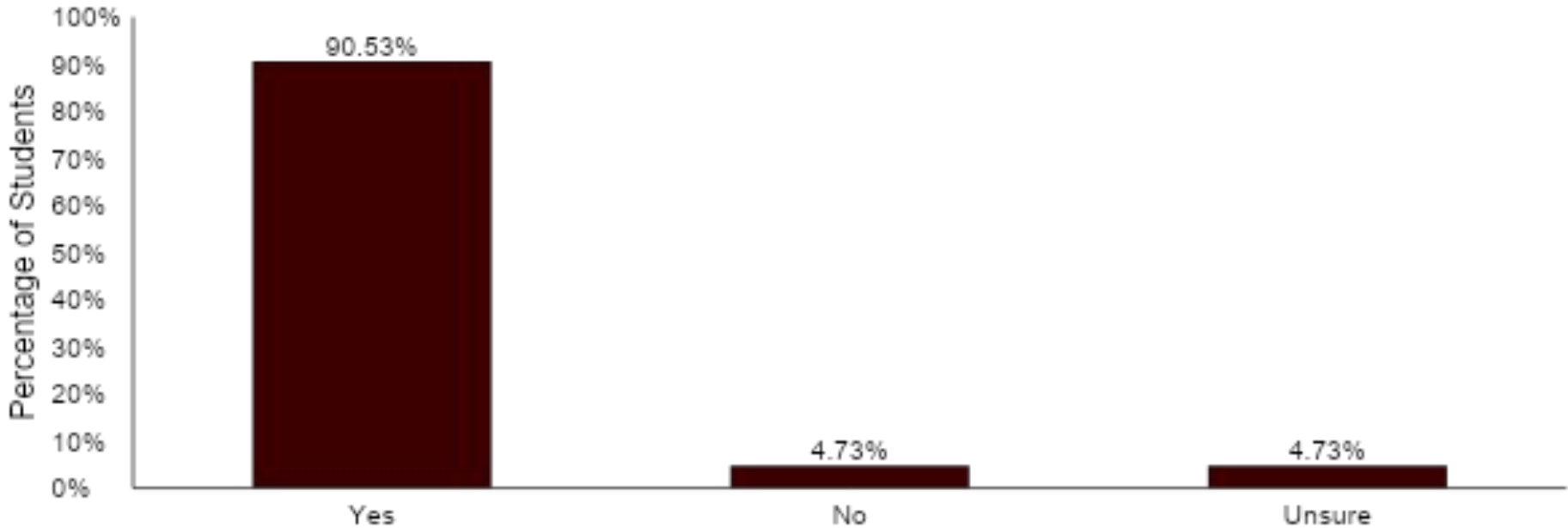
Are you continuing in Texas A&M Engineering in the Fall 2021 semester?



Entry Responses: 659
Exit Responses: 168



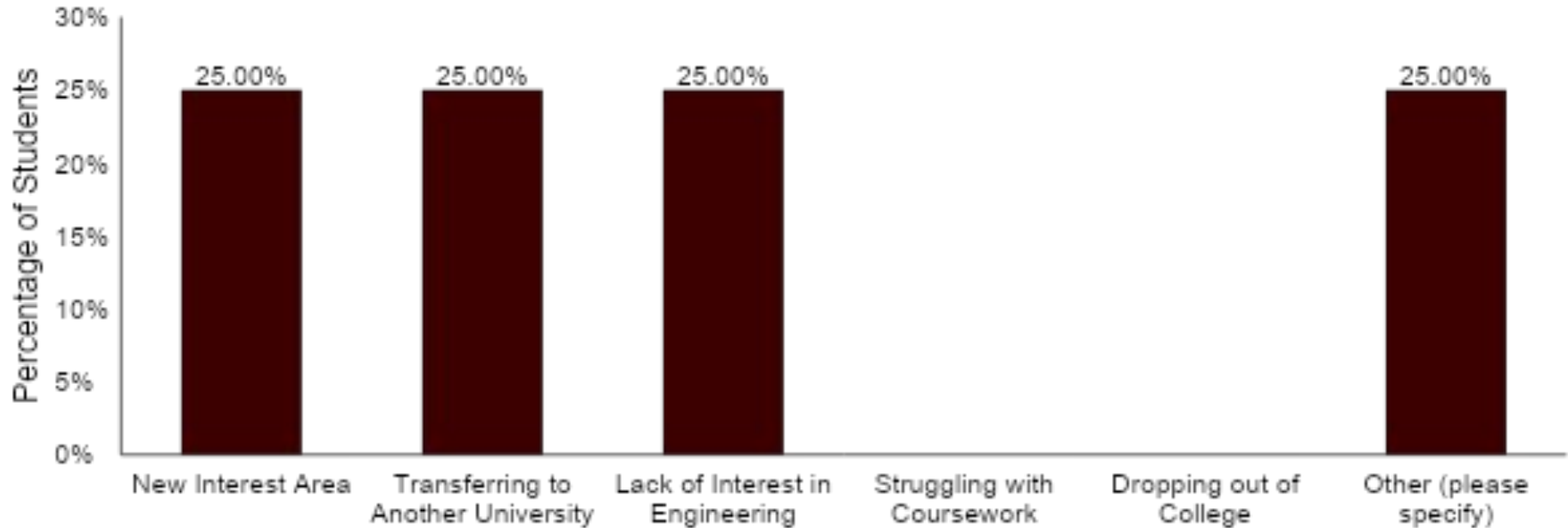
Will you be staying at Texas A&M University in the Fall 2021 semester?





Responses: 4

Why are you not continuing in Texas A&M Engineering? (select all that apply)





Responses: 1

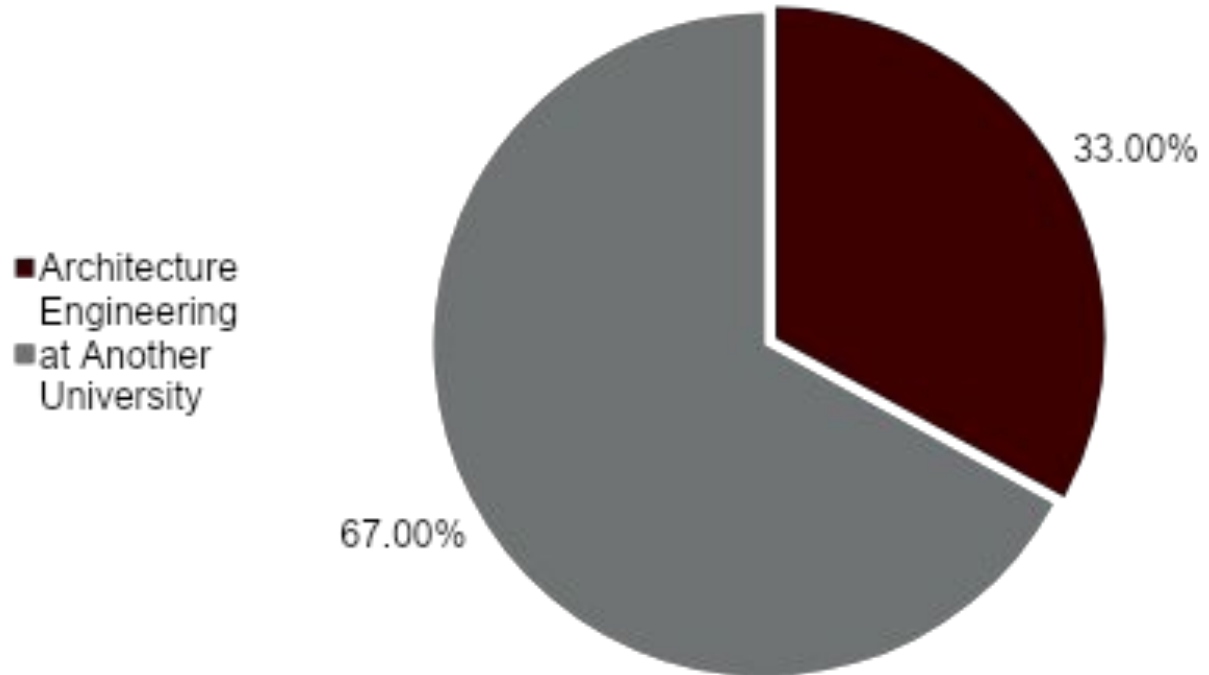
Open-Ended: Why are you not continuing in Texas A&M Engineering? Other (please specify).

Mission Trip

Responses: 3



To which college are you switching your degree plan?



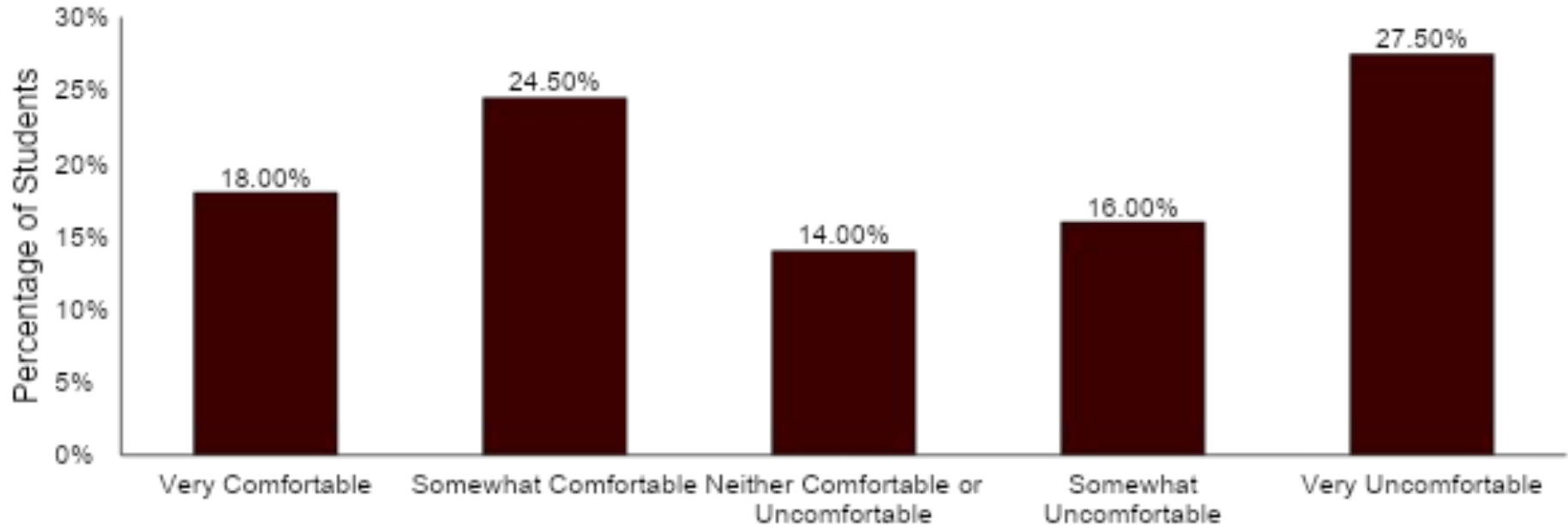
Academic Experience

Asked to all first-year students



Entry Responses: 200

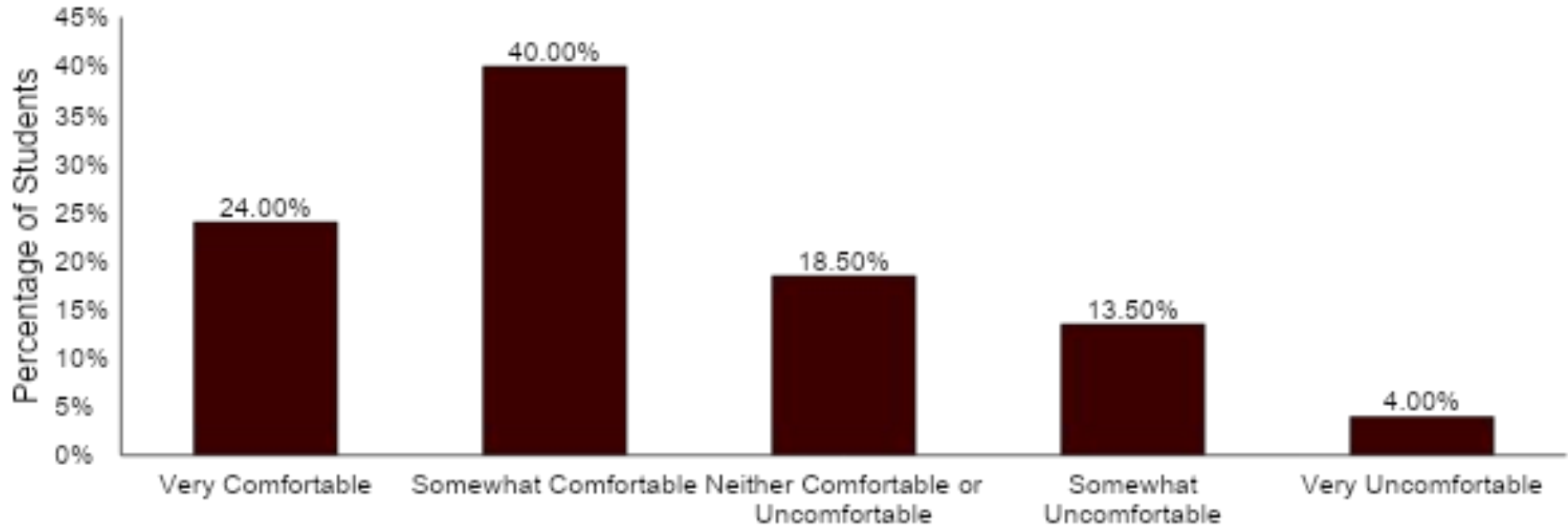
How would you describe your comfort level with programming coming into your first semester in the College of Engineering?





Exit Responses: 200

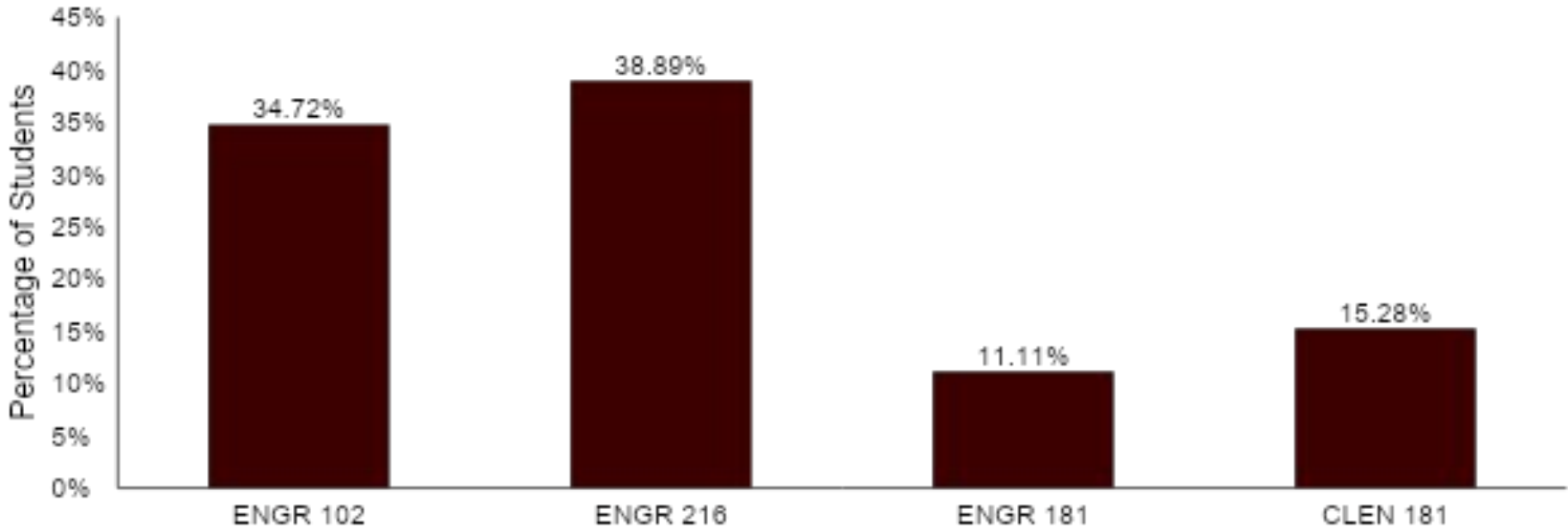
After your first year in engineering, how would you describe your current comfort level with programming?





Exit Responses: 72

Which of the following course(s) have you taken or are you taking currently?





Responses: 2

Open-Ended: Please provide any suggestions you may have for the CLEN 181 curriculum. (optional)

More Networking Opportunities

- “A bit more interaction with engineering companies with students”



Responses: 2

Open-Ended: Please provide any suggestions you may have for the ENGR 181 curriculum. (optional)

Preferred Individual Assignments

- “Group aspects made assignments more difficult”

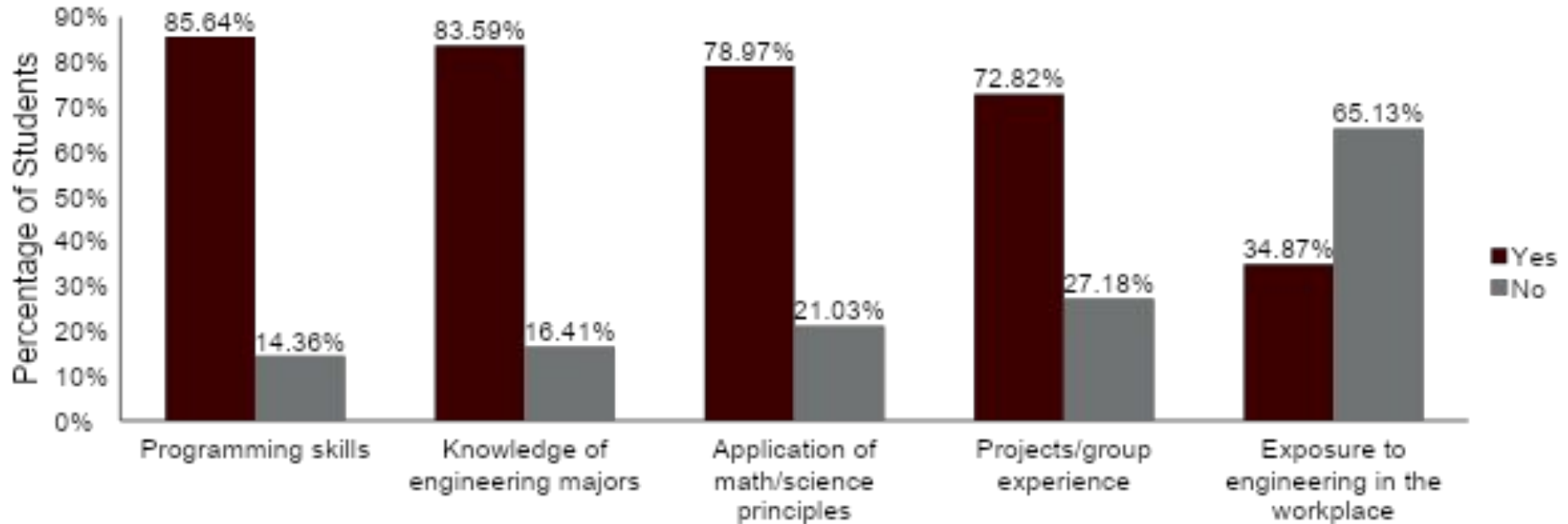
Familiarity with CLEN 181 curriculum

- “Seemed like repeat of CLEN 181 in only 5 weeks”



Responses: 195

Did you gain the following in your ENGR 102 class?.



Asked to undergraduate students only
Responses: 52



ENGINEERING
TEXAS A&M UNIVERSITY

Open-Ended: Please provide any suggestions you may have for the ENGR 102 curriculum.

Provide More Knowledge of Majors

- "I feel like the only information I gained, I could have found with my own research. I would've liked to hear from older students as to why they picked these majors and what all occupations you can have with different majors."
- "Build in time for each major to give a presentation or something to the like. It was not very informative to just read a ton of articles on majors and have nowhere to talk about them or ask questions."

Asked to undergraduate students only
Responses: 52



ENGINEERING
TEXAS A&M UNIVERSITY

Open-Ended: Please provide any suggestions you may have for the ENGR 102 curriculum.

Make It More Beginner Friendly

- “I think they should start out the semester by actually teaching us the basics of Python instead of just expecting us to already know the basics. If that's the case, I wish they would have told us to get familiar before classes start.”

Asked to undergraduate students only
Responses: 52



ENGINEERING
TEXAS A&M UNIVERSITY

Open-Ended: Please provide any suggestions you may have for the ENGR 102 curriculum (Continued).

Make It Less Fast Paced

- "Coming into this course, I was told by professors that this course is an entry level class and very beginner friendly. Other students and I agree that this is not the case. This is a very fast pace course and should be worth more than 2 credit hours. I took a semester of python before this class since previous students have mentioned to me that this is a hard class. Even with some python experience it was a struggle. However, I still learned a lot, but still feel uncomfortable with coding.."
- "The number of hours that the class required both for lectures and homework put this class as one of my most time consuming, and that was compared to Calculus III. Perhaps this could be reevaluated to see if the amount of time students need to put into the class to get an A can be reduced in some areas.."

Asked to undergraduate students only
Responses: 52



ENGINEERING
TEXAS A&M UNIVERSITY

Open-Ended: Please provide any suggestions you may have for the ENGR 102 curriculum (Continued).

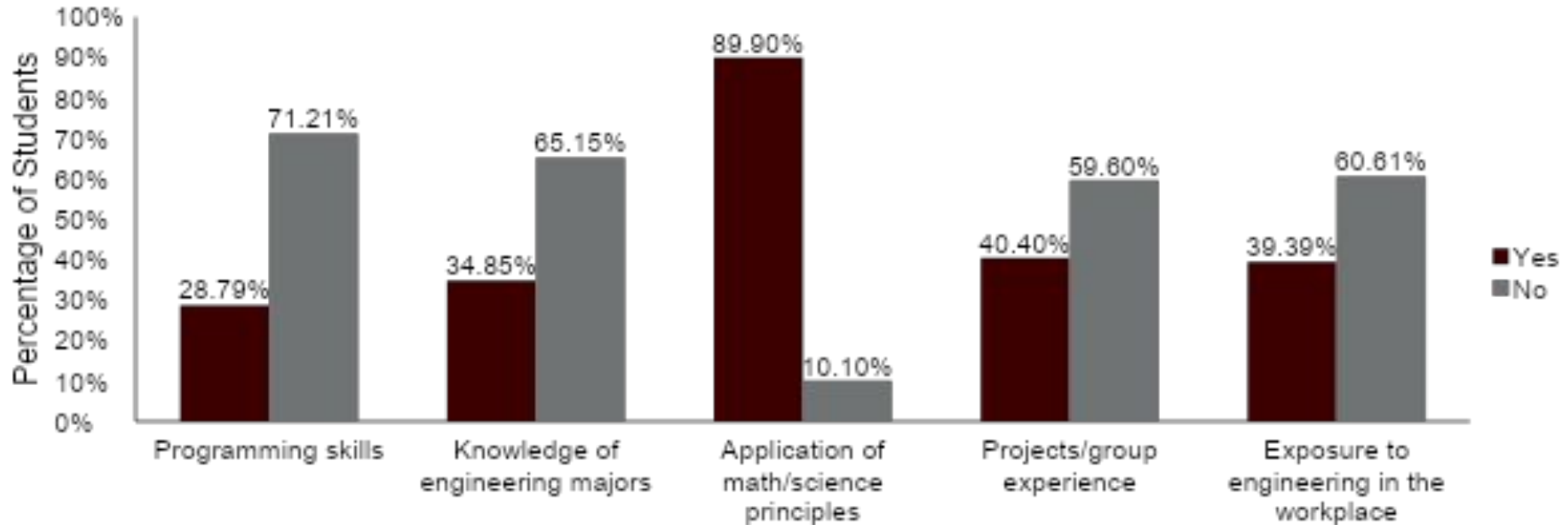
Teach More Relevant Material

- “More in depth examples in the lecture slides. The assignments did not reflect the weekly material covered very well.”
- “Provide students with the mathematical teachings before using them to code. Many mathematical principles I had no knowledge of when they were used in the homeworks, and ... I took several programming classes and every teacher I had coded examples in front of the class, ”

Responses: 198



Did you gain the following in your ENGR 216 class?.



Asked to undergraduate students only
Responses: 52



ENGINEERING
TEXAS A&M UNIVERSITY

Open-Ended: Please provide any suggestions you may have for the ENGR 216 curriculum.

Make Course Components More Correlated

- "I wish the labs and lecture correlated more, and I wish some of the procedures and many of the calculations were explained more thoroughly.."
- "ENGR 216 feels like a very random and unorganized class. The lectures and different than what we are doing in the labs and the homework is different from the labs and lectures, but the labs are similar to what we are doing in physics."

Asked to undergraduate students only
Responses: 52



ENGINEERING
TEXAS A&M UNIVERSITY

Open-Ended: Please provide any suggestions you may have for the ENGR 216 curriculum.

Very Time Consuming

- “The amount of work for my 216 class seems ridiculous. Each weekly homework writeup has been at least 4-7 pages, there have been lecture quizzes, and then the labs are almost an afterthought. It just seems a lot for a 2 hour class. “
- “The amount of work I have had to put into this class to complete all work on time with a reasonable level of quality... outweighs the amount of time that should be dedicated to a two credit hour course.”

Asked to undergraduate students only
Responses: 52



ENGINEERING
TEXAS A&M UNIVERSITY

Open-Ended: Please provide any suggestions you may have for the ENGR 216 curriculum.

More Teamwork

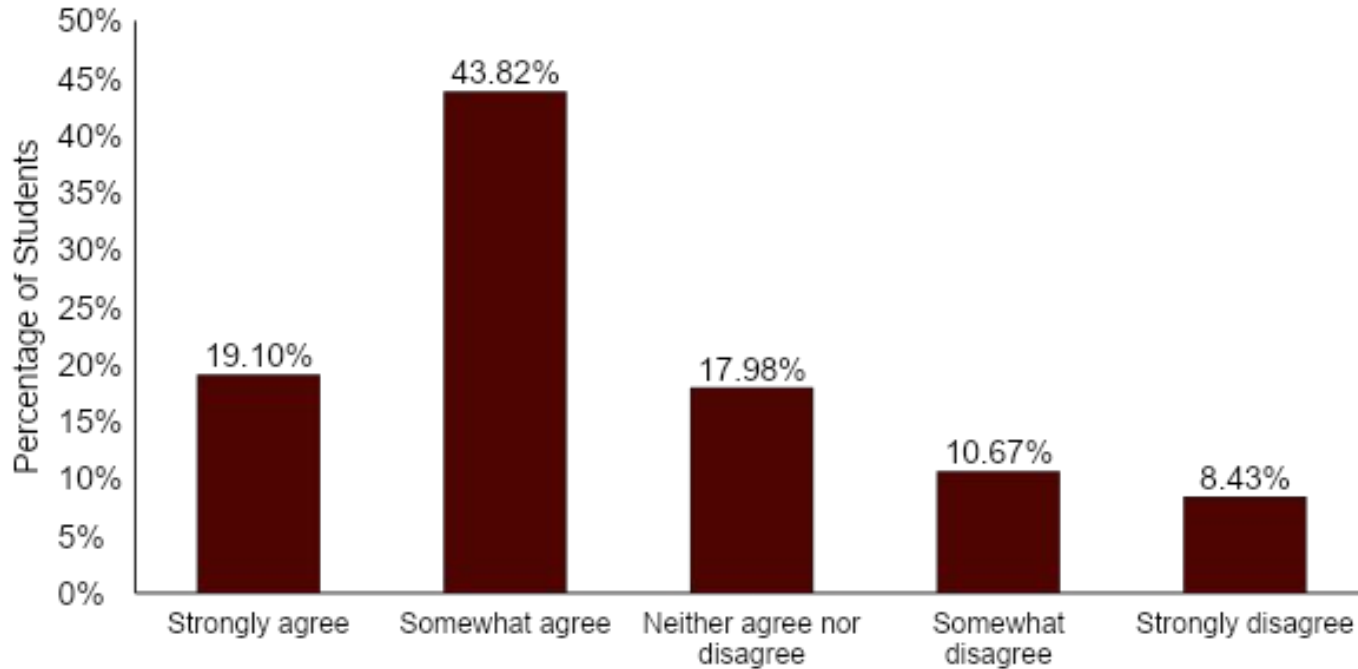
- "More group projects."
- "Please provide more group projects limited to 3-4 member experience."
- "Allow online students to work in groups."

SEC Industry Nights

Asked to all first-year students

Responses: 178

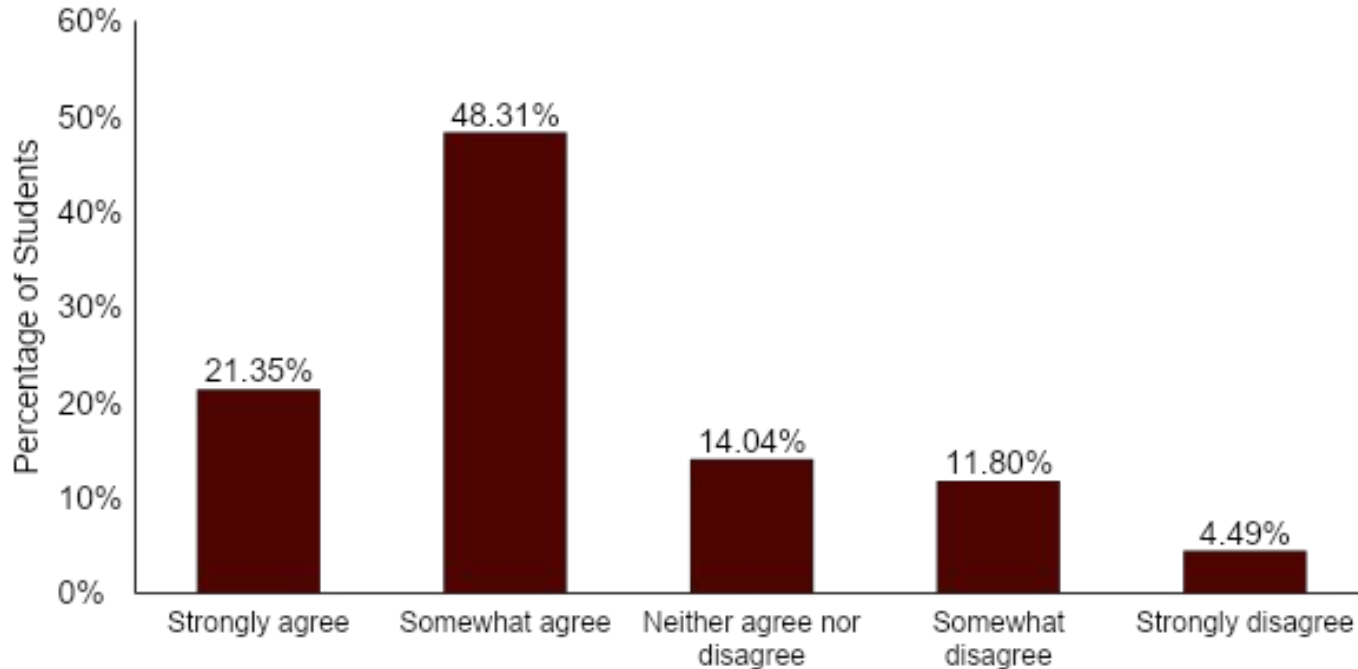
Industry Nights helped me learn about opportunities in the field of engineering.





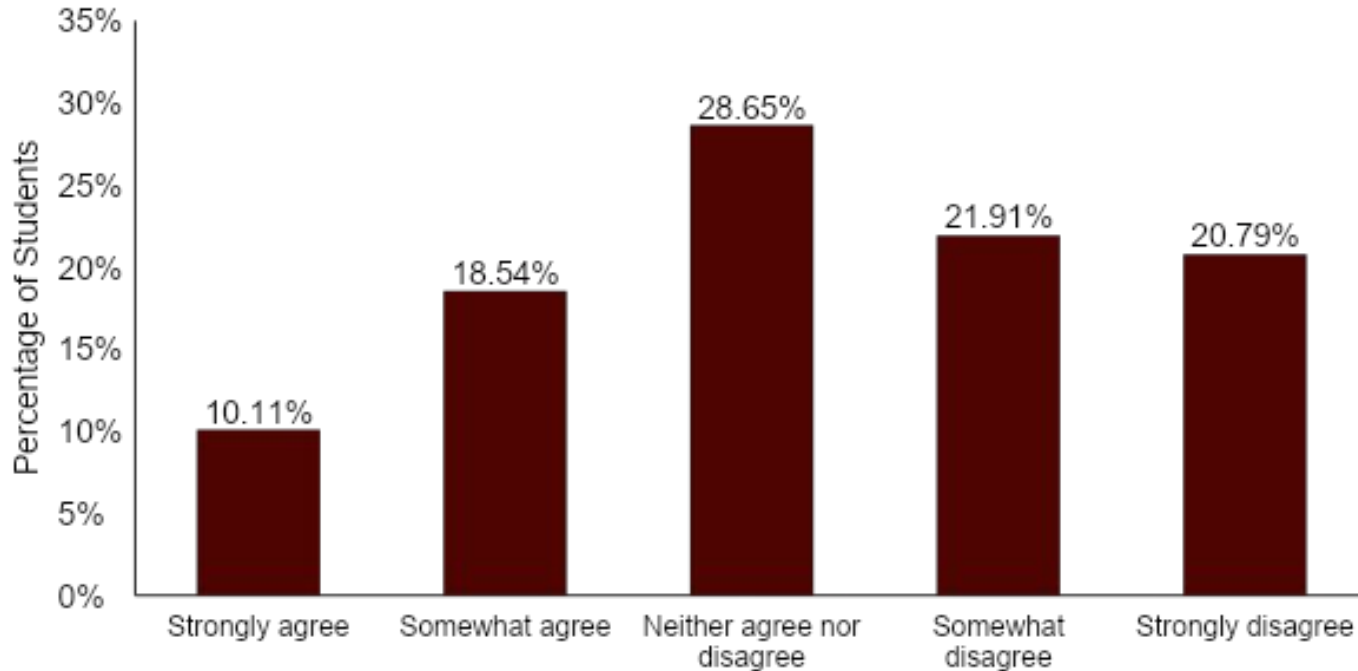
Responses: 178

Industry Nights helped me understand how multiple engineering disciplines work together and collaborate within a single industry/company.



Responses: 178

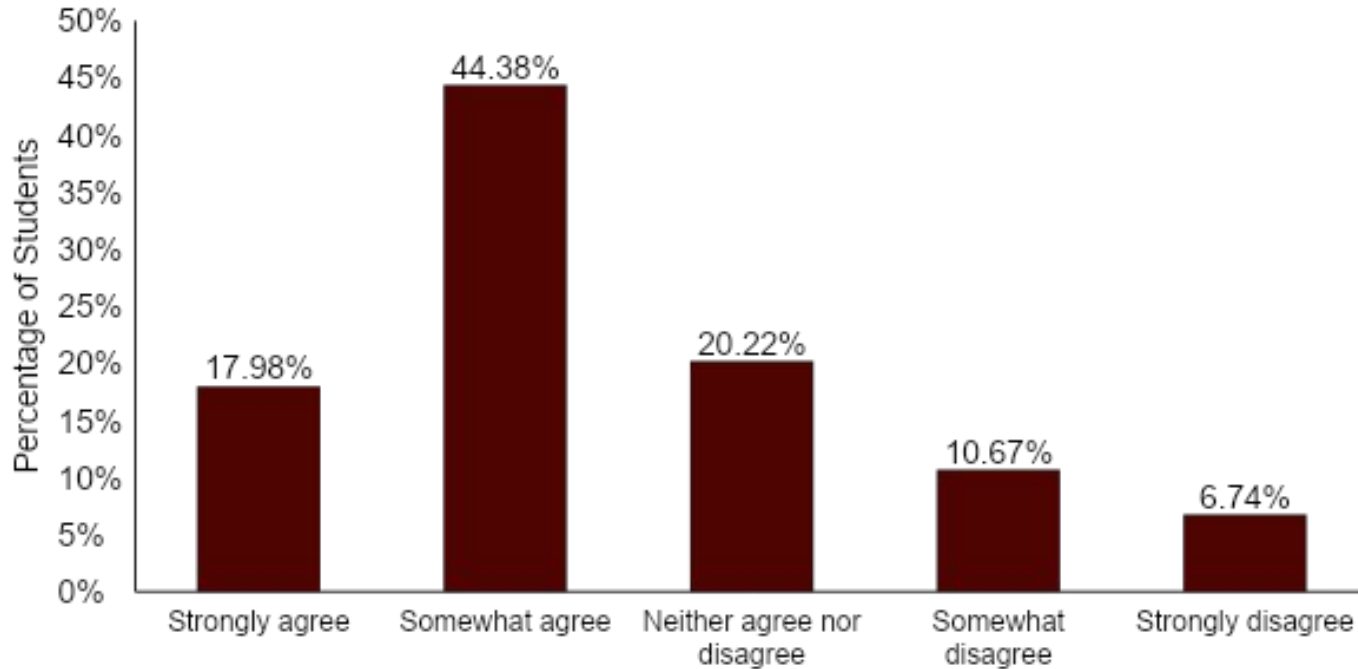
Industry Nights helped me decide which department/major I want to apply to.





Responses: 178

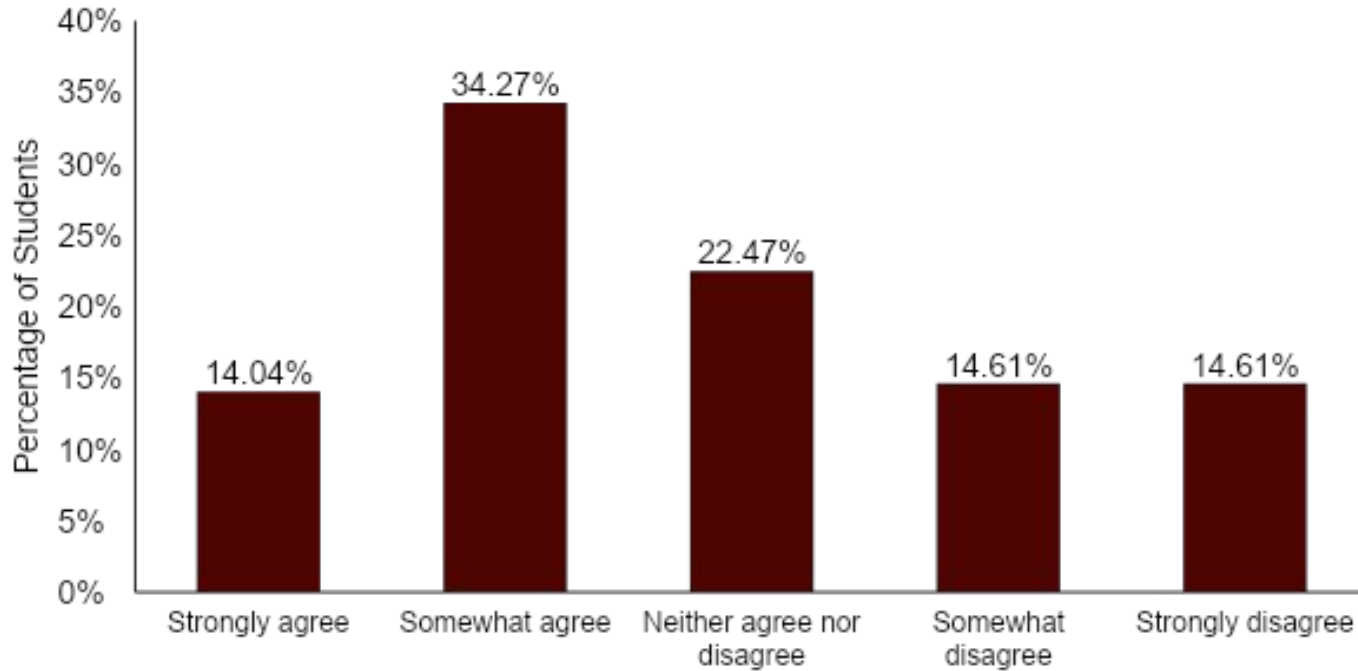
Industry Nights helped me learn about industry and what companies look for in intern/co-op candidates.



Responses: 178



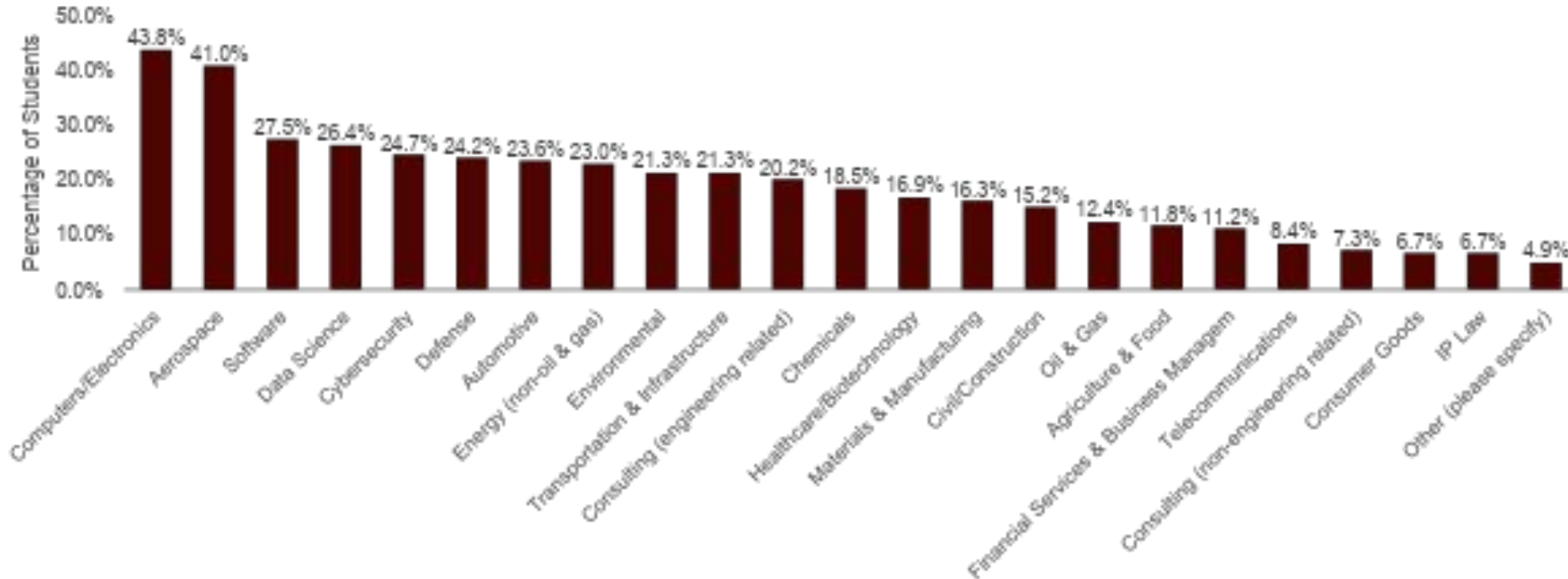
I would attend an SEC Industry Night even if it wasn't required for a class.





Responses: 178

What industries would you like to see represented at SEC Industry Nights? (check all that apply)





Responses: 14

Open-Ended: Please provide any additional comments or suggestions regarding SEC Industry Nights. (optional)

Types of Industries

- “They should provide **more diversity** of the engineering industries presented.”
- “I feel like all of the industries were very physical engineering based, like involving chemicals or energy, but **not many options** for those interested in computer science/computer engineering.”

Registration and Time Slots

- “**Increase the amount of slots** that each meeting has. As an engineering student looking to join aerospace engineering, NASA and Boeing have always filled up incredibly quickly.”
- “I recommend either having the companies with the highest demand present various times, or figure out a way to **expand the number of people in a zoom.**”
- “I wish there were **more options** because some fill up too quickly and others overlap with exam times, so there was only one I had the ability to go to this semester.”

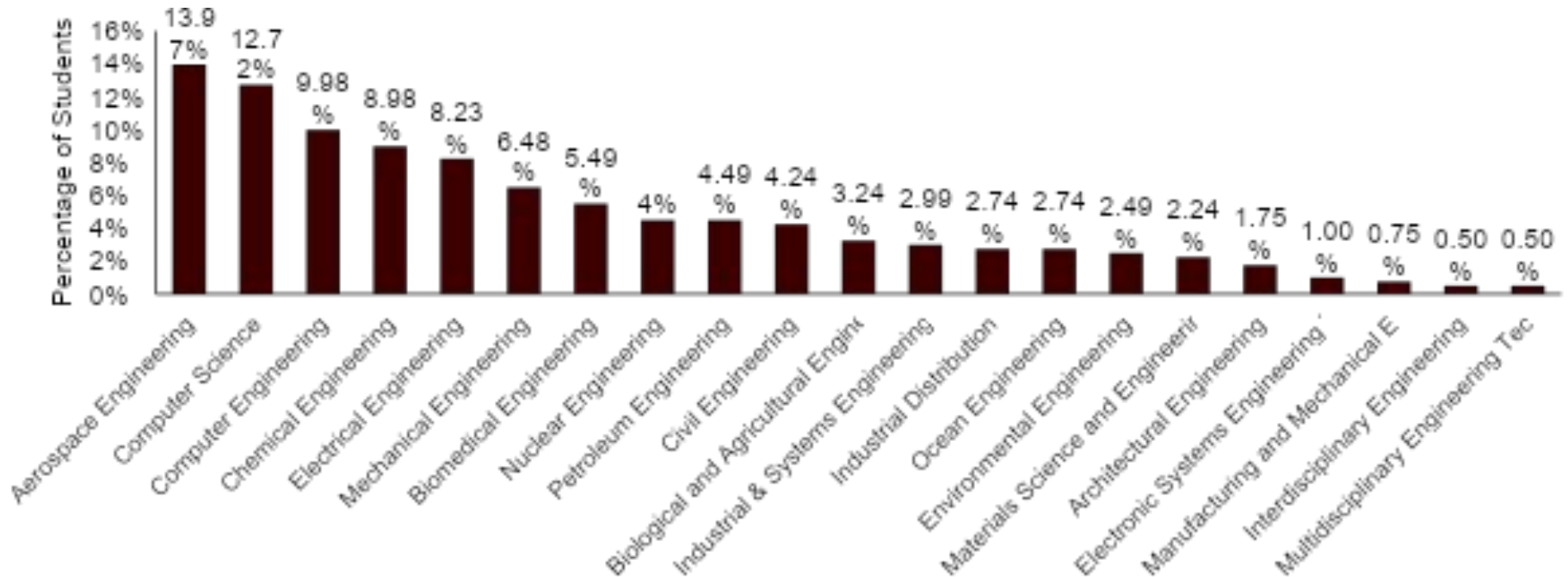
Department Informational (DI)
Saturday

Asked to all first-year students



Responses: 401

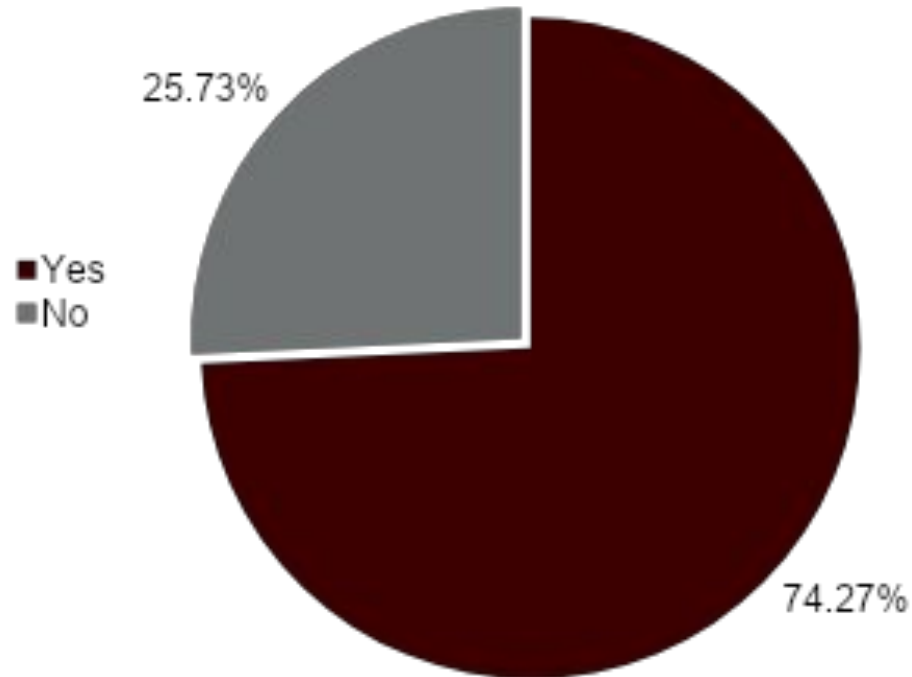
Which department/major presentations did you attend? (Please select all that apply)





Responses: 171

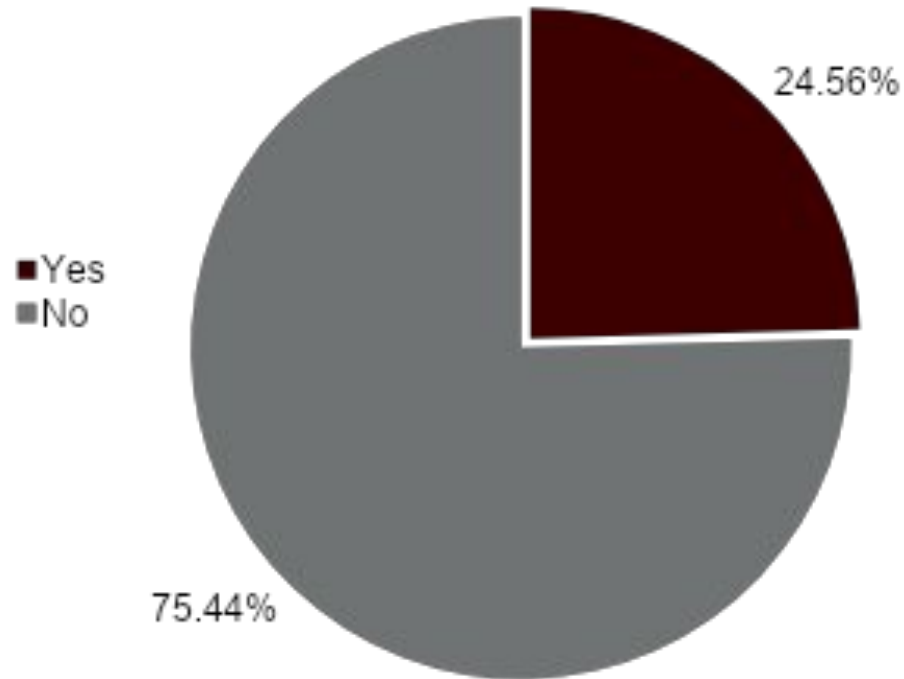
Before attending the Department Information Saturday, had you already chosen the majors you would apply for?





Responses: 171

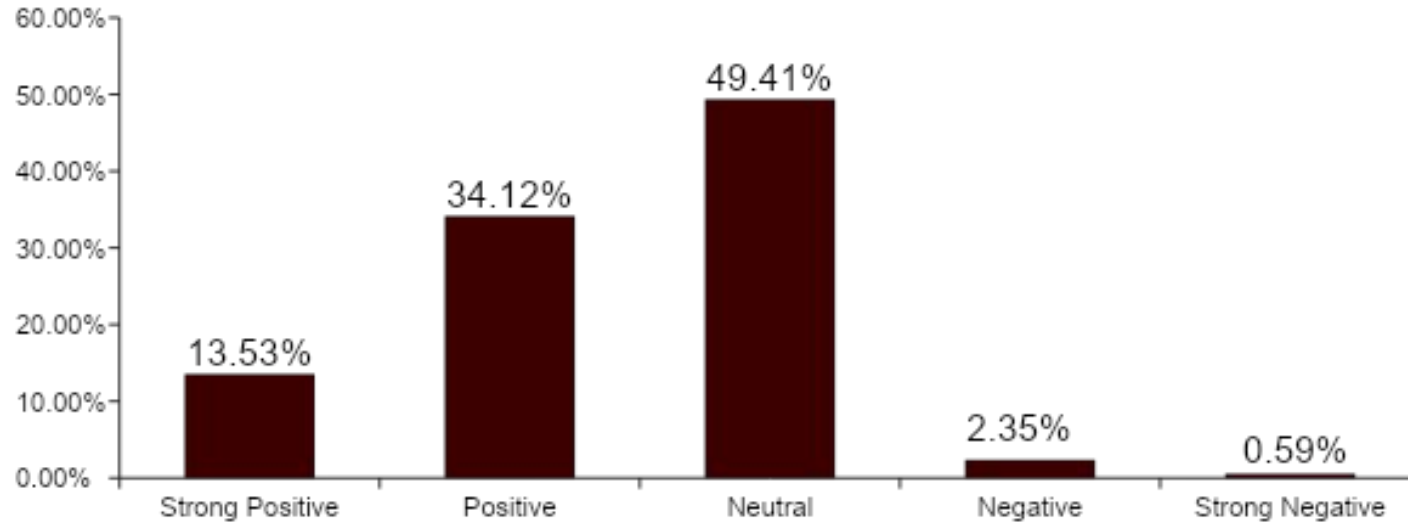
Did the Department Information Saturday change one or more of the majors you planned to apply for?





Responses: 170

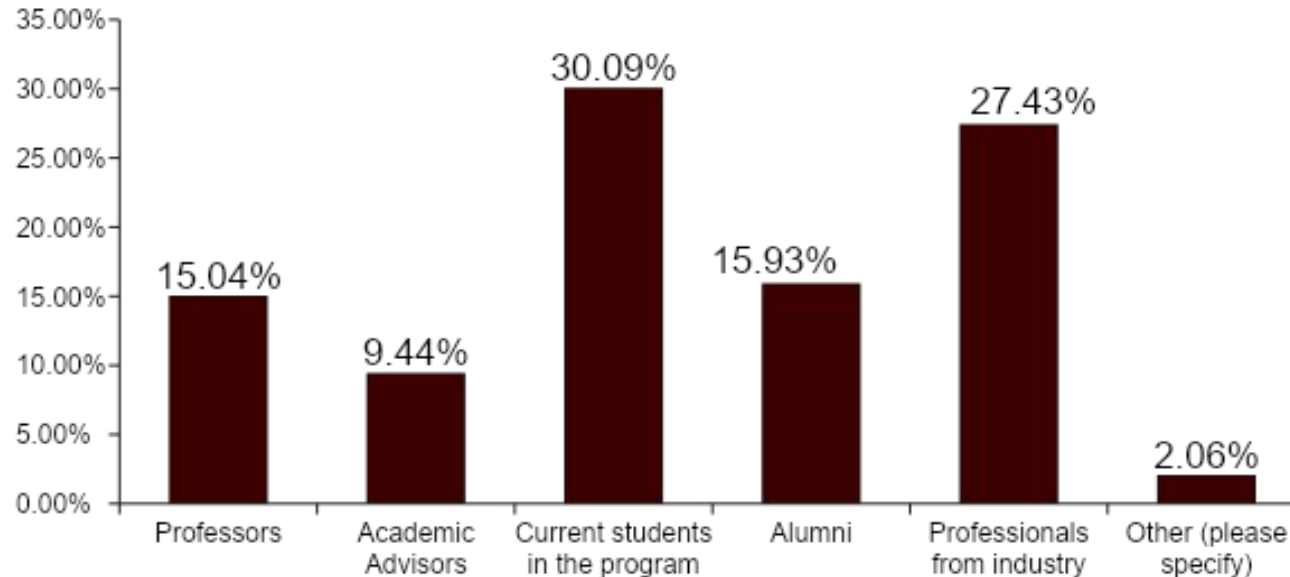
What effect did the Department Information Saturday have on your confidence in applying for your intended majors?





Responses: 339

During the Department Information Saturday which group(s) were or would have been most helpful to hear from?





Responses: 11

Open-Ended: Please provide any additional comments or suggestions regarding the Department Information Saturday. (optional)

Difficulties with Virtual Format

- "I know that because of COVID we were unable to have DI Saturday in person, but I wish we could've had zoom informationals instead of just recordings of presentations. This made it very impersonal and I was unable to really learn things I wouldn't have been able to just find on the internet."

More Focus on Careers

- "I think that students are more interested in what applying a specific major to a job would look like. For example, hearing from an engineer about what they do day to day in their career."

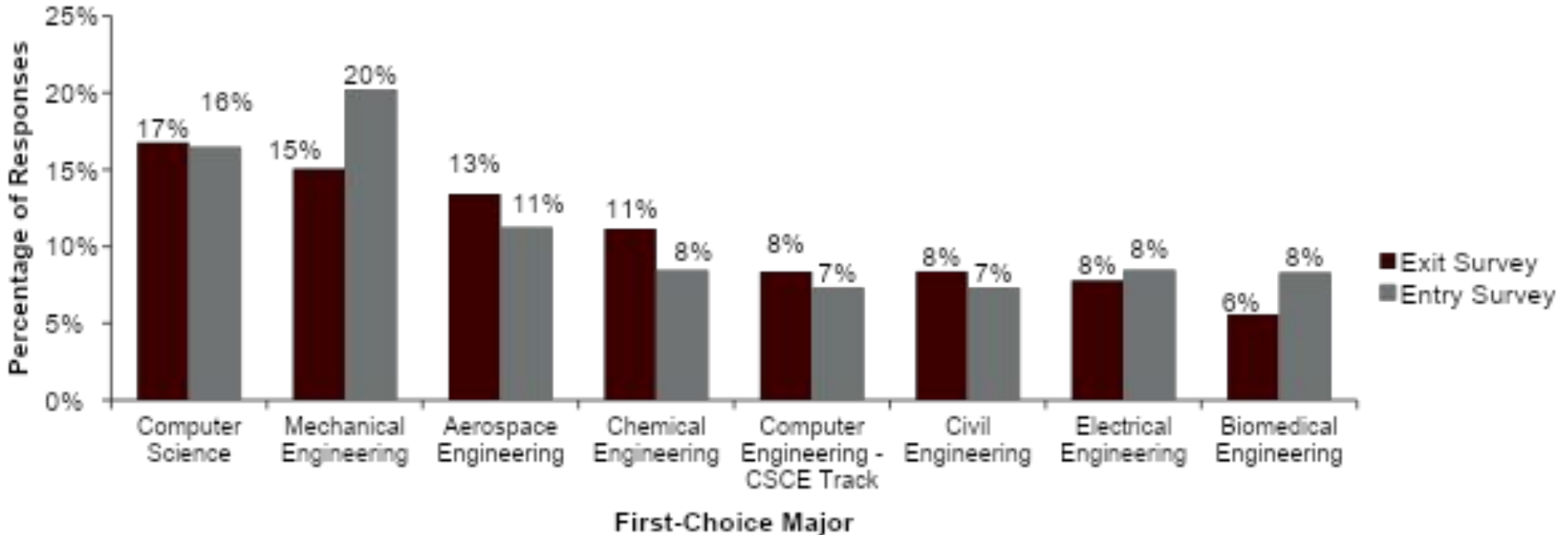
Choosing a Major

Asked to all first-year students

Entry Responses: 179
Exit Responses: 799



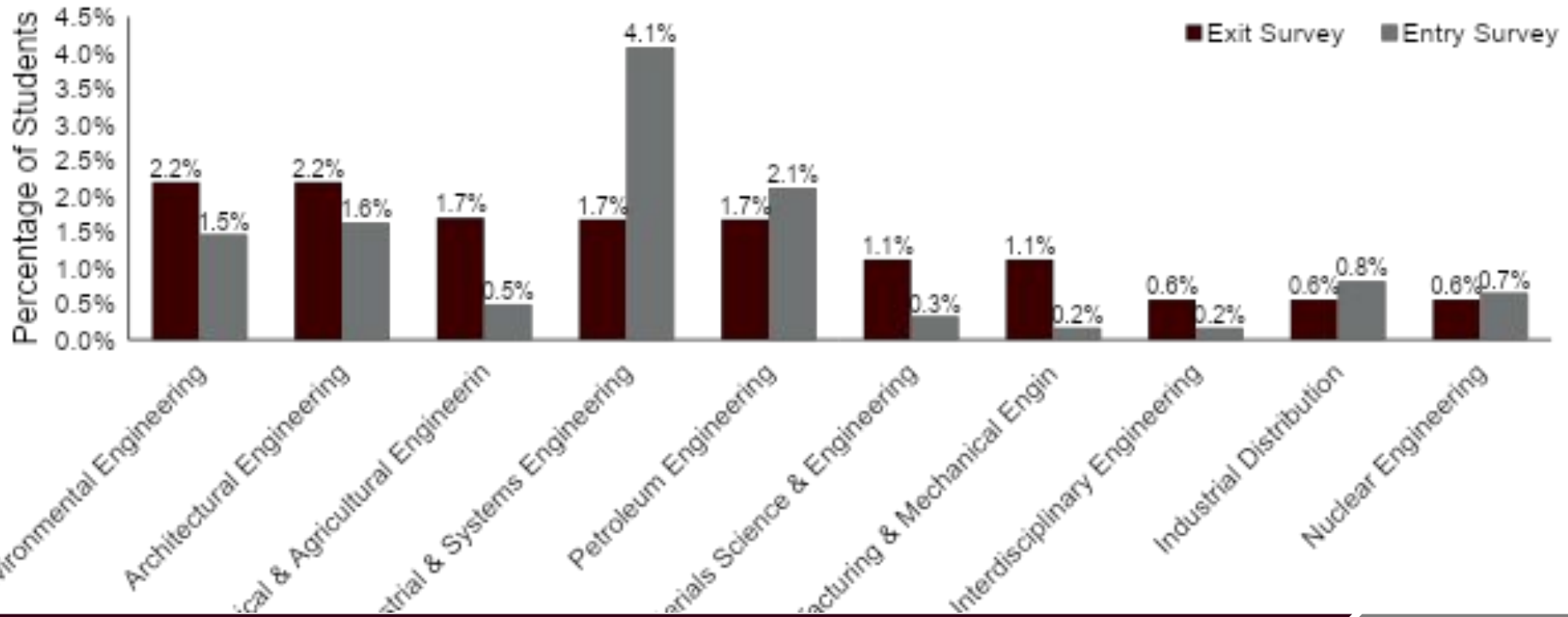
What is your first-choice major as of now?



Entry Responses: 179
Exit Responses: 799



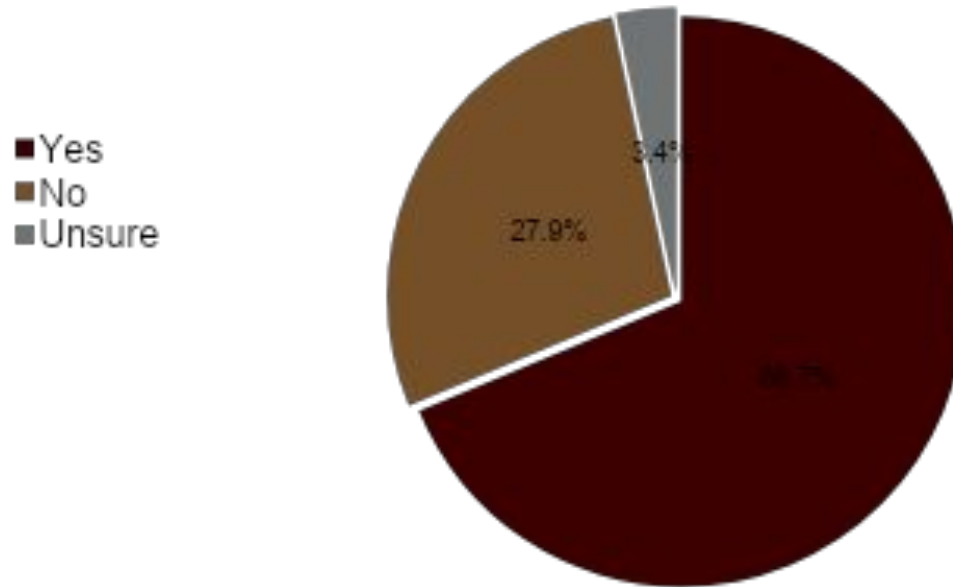
What is your first-choice major as of now? (cont.)



Responses: 179



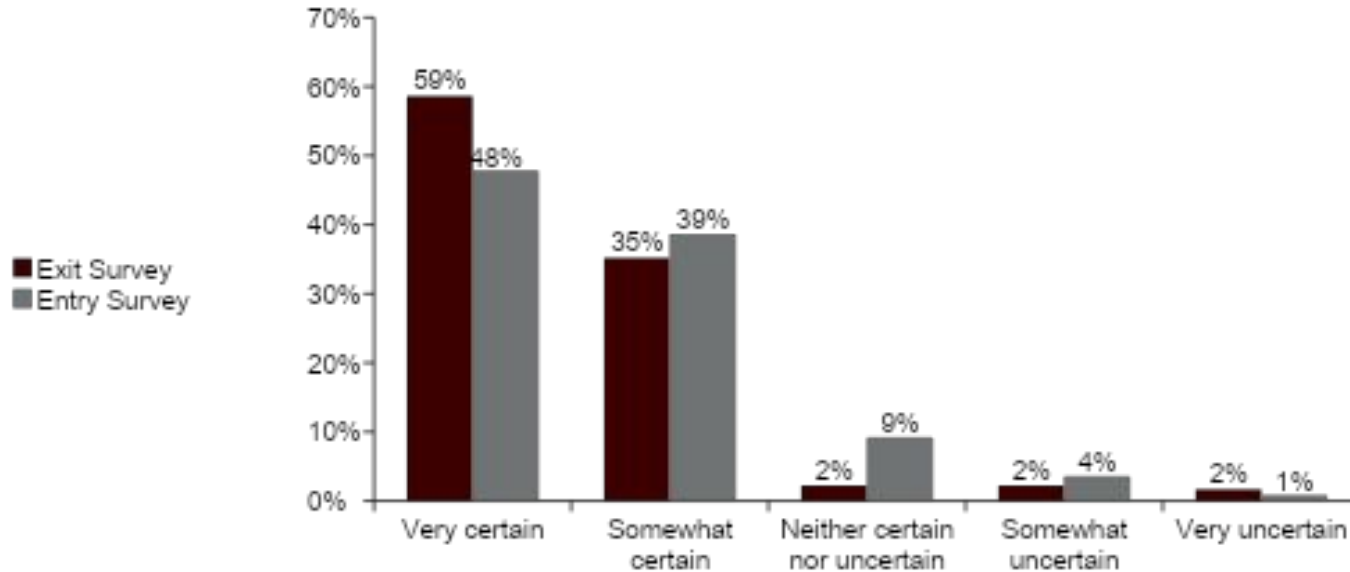
To your memory, is your current first-choice major the same major you chose when you applied to Texas A&M University?



Entry Responses: 179
Exit Responses: 829

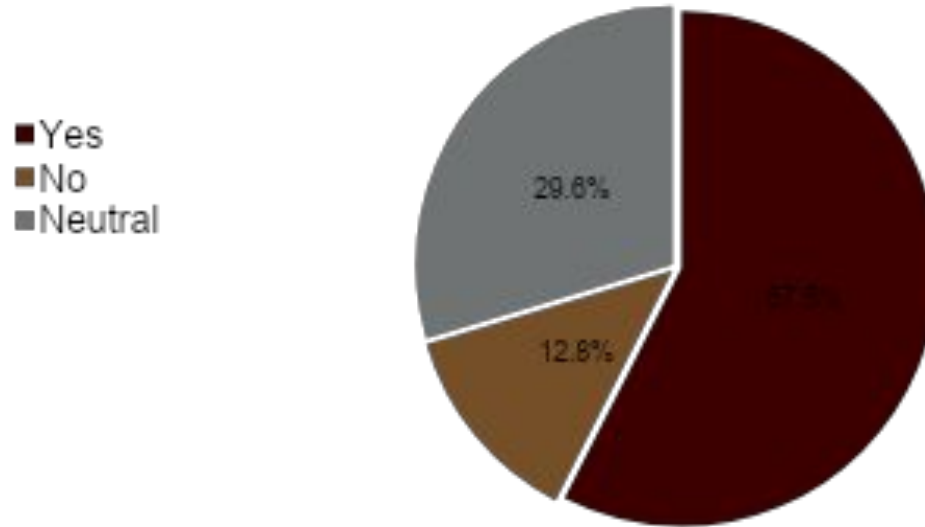


How certain are you in your decision?



Responses: 179

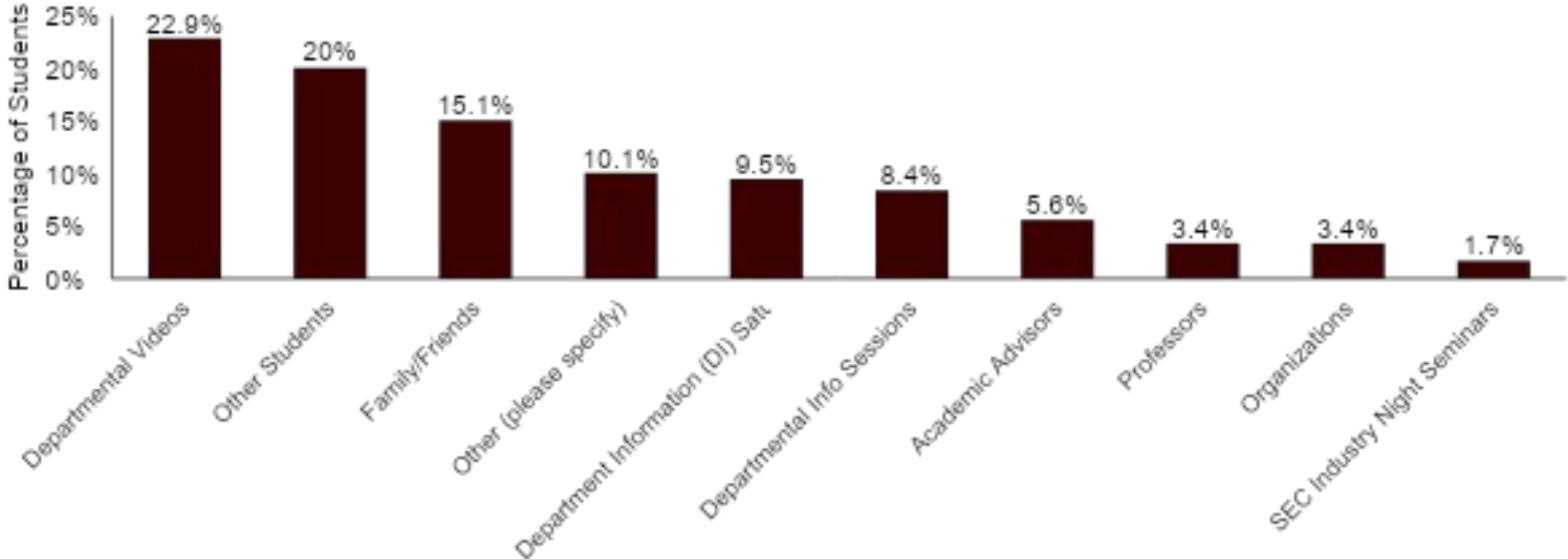
Do you feel as if you have received sufficient information about the different engineering majors to make an informed decision regarding your choice of major?



Responses: 179



During your first year at Texas A&M, what is/was the most helpful source of information to aid you in making an informed decision about your major?



Asked to those who listed a different first choice major from their application

Responses: 19



ENGINEERING
TEXAS A&M UNIVERSITY

Open-Ended: Please describe what factors influenced your decision to change the engineering discipline you want to major in.

Job Opportunity

- “I initially wanted to go into nuclear engineering, but I thought that a mechanical engineering degree with a minor in nuclear engineering would allow for more job flexibility.”
- “It was mainly as to what I felt more comfortable working in. I want to have a job where I get the chance to get hands on.”
- “Family as well as personal interests and job opportunity.”

Asked to those that responded “no” or “neutral” to if they had received sufficient information for choice of major

Responses: 11



ENGINEERING
TEXAS A&M UNIVERSITY

Open-Ended: Please explain why you feel you have not received sufficient information regarding different engineering majors.

Lack of Depth in ENGR 102

- "The ENGR102 videos I was given to watch were merely marketing ads that I feel did not give me a glimpse into what kind of coursework I would have to take for that major, and instead focusing on the tier 1 jobs available to the top students of the major. I am interested in a handful of engineering majors, but I simply did not find any information of value from those videos. Apart from those videos and the industry night I attended, there was not another source of information regarding different engineering majors."
- "The videos in the modules were very short, so watching a ~5-minute video does not help me to learn about the different engineering majors."

Difficulty Accessing Information

- "The departmental videos and industry nights have been disorganized, and I find it hard to get access to the info I want."

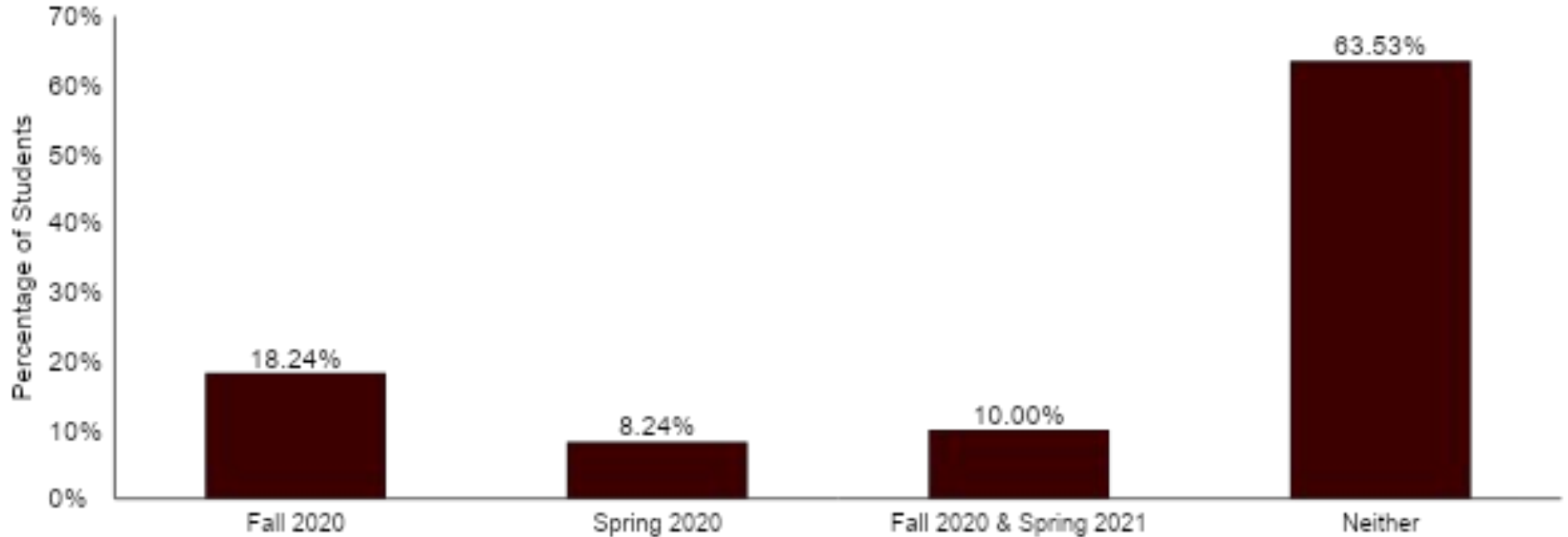
Summer Plans

Asked to all first-year students



Responses: 170

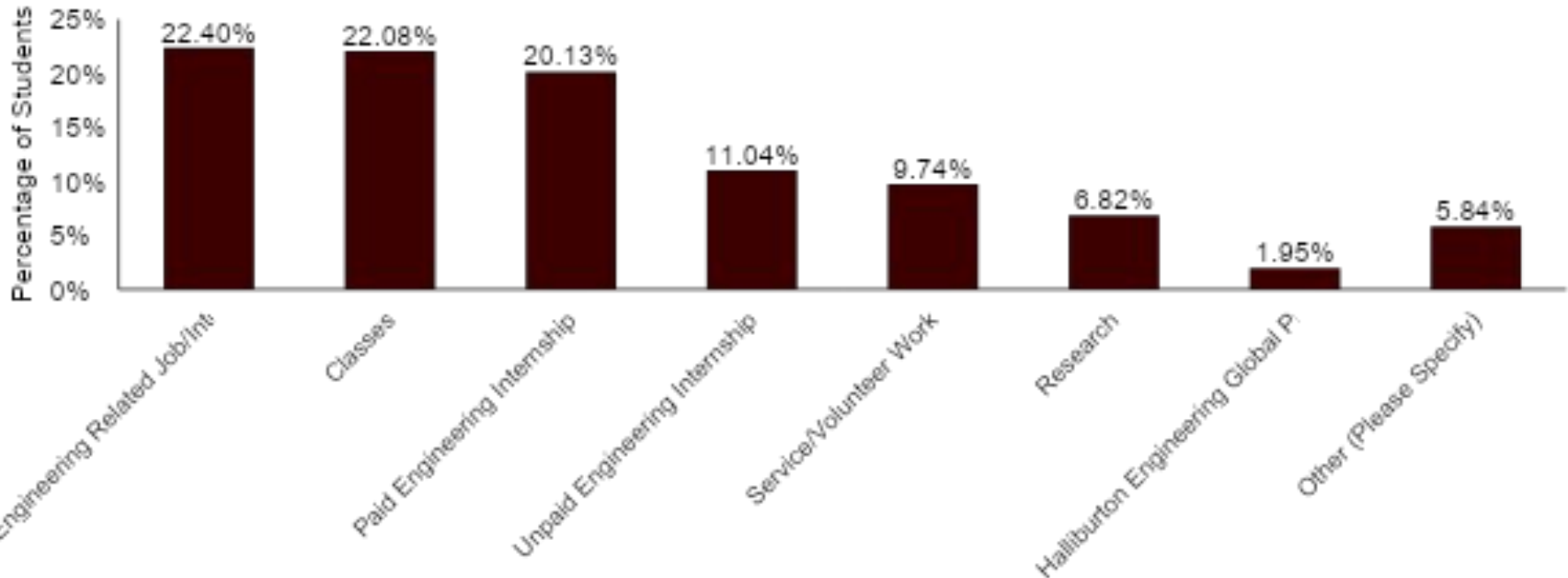
Did you attend any of the following SEC Engineering Career Fairs?





Responses: 308

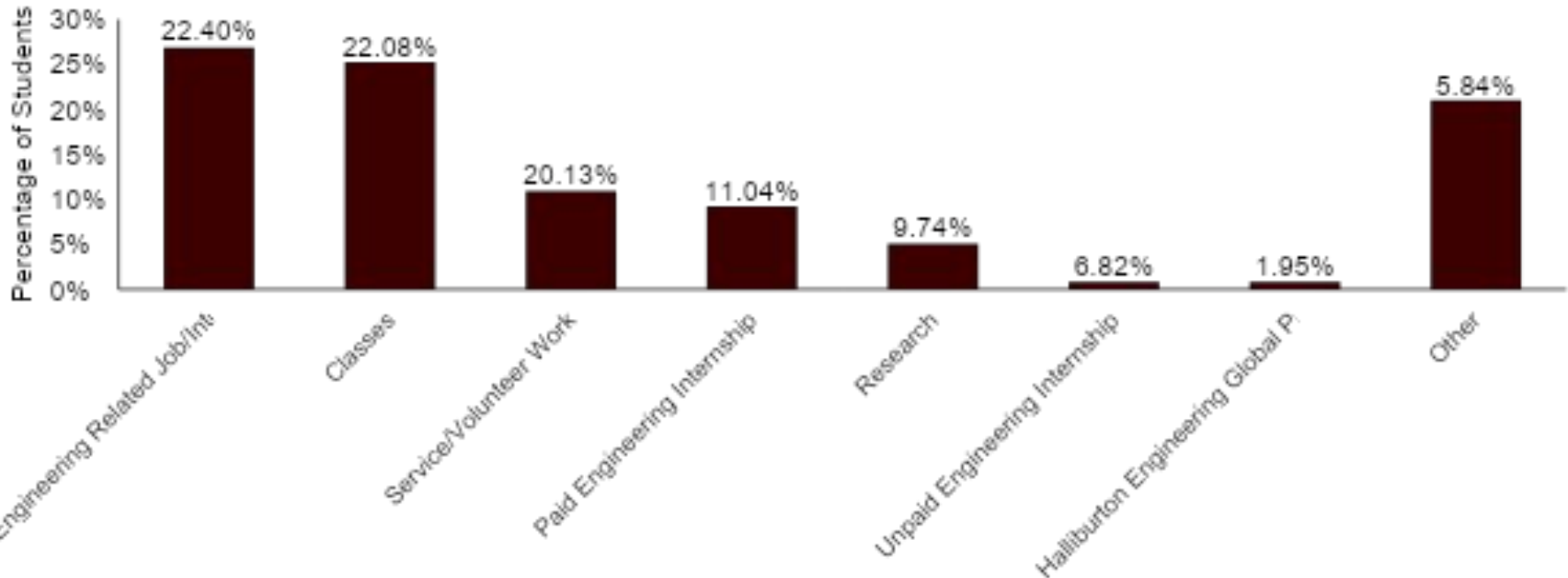
When planning for Summer 2021, which of the following have you actively tried to secure? (select that apply)





Responses: 119

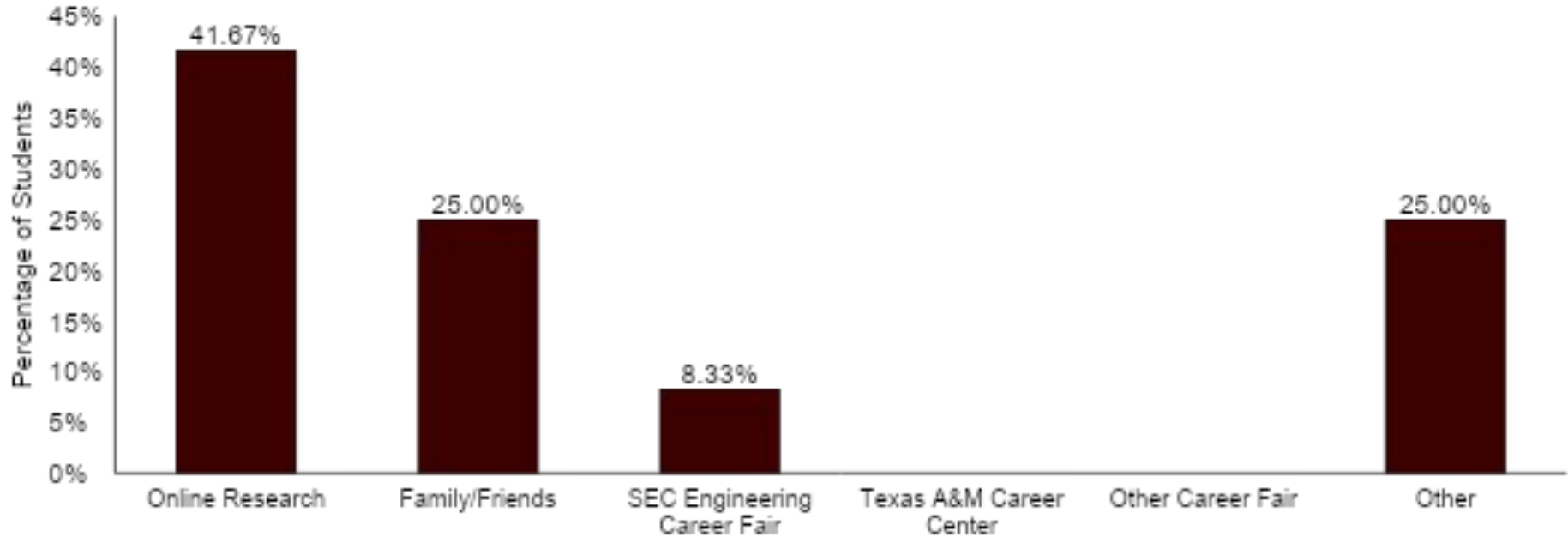
Which of the following Summer plans have you successfully secured? (select all that apply)





Responses: 12

How did you obtain your Summer 2021 internship?



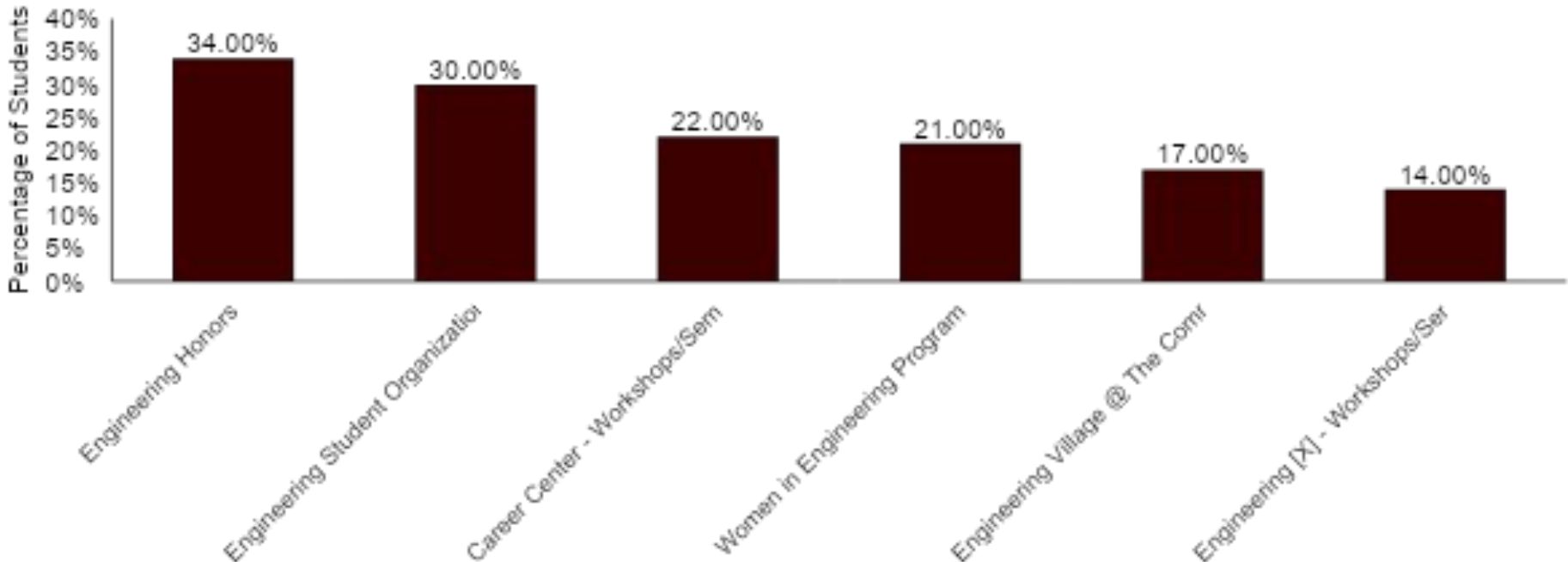
Extracurricular Activities

Asked to all first-year students



Responses: 176

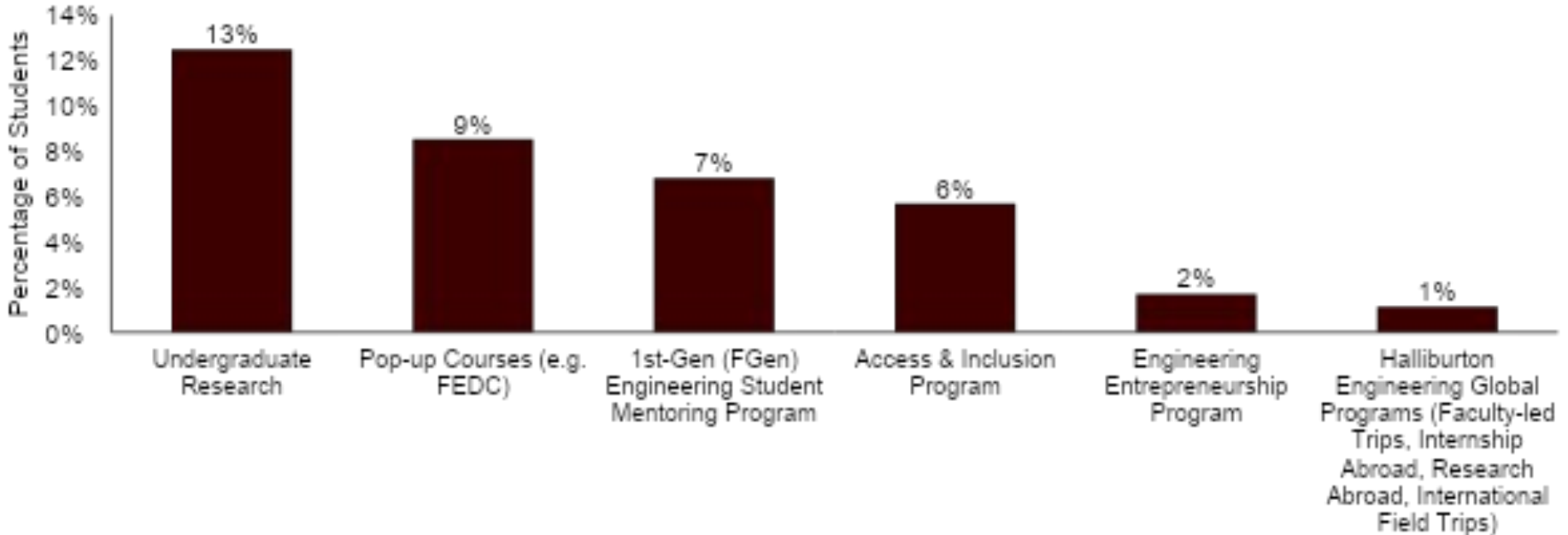
Please select any of the following programs that you have participated in as a first-year engineering student.





Responses: 176

Please select any of the following programs that you have participated in as a first-year engineering student.



Asked to students who *HAVE* completed undergraduate research.

Responses: 9



ENGINEERING
TEXAS A&M UNIVERSITY

Open-Ended: Please elaborate on how you got involved in undergraduate research and what factors made this opportunity possible.

Sent Out Emails (5)

- "I emailed close to ten professors [...] one of them said I could join."
- "I emailed people based off tamu research page."

Received an Email (1)

- "I received an email and I was interested so I attended."

Research Program (2)

- "I applied to an innovation[x] project team."

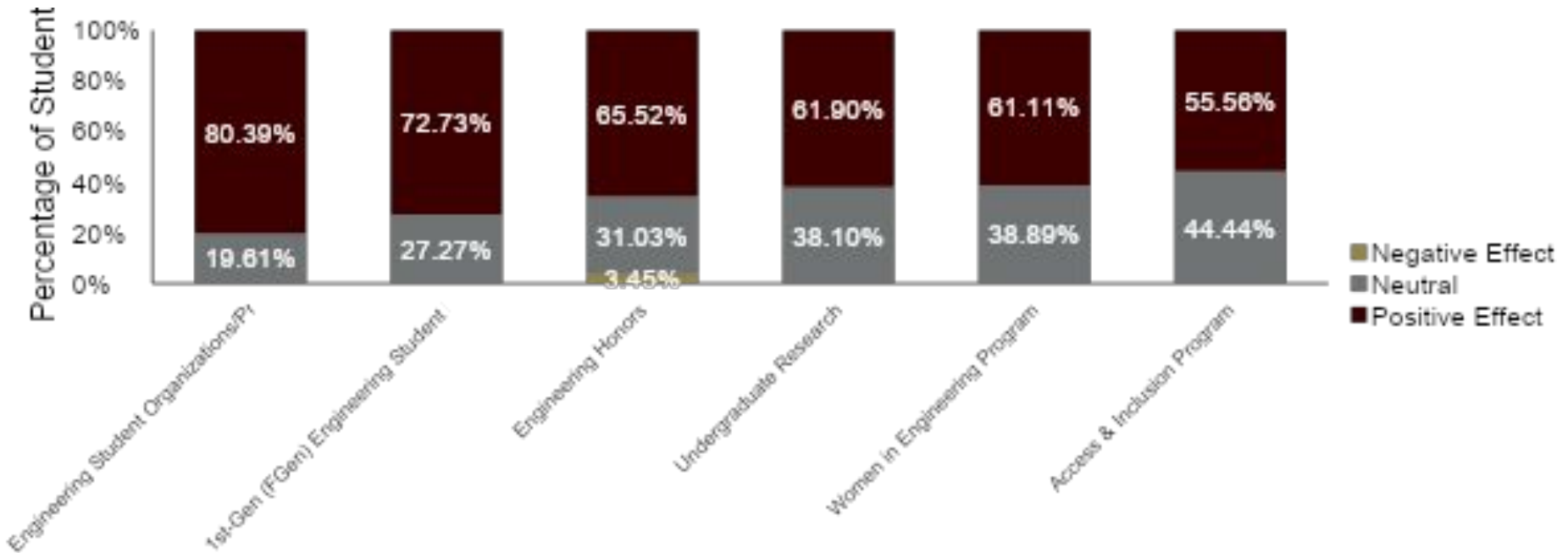
Mentor (1)

- "My mentor who helped recruit me to Aerospace Engineering recruited me and



Responses: 170

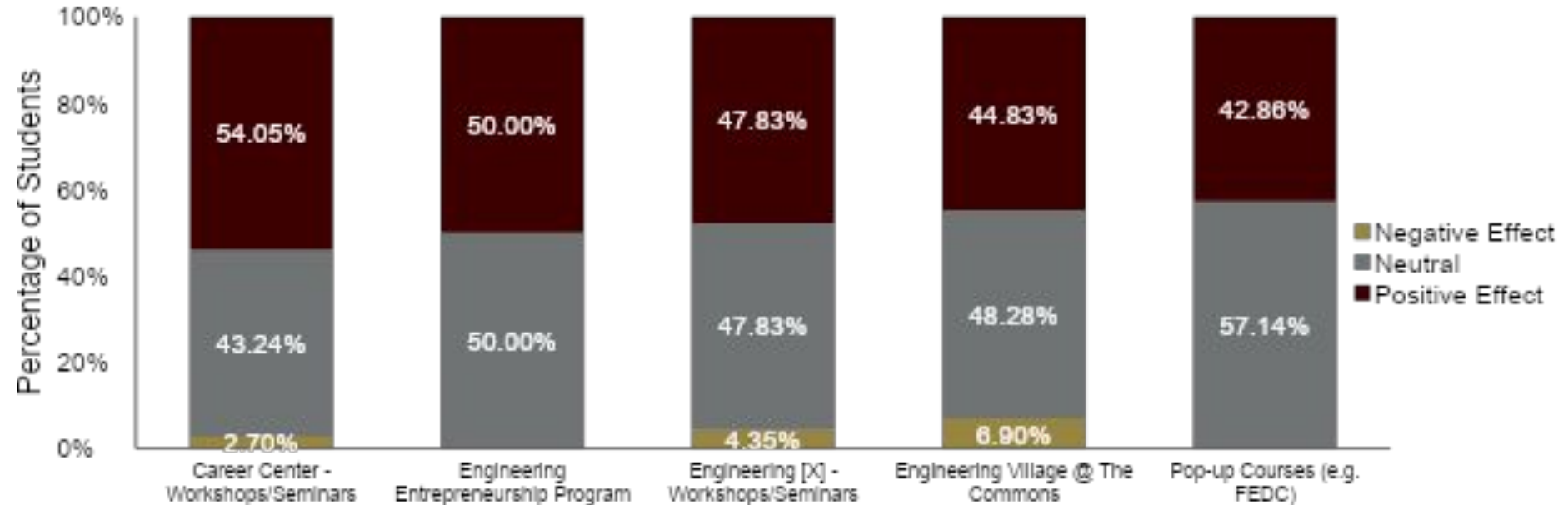
Please indicate the effect that each of the following College of Engineering attributes has on your undergraduate student experience.





Responses: 170

Please indicate the effect that each of the following College of Engineering attributes has on your undergraduate student experience.



Asked to students who selected *Negative Effect of a program.*

(Optional)

Responses: 3



ENGINEERING
TEXAS A&M UNIVERSITY

Open-Ended: Please elaborate on what areas could be improved in the...

Career Center – Workshops/Seminars (1)

- "Bad notice. Would have enjoyed more time for preparation."

Engineering Honors Program (1)

- "All of the requirements just feel like a waste of time to stay in the program."

Engineering Village (1)

- "We didn't do anything. It felt like I was convinced to live in a more expensive dorm just to be put into a group chat with other engineering students. Additionally, I was roomed with a non-engineering-honors student who stayed up until 3am and greatly harmed my sleep schedule."

Asked to students who selected *Negative Effect of a program.*

(Optional)

Responses: 0



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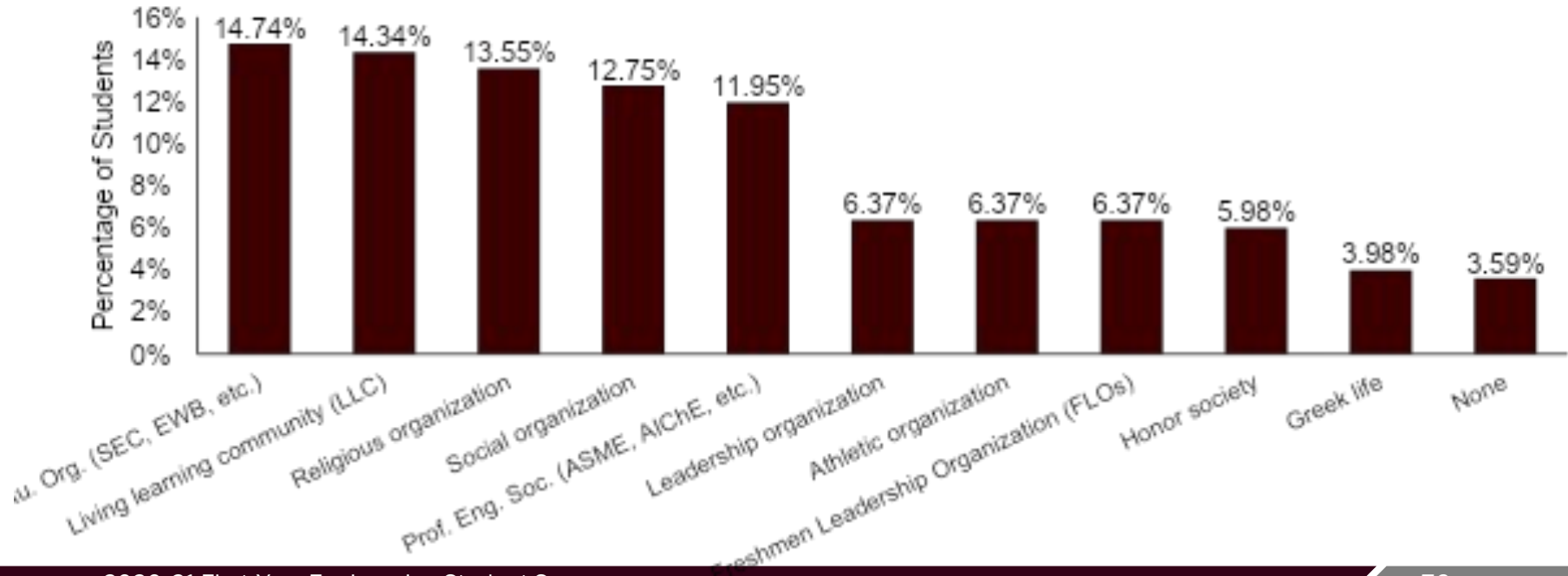
Open-Ended: Please elaborate on what areas could be improved in the...

- Pop-up Courses (e.g. FEDC)
- Engineering [X] – Workshops/Seminars
- Engineering Entrepreneurship Program
- Halliburton Engineering Global Programs
- Women in Engineering Program
- Access & Inclusion Program
- 1st-Gen (FGen) Engineering Student Mentoring Program



Responses: 144

Check all that apply: What extra-curricular activities are you involved with?

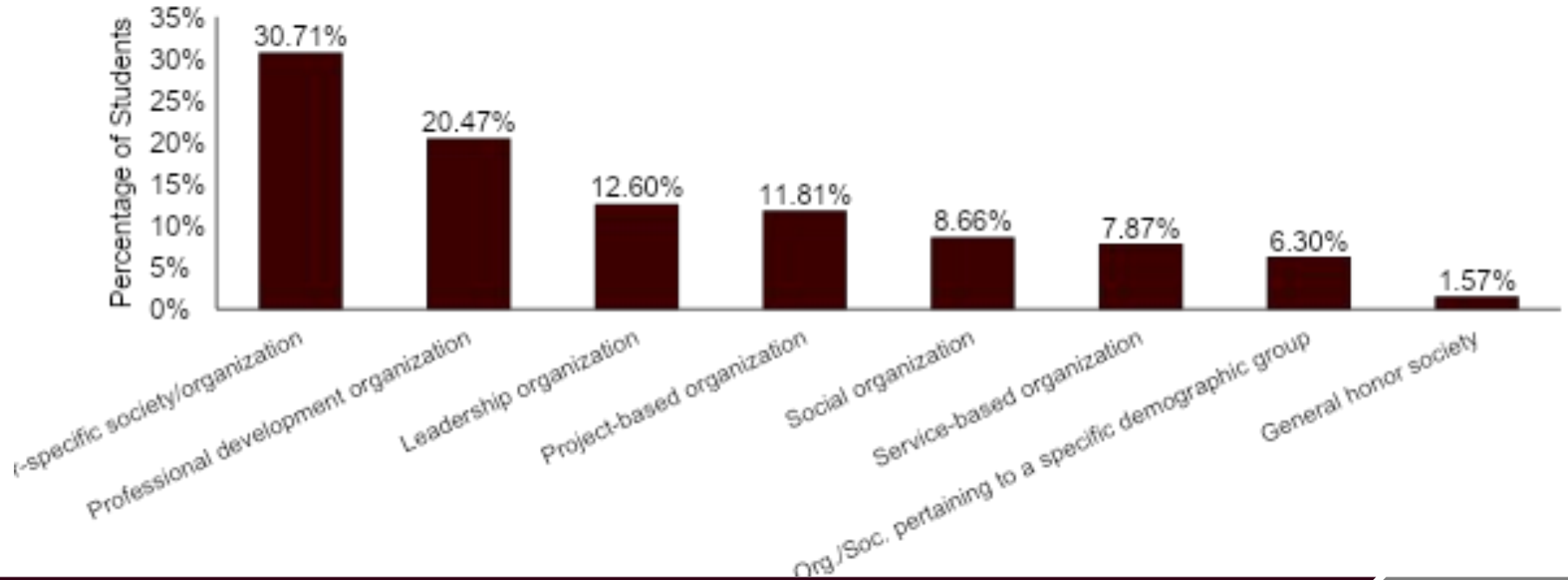


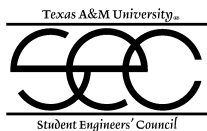
Asked to students who are involved with a Professional Engineering Society or an Engineering Student Organization



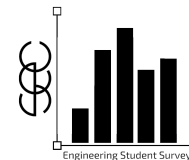
Responses: 58

Check all that apply: What categories best describe your Engineering Professional Society/Student Organization?





Spring 2021 Legislation Committee

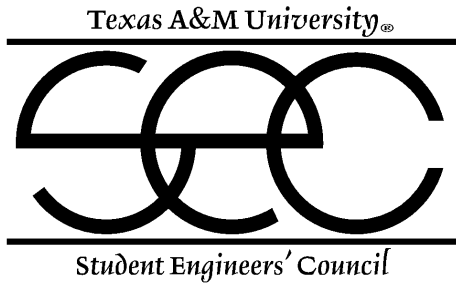


Chairs

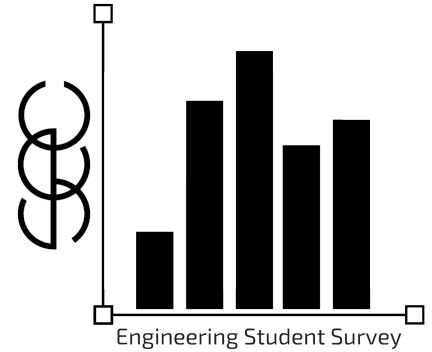
Sarah Beamer James Rushing

Members

Hunter Bureau	Scott Shepherd
Drew DeHaven	Ty Thibodeaux
Abel Gonzalez	Paul Venesky
Cindy Ho	Tony Yang
Drew Paré	Vivian Zheng



FIRST-YEAR ENGINEERING STUDENT SURVEY



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