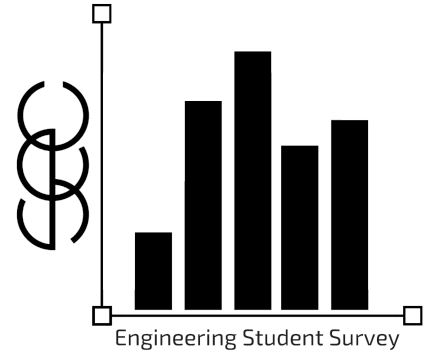
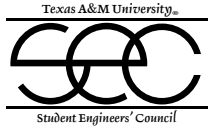


# FIRST-YEAR ENGINEERING STUDENT SURVEY

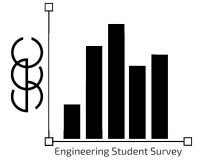


## Results Report

2017-2018



# Survey Executive Summary



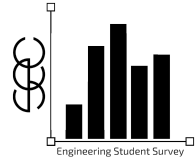
## Mission

A primary mission of the Student Engineers' Council is to serve as the representative voice for the students within the College of Engineering.

## Purpose

This survey exists to embody and communicate the student perspective with the administration of the College of Engineering.

# Survey Executive Summary

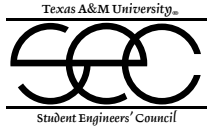


## Open-Ended Questions

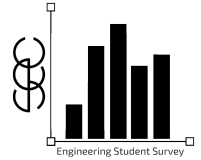
Questions labeled “Open-Ended” allowed for open-ended student responses. These responses were read by members of SEC’s Legislation committee and sorted into representative categories.

## Productive Feedback

This survey features some questions that focus specifically on students’ negative feedback. This is intended as helpful, productive information highlighting areas for improvement.



# Survey Response Summary



## Part I: Entry Survey

### 2-Week Survey Period

September 27 – October 11, 2017

**1092 Total Responses**

27% of First-Year Student Body

## Part II: Exit Survey

### 2-Week Survey Period

March 23 – April 6, 2018

**863 Total Responses**

21% of First-Year Student Body

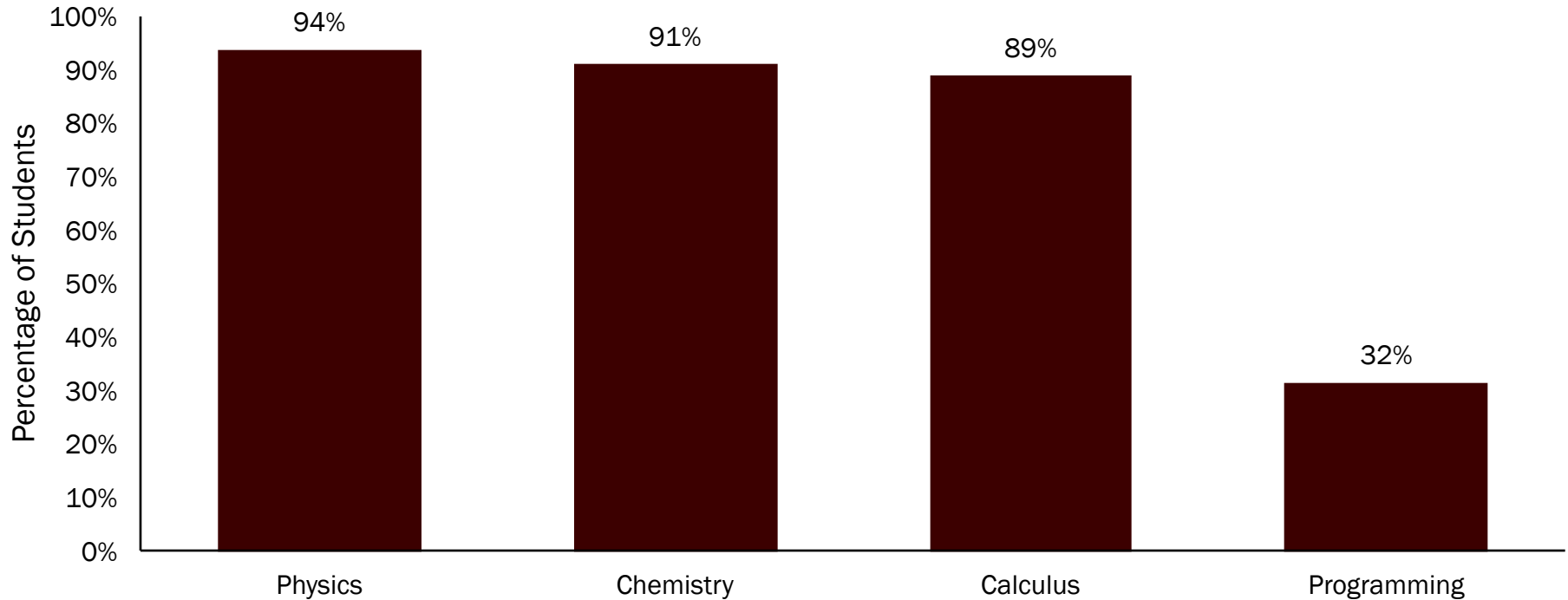
# Entry Questions

Appeared on only the Entry Survey

Responses: 1092



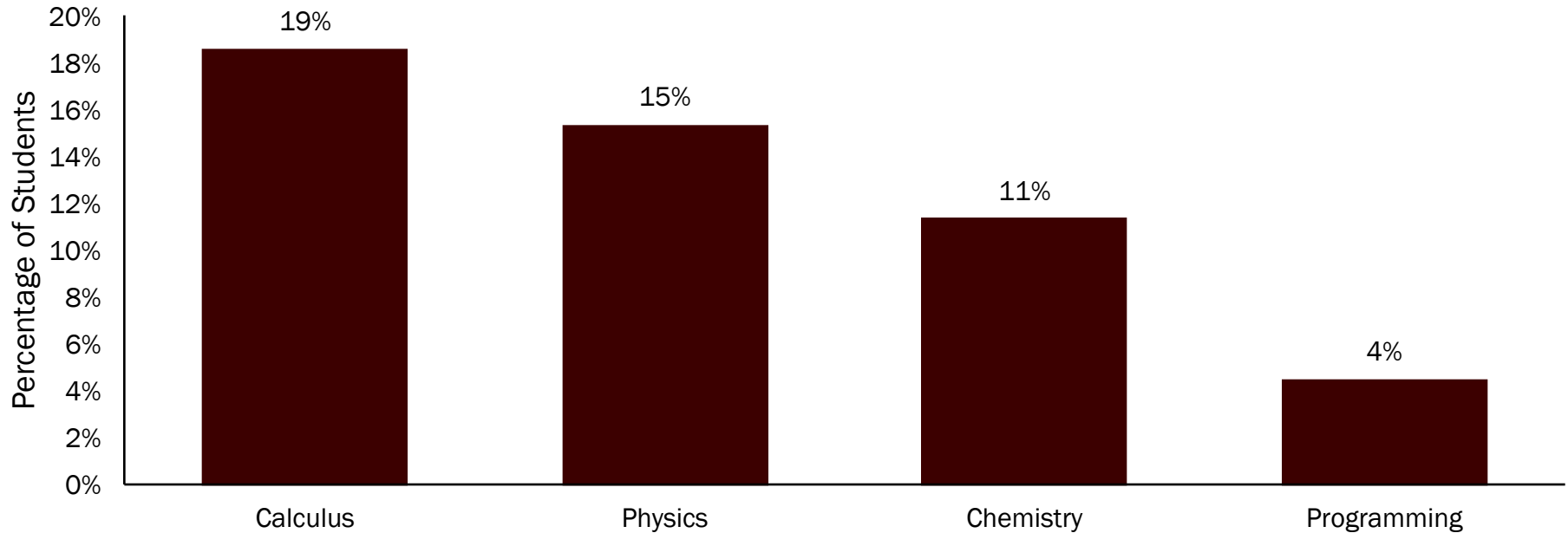
## What classes did you take in high school? (select all that apply)



Responses: 1092

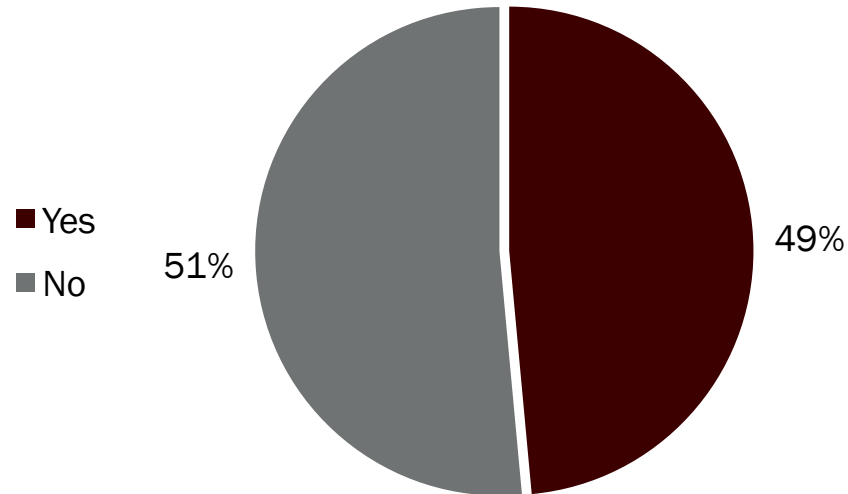


## What college classes have/will you accept high school credit for? (select all that apply)



Responses: 1092

## Did you participate in any STEM-related extracurricular activities in high school?

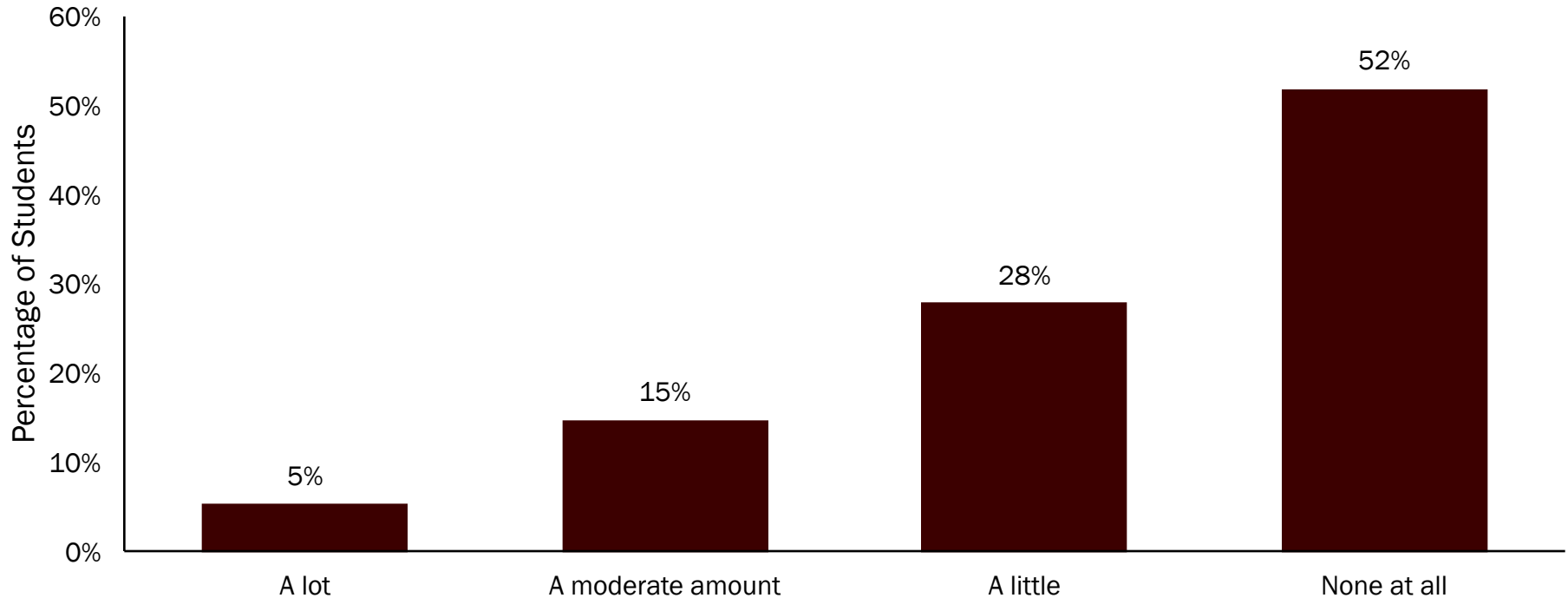




Responses: 1092



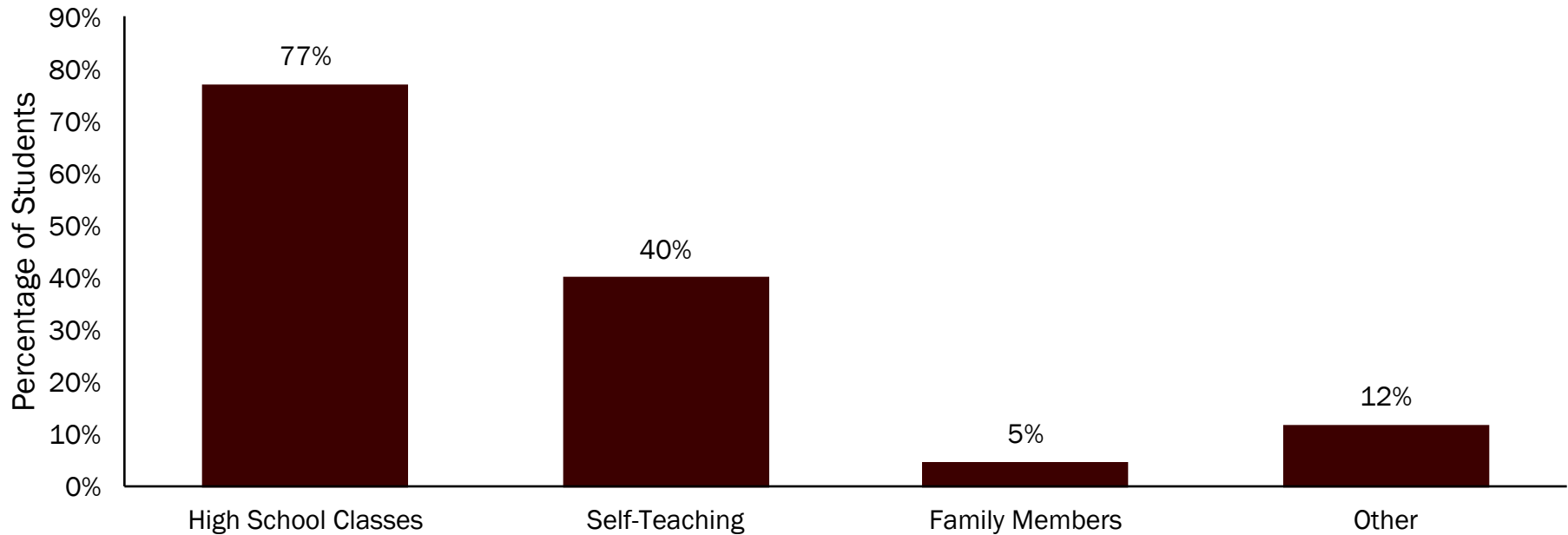
## How much prior programming experience do you have?



Asked to only those with programming experience  
Responses: 525



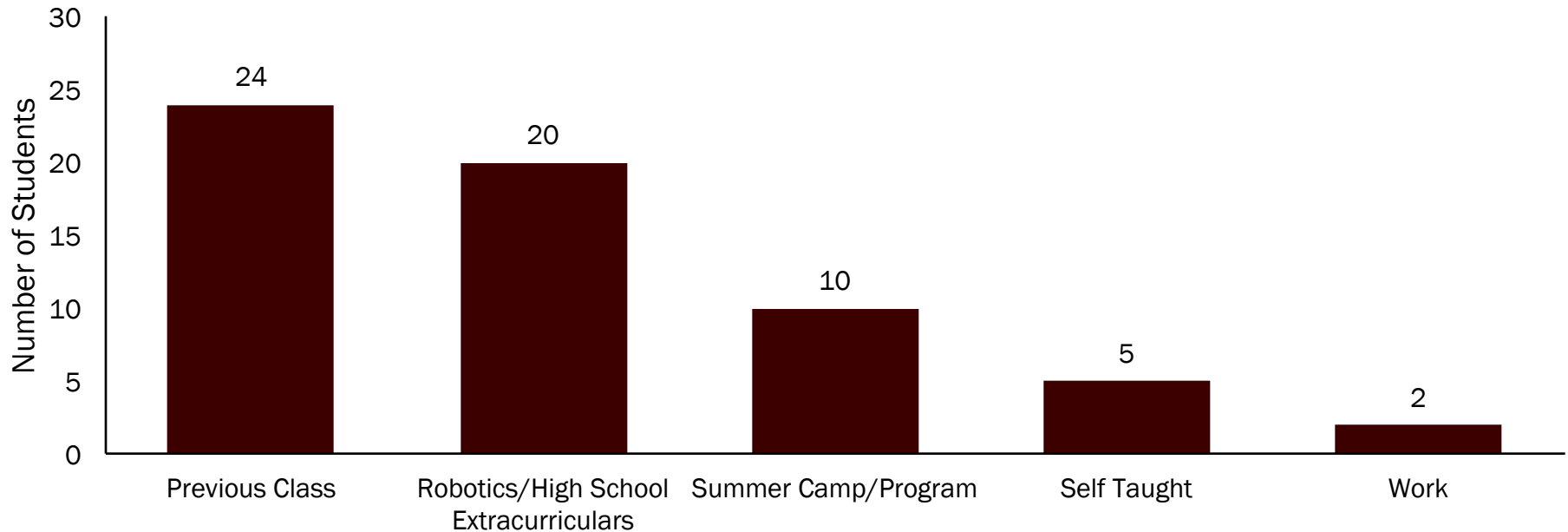
## How did you gain your programming experience? (select all that apply)



Asked to those who selected “other” for the previous question  
Responses: 63



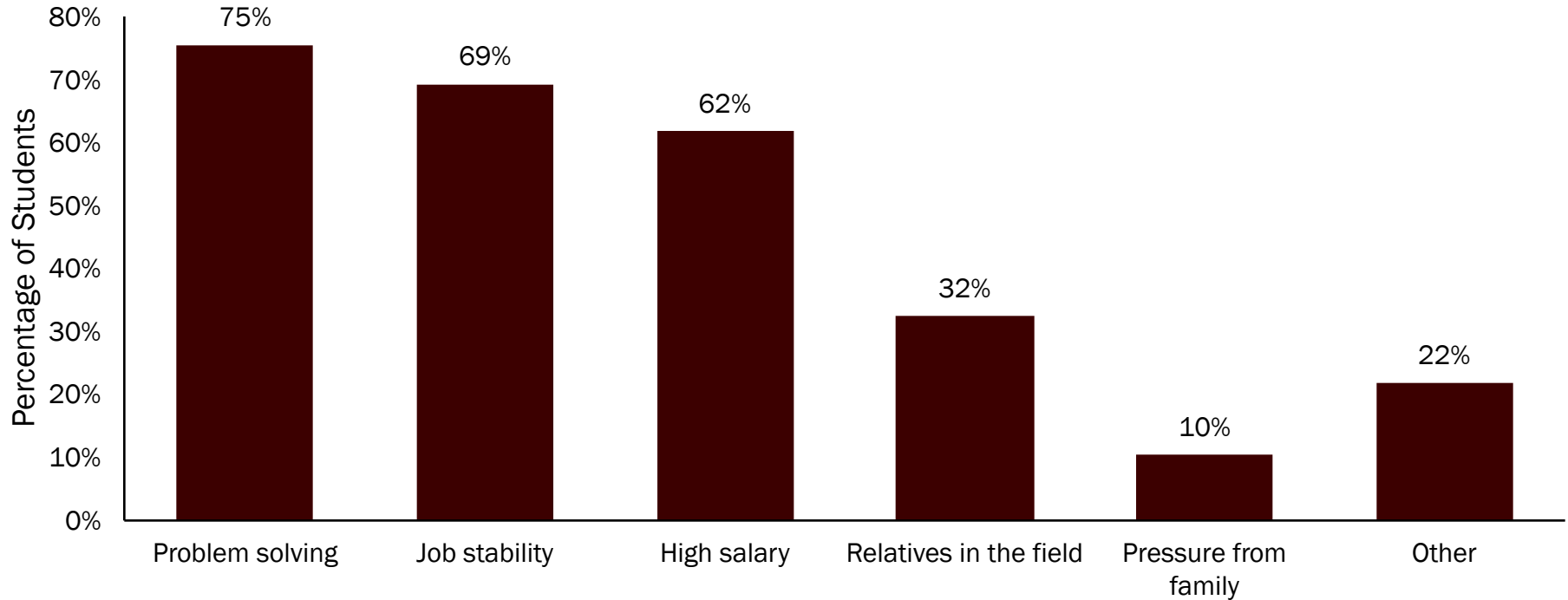
## *Open-Ended:* How did you gain your programming experience? – Other



Responses: 1092



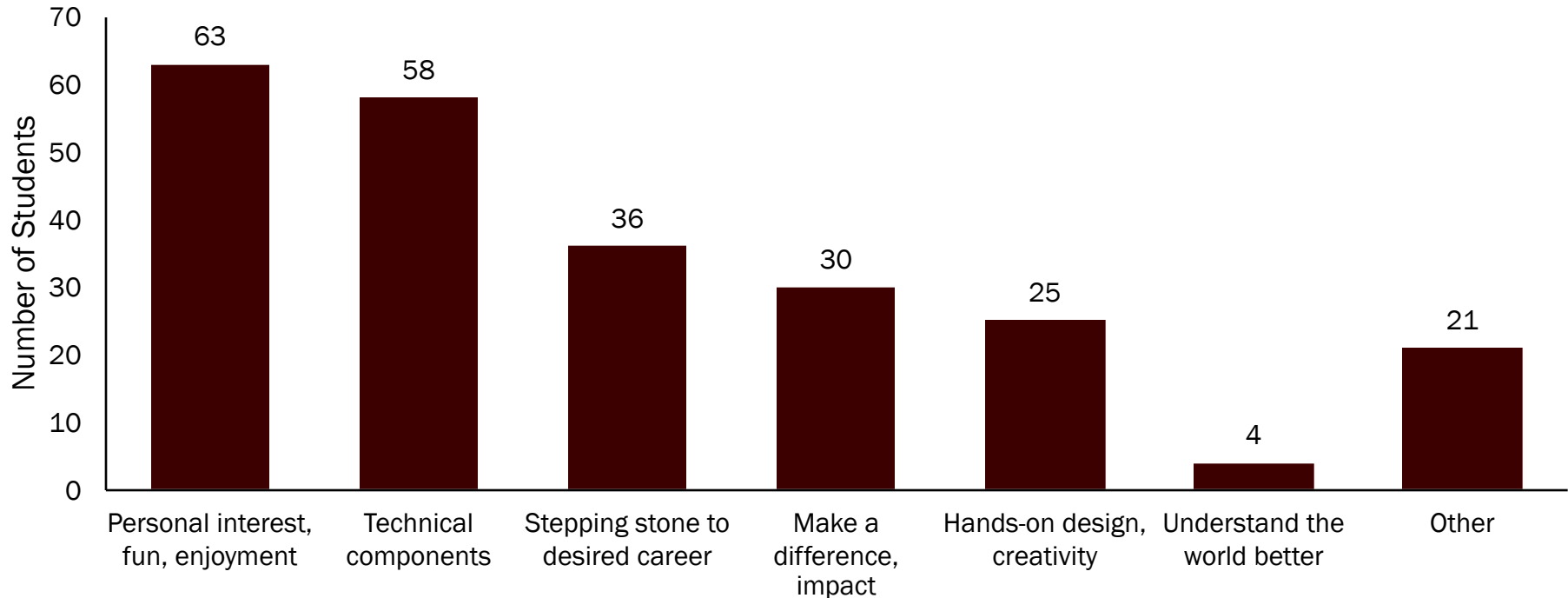
## What made you choose Engineering? (select all that apply)



Asked to those who selected “other” for the previous question  
Responses: 237



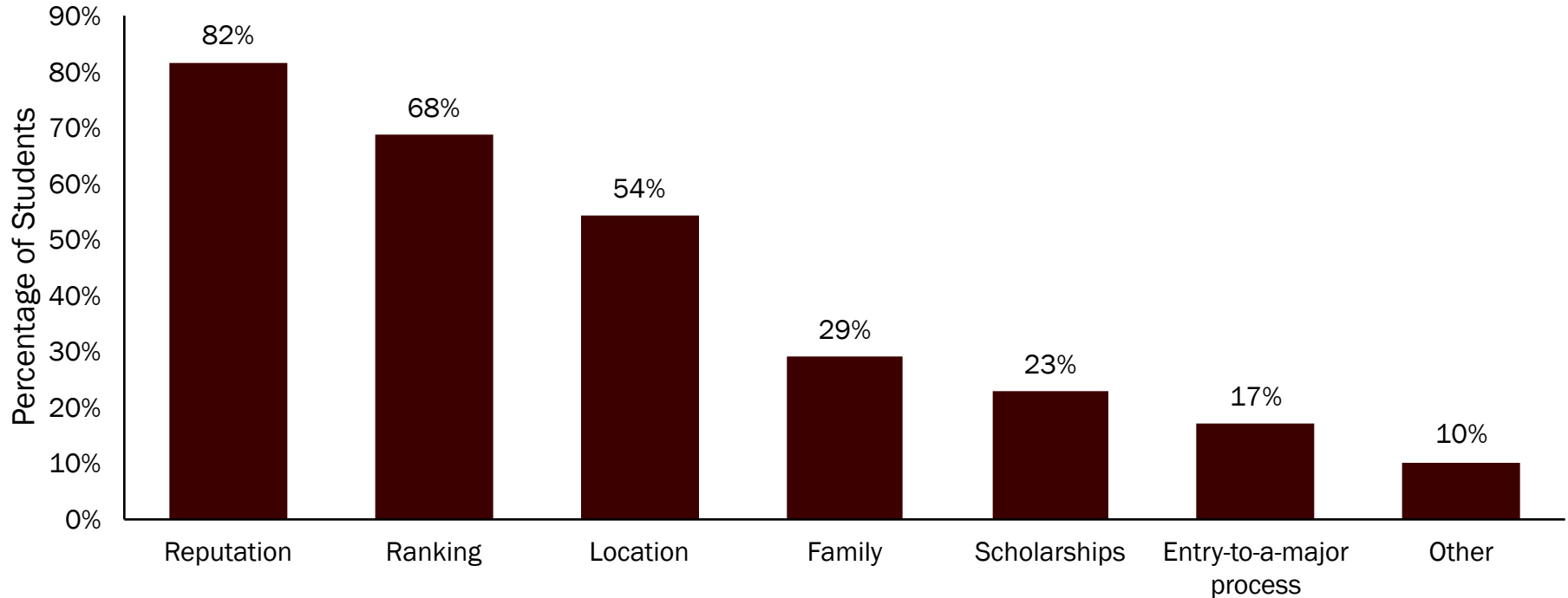
## *Open-Ended: What made you choose Engineering? – Other*



Responses: 1092



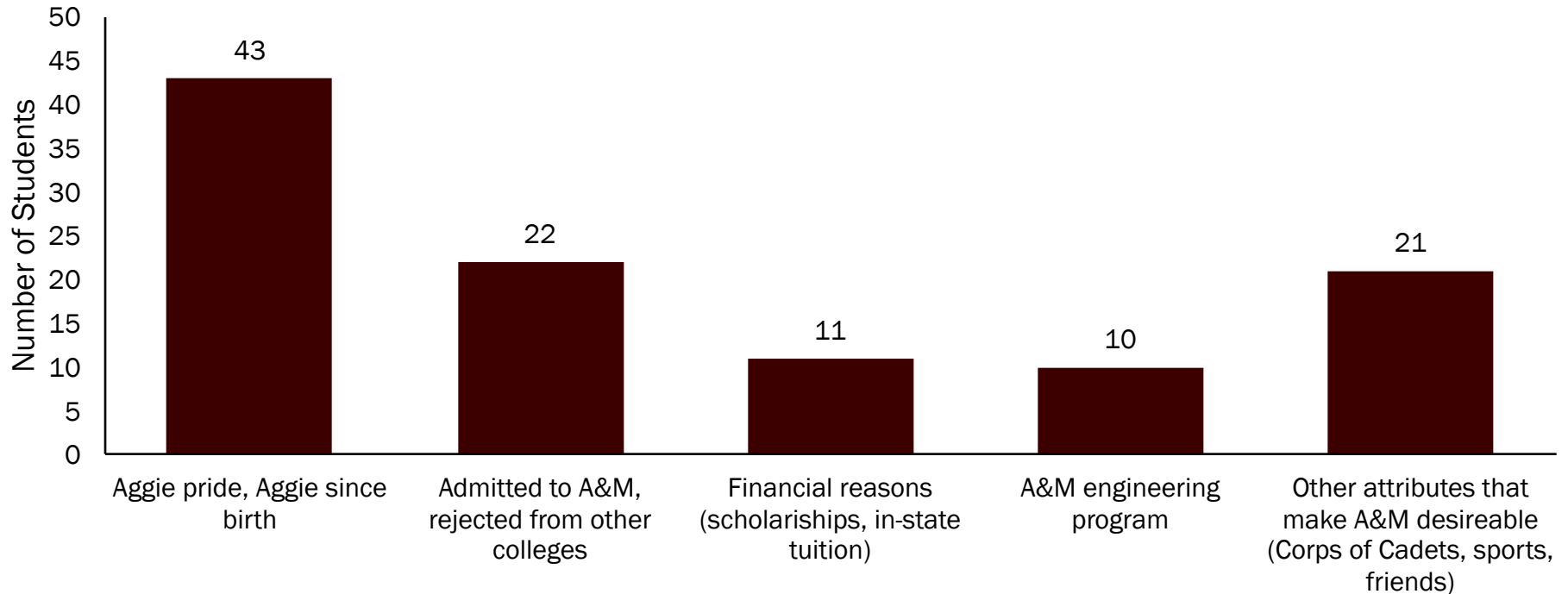
## Why did you choose Texas A&M Engineering? (select all that apply)



Asked to those who selected “other” for the previous question  
Responses: 237



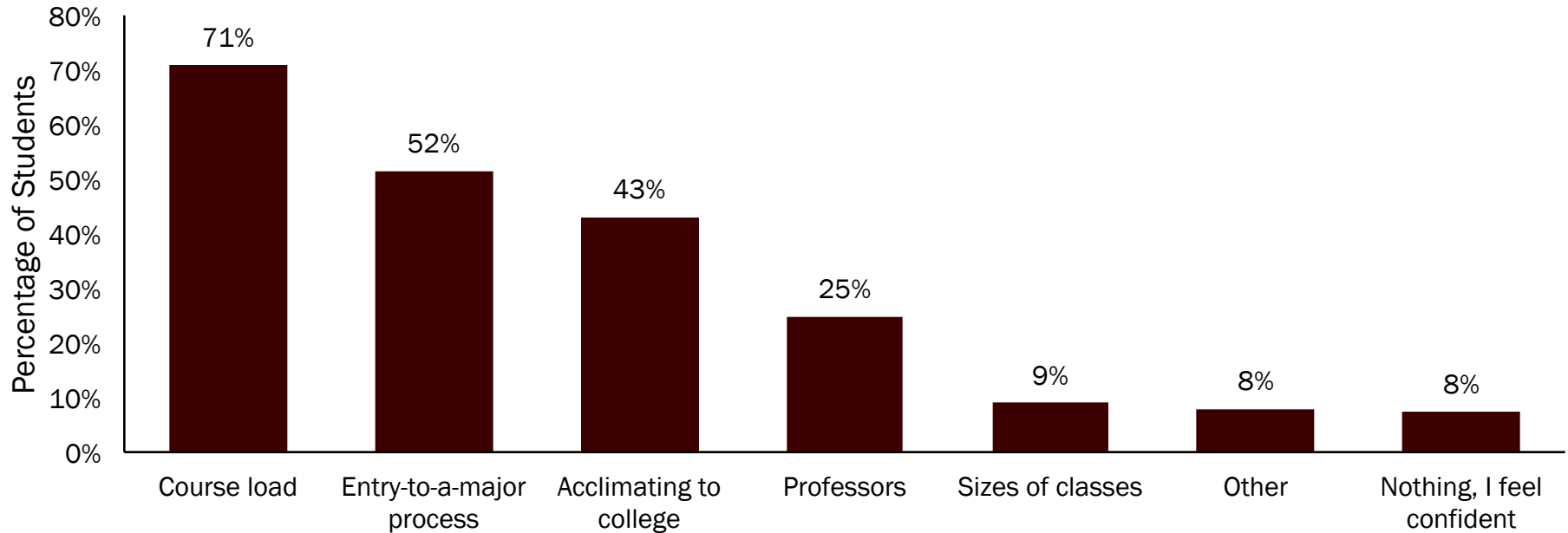
## Open-Ended: Why did you choose Texas A&M Engineering? – Other



Responses: 1091



# What are you most concerned/worried about regarding your first year in engineering? (select all that apply)

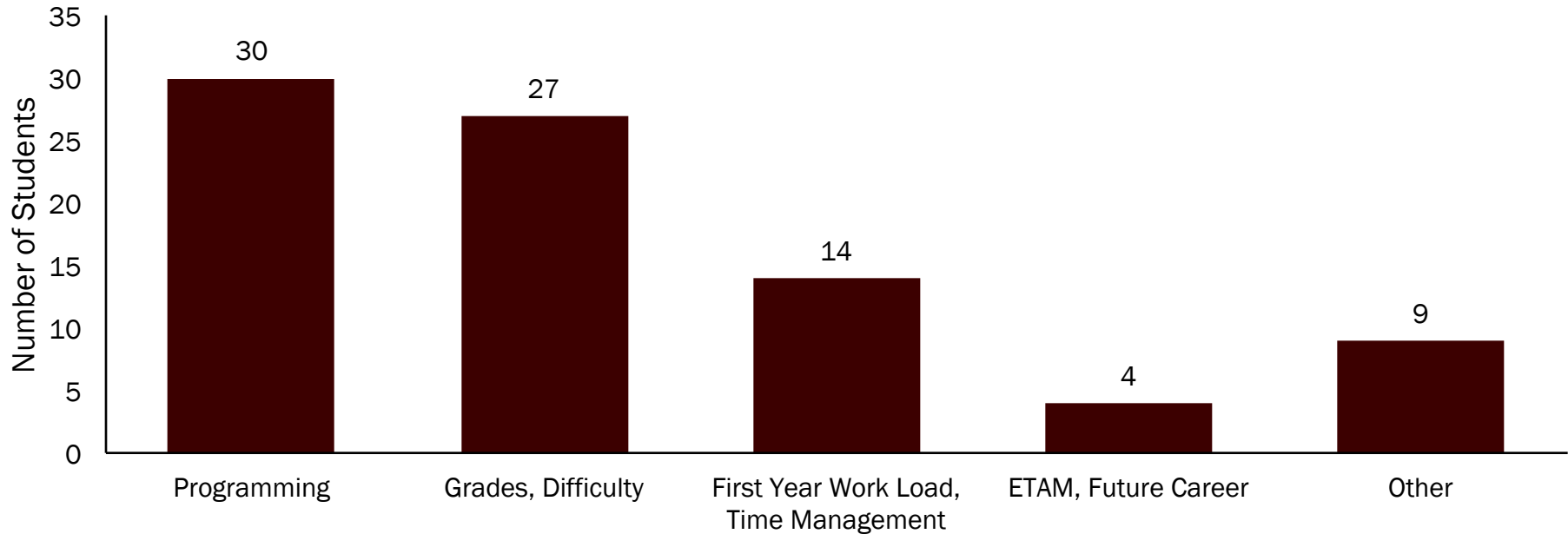




Asked to those who selected “other” for the previous question  
Responses: 89



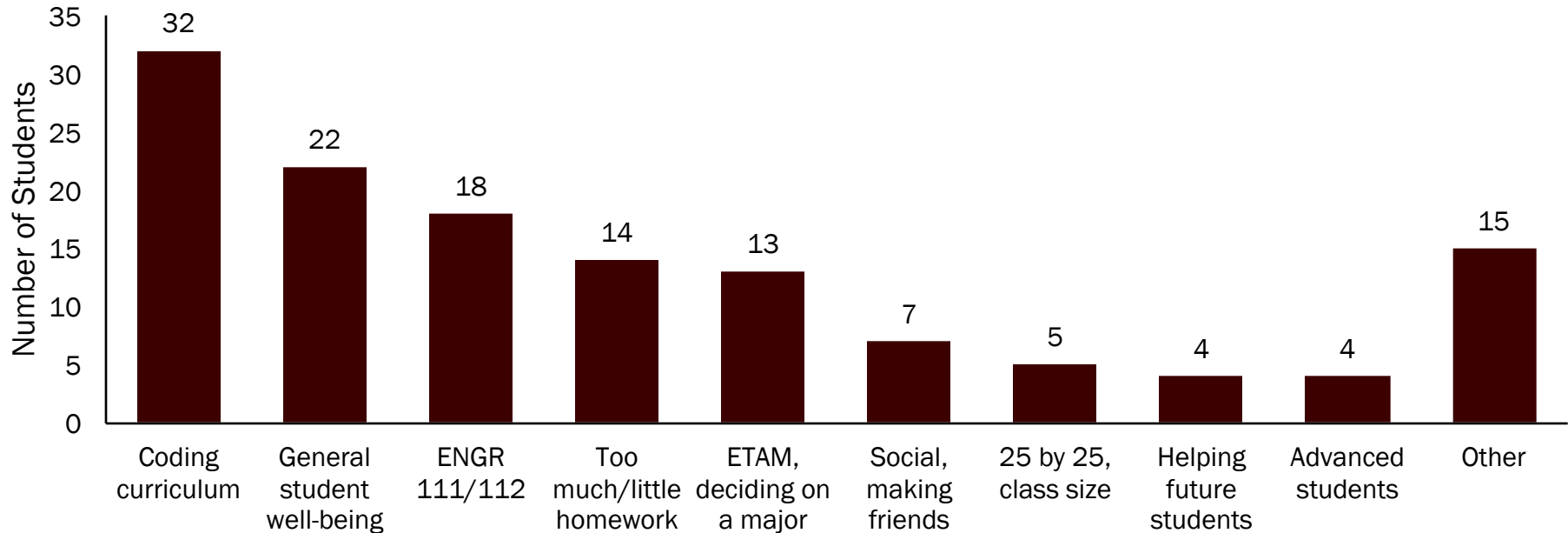
## ***Open-Ended: What are you most concerned/worried about regarding your first year in engineering? – Other***





Responses: 133

## ***Open-Ended:*** Is there anything else you want to share with us that we didn't ask you that could assist in enhancing the first-year experience?



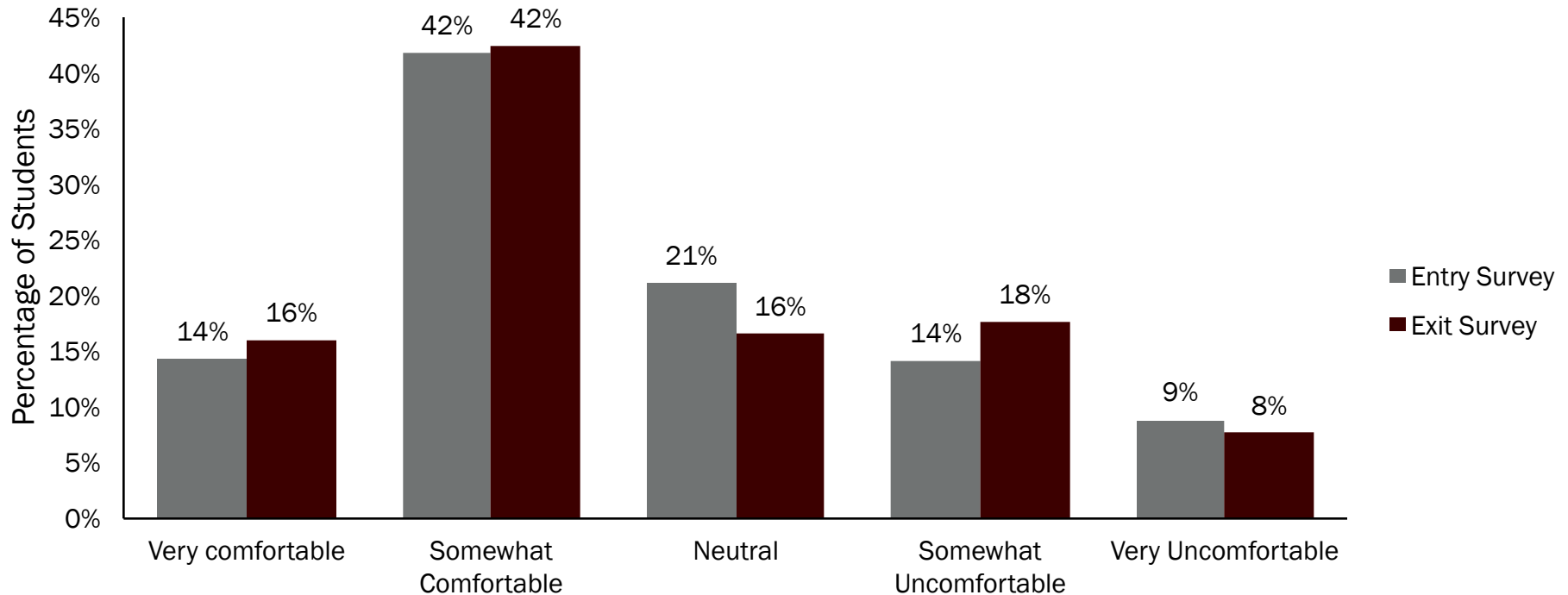
# Parallel Questions

Appeared on both the Entry Survey and the Exit Survey

(Entry Survey) Asked to only those with programming experience  
Responses: 512, 802



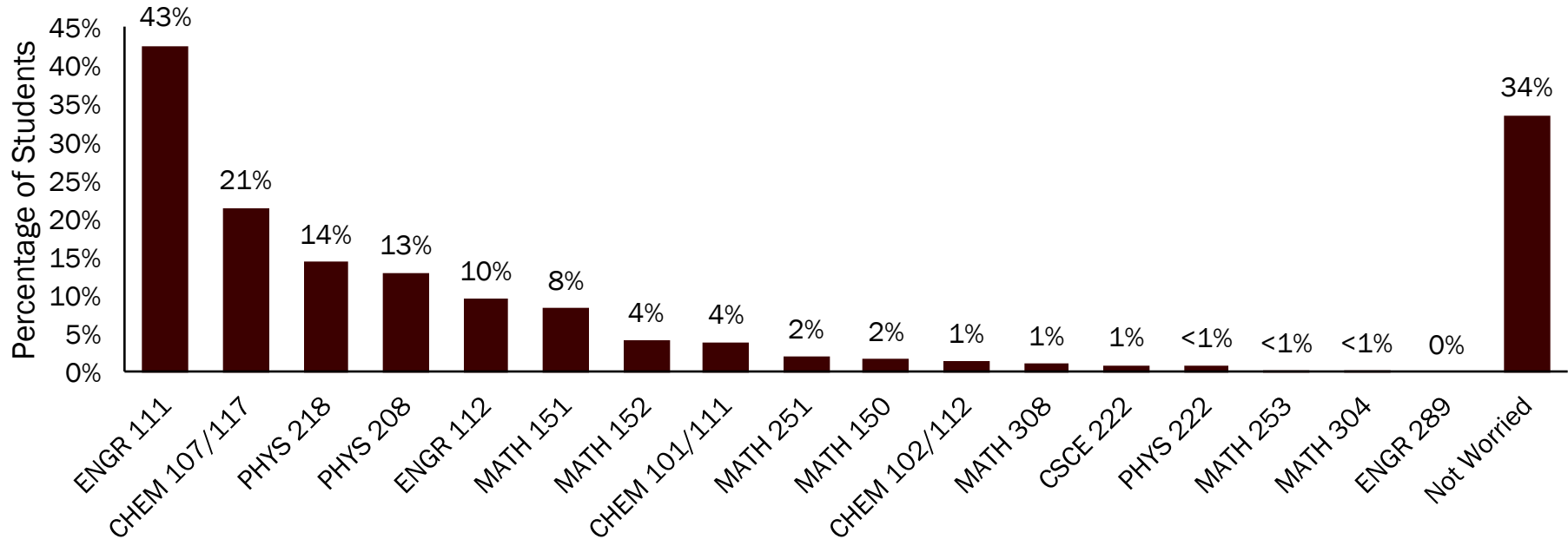
## How would you describe your comfort level with programming?





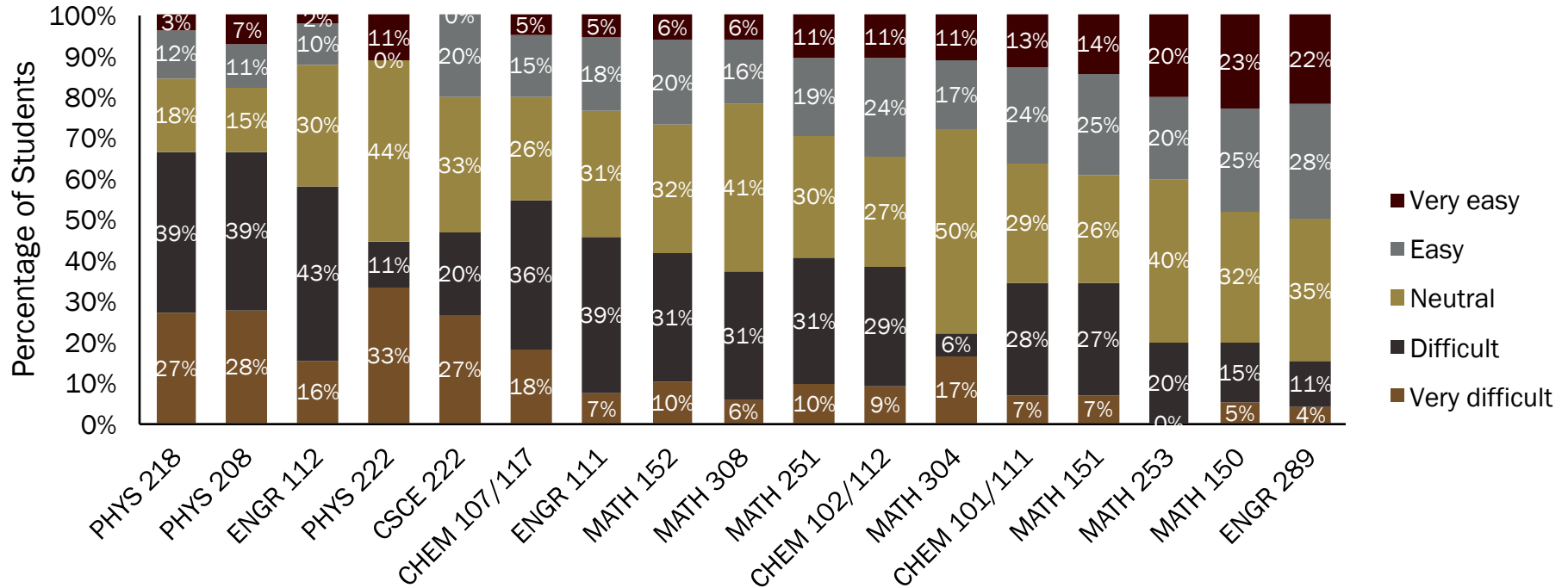
Responses: 1091

## **(Entry) Select the two courses from the general engineering curriculum that you are most concerned/worried about**



Each asked to only those who had taken that class  
 Responses: varied

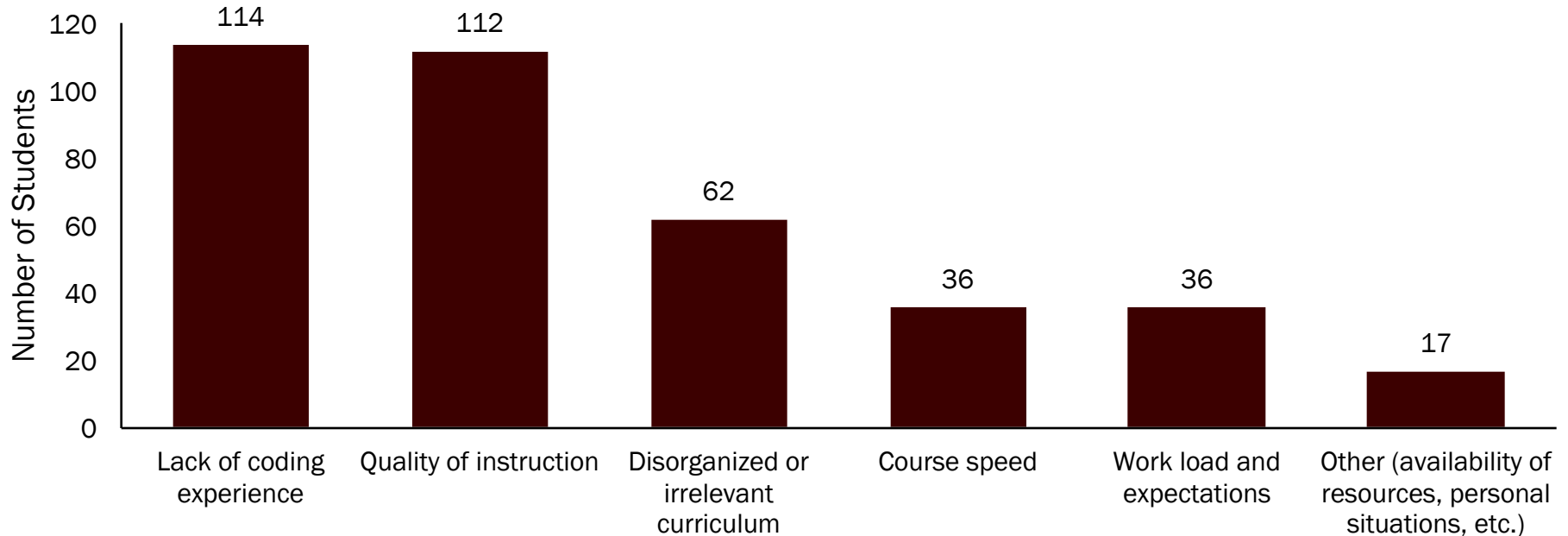
## (Exit) How would you rate the difficulty of the following classes?



Asked to those who rated ENGR 111 as “difficult” or “very difficult”  
Responses: 289



## ***Open-Ended: Why did you think ENGR 111 was "difficult" or "very difficult", and what could have been done to help you?***



Asked to those who rated ENGR 111 as “difficult” or “very difficult”  
Responses: 289



**ENGINEERING**  
TEXAS A&M UNIVERSITY

## ***Open-Ended: Why did you think ENGR 111 was "difficult" or "very difficult", and what could have been done to help you?***

### Lack of coding experience

- “This class was very difficult because I was not familiar with coding at all, [and] therefore did not understand what was going on half of the time.”

### Quality of instruction

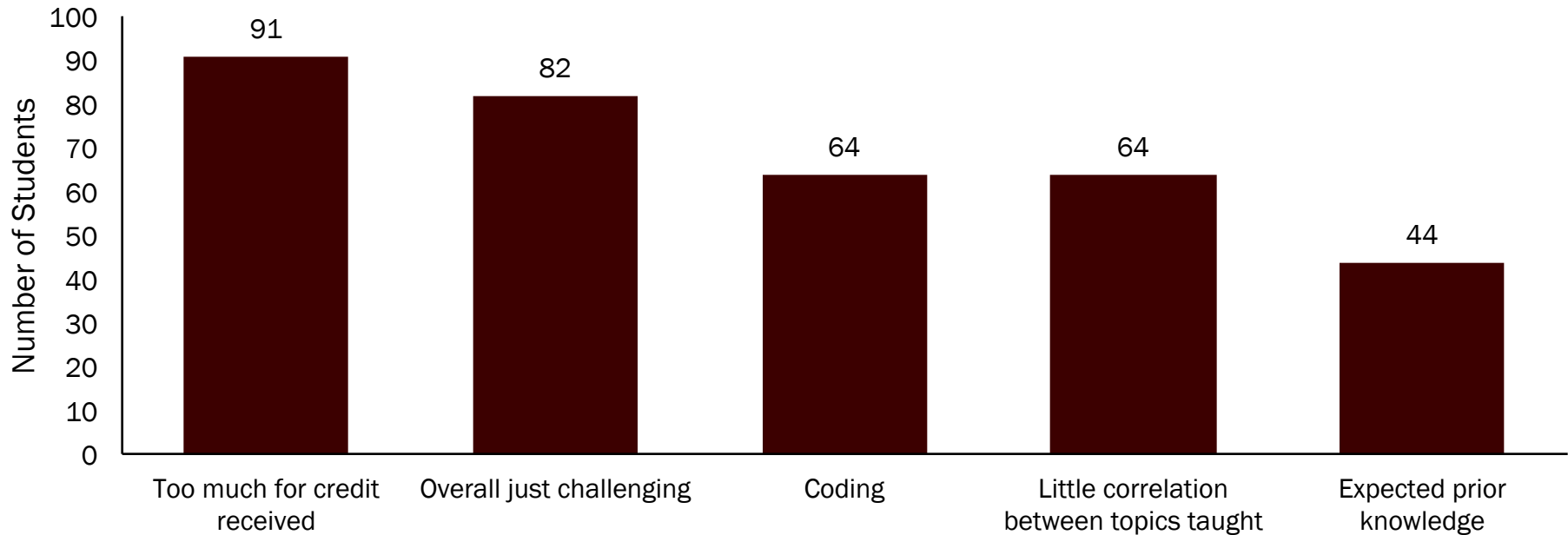
- “Most of the class is spent reading from a pre-made word doc or power point, then asking for help only to get very vague or unhelpful advice from the instructor.”



Asked to those who rated ENGR 112 as “difficult” or “very difficult”  
Responses: 334



## ***Open-Ended: Why did you think ENGR 112 was "difficult" or "very difficult", and what could have been done to help you?***



Asked to those who rated ENGR 112 as “difficult” or “very difficult”  
Responses: 334



## ***Open-Ended: Why did you think ENGR 112 was "difficult" or "very difficult", and what could have been done to help you?***

### Overall just challenging

- “There needs to be more resources to study. It was hard to do homework and ICAs when the only reference material was PowerPoints. A text book or resource of some sort would've been very helpful.”

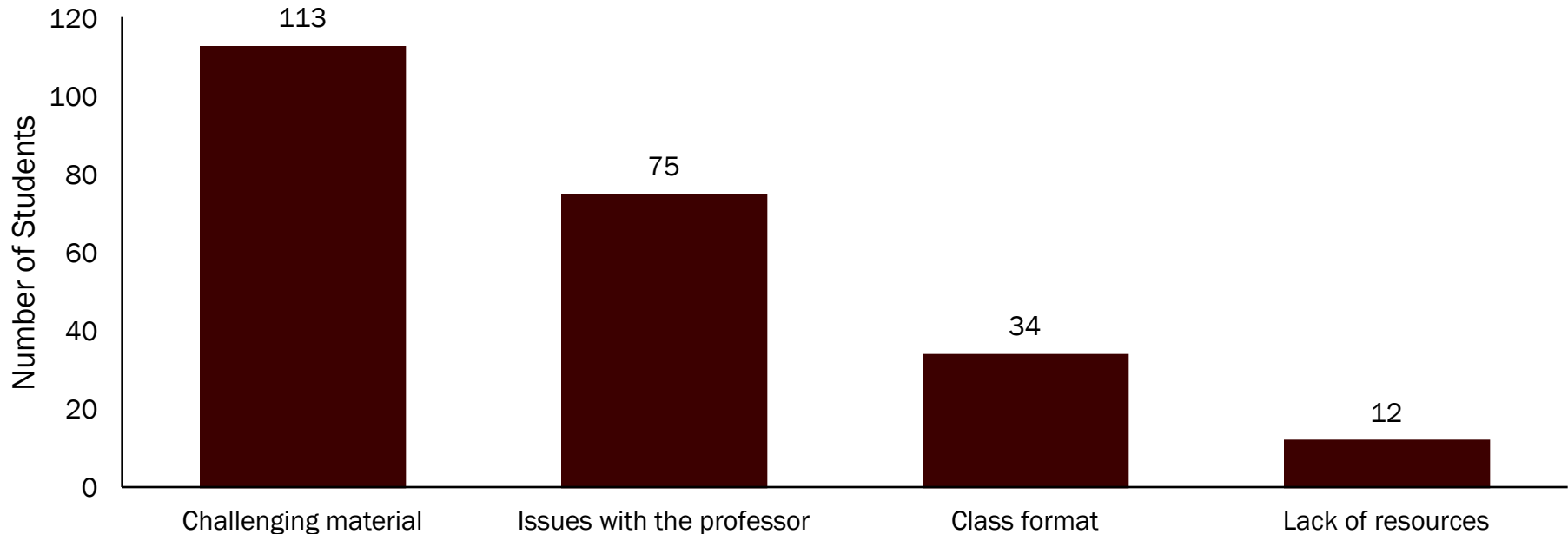
### Little correlation between topics taught

- “The content of the class is poorly designed and the curriculum is not standardized. Every professor teaches something different, and, since the curriculum changes frequently, the faculty really don't know the content very well themselves.”

Asked to those who rated PHYS 218 as “difficult” or “very difficult”  
Responses: 234



## ***Open-Ended: Why did you think PHYS 218 was "difficult" or "very difficult", and what could have been done to help you?***



Asked to those who rated PHYS 218 as “difficult” or “very difficult”  
Responses: 234



## ***Open-Ended: Why did you think PHYS 218 was "difficult" or "very difficult", and what could have been done to help you?***

### Issues with the Professor

- “The class isn't taught well. Most students have to teach themselves by reading the book because the lectures are fast paced and not easy to understand. There are not a lot of S/I sessions for students who get lost or fall behind.

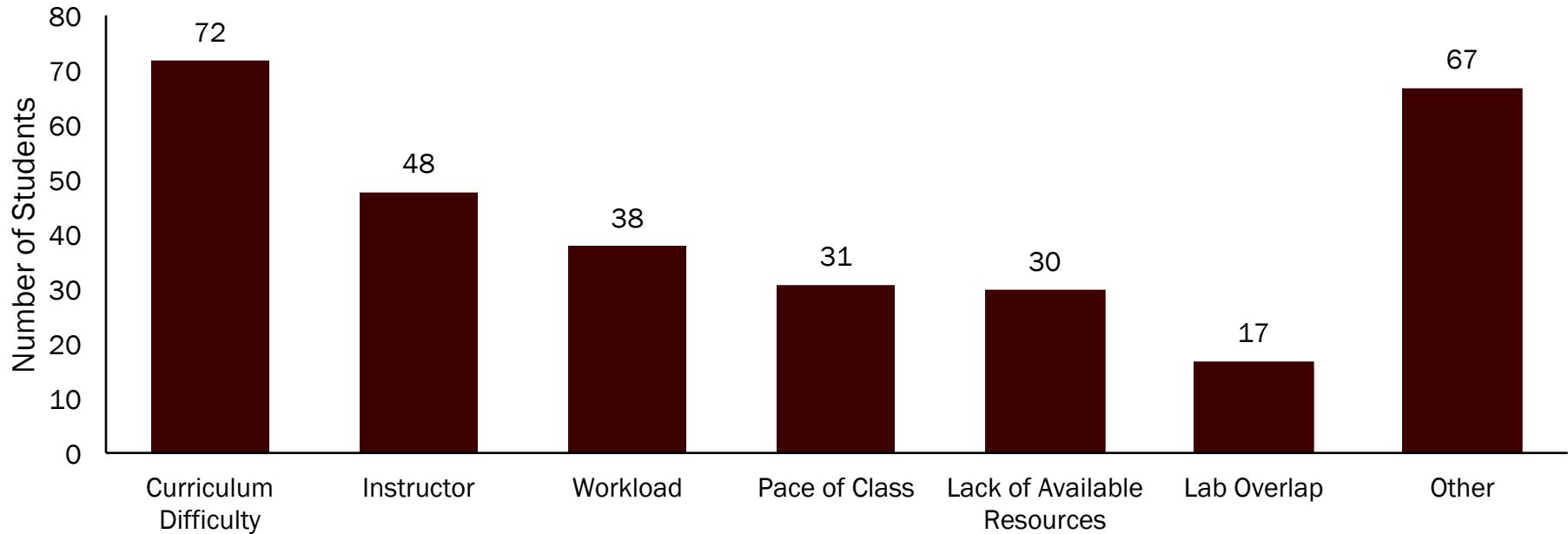
### Difficulty Level

- “Physics is an inherently hard class, but what could students help learn better would be homework and related practice problems with step by step solutions.

Asked to those who rated CHEM 107/117 as “difficult” or “very difficult”  
Responses: 235



## ***Open-Ended: Why did you think CHEM 107/117 were "difficult" or "very difficult", and what could have been done to help you?***



Asked to those who rated CHEM 107/117 as “difficult” or “very difficult”  
Responses: 235



## ***Open-Ended: Why did you think CHEM 107/117 were "difficult" or "very difficult", and what could have been done to help you?***

### Workload

- “These classes combined were a huge challenge for me because, not only does chemistry in general come difficult to me, but the work load was massive...I had to focus every night on the quantity of work I got done rather than the quality of learning I had for each topic/assignment.”

### Lab Overlap

- “CHEM 107 was a difficult class in general, but difficult [because] it required a lot of outside work besides just the homework. CHEM 117 was difficult at times because the lab would introduce a topic that wasn’t introduced in lecture, so it felt like we were jumping ahead.”

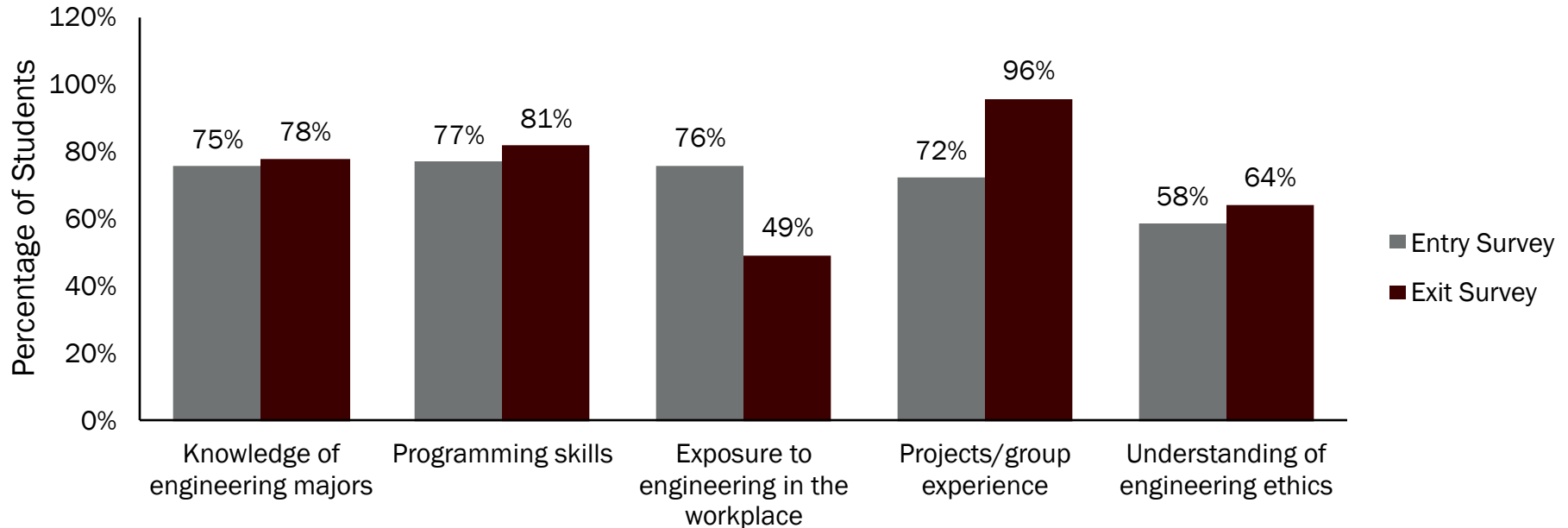
### Other

- “Have never been great at chemistry. It was difficult because I couldn't relate any of the work to what we were doing in any of my other classes.”

Responses: 1091, 728



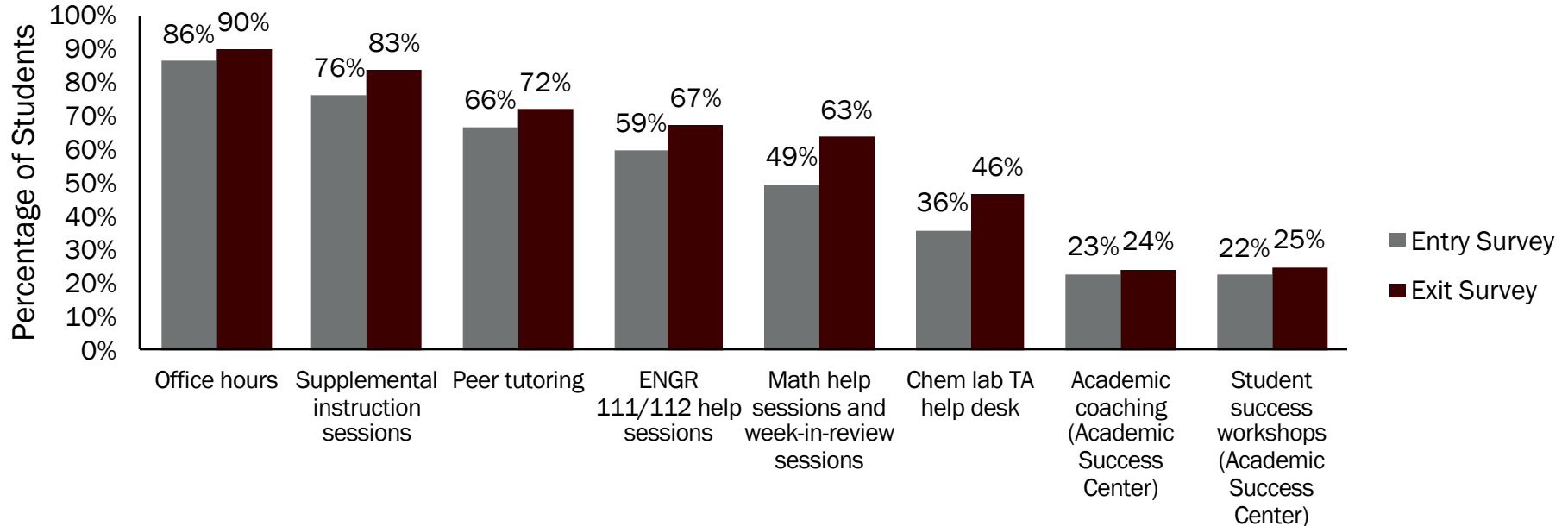
# What (do you hope to gain/did you gain) from your ENGR 111/112 class? (select all that apply)



Responses: 1091, 728



## What academic support services have you heard of? (select all that apply)

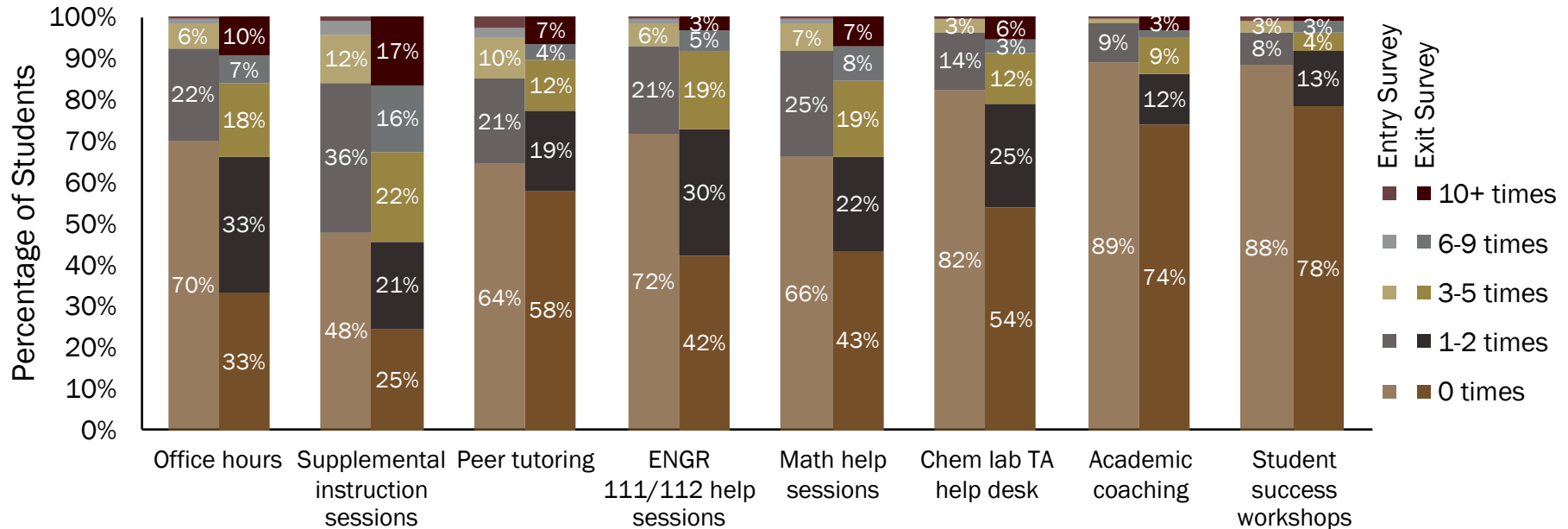




Each asked to only those aware that program  
 Responses: varied



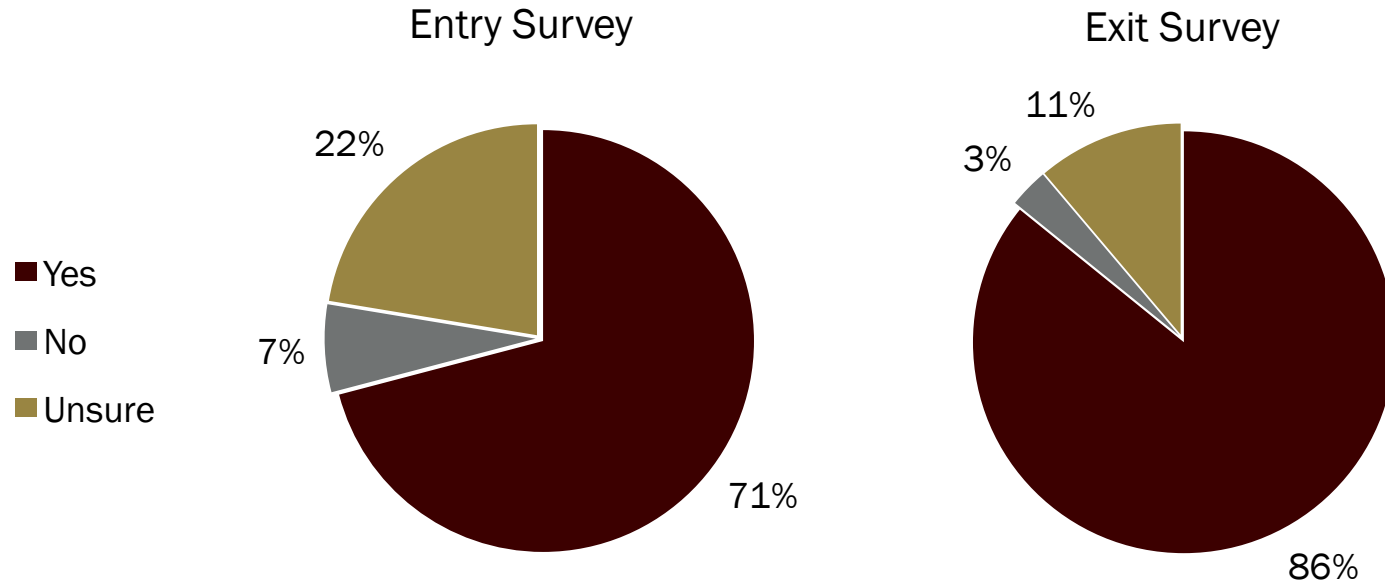
# Of the resources that you are aware of, how often have you used these resources so far?



Responses: 1045, 698



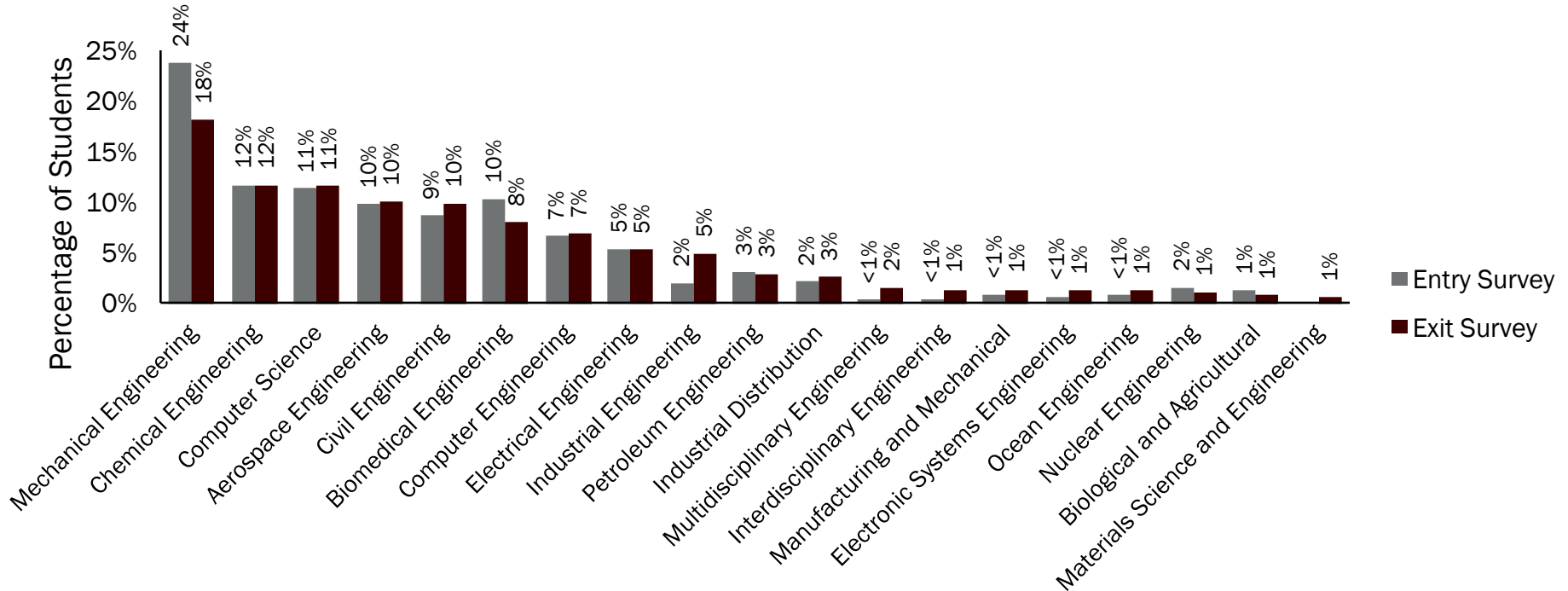
# Have you decided on an engineering discipline in which you would like to major?



Asked to only those who had decided on a major  
Responses: 512, 802



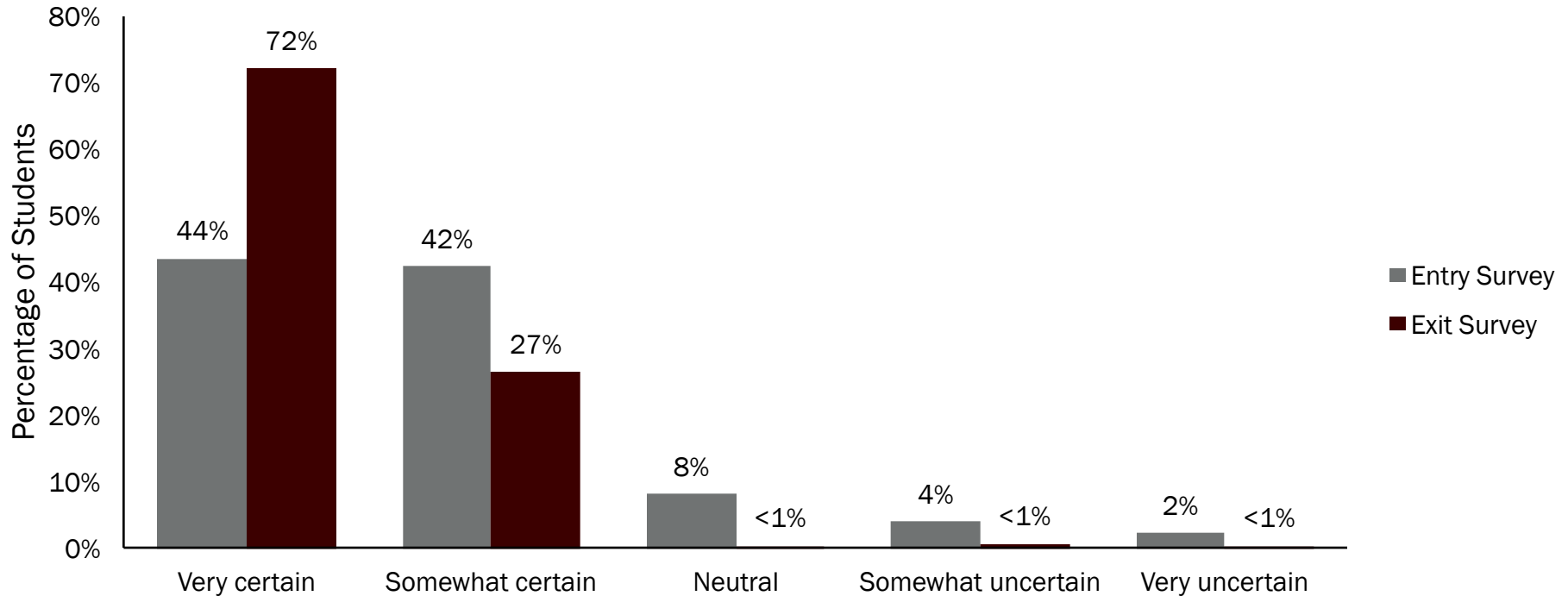
## What is your first choice major?



Asked to only those who had decided on a major  
Responses: 974, 592



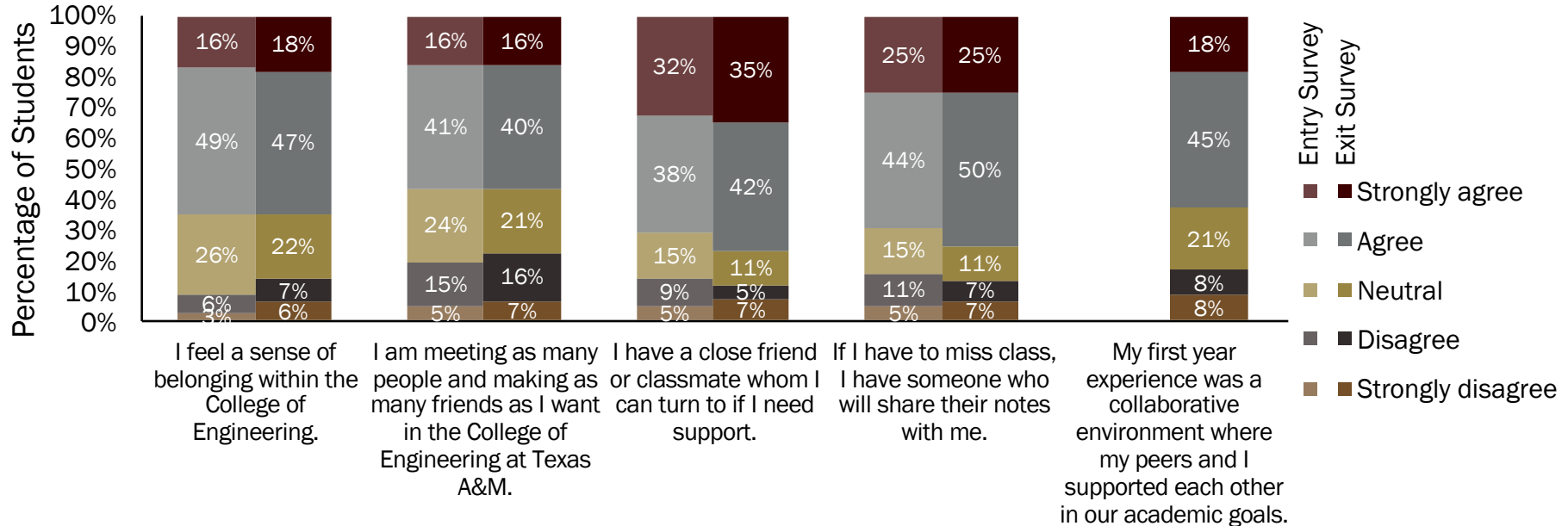
## How certain are you in your decision?



Responses: 1041, 626



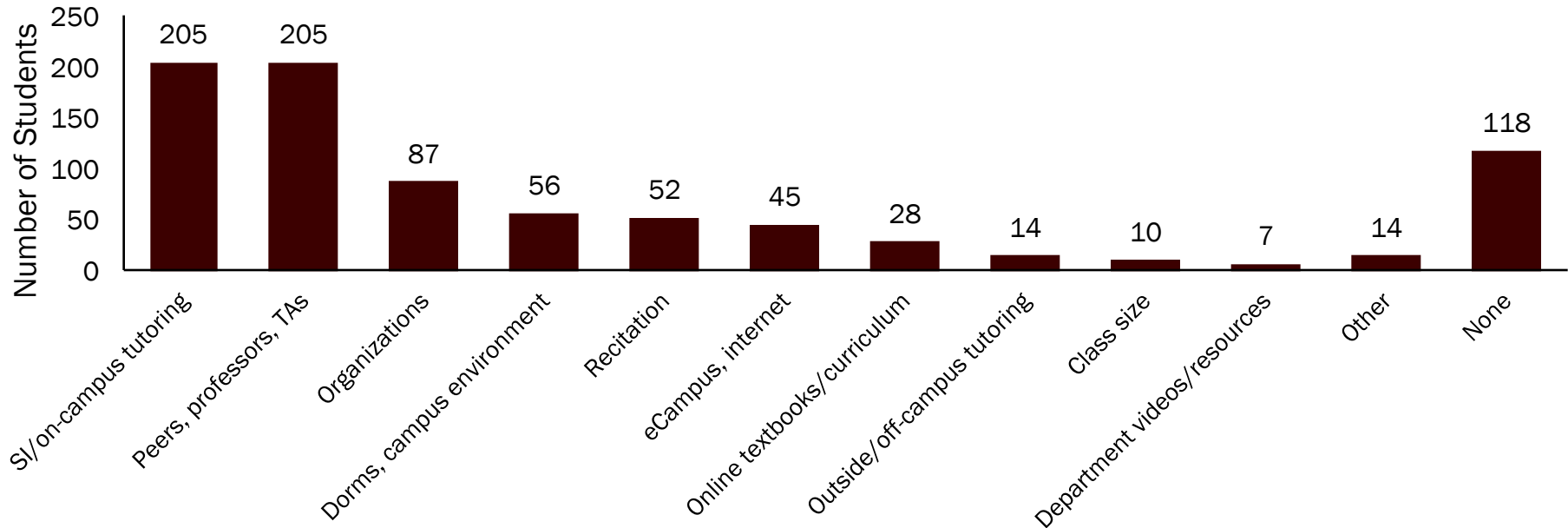
## Please indicate the extent to which you agree or disagree with the following statements.



Responses: 841



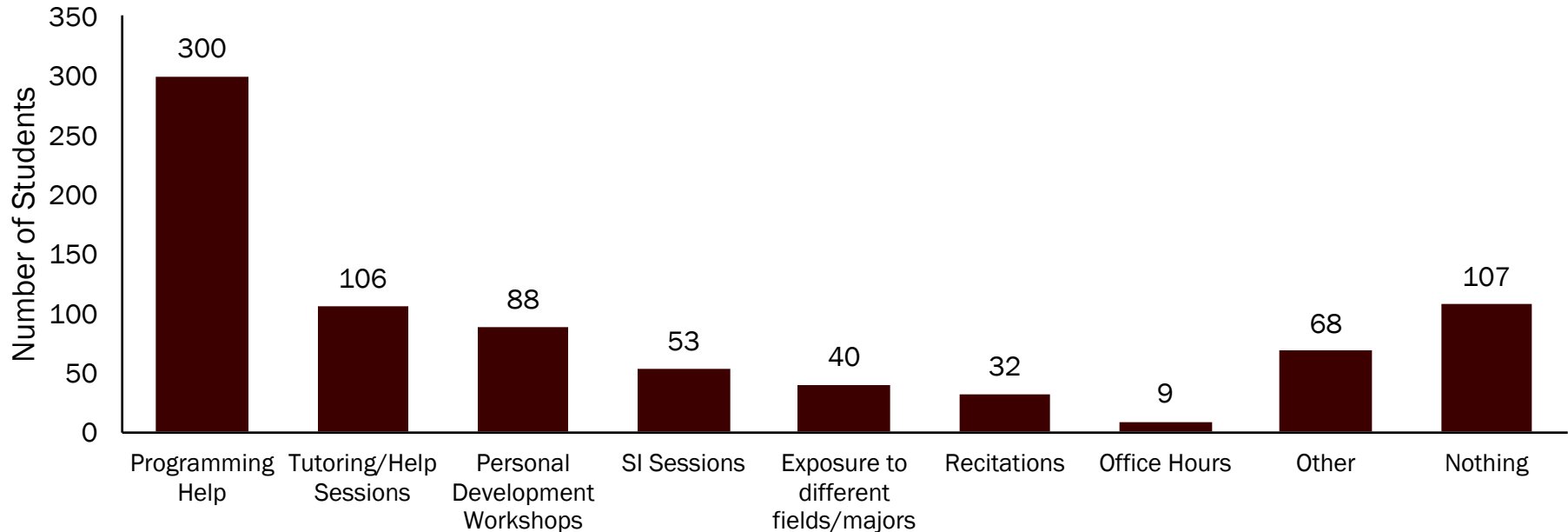
**Open-Ended: (Entry) As a freshman engineer, what resources/ programs/services are helping you adjust to the college of engineering?**



Responses: 782



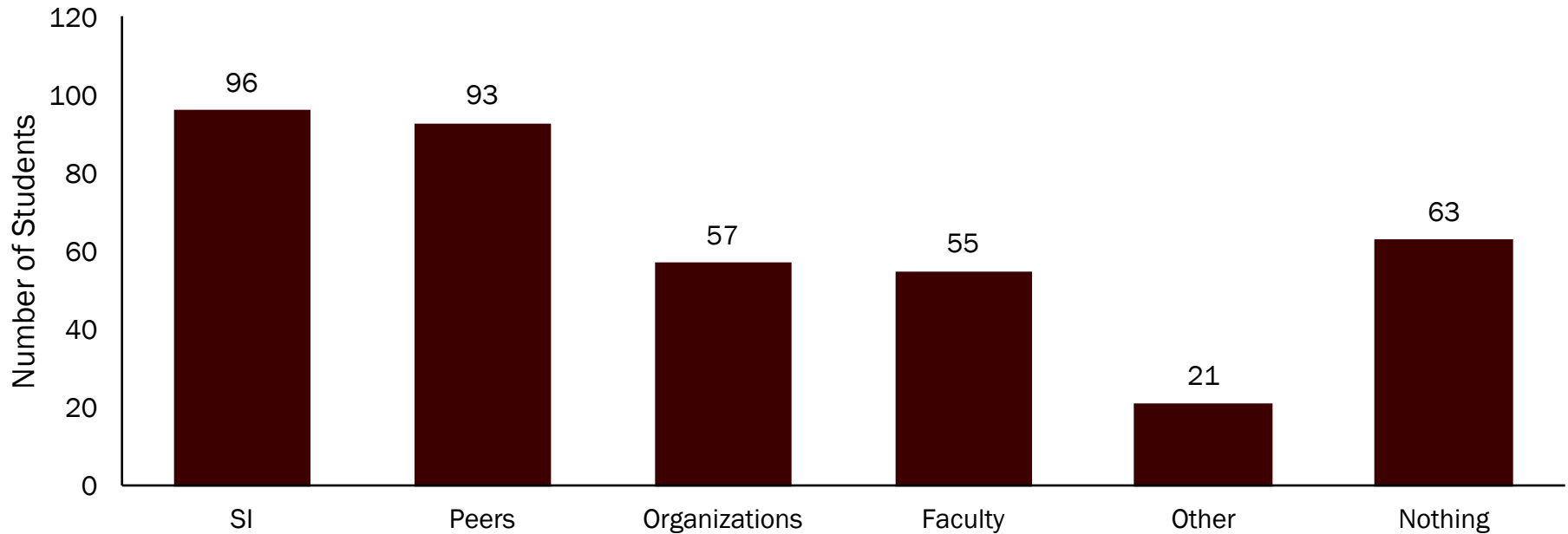
**Open-Ended: (Entry) As a freshman engineer, what trainings/workshops/programs/services/popup-classes would be most helpful for you?**



Responses: 375



***Open-Ended: (Exit)*** As a first-year engineering student, what resources/ programs/services helped you adjust to the College of Engineering?







## ***Open-Ended: (Exit)* As a first-year engineering student, what resources/ programs/services helped you adjust to the College of Engineering?**

### Peers

- “Reaching out to other students in the Engineering program has been very effective for me especially since cooperative study was rare for me prior to attending A&M.”

### Organizations

- “Being a part of an engineering organization exposed me to upper-classmates who are already in their major and their experiences in it”

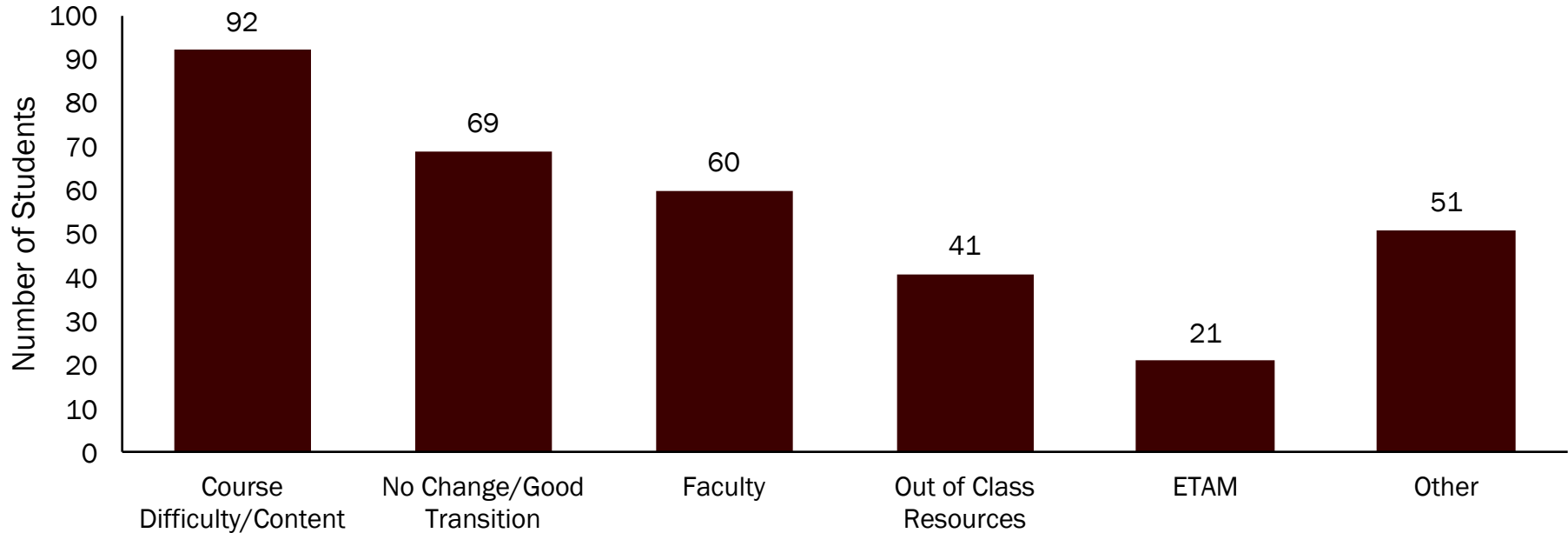
### Other

- “DI Saturday was the best resource I had that helped me choose between computer engineering electrical vs computer science track. I felt a sense of belonging and the professionals they brought in were very helpful. I think the research faculty hours for ENGR classes are also very helpful and their availability.”

Responses: 334



## ***Open-Ended: (Exit)* What might the College of Engineering have done to enhance your success or ease the transition to Texas A&M?**



Responses: 334



## ***Open-Ended: (Exit)* What might the College of Engineering have done to enhance your success or ease the transition to Texas A&M?**

### Course Difficulty/Content

- “Make ENGR 111 and ENGR 112 more useful. I feel like I've wasted two whole semesters in that class. Everyone is going to be using Excel way more than MATLAB, so why did we spend months learning MATLAB? The actual class time also does absolutely nothing to help anyone pick a major because the department videos are all exactly the same, and that's the closest thing to describing what each major does that the class ever gets to.”



## ***Open-Ended: (Exit)* What might the College of Engineering have done to enhance your success or ease the transition to Texas A&M?**

### Faculty

- “Make instructions more clear- although incoming freshman know we are "on our own now" we have no idea what that exactly means. I felt as if the professors etc; expected us to run before we could walk and I wish they could've been more thorough in the beginning of the year about their expectations of us.”

### ETAM

- “I see the logic behind the ETAM process, however it prevented me and will prevent me from signing up for most of my classes for Spring 2018 and Fall 2018 since I had a lot of AP credit. I think for students that are certain of the engineering major they want to be in, ETAM should be available a semester earlier.”

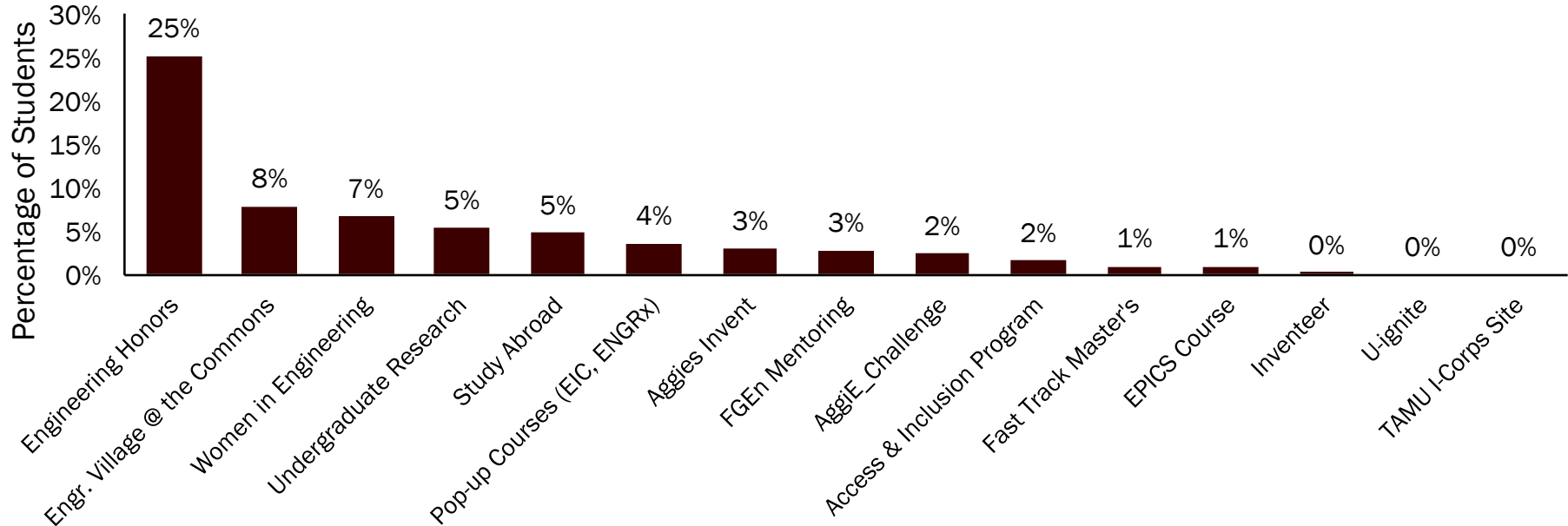
# Exit Questions

Appeared on only the Exit Survey

Responses: 707



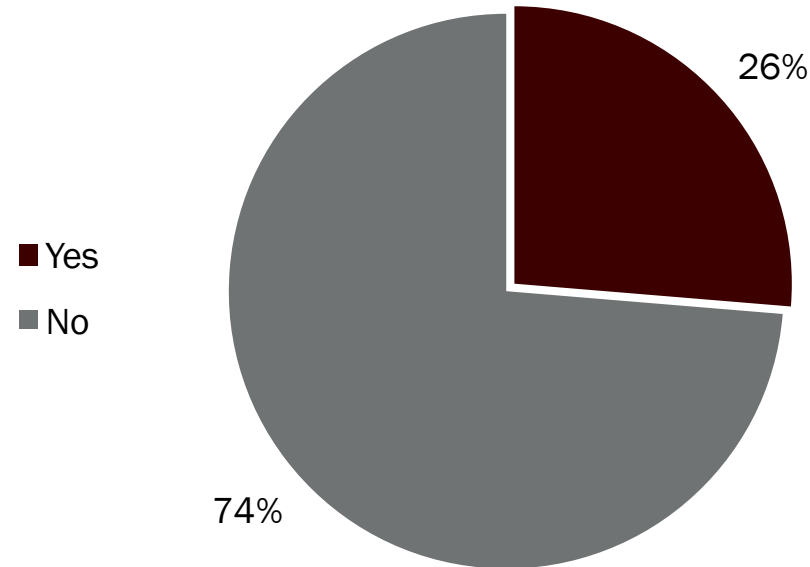
# What Student Success Programs & High Impact Experiences are you involved with? (select all that apply)



Responses: 707



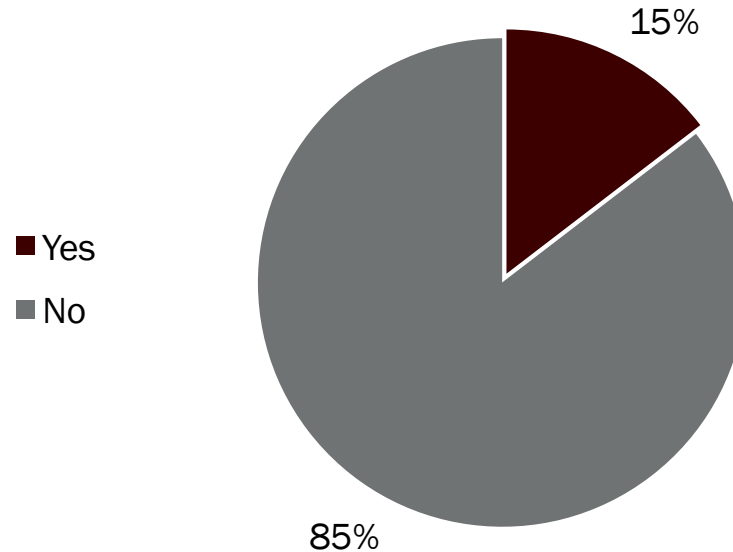
## Are you a first generation college student?



Asked to only first generation college students  
Responses: 185



## Do you participate in the First Generation Engineering Mentorship Program (FGEN) events?

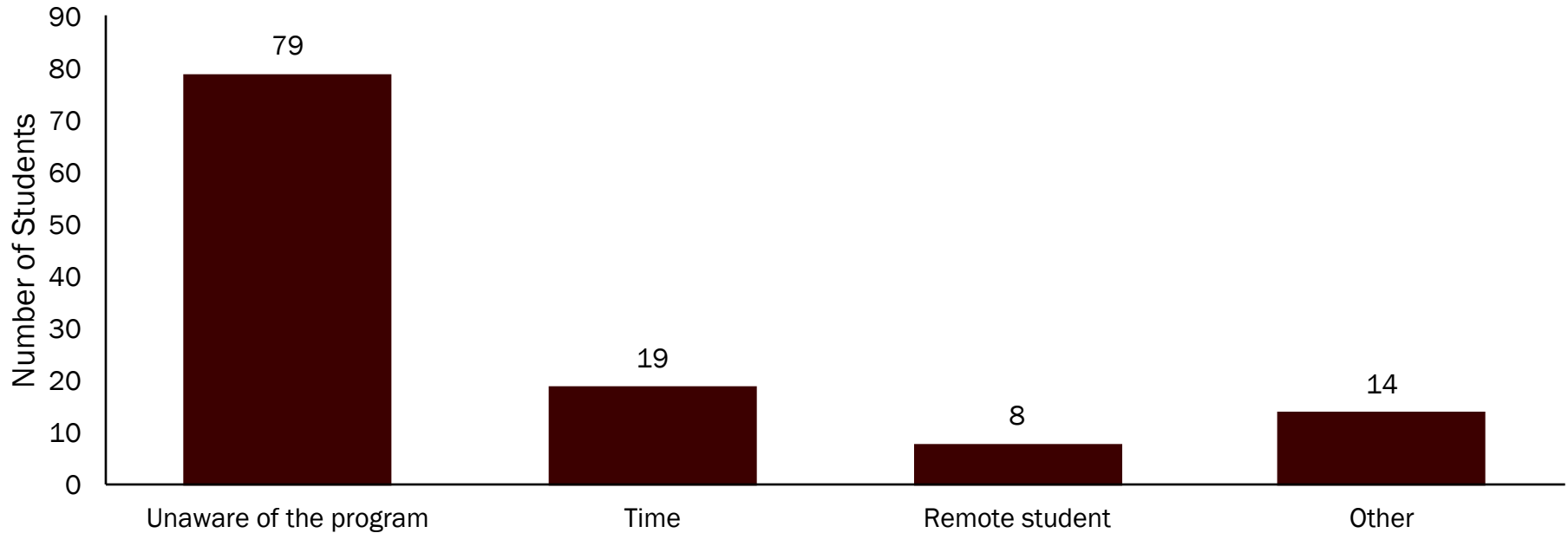




Asked to only those who did not participate in FGEN events  
Responses: 130



## ***Open-Ended:* Please explain why you do not participate in the First Generation Engineering Mentorship Program (FGEN) events.**



Responses: 130



## ***Open-Ended:* Please explain why you do not participate in the First Generation Engineering Mentorship Program (FGEEn) events.**

### Unaware/Remote Student

- “I did not know such opportunities existed for first generation students, if I did I would have attended one of these events. I suppose these events aren't available for Galveston students, because I would have certainly have been interested in something like this if I knew it existed.”

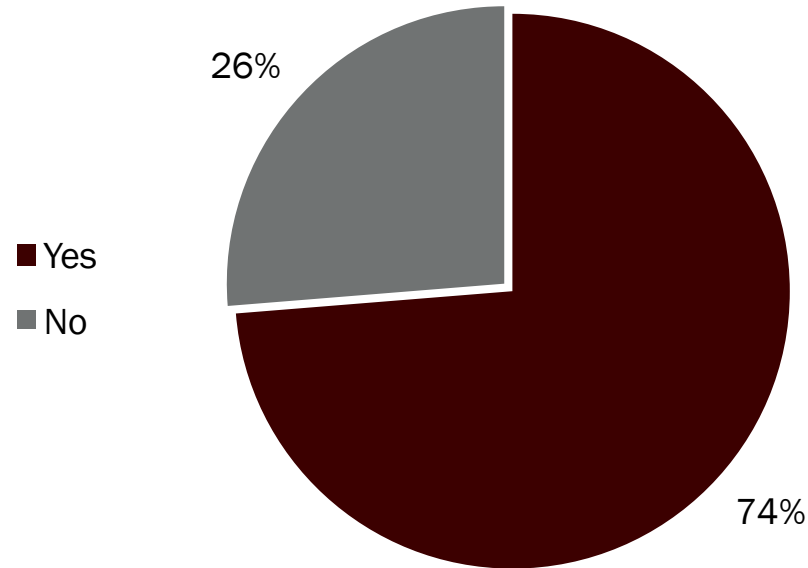
### Other

- “I never got a mentor”

Responses: 704



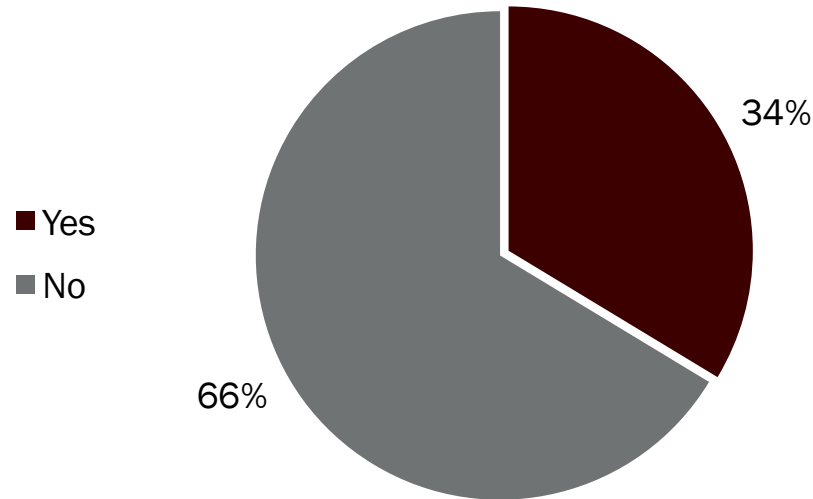
## Do you live on campus?



Asked to only students living on campus  
Responses: 517



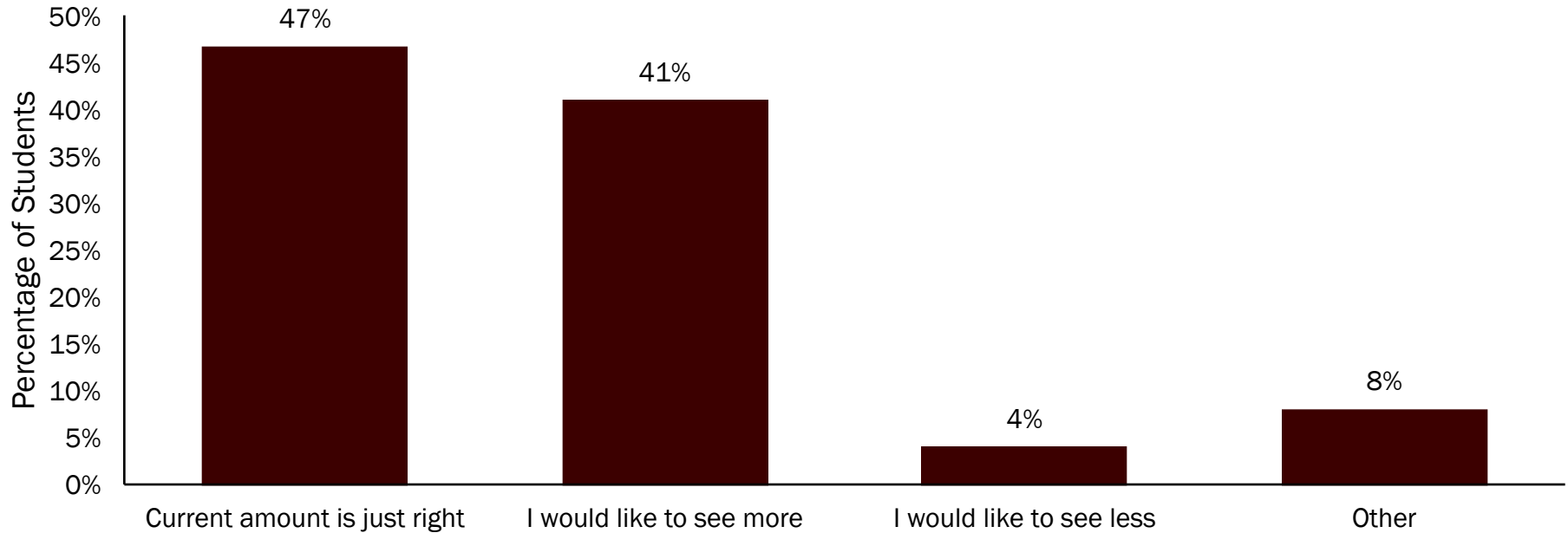
## Do you live in the Engineering Village at the Commons? (Mosher, Aston, Krueger)



Asked to only students living in the Engineering Village  
Responses: 173



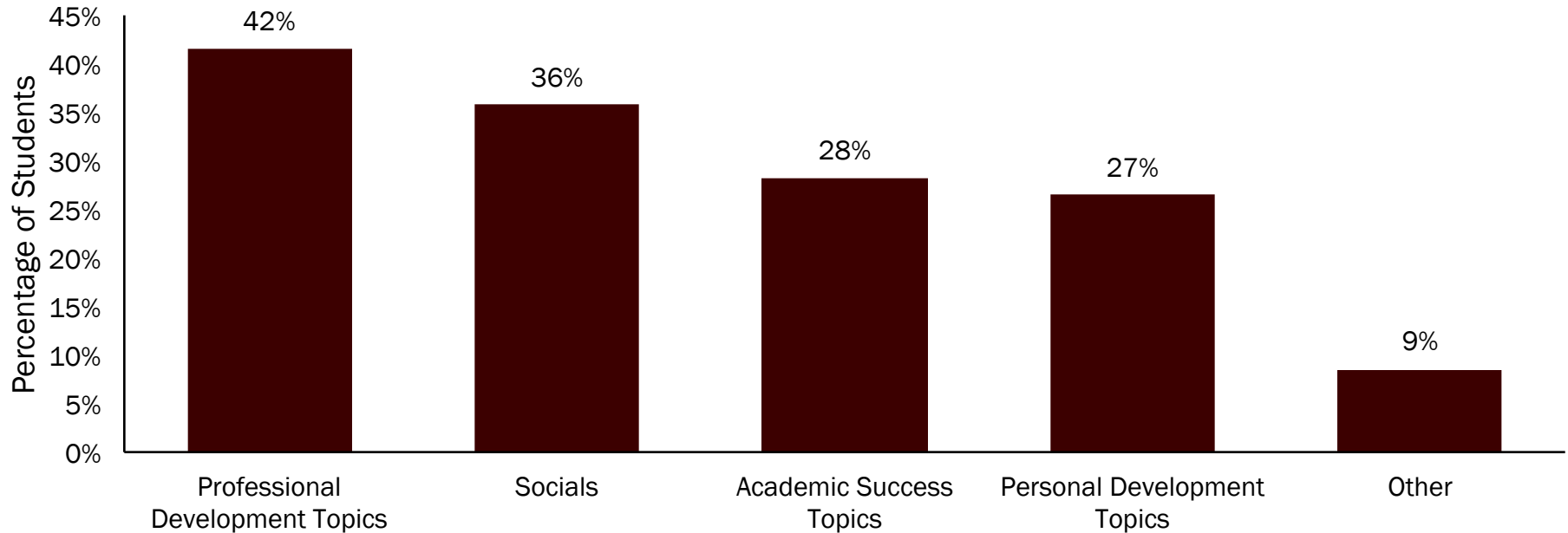
## What is your opinion of the current amount of Engineering Village programming?



Asked to only students living in the Engineering Village  
Responses: 127



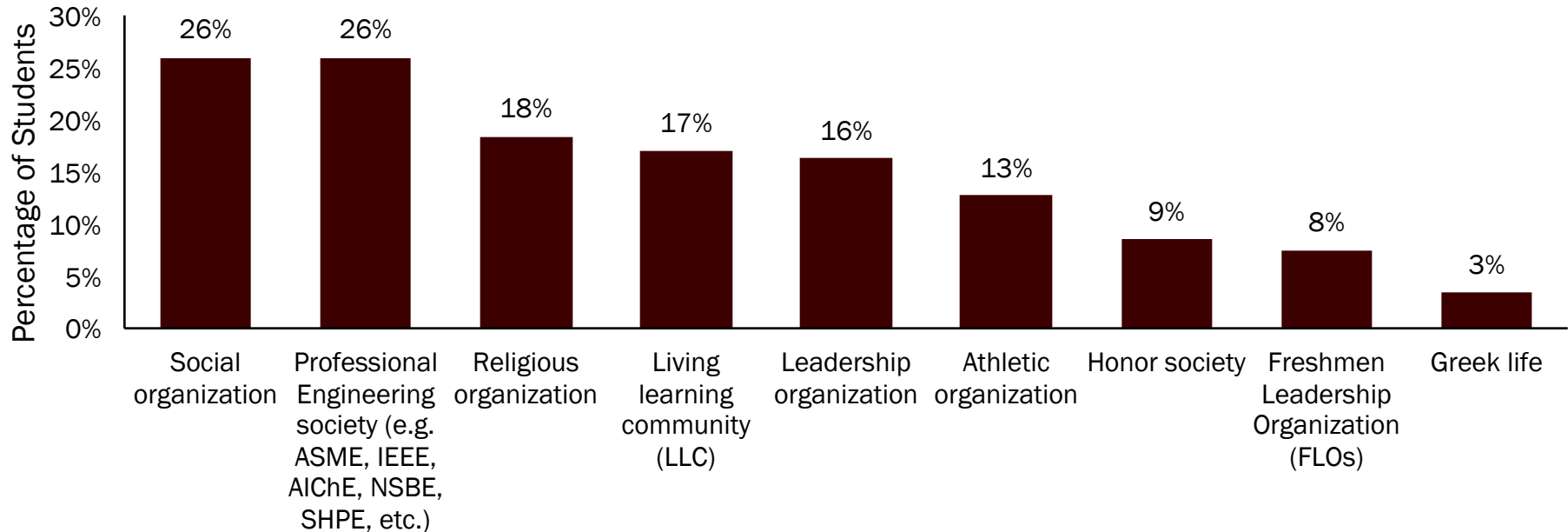
## If you would like to see more programming, what kinds of topics do you want us to cover? (select all that apply)



Responses: 698



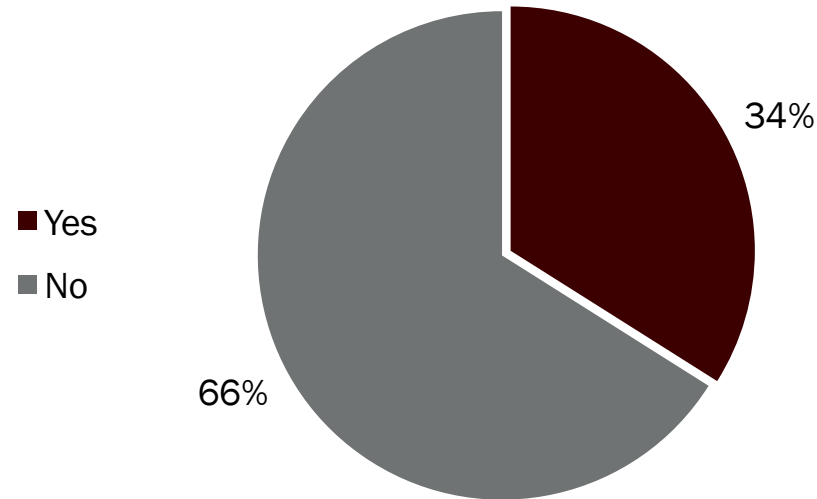
## What extra-curricular activities are you involved with? (select all that apply)



Responses: 689



## Did you change the engineering discipline you wanted to major in since you first arrived at A&M?

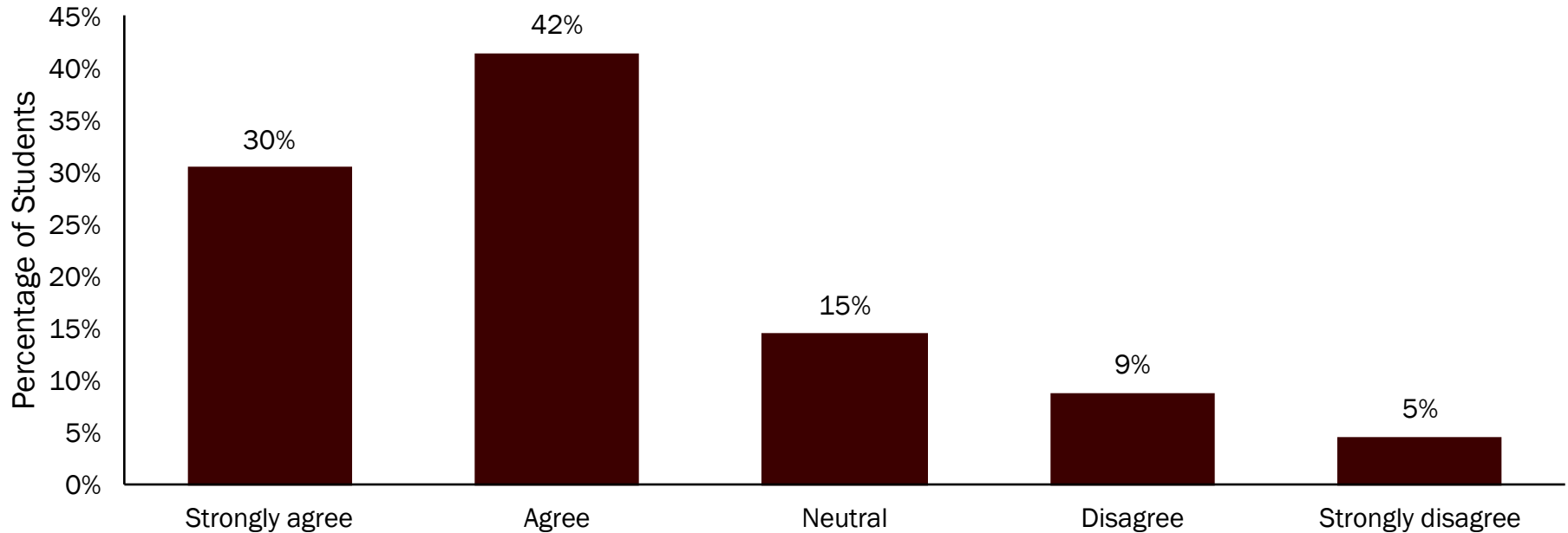






Responses: 689

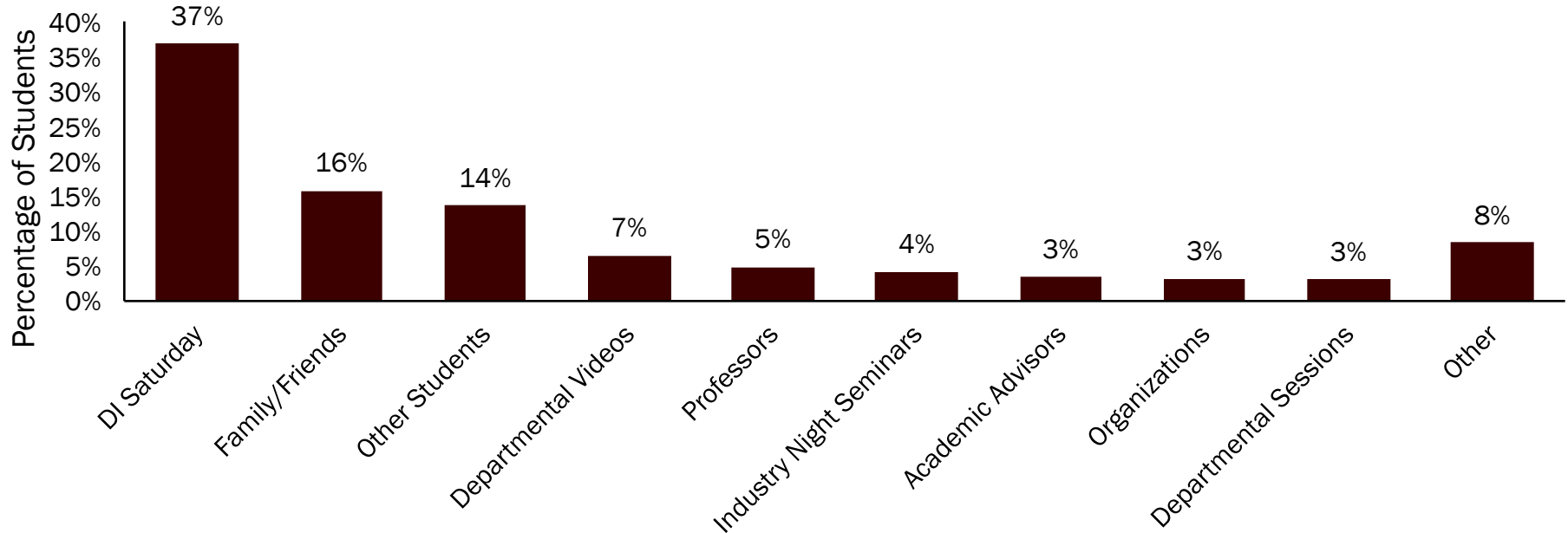
## I receive(d) sufficient information about the different majors to make an informed decision about my major.



Responses: 689



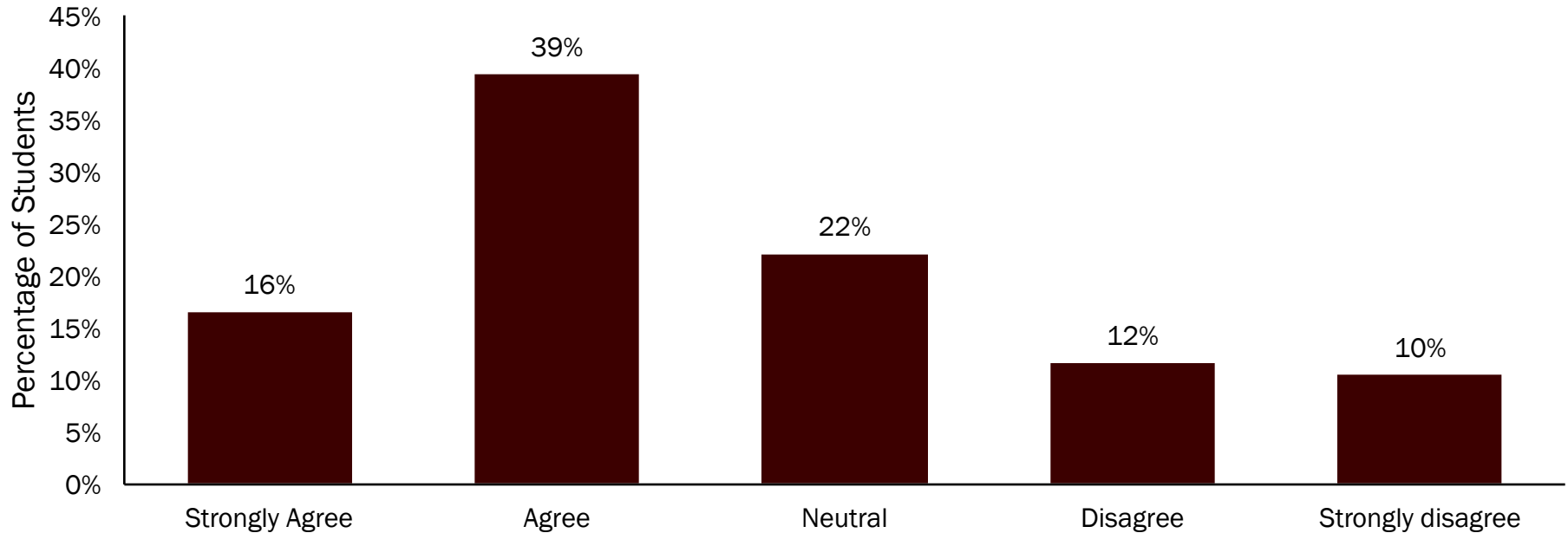
## During your first year at Texas A&M, what is/was the most helpful source of information to aid you in making an informed decision about your major?



Responses: 679



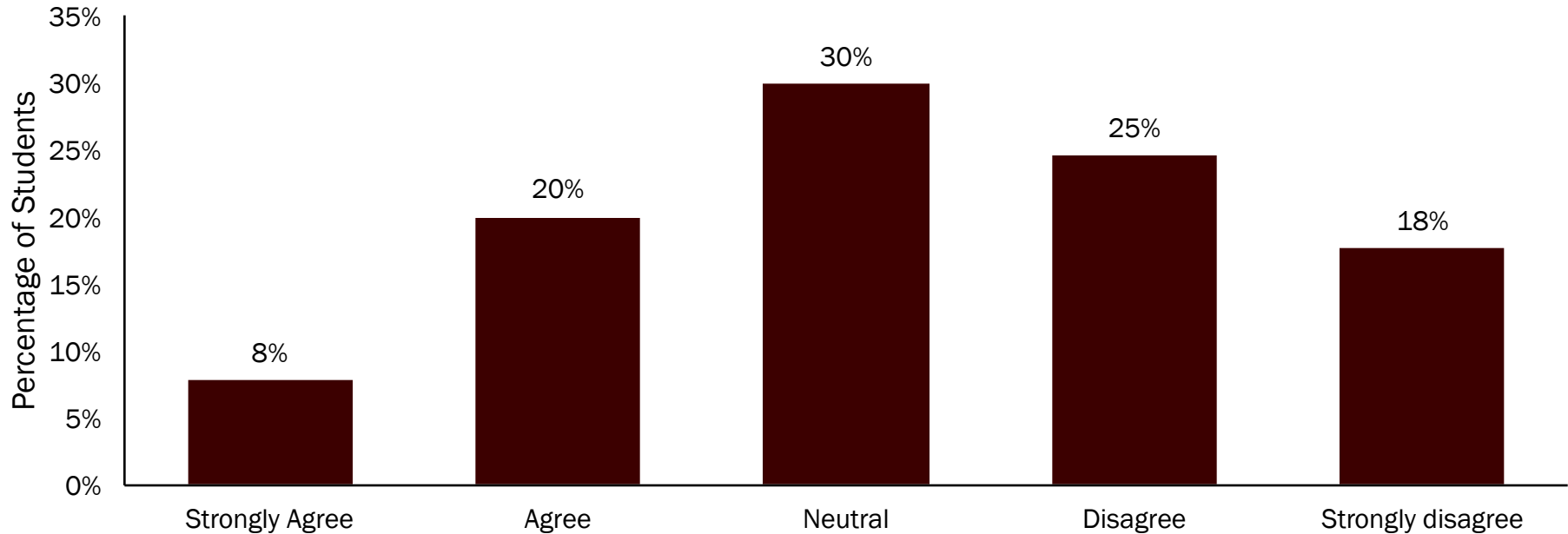
## The Industry Night helped me learn about opportunities in the field of engineering.



Responses: 679



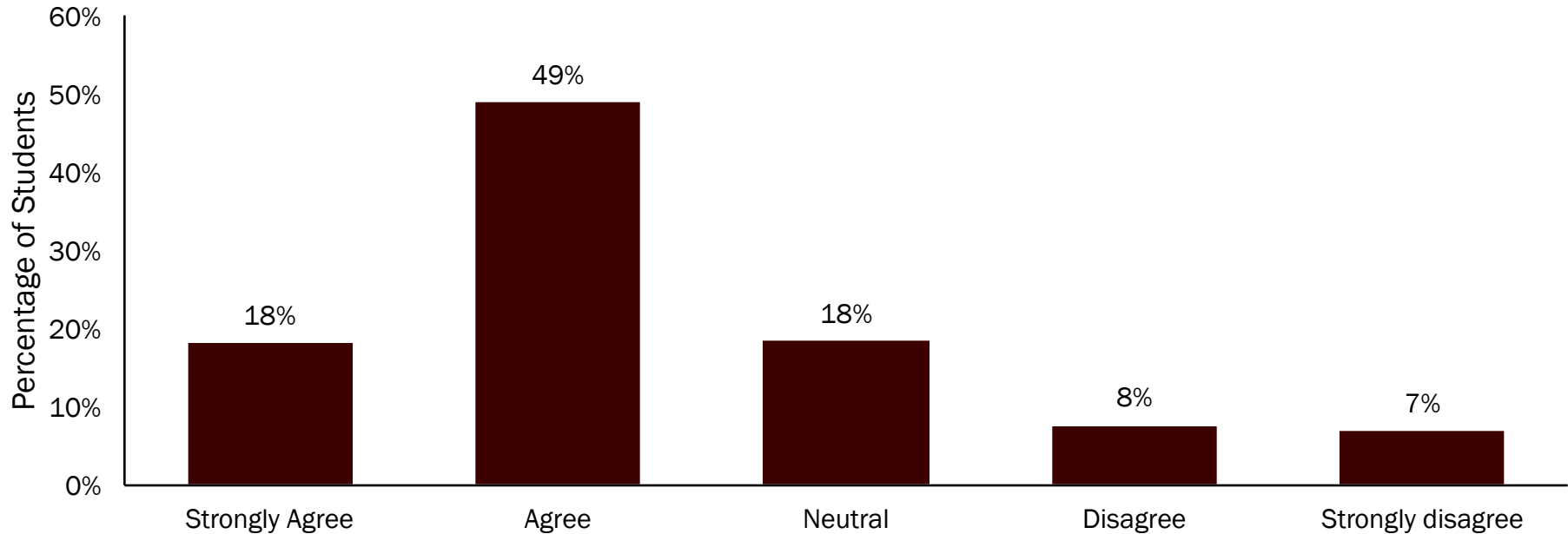
## The Industry Night helped me decide which department programs or majors I wanted to apply to.





Responses: 679

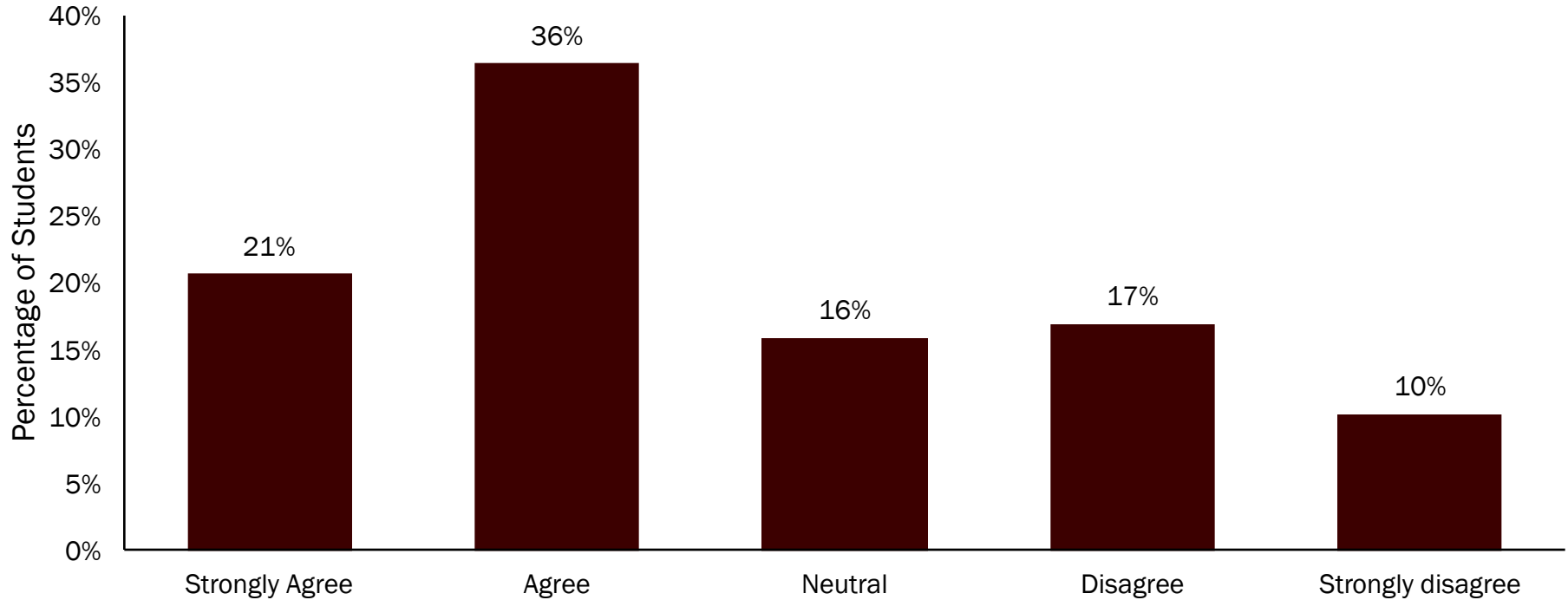
## The Industry Night helped me learn more about industry and what companies look for in intern/co-op candidates.





Responses: 679

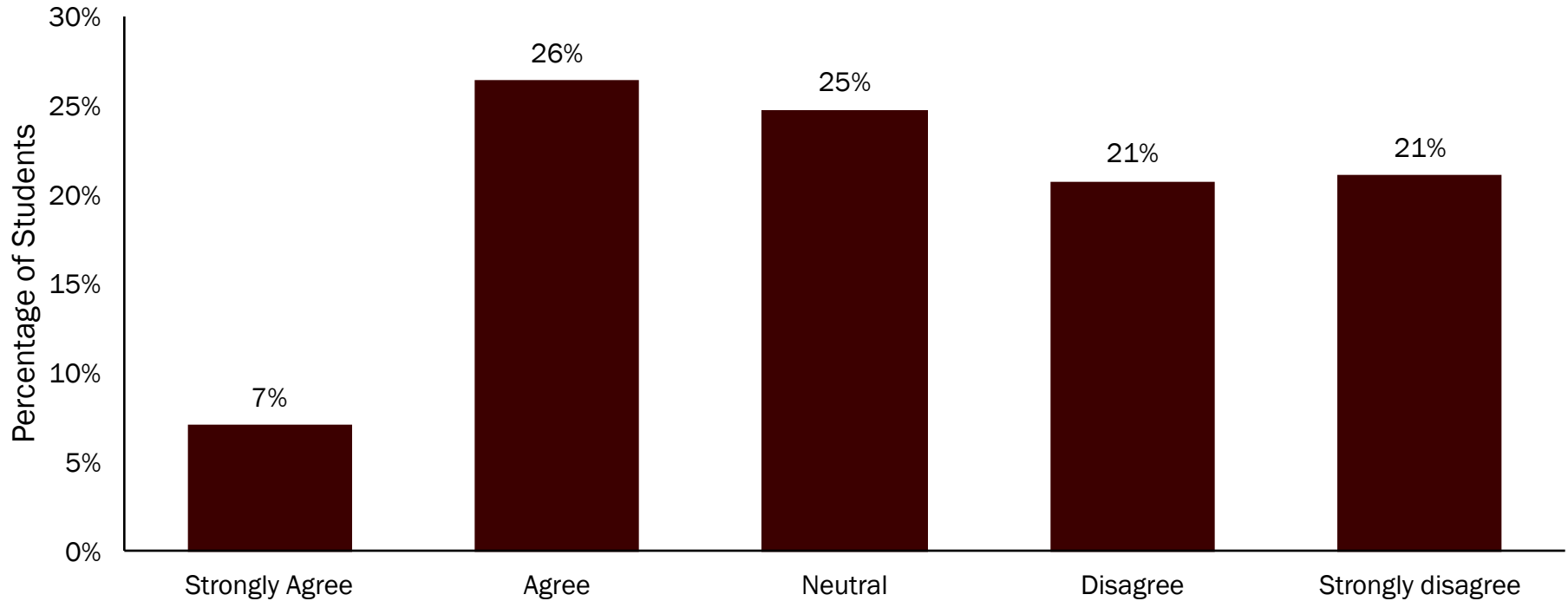
## I was able to sign up for an Industry Night I was interested in.



Responses: 679



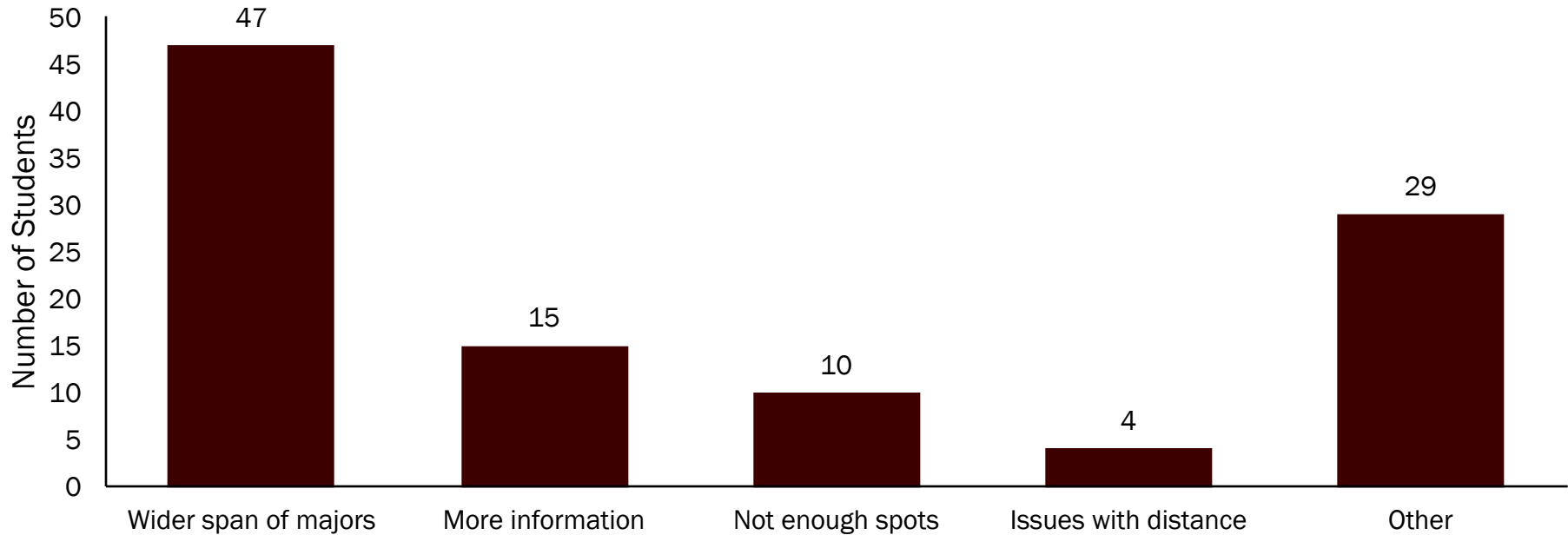
## I would attend an Industry Night even if it wasn't required for my class



Responses: 132



## *Open-Ended:* Any additional comments/suggestions regarding Industry Night Seminars?







## ***Open-Ended: Any additional comments/suggestions regarding Industry Night Seminars?***

### Wider span of majors

- “Industry Night Seminars are overwhelmingly populated by companies working in the oil and gas sector, providing little insight into other engineering disciplines for students.”

### Not enough spots

- “Spring semester unable to sign up for an industry night even though tried nine weeks out - no spots available. Insufficient spots for sign-ups as with so many opportunities within the school and department. Enrollment seems to exceed resources.”



## ***Open-Ended: Any additional comments/suggestions regarding Industry Night Seminars?***

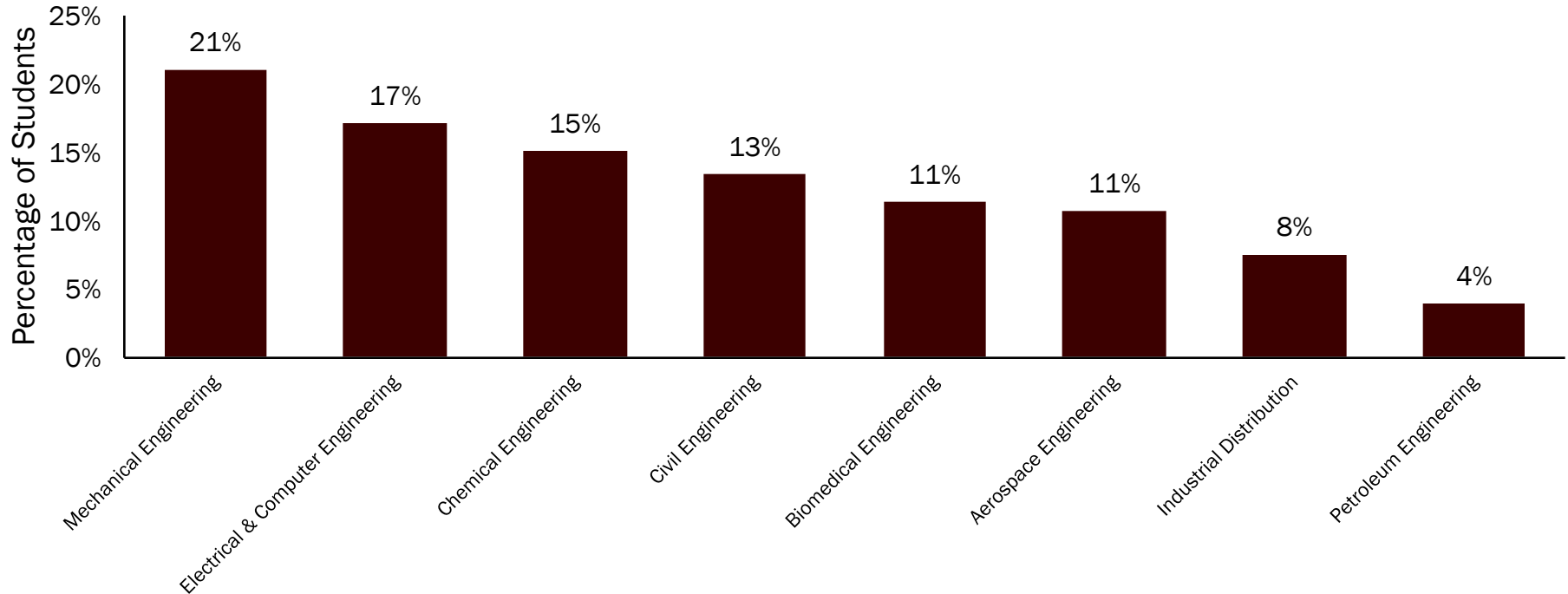
### More information

- “many of them focus on the company and not on any kind of professional development; as freshman we don't want to watch some 'cool video' about your company. We want to know what we have to strive for in order to reach our goals. In addition, I've noticed that there isn't a lot of diversity in the speakers. As a woman in engineering it is disheartening to hear questions about company culture and diversity be brushed off by people who have little to no experience handling diversity and who don't seem to care about it either.”

Responses: 637



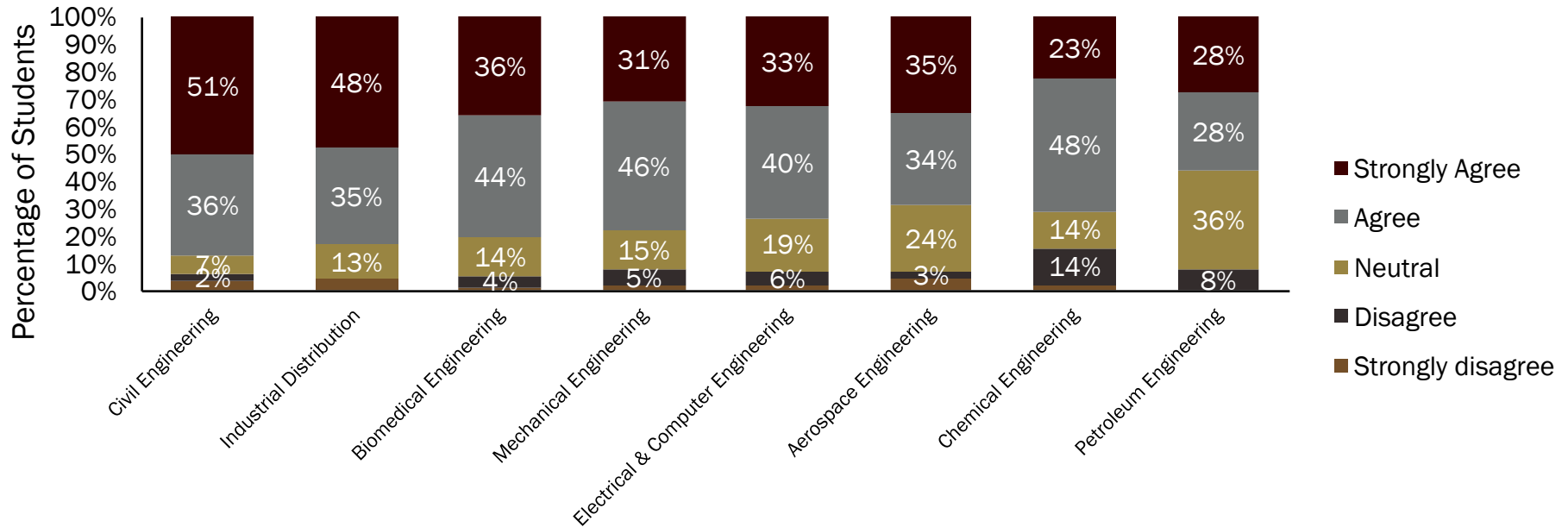
## Which Group Maroon presentation did you attend?



Responses: 637



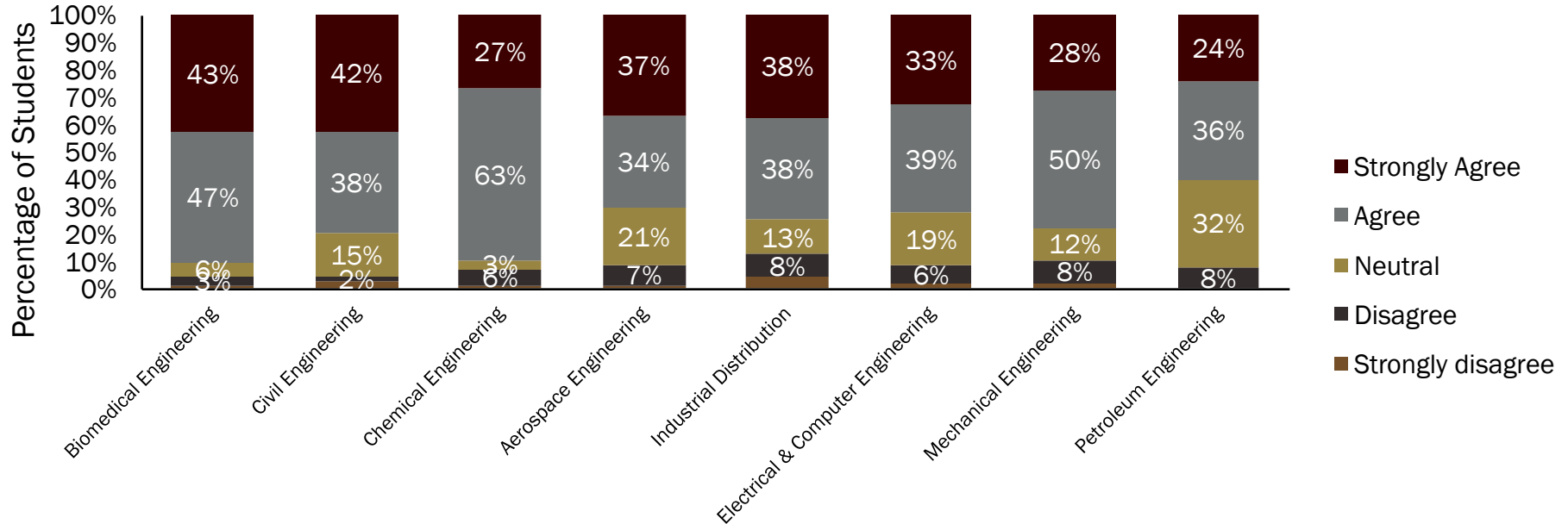
# Did your Group Maroon presentation increase your awareness of potential jobs/areas of research within the major?



Responses: 637



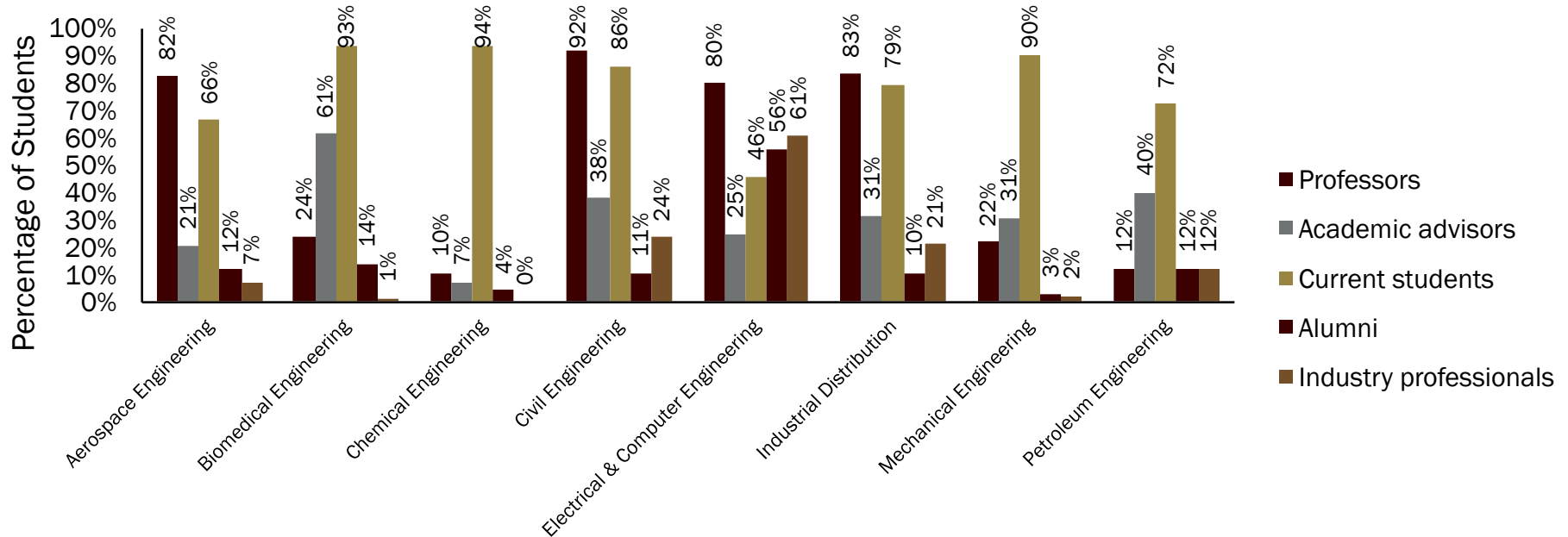
# Did your Group Maroon presentation increase your awareness of academic tracks/minors/certificates within the major?



Responses: 637



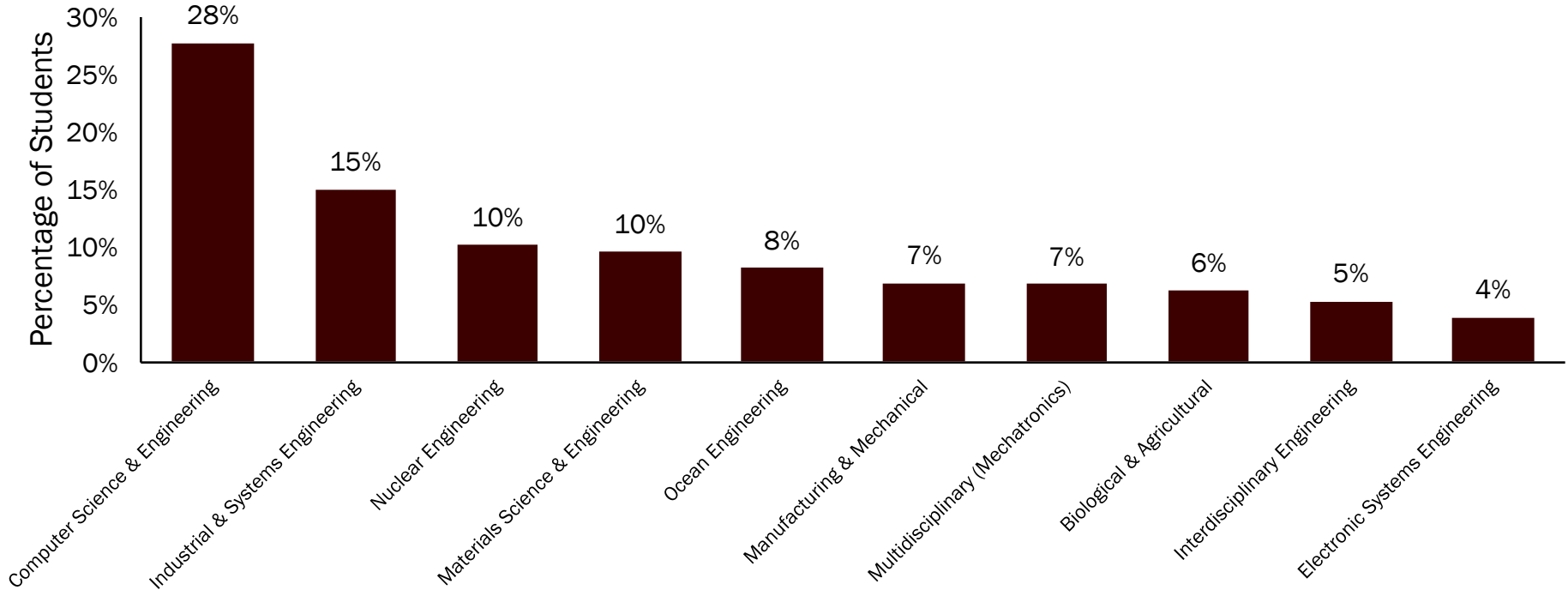
# What group(s) did you hear from during your Group Maroon presentation? (select all that apply)



Responses: 637



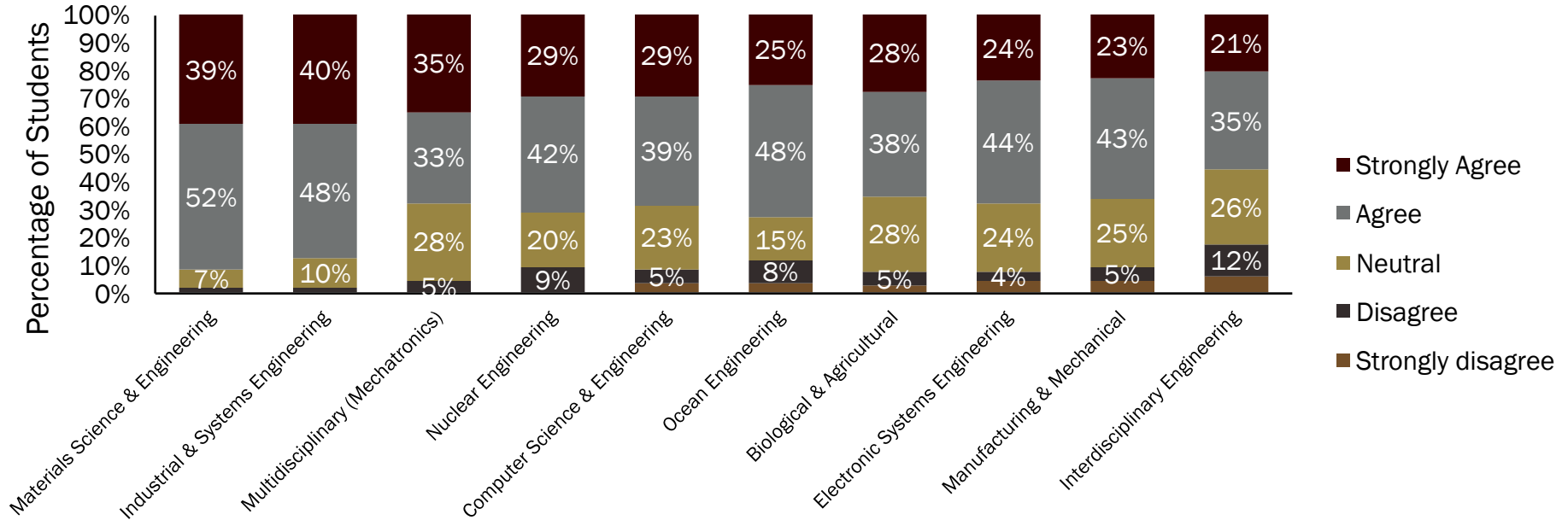
## Which Group White presentation did you attend?



Responses: 637



# Did your Group White presentation increase your awareness of potential jobs/areas of research within the major?

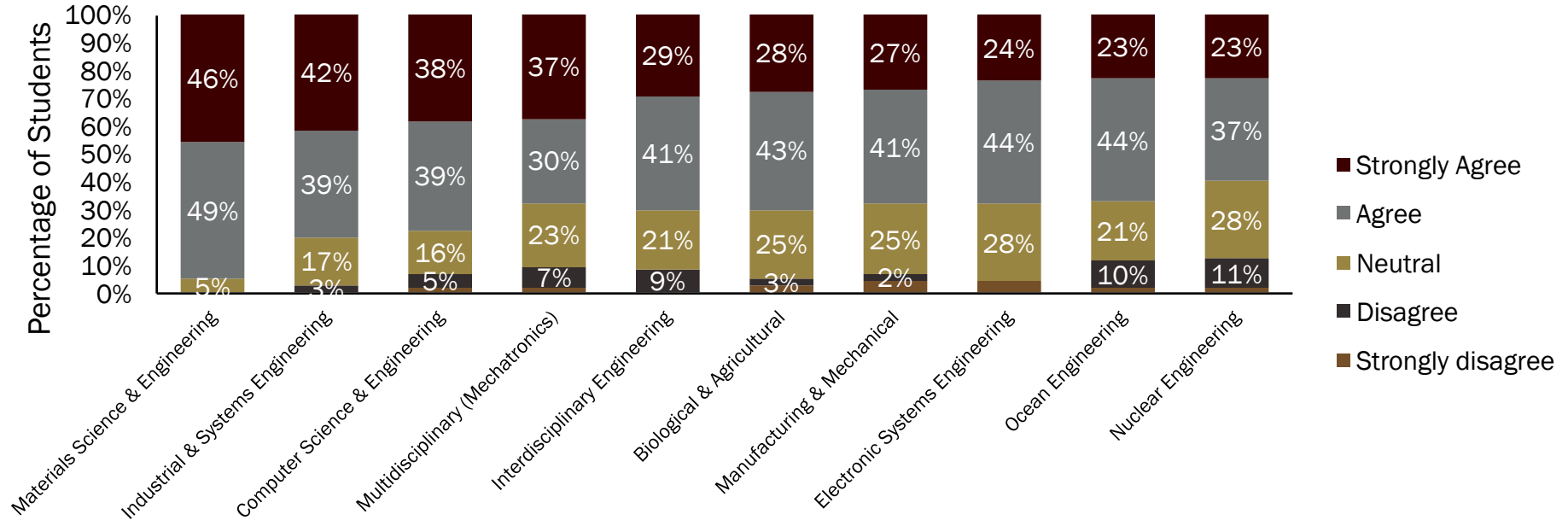




Responses: 637



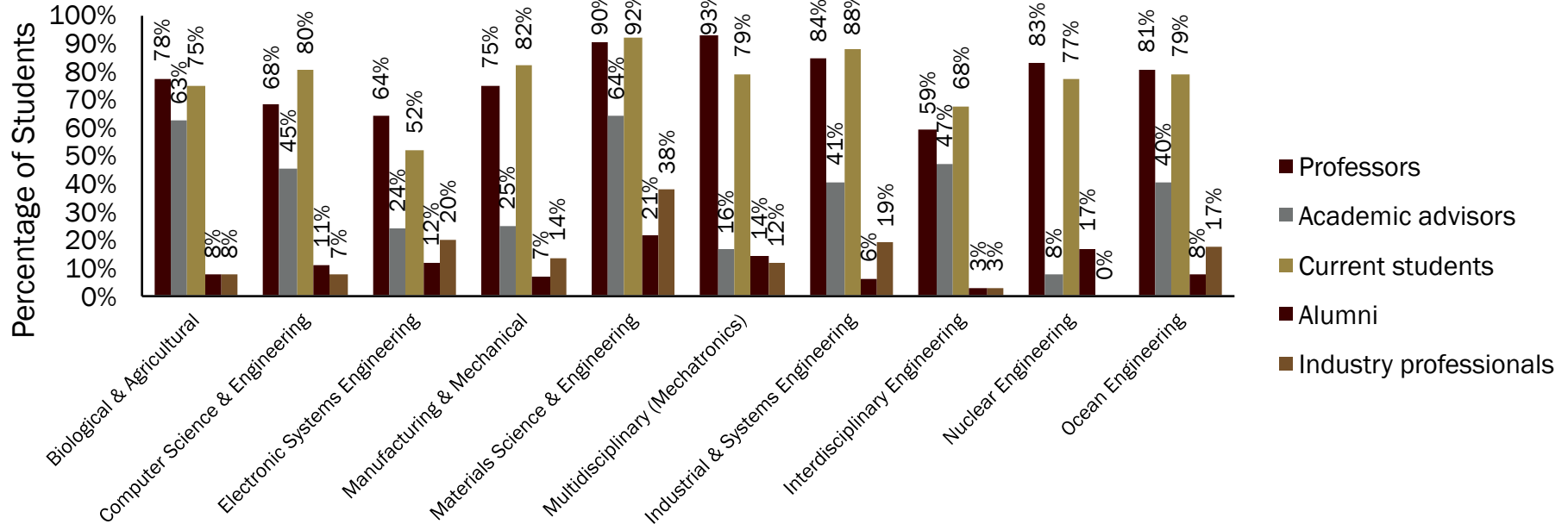
# Did your Group White presentation increase your awareness of academic tracks/minors/certificates within the major?



Responses: 637



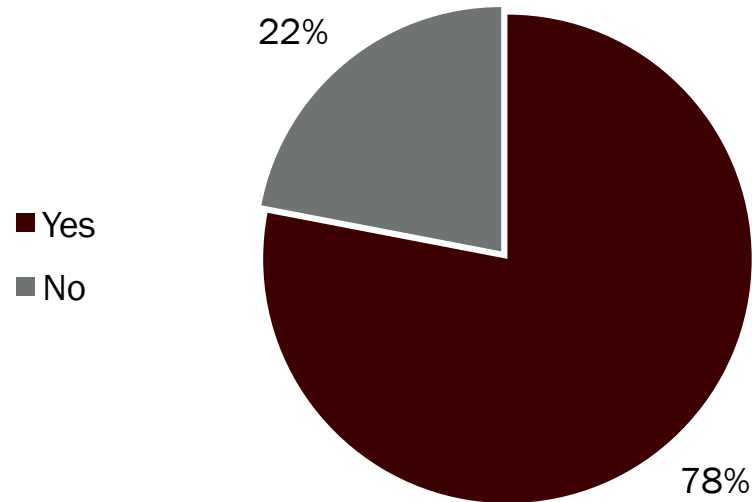
# What group(s) did you hear from during your Group Maroon presentation? (select all that apply)



Responses: 637



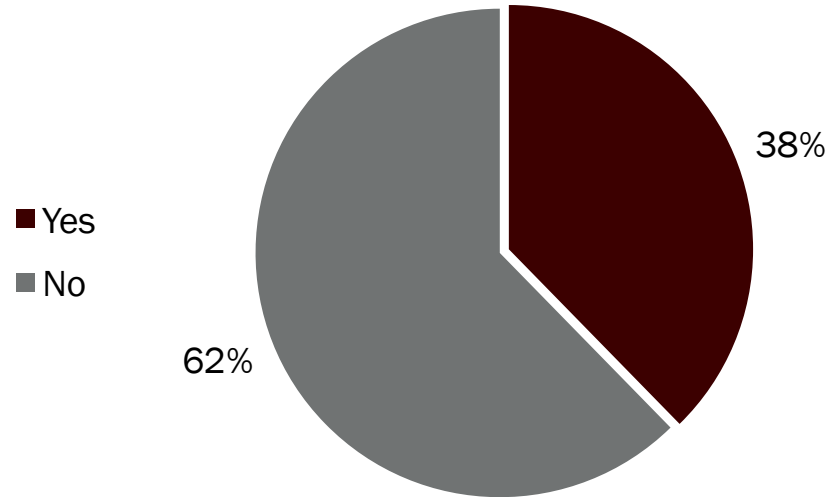
## Before attending DI Saturday, had you already chosen the majors you would apply for?



Responses: 637



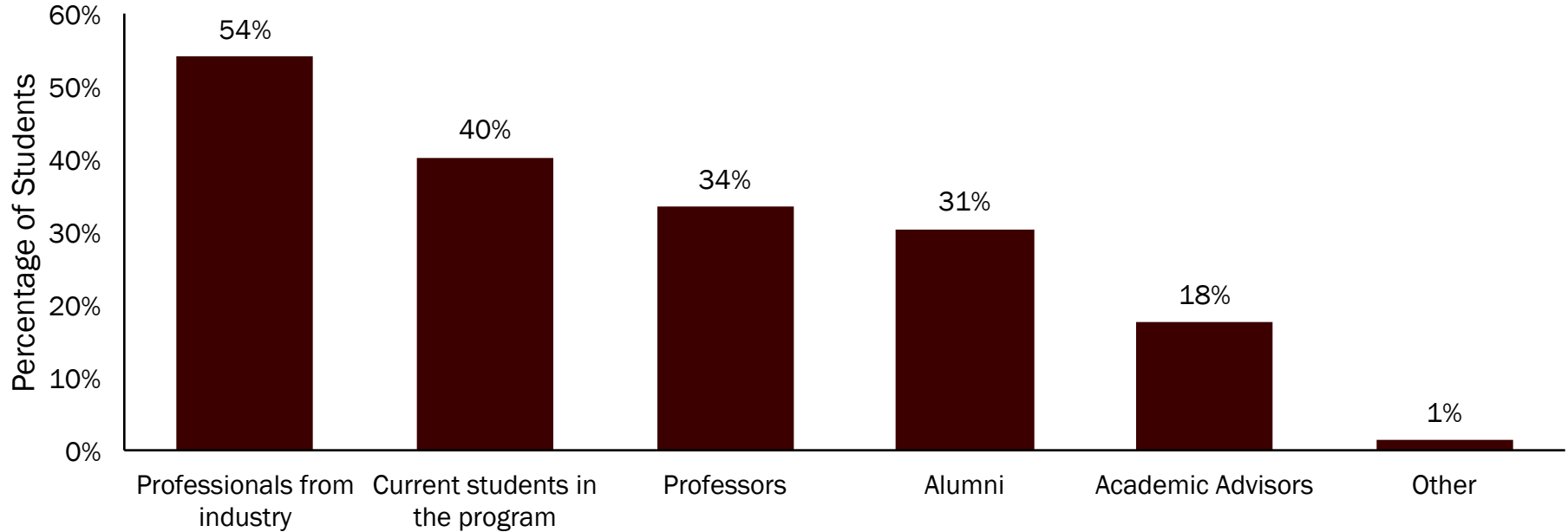
## Did DI Saturday change one or more of the majors you planned to apply for?



Responses: 606



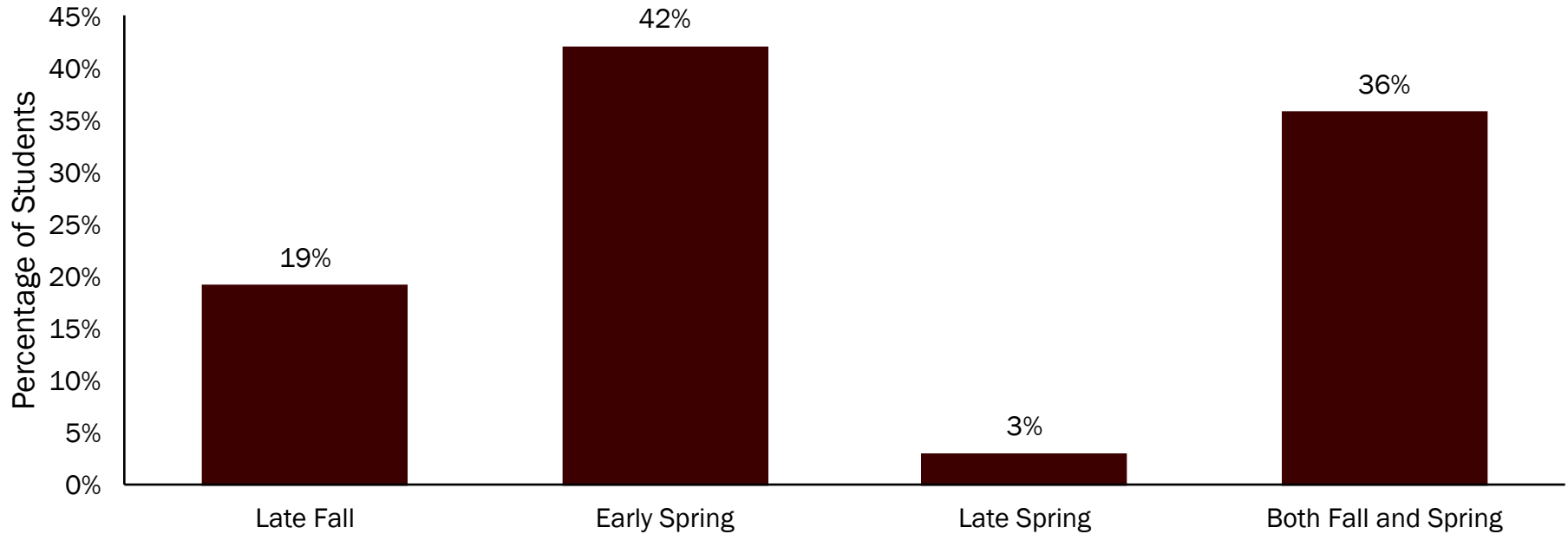
## Which group(s) would you have preferred to have heard from more? (select all that apply)



Responses: 637



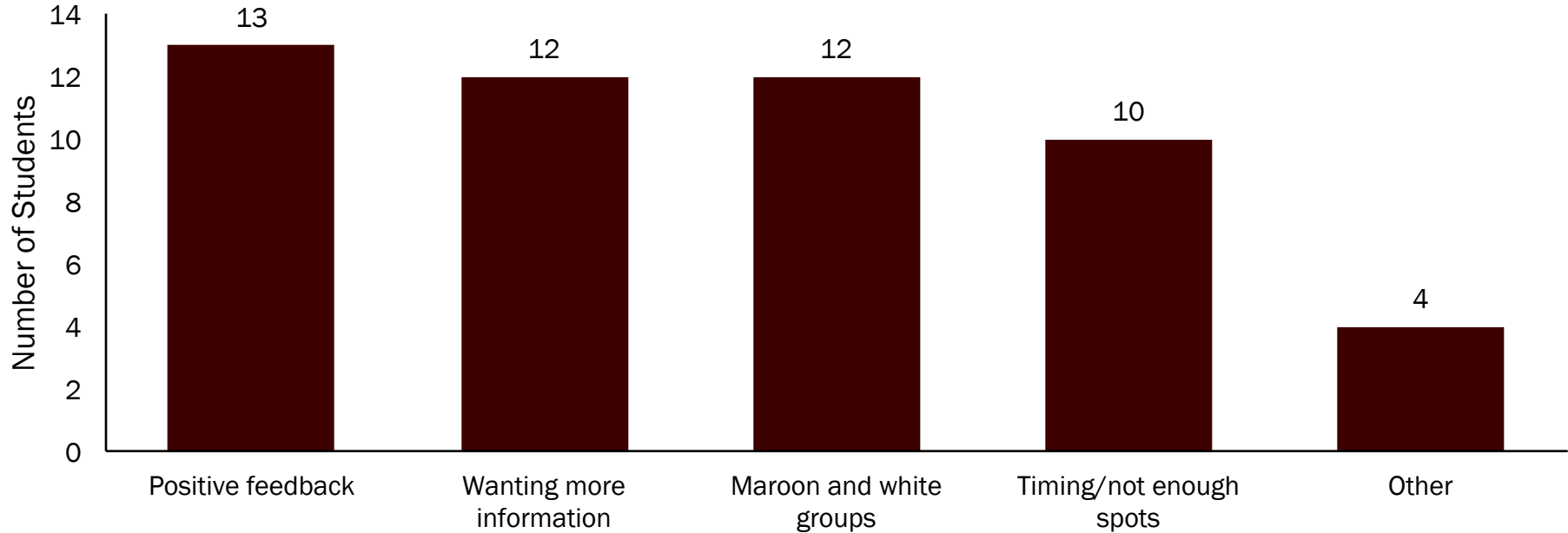
## When do you think would be the best time of the year for DI Saturday?





Responses: 85

## *Open-Ended: Any additional comments/suggestions regarding DI Saturday?*



Responses: 85



## ***Open-Ended: Any additional comments/suggestions regarding DI Saturday?***

### Wanting more information

- “I found that the [information] was similar to a presentation I attended during Aggieland Saturday in Spring of 2017. The same information used to attract freshmen to campus was reused for engineering students... I feel that DI Saturday was not a priority for the College of Engineering”



## ***Open-Ended: Any additional comments/suggestions regarding DI Saturday?***

### Maroon and white groups

- “I wasn’t able to attend the two seminars for the majors I was interested in because they were part of the same group. It would’ve been nice if the seminars for each major were offered in both the maroon and white groups.”

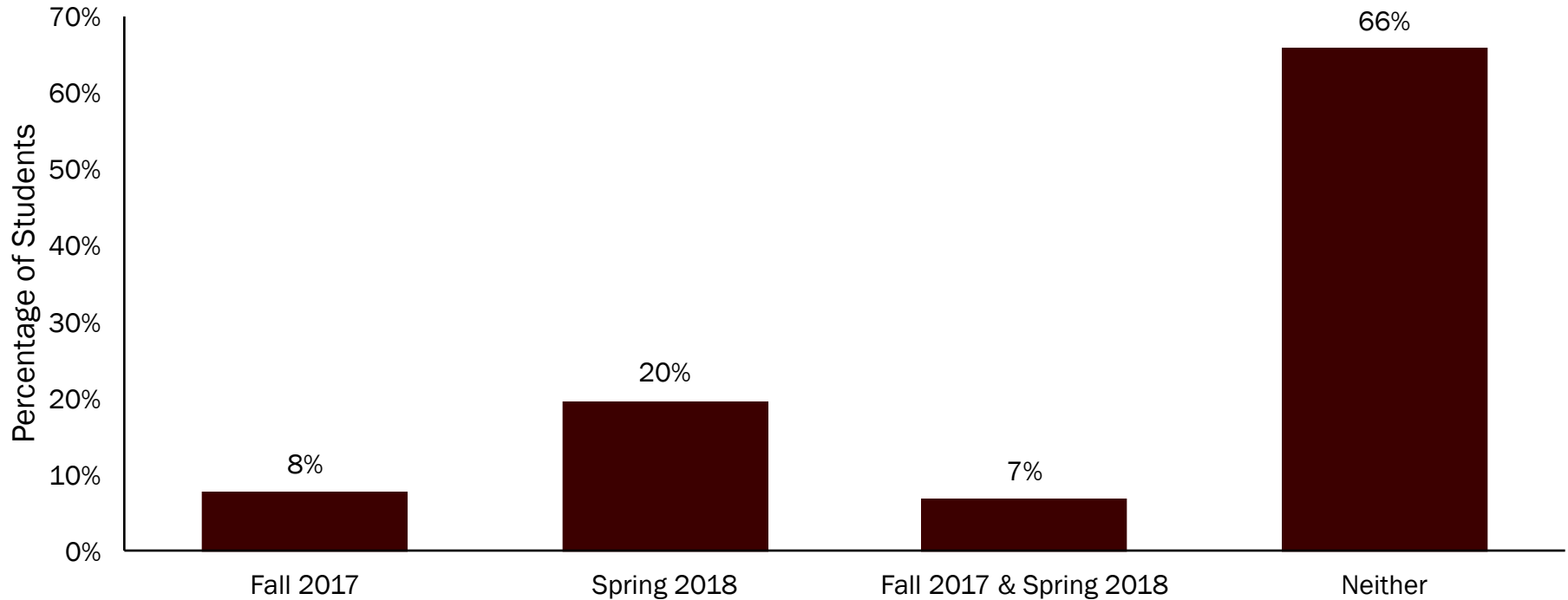
### Timing

- “Please don't schedule these presentations so close to engineering test days. It makes focusing on the presentation very difficult with the time-stress looming over one's head.”

Responses: 634



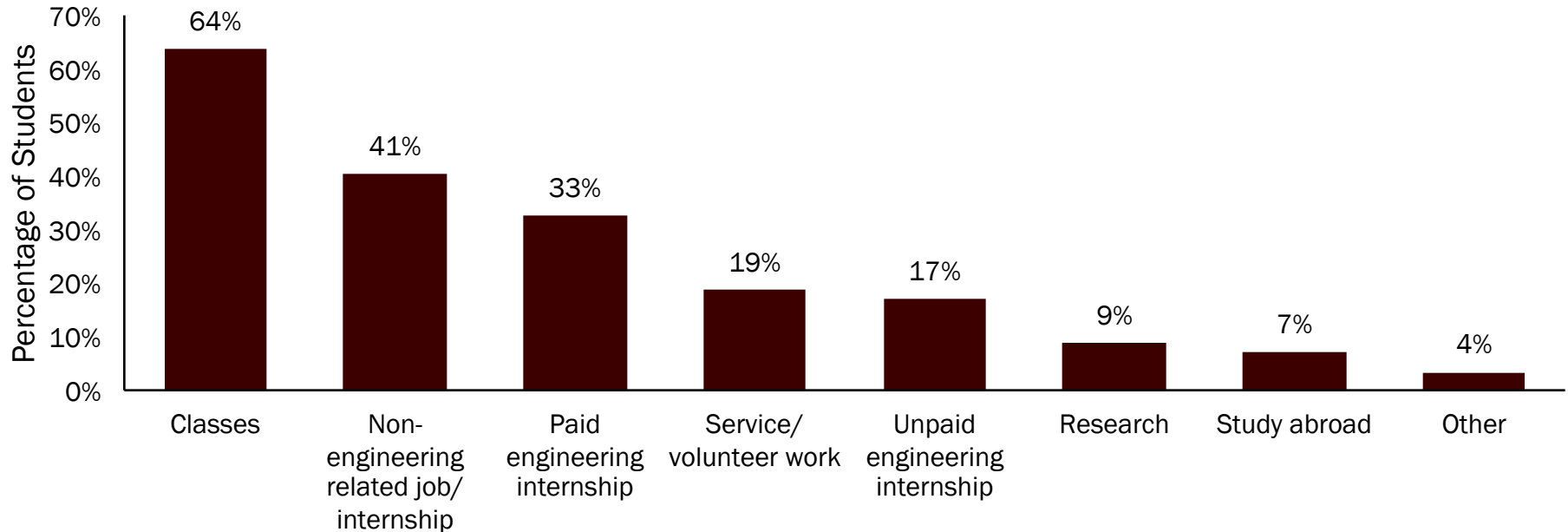
## Did you attend the SEC Engineering Career Fair?



Responses: 591



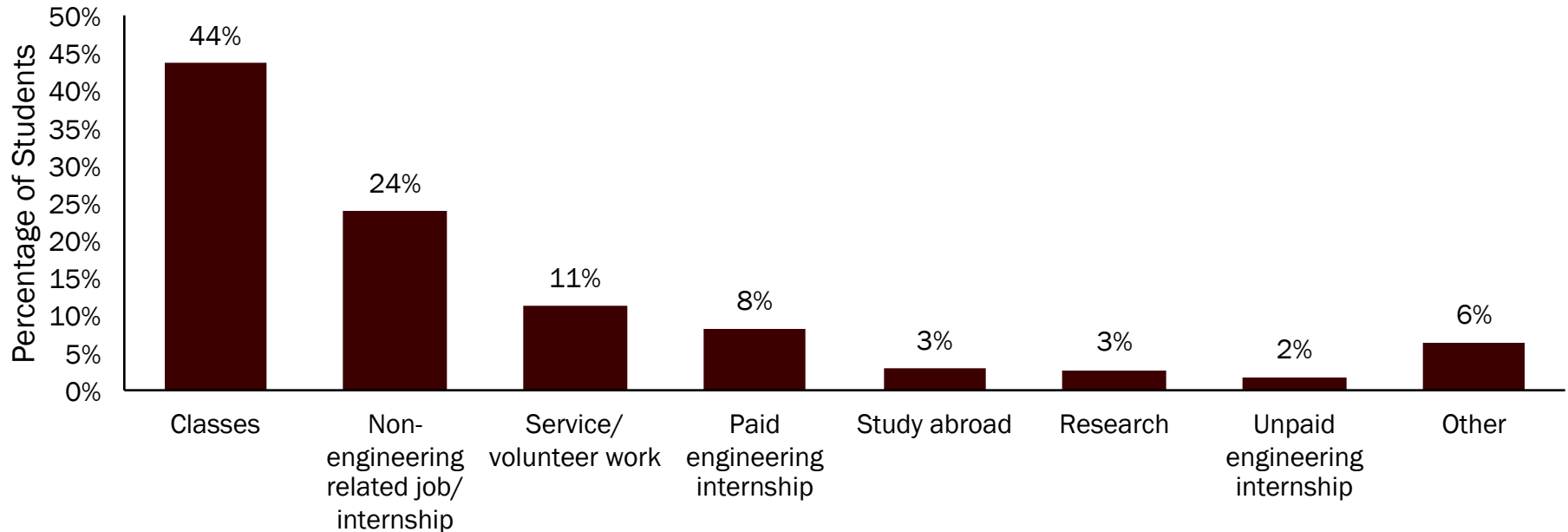
## When planning for this upcoming summer, which of the following have you actively tried to secure? (select all that apply)



Responses: 591



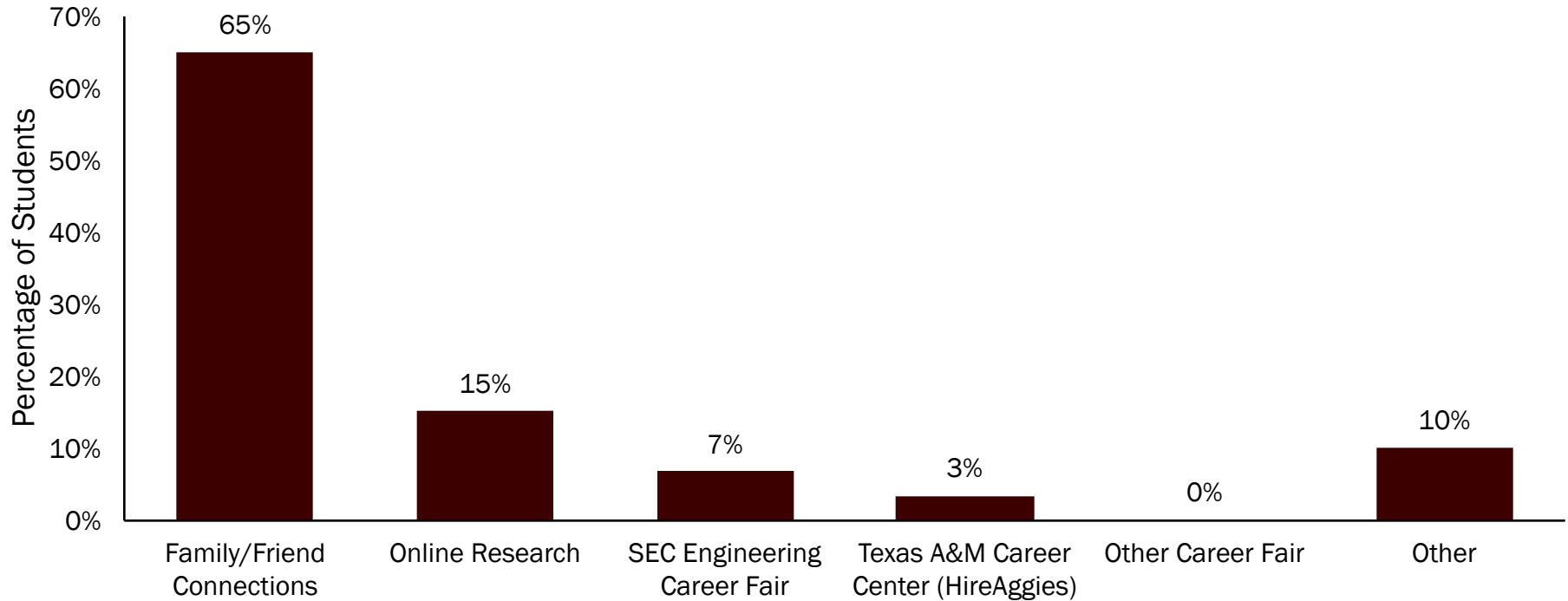
## Which of the following summer plans have you successfully secured? (select all that apply)



Asked to those who had secured an engineering internship  
Responses: 60



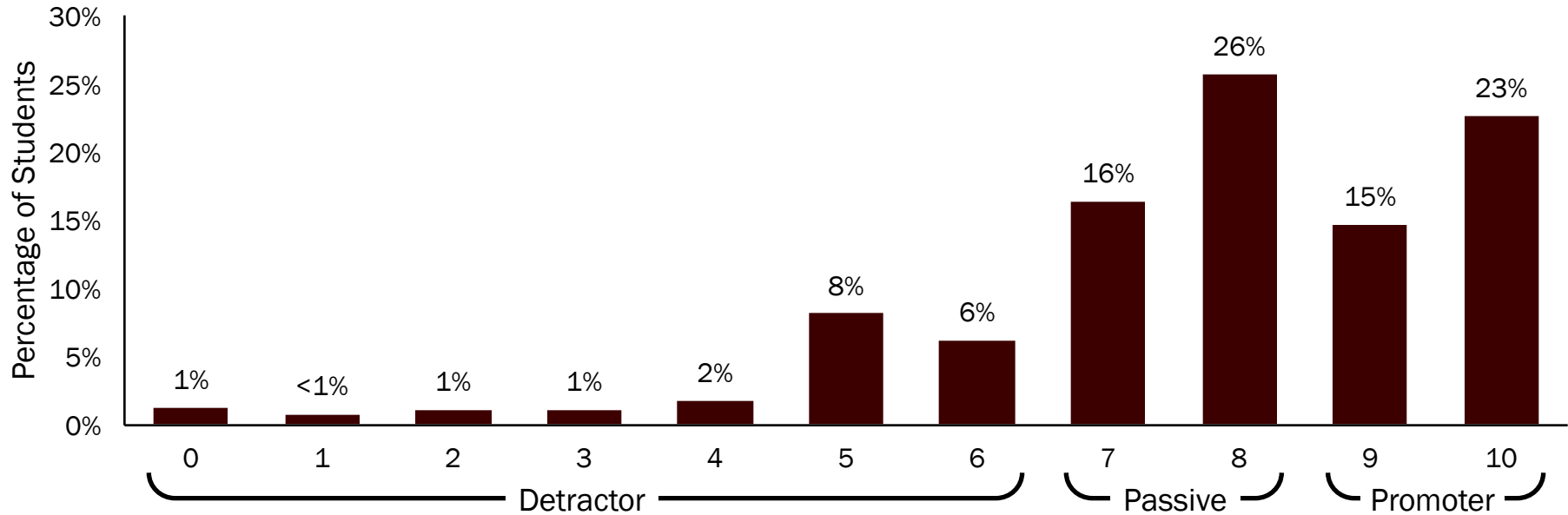
## How did you obtain your internship?



Responses: 626



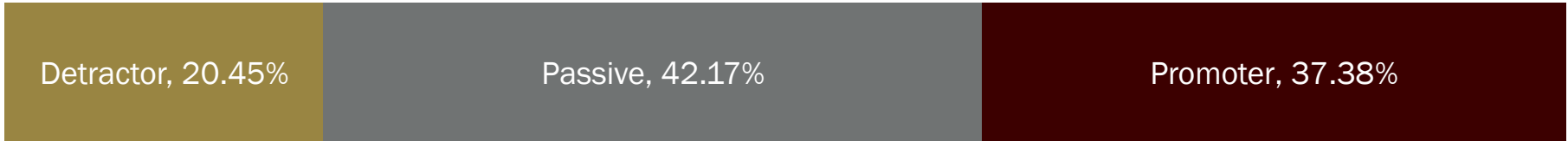
## How likely would you be to recommend Texas A&M Engineering to a prospective student?



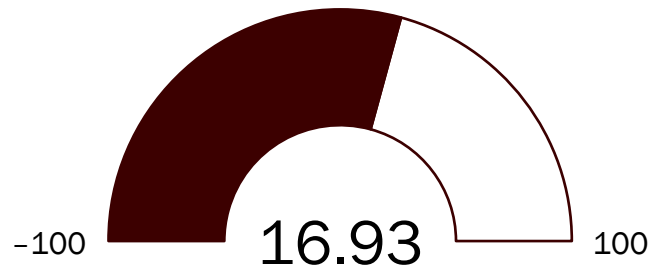
Responses: 626



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



Net Promotor Score (NPS)  
= %Promoters - %Detractors

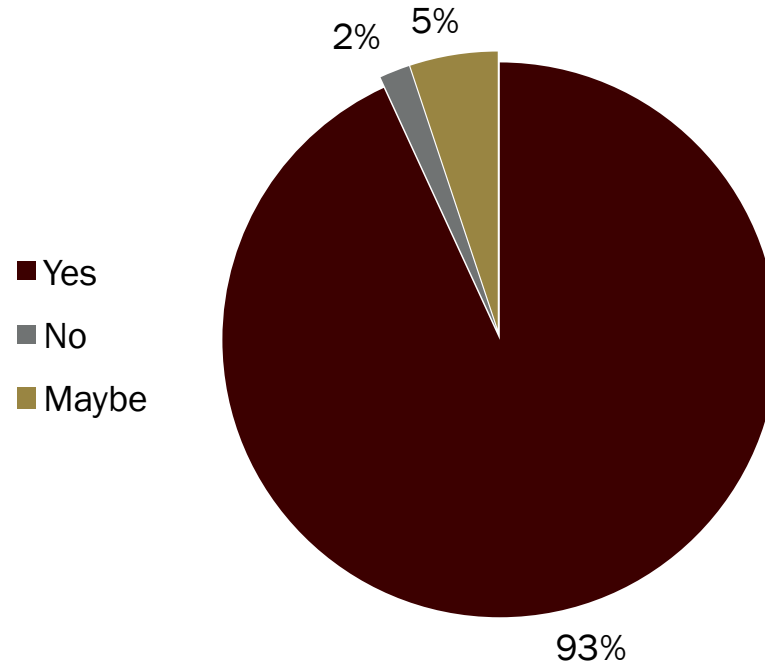


0+ is good  
50+ is excellent  
70+ is world class

Responses: 626



## Are you planning on continuing in Texas A&M Engineering?

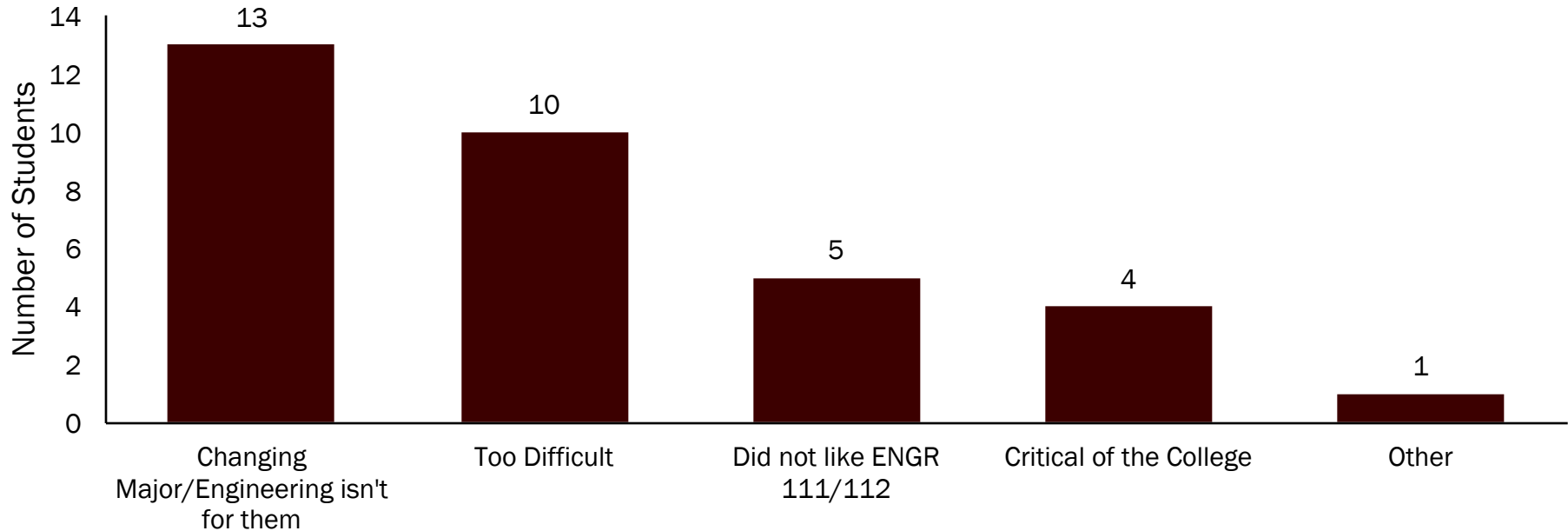




Asked to only students who answered “maybe” or “no”  
Responses: 34



## ***Open-Ended: Why are you (considering not continuing/ not planning on continuing) in Texas A&M Engineering?***



Asked to only students who answered “maybe” or “no”  
Responses: 34



**ENGINEERING**  
TEXAS A&M UNIVERSITY

## ***Open-Ended: Why are you (considering not continuing/ not planning on continuing) in Texas A&M Engineering?***

### Changing Major/Engineering isn't for them

- “I'm not sure how the engineering majors really are and what to expect from them academic wise, and whether or not they would be of interest to me and what I want to do career wise.”

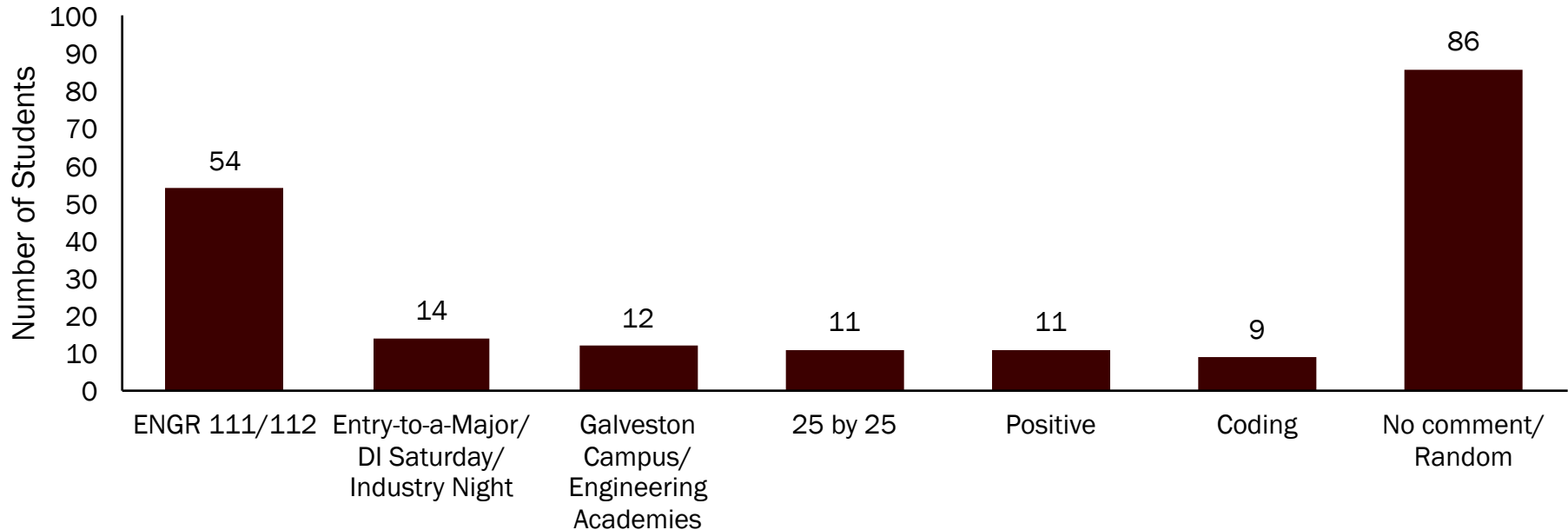
### Too Difficult

- “Because the work is too difficult for the reward givens and the program seems poorly developed”

Responses: 197



## ***Open-Ended: Any additional comments or suggestions regarding the first-year engineering program at Texas A&M?***





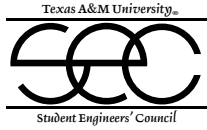
## ***Open-Ended: Any additional comments or suggestions regarding the first-year engineering program at Texas A&M?***

### ENGR 111/112

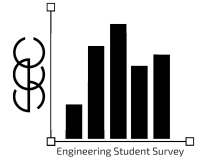
- “The primary issue with first year engineering is the Engineering 111/112 class. It needs to be updated in order to further reflect its goal of teaching students programming, problem solving, and introducing them to the major they want to pursue.”

### ETAM/DI Saturday/Industry Nights

- “Please stop ETAM process. I am really missing out on a lot because I'm not in a department yet.”



# Spring 2018 Legislation Committee



## Chairs

Gabrielle Joubran

Jake Leland

## Members

Logan Brabson

Kiersten Potter

Rebecca Dudley

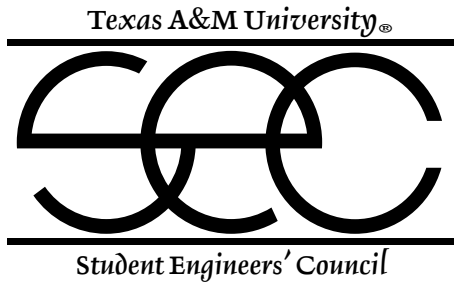
Theo Spencer

Oishik Faruque

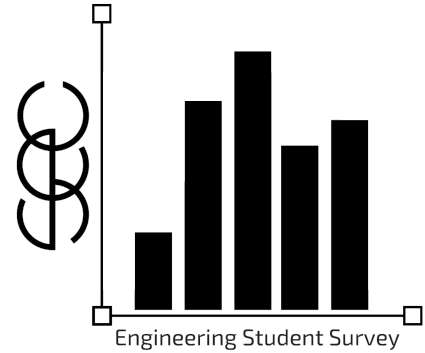
Marcos Tsocalis

Brandon Merrill

Trent Wilson



# FIRST-YEAR ENGINEERING STUDENT SURVEY



[sec.tamu.edu](http://sec.tamu.edu)

[legislation@sec.tamu.edu](mailto:legislation@sec.tamu.edu)