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 Restructuring
In addition to large-scale reorganization of survey sections, many former open-ended questions were developed into multiple choice questions to aid with survey flow.
Survey Question Breakdown

Introduction/Demographic Questions - 13
Engineering Student Organization Questions – 5
Undergraduate Student Questions – 37
ETAM Questions – 6
Graduate Student Questions – 20
ZACH/Instructional Technology Questions – 20
International Experience Questions – 7
Career Fair Questions - 12
Post-Graduation Questions - 16
Survey Response Summary

6-Week Survey Period
October 31, 2019 – December 11, 2019

5059 Total Responses
~26% of Engineering Student Body
(81% from Undergraduate Students + 19% from Graduate Students)
Working With TAMU’s Public Policy Research Institute
This year we continued to work alongside the Public Policy Research Institute to vet the survey. Specifically, we worked with PPRI to help format the structure of the survey, remove wording bias from questions, as well as developing a comprehensive marketing approach.

“Each year, PPRI administers 100,000 phone, 300,000 mail, and 10,000 in-person survey interviews.”

Source: https://ppri.tamu.edu/about-ppri/
Special Thanks

Dr. Andrea Ogilvie, Assistant Dean for Student Success
Dr. Anthony Cahill, Director of Freshmen Engineering Program
Dr. Kirby Goidel, Public Policy Research Institute
Mallory Smith, The Association of Former Students
Abhi Dhillon, SEC President
Justis Morales, SEC VP Internal
Introduction/Demographic Questions

Asked to all students
Which of the following most accurately represents your class year at Texas A&M University?

![Bar chart showing percentage of students by class year and program type]

- 1st Year Undergraduate: 23%
- 2nd Year Undergraduate: 19%
- 3rd Year Undergraduate: 18%
- 4th Year Undergraduate: 15%
- Undergraduate student of 4+ years: 7%
- Master's student: 11%
- PhD student: 8%
- Other: <1%

Responses: 4847
At which campus do you take the majority of your courses?

- College Station: 94%
- Galveston: 2%
- Blinn - Bryan: 1%
- Blinn - Brenham: 1%
- Distance Learning Graduate: 1%
- McAllen: <1%
- Austin Community College: <1%
- Houston Community College: <1%
- Alamo Colleges District: <1%
- Dallas County Community College District: <1%
- Texas Southmost College: <1%
- Qatar: <1%
- Midland College: 0%
Responses: 4847

What is your major?

- General Engineering: 16%
- Civil Engineering: 15%
- Mechanical Engineering: 8%
- Chemical Engineering: 8%
- Computer Science: 8%
- Aerospace Engineering: 7%
- Biomedical Engineering: 6%
- Industrial Engineering: 6%
- Petroleum Engineering: 5%
- Industrial Distribution: 3%
- MNET: 3%
- Nuclear Engineering: 2%
- Ocean Engineering: 2%
- Multidisciplinary Engineering: 1%
- Interdisciplinary Engineering: 1%
- Architectural Engineering: 1%
- Environmental Engineering: <1%
- Health Physics: <1%
Responses: 4847

Sex/Gender:

- Male: 68%
- Female: 31%
- Prefer not to answer: 1%
Responses: 4851

Race/Ethnic Identification (check all that apply):
Are you an international student?

Responses: 4847

- Yes: 17%
- No: 83%
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 a lower level of educational attainment."

- Yes: 2%
- No: 18%
- I prefer not to respond: 80%

Responses: 4847
Are you the first member of your family to study/have a career in engineering?

- Yes: 48%
- No: 52%

Responses: 4847
Which course sequence did you take or which course sequence are you currently enrolled in?

- ENGR 102/216/217: 42%
- ENGR 111/112: 37%
- None of the above: 22%
Responses: 4847

Are you graduating in December 2019 or May 2020?

- Yes: 21%
- No: 79%
Would you find surveys similar to this one valuable from your department specifically?

- Yes: 62%
- No: 27%
- My department currently does this: 11%
Responses: 4754

How would you prefer to receive information about events happening around the College of Engineering? (check all that apply)

- Email list: 85%
- Centralized Website: 27%
- Digital Signage (ZACH): 21%
- Outdoor Yard Signs: 21%
- Other: 2%
Open-Ended: How would you prefer to receive information about events happening around the College of Engineering? (check all that apply) – Other

- Text: 19 students
- Social Media: 9 students
- Physical Signage: 9 students
- Tabling: 5 students
- Mobile App: 4 students
- Misc.: 24 students

Responses: 70
Engineering Student Organization Questions

Asked to all students
Why did you become involved in your student organization(s)? (check all that apply)

- Growing professionally: 66%
- Learning more about industry: 62%
- Meeting peers: 60%
- Professional contacts: 44%
- Opportunity to join projects: 31%
- Making a difference: 29%
- Other: 4%

As per the Fall 2019 Engineering Student Survey, asked to students involved in 1+ ESO's, there were 2671 responses.
Open-Ended: Why did you become involved in your student organization(s)? (check all that apply) - Other
Undergraduate Student Environment
Questions

Asked to undergraduate students only
The College of Engineering promotes a diverse engineering student body.

Responses: 4296

- Strongly agree: 32%
- Agree: 47%
- Neutral: 17%
- Disagree: 3%
- Strongly disagree: <1%
The College of Engineering promotes a diverse engineering student body.

<table>
<thead>
<tr>
<th>Percentage of Students</th>
<th>Total Population</th>
<th>Ethnic Minority Population</th>
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</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>32%</td>
<td>30%</td>
</tr>
<tr>
<td>Agree</td>
<td>47%</td>
<td>45%</td>
</tr>
<tr>
<td>Neutral</td>
<td>17%</td>
<td>18%</td>
</tr>
<tr>
<td>Disagree</td>
<td>3%</td>
<td>5%</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>&lt;1%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Responses: 4296
The College of Engineering promotes a welcoming culture among the engineering student body.
The College of Engineering provides sufficient support to international students and to students from groups historically underrepresented in STEM fields.
Responses: 4296

The College of Engineering provides sufficient support to international students and to students from groups historically underrepresented in STEM fields.
The College of Engineering values diversity by having a diverse faculty.

Responses: 4296

- Strongly Agree: 29%
- Agree: 47%
- Neutral: 19%
- Disagree: 4%
- Strongly disagree: 1%

Percentage of Students
The College of Engineering values intellectual diversity and diversity of thought.

Responses: 4296

- Strongly Agree: 30%
- Agree: 48%
- Neutral: 18%
- Disagree: 4%
- Strongly disagree: 1%
**Open-Ended:** If you have additional comments regarding the College’s approach to diversity and diversity initiatives, please explain.

![Bar chart showing student responses](image)

- **Modify current diversity initiatives:** 38 responses
- **Increase faculty diversity:** 25 responses
- **Positive response:** 23 responses
- **Increase female diversity:** 18 responses
- **Increase diversity & inclusion resources:** 17 responses
- **Misc.:** 25 responses

Responses: 146
**Open-Ended:** If you have additional comments regarding the College’s approach to diversity and diversity initiatives, please explain.

**Modify current diversity & inclusion initiatives**

- “Diversity in engineering is beneficial and desirable, and it should never be at the expense of the quality of the engineering students/faculty.”

**Increase diversity & inclusion resources**

- “In the future, there can be more scholarships/financial aid especially directed towards international students who struggle with financing their education."
The College of Engineering takes sufficient measures to address sexual assault/harassment.

Responses: 4234

- **Strongly agree**: 21%
- **Agree**: 31%
- **Neutral**: 40%
- **Disagree**: 6%
- **Strongly disagree**: 1%
The College of Engineering takes sufficient measures to address mental health and wellness.
Open-Ended: If you have additional comments/suggestions regarding the College’s measures concerning mental health and wellness among the engineering student body, please explain below.

- More measures needed: 101
- Unaware of current measures: 73
- Stress from courses: 34
- Neutral: 25
- Current measures are sufficient: 16
- No measures necessary at all: 13
- Stress from graduate program: 10
Open-Ended: If you have additional comments/suggestions regarding the College’s measures concerning mental health and wellness among the engineering student body, please explain below.

Improvements Needed for Current Measures

• “I appreciate that ZACH has a counseling services center. I would like for the College of Engineering to actively support mental health campaigns across campus (i.e. the Suicide Prevention Day). For example, having engineering students discuss their experiences with mental health through the Sound Bytes podcast or Engineering articles.”

• “I feel that there is a lot of resources and outlets and promotion for mental health, yet I don't see many ads posted or flyers, or people tabling at public engineering areas (ZACH or ETB), and I think especially around finals, students would need that kind of encouragement the most.”
Open-Ended: If you have additional comments/suggestions regarding the College’s measures concerning mental health and wellness among the engineering student body, please explain below.

Stress from courses is overwhelming

• “Professors commonly assign work without any regard of what is going on with other classes or deadlines. Additionally, students are commonly disregarded when they approach professors with concerns of this type. I believe much more thorough measures can be taken to 1) educate students about healthy work, study, diet, and exercise habits; 2) demand professors work with students to deal with conflicting deadlines (primarily in upper-level courses); and 3) discourage any cultures within the college that center around ‘workaholism’.”
Academic Success Questions

Asked to undergraduate students only
The College of Engineering helps me succeed academically by having good and capable professors.
The College of Engineering helps me succeed academically by promoting a collaborative environment among my peers.
The College of Engineering helps me succeed academically by providing sufficient facilities and infrastructure.

- Strongly agree: 36%
- Agree: 45%
- Neutral: 13%
- Disagree: 5%
- Strongly disagree: 2%
The College of Engineering helps me succeed academically by providing sufficient academic support.

- **Strongly agree**: 23%
- **Agree**: 49%
- **Neutral**: 20%
- **Disagree**: 7%
- **Strongly disagree**: 2%

Responses: 4156
The size of my classes impacts my ability to succeed academically.

- Strongly agree: 23%
- Agree: 38%
- Neutral: 24%
- Disagree: 13%
- Strongly disagree: 2%
An emphasis on exams in my classes, rather than projects, impacts my ability to succeed academically.

- Strongly agree: 22%
- Agree: 34%
- Neutral: 26%
- Disagree: 14%
- Strongly disagree: 5%
During your time at Texas A&M University, approximately what percentage of your courses have promoted an active and engaging learning environment facilitated by the professor?

- 8-100%: 13%
- 60-80%: 27%
- 40-60%: 31%
- 20-40%: 21%
- 0-20%: 8%
Academic Programs & High Impact Experiences Questions

Asked to all undergraduate students
Are you aware of the following Academic Enrichment programs? (check all that apply)

- Undergrad. Research: 76%
- Eng. Honors: 76%
- Aggies Invent: 74%
- Career Center: 65%
- Fischer Eng. Design Center: 61%
- Women in Eng. Program: 57%
- Halliburton Eng. Global Programs: 53%
- Eng. Entrepreneurship Program: 50%
- Zachy Leadership Program: 50%
- Eng. I-XI Program: 48%
- Fast Track Master's: 46%
- Eng. Village @ the Commons: 45%
- FEDC Pop-Up Courses: 43%
- Access & Inclusion Program: 37%
- TAMU Corps Site: 28%
- 1st Gen Eng. Student Mentoring: 26%
- Eng. Entrepreneurship Program: 21%
Responses: 3467

Select all of the following Academic Support Services that you have utilized.

- Professor office hours: 74%
- TA office hours: 59%
- Chegg Study: 56%
- SI sessions: 46%
- MATH help sessions: 36%
- Peer tutoring from COE & ASC: 31%
- Outside tutoring services: 28%
- ENGR 102/216/217 PT office hours: 18%
- CHEM lab TA help desk: 14%
- Academic Coaching (ASC): 5%
- Student Success Workshops (ASC): 4%
How helpful are the following Academic Support Services in helping you succeed academically?

- Chegg Study: Very helpful 65%, Helpful 30%, Neither 3%, Unhelpful 2%
- Outside tutoring services: Very helpful 51%, Helpful 39%, Neither 3%, Unhelpful 1%
- Prof. office hours: Very helpful 36%, Helpful 45%, Neither 7%, Unhelpful 2%
- TA office hours: Very helpful 32%, Helpful 54%, Neither 11%, Unhelpful 2%
- MATH help sessions: Very helpful 36%, Helpful 50%, Neither 13%, Unhelpful 1%
- SI sessions: Very helpful 33%, Helpful 51%, Neither 14%, Unhelpful 2%
- Peer tutoring from COE & ASC: Very helpful 26%, Helpful 47%, Neither 17%, Unhelpful 8%
- CHEM lab TA help desk: Very helpful 33%, Helpful 53%, Neither 17%, Unhelpful 3%
- ENGR 102/216/217 PT office hours: Very helpful 22%, Helpful 39%, Neither 20%, Unhelpful 9%
- Academic Coaching (ASC): Very helpful 28%, Helpful 39%, Neither 20%, Unhelpful 3%
- Student Success Workshops (ASC): Very helpful 23%, Helpful 43%, Neither 19%, Unhelpful 5%

Asked only to students who utilized each service
Open-Ended: What additional Academic Support Services and resources would be helpful in you succeeding academically?
Open-Ended: What additional Academic Support Services and resources would be helpful in you succeeding academically?

SI/Reviews/Tutoring
- “I wish my TA’s would hold SI or review sessions for my upper level classes because they were really helpful for CHEM and PHYS.”

Professors
- “Professor-led reviews/practice exams with worked out solutions/study sessions.”

Online Services
- “Online materials highlighting the important concepts and showing examples,” “Website for 24/7 help,” “Live chat online with TAs”
Have you gone to see any of your professors outside of class this semester?

Responses: 3811

- Yes: 68%
- No: 32%
Have you gone to see any of your professors outside of class this semester?

**Fall 2018**
- Yes: 78%
- No: 22%

**Fall 2019**
- Yes: 68%
- No: 32%
On average, are your visits with your professors helpful or unhelpful?

- Very helpful: 31%
- Helpful: 63%
- Unhelpful: 5%
- Very unhelpful: 1%
On average, are your professors more helpful when teaching during lectures or during office hours?

- Significantly more in lectures: 6%
- A little more during lectures: 11%
- Roughly equal: 33%
- A little more during office hours: 34%
- Significantly more during office hours: 16%
Have you gone to see any of your TAs outside of class this semester?

- **Yes**: 40%
- **No**: 60%

Responses: 3798
Asked to students who have visited TAs in the Fall 2019 semester
Responses: 1522

On average, are your visits with your TAs helpful or unhelpful?

- Very helpful: 39%
- Helpful: 54%
- Unhelpful: 6%
- Very unhelpful: 1%
When registering for the Fall 2019 semester, were you able to register for all of the courses you needed?

- Yes: 86%
- No: 14%
When registering, were you able to register for all of the courses you needed?

<table>
<thead>
<tr>
<th></th>
<th>Fall 2018</th>
<th>Fall 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>86%</td>
<td>86%</td>
</tr>
<tr>
<td>No</td>
<td>14%</td>
<td>14%</td>
</tr>
</tbody>
</table>
Open-Ended: What courses were you unable to register for?

Number of courses mentioned

- CSCE: 58
- MEEN: 47
- ENGL: 35
- ISEN: 32
- ENGR: 29
- MATH: 27
- ECEN: 26
- MMET: 26
- CHEM: 22
- CVEN: 21
- BMEN: 14
- POLS: 14
- PHYS: 11
- AERO: 10
- COMM: 10
- CHEN: 9
- ESET: 6

Asking to students who had difficulty registering for the Fall 2019 semester
Responses: 436
First-Year Coursework Questions

Asked to 2nd Year and higher undergraduate students only
My first-year coursework (CHEM, MATH, PHYS or ENGR) adequately prepared me for my upper-level engineering coursework.
My first-year coursework (CHEM, MATH, PHYS or ENGR) helped me decide that being an engineer was right for me.
Entry-to-a-Major Questions

Asked only to 1\textsuperscript{st} and 2\textsuperscript{nd} year undergraduate students
I receive(d) sufficient information about the different majors to make an informed decision about my major.

- Strongly agree: 27%
- Agree: 38%
- Neutral: 15%
- Disagree: 9%
- Strongly disagree: 4%
- I did not participate in the ETAM process: 6%
I receive(d) sufficient information about the different majors to make an informed decision about my major.

- **Strongly agree**: Fall 2018 - 30%, Fall 2019 - 27%
- **Agree**: Fall 2018 - 38%, Fall 2019 - 38%
- **Neutral**: Fall 2018 - 15%, Fall 2019 - 15%
- **Disagree**: Fall 2018 - 7%, Fall 2019 - 9%
- **Strongly disagree**: Fall 2018 - 4%, Fall 2019 - 4%
- **I did not participate in the ETAM process**: Fall 2018 - 7%, Fall 2019 - 6%
During your first year at Texas A&M University, what is/was the most helpful source of information when applying to your major?

- Other Students: 22%
- Departmental Videos: 15%
- Family/friends: 15%
- DI Saturday: 14%
- Academic Advisors: 10%
- Departmental Info Sessions: 8%
- Professors: 4%
- Organizations: 3%
- SEC Industry Night Seminars: 3%
- Other: 7%

Responses: 1474
Open-Ended: During your first year at Texas A&M University, what is/was the most helpful source of information when applying to your major? - Other

- Self: 36
- Internet: 19
- Courses: 5
- Experiences: 5
- Misc.: 13
Open-Ended: During your first year at Texas A&M University, what is/was the most helpful source of information when applying to your major? - Other

Experiences

• “Opportunities to indulge myself within the field I think I want to go into. For example, I thought I wanted to go into ECEN, so I am part of a research team. I later attended the TAMUDatathon, did applied coding/programming and realized I liked that more than electrical engineering.”
During your first year at Texas A&M University, what is/was the most helpful source of information when applying to your major?

<table>
<thead>
<tr>
<th>Source</th>
<th>Fall 2018</th>
<th>Fall 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Departmental Videos</td>
<td>18%</td>
<td>15%</td>
</tr>
<tr>
<td>Academic Advisors</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>Other Students</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>Professors</td>
<td>18%</td>
<td>17%</td>
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<tr>
<td>Family/friends</td>
<td>6%</td>
<td>4%</td>
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<td>Organizations</td>
<td>15%</td>
<td>14%</td>
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<tr>
<td>SEC Industry Night Seminars</td>
<td>8%</td>
<td>8%</td>
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<tr>
<td>DI Saturday</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
<td>7%</td>
</tr>
</tbody>
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Fall 2018 Responses: 1796
Fall 2019 Responses: 1474
To your memory, when undergoing the ETAM process, was your first-choice major the same major you chose when you applied to TAMU?

- Yes: 63%
- No: 33%
- I do not remember what major I chose when I applied to the university: 4%
Please rate how valuable you would find each of the following additions to your ENGR 102 class.

- Upper-level students discussing their academic experiences: 48% extremely valuable, 60% somewhat valuable, 44% no value
- Upper-level students discussing their majors: 46% extremely valuable, 44% somewhat valuable, 33% no value
- Industry professionals discussing their careers/fields: 49% extremely valuable, 37% somewhat valuable, 10% no value
- Projects relating to different majors: 32% extremely valuable, 51% somewhat valuable, 17% no value
- Professors from different majors: 38% extremely valuable, 45% somewhat valuable, 16% no value
- Learn about research opportunities: 48% extremely valuable, 60% somewhat valuable, 44% no value
Please rate how valuable you would have found each of the following additions to your ENGR 102 class.

- Upper-level students discussing their academic experiences: 43% Extremely valuable, 39% Somewhat valuable, 15% No value
- Upper-level students discussing their majors: 48% Extremely valuable, 13% Somewhat valuable, 4% No value
- Industry professionals discussing their careers/fields: 50% Extremely valuable, 9% Somewhat valuable, 1% No value
- Projects relating to different majors: 39% Extremely valuable, 41% Somewhat valuable, 20% No value
- Professors from different majors: 31% Extremely valuable, 49% Somewhat valuable, 20% No value
- Learn about research opportunities: 33% Extremely valuable, 44% Somewhat valuable, 23% No value

Fall 2019 Engineering Student Survey
Please rate how valuable you would find/have found each of the following additions to your ENGR 102 class.

- Upper-level students discussing their academic experiences: 92% 1st Year UG, 93% 2nd Year UG
- Upper-level students discussing their majors: 85% 1st Year UG, 87% 2nd Year UG
- Industry professionals discussing their careers/fields: 90% 1st Year UG, 91% 2nd Year UG
- Projects relating to different majors: 86% 1st Year UG, 80% 2nd Year UG
- Professors from different majors: 83% 1st Year UG, 80% 2nd Year UG
- Learn about research opportunities: 84% 1st Year UG, 77% 2nd Year UG
Graduate Student Environment Questions

Asked only to graduate students
What department are you in?

<table>
<thead>
<tr>
<th>Department</th>
<th>Percentage of Students</th>
</tr>
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<tbody>
<tr>
<td>Mechanical Engineering</td>
<td>19%</td>
</tr>
<tr>
<td>Electrical &amp; Computer Engineering</td>
<td>17%</td>
</tr>
<tr>
<td>Civil &amp; Environmental Engineering</td>
<td>13%</td>
</tr>
<tr>
<td>Computer Science &amp; Engineering</td>
<td>11%</td>
</tr>
<tr>
<td>Industrial &amp; Systems Engineering</td>
<td>10%</td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td>5%</td>
</tr>
<tr>
<td>Aerospace Engineering</td>
<td>5%</td>
</tr>
<tr>
<td>Biomedical Engineering</td>
<td>5%</td>
</tr>
<tr>
<td>Material Science &amp; Engineering</td>
<td>4%</td>
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<tr>
<td>Petroleum Engineering</td>
<td>3%</td>
</tr>
<tr>
<td>Nuclear Engineering</td>
<td>2%</td>
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<tr>
<td>Biological &amp; Agricultural Engineering</td>
<td>2%</td>
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<tr>
<td>Engineering Technology &amp; Industrial Distribution</td>
<td>2%</td>
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<tr>
<td>Ocean Engineering</td>
<td>1%</td>
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</table>
My department creates a welcoming environment by fostering good faculty/student relationships.

Responses: 628
I have a strong and healthy *professional* relationship with my advisor.
I have a strong and healthy personal relationship with my advisor.

Responses: 628

- **Master's Students**
  - Strongly agree: 33%
  - Agree: 30%
  - Neutral: 20%
  - Disagree: 5%
  - Strongly disagree: 5%

- **PhD Students**
  - Strongly agree: 38%
  - Agree: 32%
  - Neutral: 20%
  - Disagree: 5%
  - Strongly disagree: 5%
Responses: 628

I have a strong and healthy ___ relationship with my advisor.

- Strongly agree: 41%
- Agree: 36%
- Neutral: 17%
- Disagree: 4%
- Strongly disagree: 2%

Percentage of Students

- Professional
- Personal
My department creates a welcoming environment by providing social support and opportunities to interact with other graduate students.
My department creates a welcoming environment by allowing me to work with other graduate students and faculty members, other than my advisor and other graduate students in my lab.
My department creates a welcoming environment by creating an inclusive atmosphere.
Responses: 628

I am given adequate financial support to succeed in graduate school.

- **Strongly agree**: 25% for Master's Students, 25% for PhD Students
- **Agree**: 25% for Master's Students, 38% for PhD Students
- **Neutral**: 24% for Master's Students, 21% for PhD Students
- **Disagree**: 16% for Master's Students, 11% for PhD Students
- **Strongly disagree**: 10% for Master's Students, 5% for PhD Students
Open-Ended: What additional financial support do you feel the College of Engineering can provide to assist you as a graduate student?

- Increase scholarships/stipends: 49
- Increase teacher assistant positions: 26
- Reduce tuition costs, 18 mention fees specifically: 26
- Increase research assistant positions: 19
- Increase Master's representation in research opportunities: 8
- Misc.: 39
Open-Ended: What additional financial support do you feel the College of Engineering can provide to assist you as a graduate student?

Reduce tuition costs
- “The increase in tuition and fees for Fall 2019 and onwards has officially made getting a ME here unsustainable for me. I was previously able to pay for it using internship money ($35/hr), but now I would need to work my internship for 6 mos. to pay for 2 semesters.”

Increase Master’s representation in research opportunities
- “Providing assistantships to Masters students. PhD students are almost always preferred over us.”
I am receiving ample professional development from the College of Engineering.

Responses: 628

**Master's Students**
- Strongly agree: 22%
- Agree: 45%
- Neutral: 24%
- Disagree: 6%
- Strongly disagree: 0%

**PhD Students**
- Strongly agree: 16%
- Agree: 47%
- Neutral: 28%
- Disagree: 7%
- Strongly disagree: 0%
Open-Ended: What additional professional development resources can the College of Engineering provide to graduate students?

- Employment/recruiting opportunities and workshops: 14 responses
- Greater interaction with industry: 10 responses
- "Soft" skills workshops: 9 responses
- Networking among graduate students: 5 responses
- Misc.: 11 responses
Open-Ended: What additional professional development resources can the College of Engineering provide to graduate students?

Greater interaction with industry

• “There is (and rightly so for most people) too much emphasis on research and PhD programs. There needs to be something for student getting a masters who want to go into industry and consulting.”

Employment/recruiting opportunities and workshops

• “More interactions with industry leaders, more recruiting opportunities, ability to go for internships (some PIs don't allow students to go on internships), professional development classes as part of graduate school training especially if the grad students want to go outside of academia.”
I am able to succeed academically in my department because of helpful advising.
I am able to succeed academically in my department because I am given sufficient research support.
Open-Ended: What are additional guidance/resources from your research advisor that would help you succeed academically?

- Consistent feedback from advisor: 6
- Greater availability from advisor: 5
- More/better lab equipment: 4
- Greater research opportunities: 4
- Misc.: 6

Responses: 25
Open-Ended: What are additional guidance/resources from your research advisor that would help you succeed academically?

Consistent feedback from advisor

- “Being willing to provide research feedback during academic breaks, being encouraging when students adopt good research practices for research reproducibility”
- “Initial regular sessions focusing more on learning followed by focused research targets.”

Greater availability from advisor

- “Advisors appear to place lowest focus and priority on Graduate program. Delayed response time and minimum amount of feedback provided.”
I am able to succeed academically in my department because of sufficient course availability.
I am given sufficient lab/office space as a graduate student.
As a TA, I feel competent in instructing undergraduate students.

- Strongly agree: 31%
- Agree: 42%
- Neutral: 13%
- Disagree: 1%
- Strongly disagree: <1%
As a TA, I feel prepared each time I enter a lecture or lab course in which I am the instructor.

- Strongly agree: 33%
- Agree: 45%
- Neutral: 20%
- Disagree: 2%
- Strongly disagree: 0%
ZACH/Use of Instructional Technology Questions

Asked to all students
Do you, on average, spend more time studying on campus or off-campus?

- Significantly more time on campus: 44%
- A little more time on campus: 13%
- Roughly equal time: 14%
- A little more time off-campus: 10%
- Significantly more time off-campus: 19%
When studying on campus, do you spend more time studying in ZACH or other academic buildings?

- **Significantly more time in ZACH**: 29%
- **A little more time in ZACH**: 13%
- **Roughly equal time**: 15%
- **A little more time in other academic buildings**: 12%
- **Significantly more time in other academic buildings**: 31%
Responses: 3732

Approximately how many hours per week do you study in ZACH?

<table>
<thead>
<tr>
<th>Hours</th>
<th>Percentage of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>33%</td>
</tr>
<tr>
<td>6-10</td>
<td>19%</td>
</tr>
<tr>
<td>11-15</td>
<td>11%</td>
</tr>
<tr>
<td>16-20</td>
<td>6%</td>
</tr>
<tr>
<td>21-25</td>
<td>3%</td>
</tr>
<tr>
<td>26-30</td>
<td>2%</td>
</tr>
<tr>
<td>31+</td>
<td>2%</td>
</tr>
<tr>
<td>Don't study in ZACH</td>
<td>23%</td>
</tr>
</tbody>
</table>
Responses: 3722

ZACH has allowed me to meet and interact with more engineering students.

- **Strongly agree**: 21%
- **Agree**: 36%
- **Neutral**: 28%
- **Disagree**: 10%
- **Strongly disagree**: 4%
ZACH has created more opportunities to collaborate with other students.
Responses: 3720

Do you know how to reserve a room in ZACH?

- Yes: 75%
- No: 25%
As asked to students who know how to reserve study rooms in ZACH
Responses: 2787

Approximately how many times per week do you utilize the ZACH study rooms?

- 68% use the ZACH study rooms 0-1 times per week.
- 23% use them 2-3 times per week.
- 6% use them 4-5 times per week.
- 3% use them 6+ times per week.
Asked to students who know how to reserve study rooms in ZACH
Responses: 2787

Which of the following best describes how often you use the MirrorOp feature in the ZACH study rooms?

- 4+ times per week: 3%
- 2-3 times per week: 6%
- Once per week: 10%
- Once every few weeks: 17%
- Once per semester: 15%
- Never: 48%
Which of the following best described how often you use the following amenities in ZACH?

<table>
<thead>
<tr>
<th>Amenities</th>
<th>1+ times per week</th>
<th>Less than weekly</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starbucks</td>
<td>40%</td>
<td>29%</td>
<td>31%</td>
</tr>
<tr>
<td>E-Quad food trucks</td>
<td>22%</td>
<td>49%</td>
<td>28%</td>
</tr>
<tr>
<td>Learning Stairs</td>
<td>22%</td>
<td>24%</td>
<td>55%</td>
</tr>
<tr>
<td>Career Center</td>
<td>27%</td>
<td>69%</td>
<td>14%</td>
</tr>
<tr>
<td>FEDC</td>
<td>14%</td>
<td>16%</td>
<td>70%</td>
</tr>
<tr>
<td>General Advising Suite</td>
<td>25%</td>
<td>16%</td>
<td>71%</td>
</tr>
<tr>
<td>Collaboration Center</td>
<td>12%</td>
<td>16%</td>
<td>72%</td>
</tr>
<tr>
<td>HPE Tech Deck</td>
<td>15%</td>
<td>80%</td>
<td>10%</td>
</tr>
<tr>
<td>Leach Learning Resource Center</td>
<td>8%</td>
<td>82%</td>
<td>10%</td>
</tr>
</tbody>
</table>
Please rate your satisfaction with the E-Quad food trucks and the variety of food offered.

- Very satisfied: 24%
- Somewhat satisfied: 27%
- Neither satisfied nor unsatisfied: 40%
- Somewhat unsatisfied: 6%
- Very unsatisfied: 3%
Open-Ended: What other food options would you like to see offered in/around ZACH?

- Mexican food: 215
- Healthier food: 196
- Fast food: 174
- General variety: 170
- Aggie Express: 101
- Asian food: 65
- Italian food: 40
- Low-budget options: 33
- Currently satisfied: 66
**Open-Ended: What other food options would you like to see offered ZACH?**

**Healthier food options**
- “I like the food trucks, but I would like to see some more health-conscious options such as wraps, salads, and sandwiches.”

**More cost-effective/low budget options**
- “There needs to be cheaper meal options. The food trucks are great, but expensive. Starbucks is great, but expensive. Potentially having an Aggie Express or somewhere you can get a more inexpensive meal would be helpful.”
**Open-Ended:** What ways are you personally utilizing instructional technology in ZACH?
Open-Ended: What ways are you personally utilizing instructional technology in ZACH?

Screen Projecting
• “My engineering groupmates often utilize the monitors at the ends of the tables in our engineering class to display code and talk through it during group projects.”

Not utilizing any instructional technology
• “I don't study in ZACH at this point in my CHEN studies. The computers do not have the software I need.”

Miscellaneous
• “Sitting at tables in groups instead of individual desks has really helped me get to know the people in my classes better. This has helped me feel more connected with other people in my major. I’ve specifically noticed a lot more study groups being formed and a lot more people socializing together outside of class.”
Of your courses that take place in ZACH, how many of your professors have taken advantage of the available technology to promote an active and engaging learning environment?

- Most/all of my professors: 51%
- Some of my professors: 34%
- None of my professors: 5%
- None of my classes take place in ZACH: 10%

Responses: 3699
Open-Ended: What are specific ways that your professors take advantage of the available instructional technology in ZACH to promote an active and engaging learning environment?

- Screensharing: 975
- Using the interactive whiteboard: 145
- Record/Upload Lectures: 77
- Additional assignments: 31

Responses: 1228
Open-Ended: What are specific ways that your professors take advantage of the available instructional technology in ZACH to promote an active and engaging learning environment?

Screensharing
- “They are effectively communicating through the many available screens through presentations and PowerPoints, allowing me to understand my classes better.”

Using the interactive whiteboard
- “Going through live coding demonstrations or making notes on the powerpoints they have on the screen with the pens”

Record/Upload Lectures
- “My professor recorded his class and uploaded them to eCampus, so it is very helpful if I miss class or when I want to rewatch part of his lecture.”
Open-Ended: What are specific challenges that your professors are having when dealing with the instructional technology in ZACH?

- Unfamiliarity: 342
- Display Issues: 322
- Faulty Equipment: 270
- Connection Issues: 158
- Misc.: 48

Responses: 1140
Open-Ended: What are specific challenges that your professors are having when dealing with the instructional technology in ZACH?

Unfamiliarity
• “Some professors have a hard time using the technology to their benefit... This hinders learning ability greatly for large classes.”

Display Issues
• “There have been times when the class would have to wait several minutes for the teacher to get his presentation on the monitors.”

Faulty Equipment
• “The small screens at the tables have been going out every class this semester... This has made it difficult...”
Of your courses that take place in ZACH, how many of your professors have taken advantage of the physical space in the learning studios to promote an active and engaging learning environment?

- Most/all of my professors: 27%
- Some of my professors: 42%
- None of my professors: 20%
- None of my classes take place in ZACH: 11%
How likely are you to use ZACH learning studios after normal class hours?

Percentage of Students

- Very likely: 20%
- Somewhat likely: 28%
- Neutral: 22%
- Somewhat unlikely: 12%
- Very unlikely: 18%
Open-Ended: If you have any other comments concerning ZACH, please provide those below.
Open-Ended: If you have any other comments concerning ZACH, please provide those below.

Learning Studio Layout
• “Students need to see the instructor. When half the class faces the back of the classroom, no one is paying attention. Even when the professors use the monitors at each table, students trying to learn still need to see the main board to see where the professor is pointing...It’s just distracting and destructive to classroom learning.”

Room Reservation Issues
• “There is a lot of wide open areas but not much study space we engineers need to work. It feels like it takes more time to find an adequate spot than to actually study. The rooms are reserved, but people reserve them and don’t use them so that space goes to waste.”
Open-Ended: If you have any other comments concerning ZACH, please provide those below.

Technology Not at Full Potential

• “Need to invest in helping the professors learn and understand how to engage their students, not invest in technology that isn’t being used, because the professors often times don’t know how to make their lectures more interactive. Better technology does not equal better education, better and well equipped professors equals better education.”

Providing More Study Space

• “It’s incredibly frustrating that there is not enough study spaces open and that there are big classrooms that could offer tons of study space going unused.”
International Experience Questions

Asked to all students
Responses: 3664

How many international experiences have you had outside of the U.S. while in college?

- None: 78%
- 1: 14%
- 2: 5%
- 3: 1%
- 4+: 2%
What was the average length of your learning experience(s) abroad?

- Short (1 - 2 weeks): 27%
- Medium (3 - 6 weeks): 43%
- Long (8 weeks - 1 year): 30%
Why did you choose to participate in international learning experience(s)?
(check all that apply)
Why did you choose to participate in international learning experience(s)?

- **Interesting Location**: 60% (Fall 2018), 61% (Fall 2019)
- **Relevant to my major**: 51% (Fall 2018), 55% (Fall 2019)
- **Unique technical visits not available locally**: 20% (Fall 2018), 26% (Fall 2019)
- **Lifetime opportunity to travel**: 52% (Fall 2018), 57% (Fall 2019)
- **Traveling with friends**: 25% (Fall 2018), 34% (Fall 2019)
- **Traveling with a faculty member**: 14% (Fall 2018), 17% (Fall 2019)
- **Developing global competency skills**: 41% (Fall 2018), 43% (Fall 2019)
- **Personal development**: 61% (Fall 2018), 59% (Fall 2019)
- **Professional skills development**: 39% (Fall 2018), 39% (Fall 2019)
- **Other**: 7% (Fall 2018), 6% (Fall 2019)
Why did you choose to not participate in international learning experience(s)? (check all that apply)

- High cost: 62%
- Did not fit into degree plan: 35%
- Would delay graduation: 30%
- Would conflict with internship/co-op: 20%
- Did not see value for career: 17%
- Have wanted to, but did not get accepted into a program: 6%
- Difficulty learning another language/culture shock: 4%
- Other: 16%
**Open-Ended:** Why did you choose to not participate in international learning experience(s)? (check all that apply) – Other

- Going in near future: 47
- Other conflict: 28
- Lack of desire: 27
- International Student: 24
- Haven't met requirements: 13
- No relevant program available: 13
- Prior international experience(s): 11
- Funding/Scholarships: 7
- Insufficient information: 7
- General fears: 5
- Misc.: 30
- Haven't ruled it out: 93
**Open-Ended: Why did you choose to not participate in international learning experience(s)? (check all that apply) – Other**

Haven’t ruled out international learning experience(s)
- “Have never seriously pursued it, although I want to because I’ve heard great things.”

Miscellaneous
- “Always wanted to, but seemed time consuming to organize.”
- “Spots fill up too fast for programs that actually help towards my graduation.”
- “I want to participate, but I wish that it would cover at least 9 credits.”
What did you learn during your international learning experience and how will it make you a better engineer? (check all that apply)

- How to interact better with different cultures: 76%
- How to operate comfortably in a foreign environment: 64%
- How to adapt to different styles of learning/working: 61%
- How many different engineering opportunities exist throughout the world: 50%
- How other countries approach engineering & engineering problems: 48%
- Other: 3%
Career/Post-Graduation Questions

Asked to all students
Responses: 3655

Did you attend the Fall 2019 SEC Engineering Career Fair?

- Yes: 46%
- No: 54%
Asked to students who attended the Fall 2019 SEC CF
Responses: 1955

Did you use the following Career Fair resources? (check all that apply)

- Career Fair website (Company Search) 91%
- Resume reviews 34%
- Resume writing workshop 23%
- "How to work the Engineering Career Fair" workshops 19%
- Interviewing skills workshop 16%
- International Student Career Panel 13%
Responses: 3649

Have you completed an internship or co-op?

- Yes: 34%
- No: 66%
Asked to students who have completed an internship/co-op experience(s). (check all that apply)
Asked to students who have completed an internship/co-op experience
Responses: 1238

**When was your *first* internship/co-op experience?**
Asked to students who have completed an internship/co-op
Responses: 1238

How did you obtain your internship/co-op experience(s)? (check all that apply)

- Friends/family: 35%
- SEC Engineering Career Fair: 28%
- Online research: 21%
- HireAggies: 10%
- Other career fair: 7%
- Professors: 7%
- Student orgs.: 5%
- Elsewhere: 16%
Has you completed an internship/co-op experience outside of Texas? The United States?

- Outside of Texas?
  - Yes: 38%
  - No: 62%

- Outside of the U.S.?
  - Yes: 9%
  - No: 91%
Asking to students graduating in December 2019/May 2020
Responses: 843

Which of the following will you pursue after you graduate?

- **77%** Job (engineering-related)
- **5%** Job (not engineering-related)
- **8%** GS at TAMU (engineering-related)
- **2%** GS at TAMU (not engineering-related)
- **2%** GS elsewhere (engineering-related)
- **2%** GS elsewhere (not engineering-related)
- **1%** Military
- **2%** Other
- **3%** Other
Which of the following will you pursue after you graduate?

- Job (engineering-related): 72% (Fall 2018), 77% (Fall 2019)
- Job (not engineering-related): 5% (Fall 2018), 5% (Fall 2019)
- GS at TAMU (engineering-related): 9% (Fall 2018), 8% (Fall 2019)
- GS at TAMU (not engineering-related): 2% (Fall 2018), 2% (Fall 2019)
- GS elsewhere (engineering-related): 3% (Fall 2018), 2% (Fall 2019)
- GS elsewhere (not engineering-related): 1% (Fall 2018), 1% (Fall 2019)
- Military: 2% (Fall 2018), 2% (Fall 2019)
- Other: 5% (Fall 2018), 3% (Fall 2019)
What kind of graduate school are you pursuing after you graduate?

- 31% Business
- 35% Medical
- 23% Other
- 12% Law
Asked to non-graduating students
Responses: 2803

Which of the following are you planning on pursuing after you graduate?

- 69% Job (engineering-related)
- 3% Job (not engineering-related)
- 13% GS at TAMU (engineering-related)
- 3% GS at TAMU (not engineering-related)
- 4% GS elsewhere (engineering-related)
- 2% GS elsewhere (not engineering-related)
- 3% Military
- 3% Other

Percentage of Students
What kind of graduate school are you considering pursuing after you graduate?

- 41% Business
- 30% Medical
- 17% Other
- 12% Law
Which of the following do you plan to pursue after graduation?

<table>
<thead>
<tr>
<th>Option</th>
<th>Graduating Students</th>
<th>Non-graduating Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job (engineering-related)</td>
<td>77%</td>
<td>69%</td>
</tr>
<tr>
<td>Job (not engineering-related)</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>GS at TAMU (engineering-related)</td>
<td>8%</td>
<td>13%</td>
</tr>
<tr>
<td>GS at TAMU (not engineering-related)</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>GS elsewhere (engineering-related)</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td>GS elsewhere (not engineering-related)</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Military</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
<td>3%</td>
</tr>
</tbody>
</table>
As asked to graduating students pursuing a full-time job
Responses: 853

How did you obtain your full-time job opportunity?

- Offered after an internship/co-op: 30%
- SEC Engineering Career Fair: 28%
- Online research: 16%
- Texas A&M Career Center: 14%
- Other career fair: 4%
- Elsewhere: 9%
Asking graduating students pursuing a full-time job
Responses: 680

Is your full-time job opportunity outside of Texas? The United States?

Outside of Texas?
- Yes: 28%
- No: 72%

Outside of the U.S.?
- Yes: 4%
- No: 96%
2019-2020 Legislation Committee

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Brandon Merrill

Members
Drew DeHaven  Oishik Faruque  Abel Gonzalez
Dean Hoff  Vincent Mayer  Rajeev Peshori
Brandon Smith  Ty Thibodeaux