

Students Leaving Engineering Survey

Name: _____
(Please **PRINT** your first and last name.)

Student Number: _____

Email Address: _____

School: _____ **e.g. Penn State)**

Gender:

- Male
- Female

Ethnicity / Citizenship: (Check a maximum of two)

- Black/African American
- American Indian/Alaskan Native
- Asian & Pacific American
- Latina/Latino/Hispanic American
- White American
- Foreign National on student visa
- Foreign National/U.S. Resident (green card)
- Other: _____

As of today, I am a: (Choose one)

- First-year Student
- Second-year Student
- Third-year Student
- Fourth-year Student
- Fifth-year Student and above

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Today's date _____

1. Where were you immediately before your first semester/term at this institution? (Check one).

- High school 2-year college Vocational /technical school
 4-year college Military Other: _____
 Working a full-time job

1a. If you checked 2-year college or 4-year college, tell us the name of institution:

2. What was your cumulative college GPA at the end of the most recent academic semester/term?

Cumulative GPA: _____ on a system where the maximum GPA is _____

3. When did you first enroll in our college/school of engineering (month / year)? ____/____

4. What was your intended or actual engineering major? (Check one)

- | | |
|---|--|
| <input type="checkbox"/> Pre Engineering | <input type="checkbox"/> Engineering Science |
| <input type="checkbox"/> Aerospace | <input type="checkbox"/> Environmental |
| <input type="checkbox"/> Agricultural | <input type="checkbox"/> General Engineering |
| <input type="checkbox"/> Architectural | <input type="checkbox"/> Industrial |
| <input type="checkbox"/> Bioengineering | <input type="checkbox"/> Materials |
| <input type="checkbox"/> Chemical | <input type="checkbox"/> Mechanical |
| <input type="checkbox"/> Civil | <input type="checkbox"/> Nuclear |
| <input type="checkbox"/> Computer Engineering | <input type="checkbox"/> Petroleum |
| <input type="checkbox"/> Computer Science | <input type="checkbox"/> Undecided |
| <input type="checkbox"/> Electrical | <input type="checkbox"/> Other: _____ |

5. When did you transfer out of the college/school of engineering (month / year)? ____/____

6. Why did you initially decide to major in engineering? (Check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Attracted by the challenge of a difficult curriculum | <input type="checkbox"/> Parents, other relatives or friend is an engineer |
| <input type="checkbox"/> Good at math or science | <input type="checkbox"/> Parents, siblings or other relatives recommended it |
| <input type="checkbox"/> High school adviser or teacher recommended it | <input type="checkbox"/> Received or anticipated possibility of good college scholarship |
| <input type="checkbox"/> Like to solve problems | <input type="checkbox"/> Wanted to be able to get a well-paying job after I graduate |
| <input type="checkbox"/> Like the design work that engineers do | <input type="checkbox"/> Wanted to use engineering solutions to address social problems |
| <input type="checkbox"/> Participated in engineering camp or workshop that influenced me | <input type="checkbox"/> Not Sure |
| | <input type="checkbox"/> Other: _____ |

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7. Using the table below, check **Yes** or **No** to indicate the **honors** or **advanced courses** you completed during high school.

| | Honors/Advanced? | |
|------------------|------------------|----|
| | Yes | No |
| Algebra | | |
| Biology | | |
| Computer science | | |
| Pre-calculus | | |
| Calculus | | |
| Chemistry | | |
| English | | |
| Geometry | | |
| History | | |
| Physics | | |
| Trigonometry | | |

8. Do you feel your high school coursework adequately prepared you to be successful in an engineering curriculum? Yes No

Please explain your response:

9. When you began your engineering degree, how confident were you that you would complete it? (Check one)

- Not very confident; I was already unsure of my plan to study engineering
- There was about a 50% chance that I would complete a degree in engineering
- I was fairly confident that I would complete a degree in engineering
- I was very confident that I would complete a degree in engineering
- Other: _____

10. At the present time, how confident are you that you will complete a degree (in any major) at this institution? (Check one)

- Not very confident; it is highly likely I will not complete any college degree at this institution
- There is about a 50% chance that I will complete a degree at this institution
- I am fairly confident that I will complete a degree at this institution
- I am very confident that I will complete a degree at this institution
- Other: _____

11. What are you currently studying or planning to study? (Check one):

- Agriculture
- Art / Fine Arts
- Business / Management
- Computer/Information Science
- Education
- Engineering Technology
- Liberal Arts / Humanities
- Pre Med/Health Professions
- Science
- Pre Law Studies
- No other major; not returning to school
- Transferring to another institution
- Undecided
- Other _____

12. When you had an academic problem in engineering, what did you do?
Rank your top three choices.

- Talk to engineering advisor and/or advising staff _____
- Talk to other students and/or friends _____
- Visit the Women in Engineering or Minority offices _____
- Spend more time studying _____
- Talk to my parents or siblings _____
- Talk to a faculty member _____
- Form or join a student study group _____
- Talk to a mentor _____
- Do something social or something that relaxes me (e.g. exercise, read a novel) _____
- Seek academic help at a tutoring center _____
- I never feel this way _____
- Nothing _____
- Other (please specify) _____

13. My plans for the future are to: (Check all that apply):

- Work in industry
- Work in government lab or agency
- Go on to graduate school
- Go on to professional school (e.g. medicine, law)
- Teach at the college or university level
- Teach in K-12 schools
- Participate in a business start up or start my own business
- Enter (or re-enter) the military
- Undecided
- Other: Please specify _____

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14. The following is a list of engineering activities (co-curricular and academic). For each activity indicate your level of involvement during the most recent year you were enrolled in the college of engineering.

| | Not Involved | 1-2 time/year | 3-5 times/year | More than 5 times/year |
|--|--------------|---------------|----------------|------------------------|
| a. An engineering society (e.g. American Society of Mechanical Engineers) | 0 | 1 | 2 | 3 |
| b. An engineering fraternity or sorority | 0 | 1 | 2 | 3 |
| c. A professional or student group for women or minority engineers (e.g. SWE, NSBE) | 0 | 1 | 2 | 3 |
| e. Minority / Multicultural Engineering Program sponsored activities | 0 | 1 | 2 | 3 |
| f. Women in Engineering Program or Women in Science and Engineering sponsored activities | 0 | 1 | 2 | 3 |
| g. Activities (social or academic) sponsored by your department or major | 0 | 1 | 2 | 3 |
| h. Design competition teams | 0 | 1 | 2 | 3 |
| i. Undergraduate research experiences | 0 | 1 | 2 | 3 |
| j. Co-op or Internship position | 0 | 1 | 2 | 3 |

15. The following is a list of academic and/or preparation activities. Check all the activities in which you engaged in during the last academic year (e.g. September to June).

- Attended engineering orientation prior to beginning classes
- Attended summer program designed to prepare me to begin the engineering curriculum
- Attended review sessions before exams
- Called or emailed parents or other close friends about difficulties I was experiencing in classes or school
- Got advice from a mentor in a formal mentoring program
- Lived in honors or other non-engineering special interest dorm
- Participated in engineering-focused living arrangement (e.g. dorm, engineering fraternity)
- Participated in formal or informal study groups
- Received tutoring for courses where I was experiencing difficulty
- Scheduled an appointment with a professor and / or graduate assistant outside of his or her office hours
- Sought help from other engineering students when I experienced difficulties in classes
- Visited a professor and / or graduate assistant in her or his office hours
- Visited or emailed an adviser or advising center
- Visited the Career Center or Co-op Office to seek assistance with job search (e.g. permanent, internship or co-op)

16. Do you currently participate in any college / university athletic activities (intramural or official)? (check one) _____ Yes _____ No

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17. Do you work during the academic year? (check one) _____ Yes _____ No

18. If you answered “yes” above, approximately how many hours per week are you employed?

| | Less than 5 | 6 - 10 | 11 - 15 | 16 - 20 | More than 20 |
|------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| On-campus | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Off-campus | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

19. The following is a list of factors that may have influenced your decision to transfer out of engineering. For each factor choose a number between **0** and **4** to indicate the degree to which that factor influenced your decision to leave engineering where **0 = Not a Factor** and **4 = A Significant Factor**.

| | Not a Factor | A Factor But Not Significant | 2 | 3 | A Significant Factor |
|--|--------------|------------------------------|---|---|----------------------|
| a. Lack of opportunities for financial aid or scholarships | 0 | 1 | 2 | 3 | 4 |
| b. Engineering faculty/departmental personnel showed little interest in me | 0 | 1 | 2 | 3 | 4 |
| c. Unreasonable workload of the engineering classes | 0 | 1 | 2 | 3 | 4 |
| d. Unfriendly climate in engineering classes | 0 | 1 | 2 | 3 | 4 |
| e. Unsatisfactory performance on my grades in engineering | 0 | 1 | 2 | 3 | 4 |
| f. Faculty did not help me understand what practicing engineers do | 0 | 1 | 2 | 3 | 4 |
| g. Poor teaching by engineering faculty, instructors or graduate assistants | 0 | 1 | 2 | 3 | 4 |
| h. Poor academic advising by engineering faculty or advisors | 0 | 1 | 2 | 3 | 4 |
| i. Ability to find satisfactory CO-Ops and / or internships | 0 | 1 | 2 | 3 | 4 |
| j. My personal abilities/talents are not a good “fit” with requirements in engineering | 0 | 1 | 2 | 3 | 4 |
| k. Not confident about succeeding in future engineering classes | 0 | 1 | 2 | 3 | 4 |
| l. Poor interactions with other engineering students | 0 | 1 | 2 | 3 | 4 |
| m. Negative experiences in design teams or other collaborative learning experiences in engineering | 0 | 1 | 2 | 3 | 4 |
| n. Lack of opportunities for financial aid or scholarships | 0 | 1 | 2 | 3 | 4 |
| o. Engineering faculty/departmental personnel showed little interest in me | 0 | 1 | 2 | 3 | 4 |
| p. Unreasonable workload of the engineering classes | 0 | 1 | 2 | 3 | 4 |
| q. Unfriendly climate in engineering classes | 0 | 1 | 2 | 3 | 4 |
| r. Unsatisfactory performance on my grades in engineering | 0 | 1 | 2 | 3 | 4 |
| s. Faculty did not help me understand what practicing engineers do | 0 | 1 | 2 | 3 | 4 |

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20. What was the **one biggest factor** that influenced you in deciding to change majors?

21. With whom did you talk to about your decision to leave engineering (Check all that apply)?

- | | |
|--|--|
| <input type="checkbox"/> Engineering adviser and / or advising staff | <input type="checkbox"/> Parents |
| <input type="checkbox"/> Adviser and / or advising staff in new major | <input type="checkbox"/> A faculty member |
| <input type="checkbox"/> Other students and/or friends | <input type="checkbox"/> Relatives or family friends |
| <input type="checkbox"/> Advisor or staff in diversity program (e.g. Women or Multicultural Engineering, special needs, etc. | <input type="checkbox"/> Mentor |
| | <input type="checkbox"/> No one |
| | <input type="checkbox"/> Other _____ |

22. How supportive are your parents/guardians of your decision to change majors? (Check one)

- Very supportive of my decision
- Somewhat supportive of my decision
- Did not have a preference in my decision
- Somewhat against my decision
- Firmly against my decision
- Did not discuss decision with them

23. What else would you like to tell us about your experience in engineering?

Thank you!