

Appendix 4-A
Longitudinal Cohort (PIE) Survey Examples

Survey 1, Winter 2004..... 4A-2
Survey 4, Spring 2005 4A-30
Survey 7, Spring 2007 4A-42

Academic Pathways Study Winter'04 Survey

Please click the SUBMIT button only after you have completed the survey. You will then need to enter your login and password. For best viewing results, please maximize your browser window.

1. What is your expected year of graduation from college?

- 2003
- 2004
- 2005
- 2006
- 2007
- 2008
- 2009
- 2010 or later

2. What do you intend to major in? (Currently, your first choice)

- Aeronautical Engineering
- Chemical Engineering
- Civil and Environmental Engineering
- Computer Science
- Electrical Engineering
- Management Science and Engineering
- Materials Science and Engineering
- Mechanical Engineering
- Other Engineering
- Arts and Humanities
- Education
- Physical Science/Math
- Social Science
- Other:

3. What do you intend to major in? (Currently, your second choice)

- Aeronautical Engineering
- Chemical Engineering
- Civil and Environmental Engineering
- Computer Science
- Electrical Engineering
- Management Science and Engineering
- Materials Science and Engineering
- Mechanical Engineering
- Other Engineering
- Arts and Humanities
- Education
- Physical Science/Math
- Social Science
- N/A
- Other:

4. What is the highest academic degree that you intend to obtain in engineering? (Mark one)

- None
- Bachelor's
- Master's
- Ph.D.
- Other
- I do not know

5. If you are thinking of going to graduate school (NOT in engineering), please mark your probable area of study.

- Business
- Education
- Medicine
- Law
- MA/Ph.D.
- Public Service
- Other
- N/A

6. About how many hours do you spend in a typical 7-day week doing each of the following?

	0	1-5	6-10	11-15	16-20	21-25	26-30	more than 30
Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working for pay on campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working for pay off campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participating in co-curricular activities (organizations, campus publications, student government, social fraternity or sorority, intercollegiate or intramural sports, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Relaxing and socializing (watching TV, partying, exercising, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Providing care for dependents living with you (parents, children, spouse, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Commuting to class (driving, walking, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. For each reason for studying engineering, please indicate how strongly you disagree or agree with the statement:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I enjoy figuring out how things work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technology plays an important role in solving society's problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engineers make more money than most other professionals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My parent(s) are making me study engineering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engineers are innovative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engineers have contributed greatly to fixing problems in the world	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engineers are well paid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engineering is an occupation that is respected by other people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My parents want me to be an engineer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An engineering degree will guarantee me a job when I graduate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engineers are creative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. For each statement, please indicate how strongly you disagree or agree with the statement:

Strongly Disagree Disagree Neutral Agree Strongly Agree

I prefer working/studying alone

I enjoy the subjects of science and mathematics the most

Creative thinking is one of my strengths

Studying in a group is better than studying by myself

I have strong problem solving skills

I enjoy taking liberal arts courses more than science and math courses

I enjoy problems that can be solved in different ways

My instructors often remind students that they need to do better than other students to obtain high grades

I have easy access to work spaces where I can participate in peer study/discussion sessions with my fellow students

I am encouraged by my instructors to initiate or participate in peer study sessions with my fellow students

My instructors grade on a curve.

9. Please indicate the importance to you personally of each of the following:

Not Important Somewhat Important Very Important Essential

Getting higher grades than my classmates

Influencing social values

Becoming an authority in my field

Keeping good ideas to myself unless it is to my advantage to share them

Helping to promote racial understanding

Becoming a community leader

Helping others who are in difficulty

When playing any game, to win

Developing a meaningful philosophy of life

Becoming a practicing engineer

Getting along with others

Working as part of a team

Becoming a student government official

Establishing relationships with engineering students

Establishing relationships with non-engineering students

10. Compared with when you entered this college, how would you describe your:

Much Weaker Weaker No Change Stronger Much Stronger

Analytical and problem solving skills

Critical thinking skills

General knowledge

Knowledge of a particular field or discipline

Interest in studying engineering

11. Please rate your satisfaction with this institution on each of the aspects of campus life listed below. If you do not have experience with this aspect, mark "n/a."

Very dissatisfied Dissatisfied Neutral Satisfied Very satisfied N/A

Opportunities for community service

Quality of instruction by faculty

Availability of faculty

Quality of instruction by teaching assistants

Availability of TAs

12. Please rate your satisfaction with each of the following at this institution. If you do not use the service or facility, mark "n/a."

Very dissatisfied Dissatisfied Neutral Satisfied Very satisfied N/A

Computer facilities

Libraries

Classrooms

Tutoring

Academic advising

Laboratories

13. Since entering this college, indicate how often you: (Mark one for each item)

Not at all Rarely Occasionally Frequently

Felt that your courses inspired you to think in new ways

Felt you did not have enough time to pursue nonacademic activities

Worried about keeping up with your schoolwork

Felt you did not have a "social life"

Worried about how you would pay for school

Felt stressed

18. Since entering this college, how often have you interacted with the following people (e.g. by phone, e-mail, Instant Messenger, or in person)? (Mark one for each item)

Never 1-2 times/term 1-2 times/month Once a week 2-3 times/week Daily

Faculty during office hours

Faculty outside of class or office hours

Teaching Assistants during office hours

Teaching Assistants outside of class or office hours

19. Rate yourself on each of the following traits as compared with the average person your age. We want the most accurate estimate of how you see yourself. (Mark one in each row.)

Lowest 10% Below Average Average Above Average Highest 10%

Self confidence (intellectual)

Self confidence (social)

Self understanding

Leadership ability

Public speaking ability

Math ability

Science ability

Computer and programming skills

Written communication skills

Business ability

20. How important do you think each of the following skills and abilities is to becoming a successful engineer? (Mark one in each row.)

Not Important Somewhat Important Important Very Important Crucial

Public speaking ability

Math ability

Science ability

Computer and programming skills

Written communication skills

Business ability

21. What percentage of the courses you have taken thus far have been taught primarily by graduate students?

- None
- Very little
- Less than half
- About half
- More than half

All or nearly all

22. What portion of the courses you have taken so far have used the following teaching methods?

None Very little Less than half About half More than half All or nearly all

Lectures

Individual Projects

Team Projects

Labs

Seminars

23. Do you see your self studying or practicing engineering next year?

- Yes
- No
- I do not know

24. Your sex:

- Male
- Female

25. How old will you be on December 31st of this year? (Mark one)

- 16 or younger
- 17
- 18
- 19
- 20
- 21-24
- 25-29
- 30-39
- 40-54
- 55 or older

26. Please indicate your ethnic background: (Mark all that apply)

- White/Caucasian
- African American/Black
- American Indian/Alaska Native
- Asian American/Asian
- Native Hawaiian/Pacific Islander
- Mexican American/Chicano
- Puerto Rican
- Other Latino
- Other

27. Citizenship Status:

- U.S. Citizen
- Permanent Resident (green card)
- Neither

28. What is your marital status?

- Not married
- Married
- Divorced
- Separated
- Widowed

29. How many dependents do you have?

- None

- 1
- 2
- 3
- 4
- 5 or more

30. What year did you graduate from high school?

31. How would you describe the community where you attended high school?

- Rural
- Small town
- Suburban
- Urban

32. What was your average grade in high school? (Mark one)

- A or A+
- A
- B+
- B
- B
- C+
- C
- D

33. Do any of your immediate family members hold an engineering degree? (Mark all that apply)

- No
- Yes, both parents
- Yes, father only
- Yes, mother only
- Yes, sibling(s)

34. What is the highest level of education that your mother completed? (Mark one box)

- Did not finish high school
- Graduated from high school
- Attended college but did not complete degree
- Completed an Associate's degree (A.A., A.S., etc.)
- Completed a Bachelor's degree (B.A., B.S., etc.)
- Completed a Master's degree (M.A., M.S., etc.)
- Completed a Professional degree (J.D., M.D., etc.)
- Completed a Doctoral degree (Ph.D.)

35. What is the highest level of education that your father completed? (Mark one box)

- Did not finish high school
- Graduated from high school
- Attended college but did not complete degree
- Completed an Associate's degree (A.A., A.S., etc.)
- Completed a Bachelor's degree (B.A., B.S., etc.)
- Completed a Master's degree (M.A., M.S., etc.)
- Completed a Professional degree (J.D., M.D., etc.)
- Completed a Doctoral degree (Ph.D.)

36. What is your best estimate of your parents' total income last year? Consider income from all sources before taxes. (Mark one)

- Less than \$10,000
- \$10,000-14,999
- \$15,000-19,999
- \$20,000-24,999
- \$25,000-29,999
- \$30,000-39,999
- \$40,000-49,999
- \$50,000-59,999
- \$60,000-74,999

Desktop computer

Laptop computer

Web Browser

Email

Instant Messaging (IM) Programs

Cell Phone

Text Messaging on a Cell Phone

Personal Digital Assistant (PDA) (e.g., Palm, Blackberry)

Game Console

Computer Games / Simulations

Scientific or Graphing Calculator

General-purpose Calculator

Portable Music Players (e.g., CD or MP3 player)

Audio Recording Device

Video conferencing or Web-Cam

Digital Camera

Chat Rooms

Engineering Specific Software

General Purpose Software (e.g., Office applications)

44. In your PERSONAL LIFE outside of school, how often do you use the following technologies? (Mark one for each item.)

	Never	Sometimes	Often	Very frequently	N/A
Desktop computer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laptop computer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Web Browser	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Email	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instant Messaging (IM) Programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cell Phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Text Messaging on a Cell Phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personal Digital Assistant (PDA) (e.g., Palm, Blackberry)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Game Console	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computer Games / Simulations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

-
- Scientific or Graphing Calculator
-
- General-purpose Calculator
-
- Portable Music Players (e.g., CD or MP3 player)
-
- Audio Recording Device
-
- Video conferencing or Web-Cam
-
- Digital Camera
-
- Chat Rooms
-
- Engineering Specific Software
-
- General Purpose Software (e.g., Office applications)
-

45. How often do you carry the following technologies with you? (Mark one for each item.)

- | Never | Sometimes | Often | Very frequently | N/A |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| Laptop computer | | | | |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Cell Phone without Text Messaging | | | | |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Cell Phone with Text Messaging | | | | |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Personal Digital Assistant (PDA) (e.g., Palm, Blackberry) | | | | |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Scientific or Graphing Calculator | | | | |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| General-purpose Calculator | | | | |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Portable Music Players (e.g., CD or MP3 player) | | | | |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Audio Recording Device | | | | |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Digital Camera | | | | |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

46. List all of the electronic and computer technologies (i.e., like those listed in the previous question) you made even momentary use of yesterday and say what each was used for

47. Yesterday was a: (Mark one.)

-
-
-

48. What is the first word or phrase you think of to describe your favorite professor? (Please respond in the space provided.)

49. Do you believe your peers would agree with this description: (Mark one)

-
-
-

50. Some students participate in design competitions, internships, and clubs. In the space provided identify engineering related activities you have participated in outside of class. (If this is not applicable to you, please write "None.")

51. What percentage of your friends in college (on this campus or other campuses) are studying engineering? (Mark one.)

-
-

- Less than half
- About half
- More than half
- All or nearly all

52. Since entering this college, indicate how often you have done the following with other engineering students: (Mark one for each item.)

	Not at all	Rarely	Occasionally	Frequently
Worked on class projects	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>
Held a study group	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>
Took a specific lecture-type class	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>
Took a specific laboratory class	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>
Worked on homework	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>
Reviewed class material	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>
Prepared for class exams	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>
Wrote class reports	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>	<input type="radio"/> <input type="radio"/> <input type="checkbox"/>

53. In what ways do you interact with other engineering students outside of the classroom? (If this is not applicable to you, please write "none.")

54. In the space provided identify any classes (in high school or college so far) that have STRONGLY REINFORCED your interest in studying engineering. (If this is not applicable to you, write "none.")

55. In the space provided identify any classes (in high school or college so far) that have STRONGLY WEAKENED your interest in studying engineering. (If this is not applicable to you, write "none.")

56. What intellectual, personal, financial, and other challenges do you feel you may need to overcome to graduate with an engineering degree? If this is not applicable to you, write "none."

57. In the space provided, list 5 terms you would use to describe "engineering":

58. If you were asked the same question next week, how likely is it that you would list the same 5 terms?

- Not likely
- Somewhat likely
- Likely
- Very likely
- Extremely likely

59. In the space provided, list 5 terms you would use to describe "design":

60. If you were asked the same question next week, how likely is it that you would list the same 5 terms?

- Not likely
- Somewhat likely
- Likely
- Very likely
- Extremely likely

INSTRUMENT STILL IN DEVELOPMENT - DO NOT DISTRIBUTE OUTSIDE APS!

Survey Design

[Help](#)

[General](#) [Questions](#) [Order](#) [Preview](#) [Finish](#)

This is a preview of how this survey will look. In the preview the survey navigation buttons are inactive, use the section number buttons to view different sections. Some navigation buttons may not appear on your final survey, depending on what access it is assigned. The survey will use the background color of the document in which it is embedded. If you have no further changes click **Finish** at the bottom of this page.

ACADEMIC PATHWAYS STUDY SPRING'05 SURVEY

PLEASE CLICK THE SUBMIT BUTTON ONLY AFTER YOU HAVE COMPLETED THE SURVEY. FOR BEST VIEWING RESULTS, PLEASE MAXIMIZE YOUR BROWSER WINDOW.

INSTRUMENT STILL IN DEVELOPMENT - DO NOT DISTRIBUTE OUTSIDE APS!**1. What is your expected year of graduation from college?**

- 2003
- 2004
- 2005
- 2006
- 2007
- 2008
- 2009
- 2010 or later

2. Do you intend to complete a major in engineering?

- Definitely Not
- Probably Not
- Not Sure
- Probably Yes
- Definitely Yes

3. What do you intend to major in?

- Aeronautical Engineering
- Chemical Engineering
- Civil and Environmental Engineering
- Computer Science
- Electrical Engineering
- Management Science and Engineering
- Materials Science and Engineering
- Mechanical Engineering
- Other Engineering
- Arts and Humanities
- Education
- Natural Science/Math
- Social Science
- Other Non-engineering

4. If you intend to DOUBLE MAJOR, what is the second major you intend to complete? (Mark N/A if you do not intend to double major.)

- Aeronautical Engineering
- Chemical Engineering
- Civil and Environmental Engineering
- Computer Science
- Electrical Engineering
- Management Science and Engineering
- Materials Science and Engineering
- Mechanical Engineering
- Other Engineering
- Arts and Humanities
- Education

INSTRUMENT STILL IN DEVELOPMENT - DO NOT DISTRIBUTE OUTSIDE APS!

- Natural Science/Math
- Social Science
- Other Non-engineering
- N/A

5. **Do you intend to practice, conduct research in, or teach engineering for at least 3 years after graduation?**

- Definitely Not
- Probably Not
- Not Sure
- Probably Yes
- Definitely Yes

6. **If you are thinking of going to graduate school NOT IN ENGINEERING, please mark your most probable area of study. Otherwise, mark N/A.**

- Business
- Education
- Medicine
- Law
- MA/Ph.D.
- Public Service
- Other
- N/A

7. **We are interested in knowing why you are studying engineering now. Please indicate below the extent to which the following reasons apply to you:**

	Not a Reason	Minimal Reason	Moderate Reason	Major Reason
Technology plays an important role in solving society's problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engineers make more money than most other professionals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My parent(s) would disapprove if I chose a major other than engineering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engineers have contributed greatly to fixing problems in the world	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engineers are well paid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engineering is an occupation that is respected by other people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My parent(s) want me to be an engineer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An engineering degree will guarantee me a job when I graduate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engineers are creative problem solvers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A faculty member, academic advisor, teaching assistant or other university affiliated person has encouraged and/or inspired me to study engineering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A non-university affiliated mentor has encouraged and/or inspired me to study engineering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. **Please indicate how strongly you disagree or agree with each of the statement:**

	Disagree Strongly	Disagree	Agree	Agree Strongly
I prefer studying in a group to studying by myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

INSTRUMENT STILL IN DEVELOPMENT - DO NOT DISTRIBUTE OUTSIDE APS!

I am a competitive person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I prefer working as part of a team to working alone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get along well with others in study situations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I strive to get higher grades than my classmates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The educational institution I am attending promotes competitive work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My instructors often remind students that they need to do better than other students to obtain high grades	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have easy access to work spaces where I can participate in peer study/discussion sessions with my fellow students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am encouraged by my instructors to initiate or participate in peer study sessions with my fellow students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am a collaborative person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The educational institution I am attending promotes collaborative work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. Please indicate how strongly you disagree or agree with each of the statement:

	Disagree Strongly	Disagree	Agree	Agree Strongly
Creative thinking is one of my strengths	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am familiar with what a practicing engineer does	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am skilled at solving problems that can have multiple solutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. Rate yourself on each of the following traits as compared to your classmates. We want the most accurate estimate of how you see yourself. (Mark one in each row.)

	Lowest 10%	Below Average	Average	Above Average	Highest 10%
Self confidence (social)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leadership ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public speaking ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Math ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Science ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computer skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ability to apply math and science principles in solving real world problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Business ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ability to perform in teams	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Critical Thinking skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. How important do you think each of the following skills and abilities is to becoming a successful engineer? (Mark one in each row.)

	Not Important	Somewhat Important	Very Important	Crucial
Self confidence (social)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leadership ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public speaking ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Math ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Science ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computer skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

INSTRUMENT STILL IN DEVELOPMENT - DO NOT DISTRIBUTE OUTSIDE APS!

Ability to apply math and science principles in solving real world problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Business ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ability to perform in teams	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. Please rate your satisfaction with this institution on each of the aspects of campus life listed below. If you do not have experience with this aspect, mark N/A.

	Very Dissatisfied	Dissatisfied	Satisfied	Very Satisfied	N/A
Quality of instruction by faculty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of advising by faculty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of faculty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of instruction by teaching assistants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of advising by teaching assistants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of teaching assistants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. Please rate your satisfaction with each of the following at this institution. If you do not use the service or facility, mark N/A.

	Very Dissatisfied	Dissatisfied	Satisfied	Very Satisfied	N/A
Computer facilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Libraries	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Classrooms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tutoring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academic advising	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laboratories	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. Since January, how often have you taken courses which required your engagement in individual and/or group projects?

Never
 Rarely
 Occasionally
 Frequently

15. Think about the engineering classes you have taken since January (engineering, math, and science classes). Indicate how often you: (Mark N/A if you have not taken any engineering related classes.)

	Never	Rarely	Occasionally	Frequently	N/A
Came late to engineering class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Skipped engineering class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Turned in engineering assignments that did not reflect your best work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Turned in engineering assignments late	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thought engineering classes were boring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

INSTRUMENT STILL IN DEVELOPMENT - DO NOT DISTRIBUTE OUTSIDE APS!

16. **Think about the liberal arts classes you have taken since January (not engineering, math, and science). Indicate how often you: (Mark N/A if you have not taken any non-engineering related classes.)**

	Never	Rarely	Occasionally	Frequently	N/A
Came late to liberal arts class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Skipped liberal arts class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Turned in liberal arts assignments that did not reflect your best work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Turned in liberal arts assignments late	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thought liberal arts classes were boring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. **How often have you interacted with the following people since January(e.g. by phone, e-mail, Instant Messenger, or in person)? (Mark one for each item.)**

	Never	1-2 times per Term	1-2 times per Month	Once per Week	2-3 times per Week	Daily
Faculty during class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Faculty during office hours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Faculty outside of class or office hours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teaching Assistants during class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teaching Assistants during office hours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teaching Assistants outside of class or office hours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. **What portion of the courses you have taken since January have been taught primarily by graduate students?**

- None
- Very little
- Less than half
- About half
- More than half
- All or nearly all

19. **Since January, what portion of your classes used the following teaching methods?**

	None	Very little	Less than half	About half	More than half	All or nearly all
Lectures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Individual Projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Team Projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Labs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seminars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

20. **To what extent have your courses required your engagement in individual and/or group projects?**

- Too Few
- Enough
- Too many

INSTRUMENT STILL IN DEVELOPMENT - DO NOT DISTRIBUTE OUTSIDE APS!

21. **Some people are involved in non-engineering activities on or off campus, such as hobbies, civic or church organizations, campus publications, student government, social fraternity or sorority, sports, etc. How important is it for you to be involved in these kind of activities?**

- Not Important
 Somewhat Important
 Very Important
 Essential

22. **How often are you involved in the kinds of non-engineering activities described above?**

- Never
 Rarely
 Occasionally
 Frequently

23. **Thinking about your college experience since January, please indicate how much pressure you are feeling related to the following:**

	No Pressure	Reasonable Pressure	Extreme Pressure
Course load (amount of course material being covered)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Course pace (the pace at which the course material is being covered)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Balance between social and academic life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

24. **How well are you meeting the workload demands of your coursework?**

- I am meeting all of the demands easily
 I am meeting all of the demands, but it is hard work
 I am meeting most of the demands, but cannot meet some
 I can meet some of the demands, but cannot meet most
 I cannot meet any of the demands

25. **How stressed do you feel in your coursework right now?**

- No stress
 Some stress
 Reasonable stress
 Significant stress
 Extreme stress

26. **Do you have any concern about your ability to finance your college education?**

- None (I am confident that I will have sufficient funds)
 Some (but I probably will have sufficient funds)
 Major (not sure if I will have sufficient funds to complete college)

INSTRUMENT STILL IN DEVELOPMENT - DO NOT DISTRIBUTE OUTSIDE APS!

27. **How do you meet your college expenses?**

	None	Very little	Less than half	About half	More than half	All or nearly all
Self (income)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self (savings)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parents and family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employer support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scholarships and grants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Loans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

28. **Do you have family members who are practicing engineers?**

Yes
 No

29. **Do you have close friends who are practicing engineers?**

Yes
 No

30. **How much exposure have you had to a professional engineering environment as a visitor, intern, or employee?**

No exposure
 Limited exposure
 Moderate exposure
 Extensive exposure

31. **About how many hours do you spend in a typical 7-day week doing each of the following?**

	0	1-5	6-10	11-15	16-20	21-25	26-30	more than 30
Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working for pay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participating in co-curricular activities (organizations, campus publications, student government, social fraternity or sorority, intercollegiate or intramural sports, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Relaxing and socializing (watching TV, partying, exercising, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Providing care for dependents living with you (parents, children, spouse, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Commuting to class (driving, walking, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

32. **Please rate the overall quality of your collegiate experience so far:**

INSTRUMENT STILL IN DEVELOPMENT - DO NOT DISTRIBUTE OUTSIDE APS!

- Very dissatisfied
- Dissatisfied
- Satisfied
- Very satisfied

33. Your sex:

- Male
- Female

34. Please indicate your ethnic background: (Mark all that apply)

- White/Caucasian
- African American/Black
- American Indian/Alaska Native
- Asian American/Asian
- Native Hawaiian/Pacific Islander
- Mexican American/Chicano
- Puerto Rican
- Other Latino
- Other

35. Citizenship Status:

- U.S. Resident
- Permanent Resident (Green Card)
- Neither

36. What was your average grade in high school? (Mark one)

- A or A+
- A-
- B+
- B
- B-
- C+
- C
- D

37. What is the highest level education that your mother completed? (Mark one)

- Did not finish high school
- Graduate from high school
- Attended college but did not complete degree
- Completed an Associate's degree (A.A., A.S., etc.)
- Completed a Bachelor's degree (B.A., B.S., etc.)

INSTRUMENT STILL IN DEVELOPMENT - DO NOT DISTRIBUTE OUTSIDE APS!

- Completed a Master's degree (M.A., M.S., etc.)
- Completed a Professional degree (J.D., M.D., etc.)
- Complete a Doctoral degree (Ph.D.)

38. **Please rate the extent to which you agree that each of the following is reason that you are currently majoring in or considering majoring in engineering:**

	Strongly Disagree	Moderately Disagree	Disagree	Unsure	Agree	Moderately Agree	Strongly Agree
I think engineering is interesting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am majoring in engineering for my own good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am supposed to major in engineering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There may be good reasons to major in engineering, but personally, I don't see any	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think engineering is pleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think engineering is good for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Majoring in engineering is something that I have to do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am majoring in (considering majoring in) engineering, but I am not sure if it is worth it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Majoring in engineering is fun	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is my personal decision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't have any choice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't know. I don't see what the activity brings me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel good when I am doing engineering activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe engineering is important for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that I have to do it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am doing it, but am not sure it is a good thing to pursue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

39. **Please rate the extent to which you agree with the following statements:**

	Strongly disagree	Moderately Disagree	Disagree	Unsure	Agree	Moderately Agree	Strongly Agree
On the whole, I am satisfied with myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At times, I think I am no good at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that I have a number of good qualities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am able to do things as well as most other people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel I do not have much to be proud of	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I certainly feel useless at times	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that I'm a person of worth, at least on an equal plane with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wish I could have more respect for myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
All in all, I am inclined to feel that I am a failure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

INSTRUMENT STILL IN DEVELOPMENT - DO NOT DISTRIBUTE OUTSIDE APS!

I take a positive attitude toward myself

40. Please rate the extent to which you agree with the following statements.

	Strongly Disagree	Moderately Disagree	Disagree	Unsure	Agree	Moderately Agree	Strongly Agree
Overall, being a member of my ethnic group has very little to do with how I feel about myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In general, being a member of my ethnic group is an important part of my self-image	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My destiny is tied to the destiny of other members of my ethnic group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being a member of my ethnic group is unimportant to my sense of what kind of person I am	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a strong sense of belonging to my ethnic group community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a strong attachment to other members of my ethnic group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being a member of my ethnic group is an important reflection of who I am	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being a member of my ethnic group is not a major factor in my social relationships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, being a member of my gender has very little to do with how I feel about myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In general, being a member of my gender is an important part of my self-image	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My destiny is tied to the destiny of other members of my gender	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being a member of my gender is unimportant to my sense of what kind of person I am	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a strong sense of belonging to my gender community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a strong attachment to other members of my gender	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being a member of my gender is an important reflection of who I am	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being a member of my gender is not a major factor in my social relationships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

41. Please rate the extent to which you agree with the following statements:

	Strongly disagree	Moderately Disagree	Disagree	Unsure	Agree	Moderately Agree	Strongly Agree
Overall, being an engineering student has very little to do with how I feel about myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

INSTRUMENT STILL IN DEVELOPMENT - DO NOT DISTRIBUTE OUTSIDE APS!

In general, being an engineering student is an important part of my self-image	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My destiny is tied to the destiny of other engineering students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being an engineering student is unimportant to my sense of what kind of person I am	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a strong sense of belonging to the engineering student community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a strong attachment to other engineering students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being an engineering student is an important reflection of who I am	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being an engineering student is not a major factor in my social relationships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel good about engineers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am happy that I am going to be an engineer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that engineers have made major accomplishments and advancements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often regret that I am going to become an engineer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am proud to be an engineer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that the engineering community has made valuable contributions to this society	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, engineers are considered good by others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In general, others respect engineers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most people consider engineers, on the average, to be more ineffective than other professionals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engineers are not respected by the broader society	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In general, other professionals view engineers in a positive manner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Society views engineers as an asset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I identify with engineering students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am glad to belong to a group of engineering students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel held back by engineering students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think engineering students work well together	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I see myself as an important part of engineering students on campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I fit in well with the other engineering students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I consider engineering students to not be important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel uneasy with other engineering students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel strong ties to engineering students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

INSTRUMENT STILL IN DEVELOPMENT - DO NOT DISTRIBUTE OUTSIDE APS!

42. **Of the twenty-three design activities below, please put a check mark next to the six MOST IMPORTANT.**

- Abstracting
- Brainstorming
- Building
- Communicating
- Decomposing
- Evaluating
- Generating alternatives
- Goal Setting
- Identifying Constraints
- Imagining
- Iterating
- Making decisions
- Making trade-offs
- Modeling
- Planning
- Prototyping
- Seeking Information
- Sketching
- Synthesizing
- Testing
- Understanding the problem
- Using creativity
- Visualizing

43. **Of the twenty-three design activities below, please put a check mark next to the six LEAST IMPORTANT.**

- Abstracting
- Brainstorming
- Building
- Communicating
- Decomposing
- Evaluating
- Generating alternatives
- Goal Setting
- Identifying Constraints
- Imagining
- Iterating
- Making decisions
- Making trade-offs
- Modeling
- Planning
- Prototyping
- Seeking Information
- Sketching
- Synthesizing
- Testing

INSTRUMENT STILL IN DEVELOPMENT - DO NOT DISTRIBUTE OUTSIDE APS!

- Understanding the problem
- Using creativity
- Visualizing

In questions 44-48, respond five times to the question "Who Am I?" ("Answer A" should be for your first response, "Answer B" for your second response, "Answer C" for your third response, "Answer D" for your fourth response, and "Answer E" for your fifth response.)

44. **Who am I? (Answer A)**

45. **Who am I? (Answer B)**

46. **Who am I? (Answer C)**

47. **Who am I? (Answer D)**

48. **Who am I? (Answer E)**

49. **Rank order your answer to the previous question in terms of how important it is to the way you generally feel about yourself. For each of your answers, mark a rank between 1 and 5. A rank of "1" indicates the most important component, and "5" indicates the least important component.**

	1	2	3	4	5
Answer A	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Answer B	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Answer C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Answer D	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Answer E	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

50. **For the following engineering design activities, please indicate your level of confidence. For example, if you have little or no confidence in your ability to model engineering solutions, then mark poor. If you are extremely confident in your ability, mark excellent.**

	Poor	Fair	Good	Very Good	Excellent
Defining what the problem really is	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

INSTRUMENT STILL IN DEVELOPMENT - DO NOT DISTRIBUTE OUTSIDE APS!

Searching for and collecting information needed to solve the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thinking up potential solutions to the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Detailing how to build the solution to the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assessing and passing judgment on a possible or planned solution to the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comparing and contrasting two solutions to the problem on a particular dimension such as cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Selecting one idea or solution to the problem from among those considered	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicating elements of the design in sketches, diagrams, lists, and written or oral reports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

51. **For the following engineering design activities, please indicate how often you engaged in the activity in your coursework in the current academic year.**

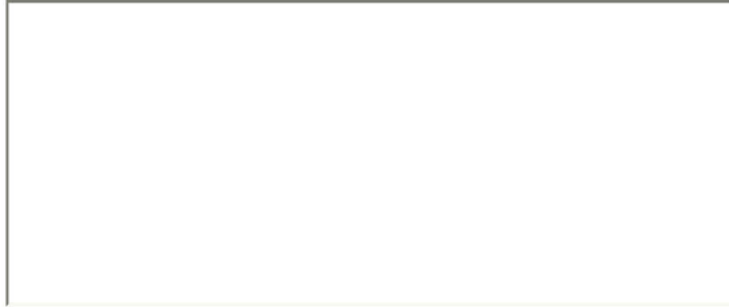
	Never	1-2 times per term	1-2 times a month	Once a week	2-3 times a week	Daily
Defining what the problem really is	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Searching for and collecting information needed to solve the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thinking up potential solutions to the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Detailing how to build the solution to the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assessing and passing judgment on a possible or planned solution to the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comparing and contrasting two solutions to the problem on a particular dimension such as cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Selecting one idea or solution to the problem from among those considered	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicating elements of the design in sketches, diagrams, lists, and written or oral reports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

52. **For the following engineering design activities, please indicate how well you think your courses are preparing you to engage in the activity. For example, if you think they are not preparing you at all, then mark poor. If you think they are preparing you extremely well, then mark excellent.**

	Poor	Fair	Well	Very well	Excellent
Defining what the problem really is	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Searching for and collecting information needed to solve the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thinking up potential solutions to the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Detailing how to build the solution to the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assessing and passing judgment on a possible or planned solution to the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comparing and contrasting two solutions to the problem on a particular dimension such as cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Selecting one idea or solution to the problem from among those considered	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicating elements of the design in sketches, diagrams, lists, and written or oral reports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

53. **What are your summer plans?**

INSTRUMENT STILL IN DEVELOPMENT - DO NOT DISTRIBUTE OUTSIDE APS!



The survey title and other general fields are on the **General** tab. Individual survey questions are added and modified on the **Questions** tab. Questions may be re-ordered or deleted from the **Order** tab. You may see a preview of your survey at any time, by going to the **Preview** tab. If you have no further changes click **Finish** to go back to the Management Interface.
[Click here to open the Help window.](#)

Survey Design[Help](#)[General](#) [Questions](#) [Order](#) [Preview](#) [Finish](#)

This is a preview of how this survey will look. In the preview the survey navigation buttons are inactive, use the section number buttons to view different sections. Some navigation buttons may not appear on your final survey, depending on what access it is assigned. The survey will use the background color of the document in which it is embedded. If you have no further changes click **Finish** at the bottom of this page.

ACADEMIC PATHWAYS STUDY SPRING'07 SURVEY**STANFORD UNIVERSITY**

Please click the [Submit Survey] button to access the next page of the survey, and only after you have completed this page.

For best viewing results, please maximize your browser window.

1. What is your expected year of graduation from college?

- 2007
- 2008
- 2009
- 2010 or later

2. Do you intend to complete a major in engineering?

- Definitely Not
- Probably Not
- Not Sure
- Probably Yes
- Definitely Yes

3. What do you intend to major in?

- Aeronautical Engineering
- Chemical Engineering
- Civil and Environmental Engineering
- Computer Science
- Electrical Engineering
- Management Science and Engineering
- Materials Science and Engineering
- Mechanical Engineering
- Other Engineering
- Arts and Humanities
- Education

- Natural Science/Math
- Social Science
- Other Non-engineering

4. **If you intend to DOUBLE MAJOR, what is the second major you intend to complete? (Mark N/A if you do not intend to double major.)**

- Aeronautical Engineering
- Chemical Engineering
- Civil and Environmental Engineering
- Computer Science
- Electrical Engineering
- Management Science and Engineering
- Materials Science and Engineering
- Mechanical Engineering
- Other Engineering
- Arts and Humanities
- Education
- Natural Science/Math
- Social Science
- Other Non-engineering
- N/A

5. **Do you intend to practice, conduct research in, or teach engineering for at least 3 years after graduation?**

- Definitely Not
- Probably Not
- Not Sure
- Probably Yes
- Definitely Yes

6. **If you are thinking of going to graduate school in a field OTHER THAN engineering, please mark your most probable area of study. Otherwise, mark N/A.**

- Business
- Education
- Humanities and Social Sciences
- Law
- Medicine
- Natural Sciences/Math
- Public Service
- Other
- N/A

7. **We are interested in knowing why you are studying engineering now. Please indicate below the extent to which the following reasons apply to you:**

	Not a Reason	Minimal Reason	Moderate Reason	Major Reason
Technology plays an important role in solving society's problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engineers make more money than most other professionals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My parent(s) would disapprove if I chose a major other than engineering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engineers have contributed greatly to fixing problems in the world	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engineers are well paid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My parent(s) want me to be an engineer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An engineering degree will guarantee me a job when I graduate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A faculty member, academic advisor, teaching assistant or other university affiliated person has encouraged and/or inspired me to study engineering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A non-university affiliated mentor has encouraged and/or inspired me to study engineering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. Please indicate how strongly you disagree or agree with each of the statements:

	Disagree Strongly	Disagree	Agree	Agree Strongly
Creative thinking is one of my strengths	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am familiar with what a practicing engineer does	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am skilled at solving problems that can have multiple solutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. Rate yourself on each of the following traits as compared to your classmates. We want the most accurate estimate of how you see yourself. (Mark one in each row.)

	Lowest 10%	Below Average	Average	Above Average	Highest 10%
Self confidence (social)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leadership ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public speaking ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Math ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Science ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ability to apply math and science principles in solving real world problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Business ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ability to perform in teams	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Critical thinking skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. How important do you think each of the following skills and abilities is to becoming a successful engineer? (Mark one in each row.)

	Not Important	Somewhat Important	Very Important	Crucial
Self confidence (social)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leadership ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public speaking ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Math ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Science ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ability to apply math and science principles in solving real world problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Business ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ability to perform in teams	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. Please rate your satisfaction with this institution on each of the aspects of campus life listed below. If you do not have experience with this aspect, mark N/A.

	Very Dissatisfied	Dissatisfied	Satisfied	Very Satisfied	N/A
Quality of instruction by faculty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of advising by faculty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of faculty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of instruction by teaching assistants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of advising by teaching assistants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of teaching assistants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. Please rate your satisfaction with each of the following at this institution. If you do not use this facility, mark N/A.

	Very Dissatisfied	Dissatisfied	Satisfied	Very Satisfied	N/A
Computer facilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Libraries	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Classrooms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laboratories	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. Think about the engineering classes you have taken during the current school year (engineering, math, and science classes). Indicate how often you: (Mark N/A if you have not taken any engineering related classes.)

	Never	Rarely	Occasionally	Frequently	N/A
Came late to engineering class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Skipped engineering class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Turned in engineering assignments that did not reflect your best work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Turned in engineering assignments late	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. Think about the liberal arts classes you have taken during the current school year (not engineering, math, and science). Indicate how often you: (Mark N/A if you have not taken any non-engineering related classes.)

	Never	Rarely	Occasionally	Frequently	N/A
Came late to liberal arts class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Skipped liberal arts class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Turned in liberal arts assignments that did not reflect your best work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Turned in liberal arts assignments late	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15. **How often have you interacted with the following people during the current school year (e.g. by phone, e-mail, Instant Messenger, or in person)? (Mark one for each item.)**

	Never	1-2 times per Term	1-2 times per Month	Once per Week	2-3 times per Week	Daily
Faculty during class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Faculty during office hours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Faculty outside of class or office hours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teaching Assistants during class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teaching Assistants during office hours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teaching Assistants outside of class or office hours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. **What portion of the courses you have taken during the current school year have been taught primarily by graduate students?**

- None
- Very little
- Less than half
- About half
- More than half
- All or nearly all

17. **During the current school year, what portion of your classes have used the following teaching methods?**

	None	Very little	Less than half	About half	More than half	All or nearly all
Lectures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Individual Projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Team Projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Labs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seminars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. **Some people are involved in non-engineering activities on or off campus, such as hobbies, civic or church organizations, campus publications, student government, social fraternity or sorority, sports, etc. How important is it for you to be involved in these kind of activities?**

- Not Important
- Somewhat Important
- Very Important
- Essential

19. **How often are you involved in the kinds of non-engineering activities described above?**

- Never
- Rarely
- Occasionally

Frequently

20. **Thinking about your college experience during the current school year, please indicate how much pressure you are feeling related to the following:**

	No Pressure	Reasonable Pressure	Extreme Pressure
Course load (amount of course material being covered)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Course pace (the pace at which the course material is being covered)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Balance between social and academic life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

21. **How well are you meeting the workload demands of your coursework?**

- I am meeting all of the demands easily
- I am meeting all of the demands, but it is hard work
- I am meeting most of the demands, but cannot meet some
- I can meet some of the demands, but cannot meet most
- I cannot meet any of the demands

22. **How stressed do you feel in your coursework right now?**

- No stress
- Some stress
- Reasonable stress
- Significant stress
- Extreme stress

23. **Do you have any concerns about your ability to finance your college education?**

- None (I am confident that I will have sufficient funds)
- Some (but I probably will have sufficient funds)
- Major (not sure if I will have sufficient funds to complete college)

24. **How do you meet your college expenses?**

	None	Very little	Less than half	About half	More than half	All or nearly all
Self (income)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self (savings)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parents and family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employer support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scholarships and grants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Loans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

25. **How much exposure have you had to a professional engineering environment as a visitor, intern, or employee?**

- No exposure
- Limited exposure
- Moderate exposure
- Extensive exposure

26. **About how many hours do you spend in a typical 7-day week doing each of the following?**

	0	1-5	6-10	11-15	16-20	21-25	26-30	more than 30
Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working for pay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participating in co-curricular activities (organizations, campus publications, student government, social fraternity or sorority, intercollegiate or intramural sports, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Relaxing and socializing (watching TV, partying, exercising, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Providing care for dependents living with you (parents, children, spouse, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Commuting to class (driving, walking, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

27. **Please rate the overall quality of your collegiate experience so far:**

- Very dissatisfied
- Dissatisfied
- Satisfied
- Very satisfied

28. **Which of the following statements best describes your situation with respect to an engineering major? (Mark one.)**

I started at this institution...

- Intending to major in engineering and never doubted the decision.
- Intending to major in engineering and have/had doubts.
- Considering engineering, but was open to other majors, too.
- Intending another major, but am now considering engineering.
- Completely undecided about what my major would be.

29. **My decision to CONTINUE with an engineering major primarily came from: (Mark one.)**

- Not applicable - I am not continuing in an engineering major.
- Experiences with **PRE-ENGINEERING**-related (math, physics, etc) coursework, faculty, and/or research/internship(s)

- Experiences with **ENGINEERING**-related coursework, faculty, and/or research/internship(s)
- Experiences with **OTHER** coursework, faculty, and/or research/internship(s)

30. **My DOUBTS about continuing in an engineering major *primarily* came from: (Mark one.)**

- Not applicable - I never doubted continuing in an engineering major.
- Experiences with **PRE-ENGINEERING**-related (math, physics, etc) coursework, faculty, and/or research/internship(s)
- Experiences with **ENGINEERING**-related coursework, faculty, and/or research/internship(s)
- Experiences with **OTHER** coursework, faculty, and/or research/internship(s)

31. **Since coming to college, have you had any research experience(s)?**

- No
- Yes, in engineering related areas
- Yes, in non-engineering related areas
- Yes, in both engineering and non-engineering related areas

32. **What is your expected grade point average this academic term?**

- A or A+ (3.9-4.0)
- A- (3.5-3.8)
- B+ (3.2-3.4)
- B (2.9-3.1)
- B- (2.5-2.8)
- C+ (2.2-2.4)
- C (1.9-2.1)
- C- (1.5-1.8)
- D (less than 1.4)

33. **Your sex:**

- Male
- Female

34. **How old will you be on December 31st of this year? (Mark one.)**

- 20 or younger
- 21
- 22
- 23
- 24
- 25-29
- 30-34

- 35-39
- 40-54
- 55 or older

35. **Please indicate your ethnic background: (Mark all that apply.)**

- White/Caucasian
- African American/Black
- American Indian/Alaska Native
- Asian American/Asian
- Native Hawaiian/Pacific Islander
- Mexican American/Chicano
- Puerto Rican
- Other Latino
- Other

36. **What is your marital status?**

- Not married
- Married
- Divorced
- Separated
- Widowed

37. **How many dependents do you have?**

- None
- 1
- 2
- 3
- 4
- 5 or more

38. **Are you:**

- A U.S. Citizen
- A Permanent Resident of the U.S.
- Other

39. **Were you born in the United States?**

- Yes
 If no, at what age did you immigrate to the U.S.?

40. Did one or more of your parents/guardians immigrate to the United States?

- Yes
 No

41. Is English your first language?

- Yes
 No

42. What is the highest level of education that your mother completed? (Mark one.)

- Did not finish high school
 Graduated from high school
 Attended college but did not complete degree
 Completed an Associate's degree (AA, AS, etc.)
 Completed a Bachelor's degree (BA, BS, etc.)
 Completed a Master's degree (MA, MS, etc.)
 Completed a Doctoral or Professional degree (JD, MD, PhD, etc.)

43. What is the highest level of education that your father completed? (Mark one.)

- Did not finish high school
 Graduated from high school
 Attended college but did not complete degree
 Completed an Associate's degree (AA, AS, etc.)
 Completed a Bachelor's degree (BA, BS, etc.)
 Completed a Master's degree (MA, MS, etc.)
 Completed a Doctoral or Professional degree (JD, MD, PhD, etc.)

44. What is your best estimate of your parents' total income last year? Consider income from all sources before taxes. (Mark one.)

- Less than \$10,000
 \$10,000-\$14,999
 \$15,000-\$19,999
 \$20,000-\$24,999
 \$25,000-\$29,999
 \$30,000-\$39,999
 \$40,000-\$49,999
 \$50,000-\$59,999
 \$60,000-\$74,999

- \$75,000-\$99,999
- \$100,000-\$149,999
- \$150,000-\$199,999
- \$200,000-\$249,999
- \$250,000 or more

45. **Would you describe your family as: (Mark one.)**

- Low income
- Middle income
- Upper-middle income
- High income

46. **What did you do last summer (2006) that was particularly important to you?**

47. **Did your experience last summer (2006) advance your interest in studying engineering?**

- Yes
- No

48. **Did you participate over the last summer (2006) in any of the following? (Mark all that apply.)**

- Engineering related internship/job
- Engineering related research
- Engineering related coursework
- N/A

49. **What do you plan to do after graduating from college?**



50. **Did you take the Academic Pathways of People Learning Engineering Survey (APPLES)?**

- Yes
- No
- I'm not sure

Please click the SUBMIT SURVEY button below to access the next page of the survey, and ONLY after you have completed this page. Once you click the button, you will not be able to return to this page.

The survey title and other general fields are on the **General** tab. Individual survey questions are added and modified on the **Questions** tab. Questions may be re-ordered or deleted from the **Order** tab. You may see a preview of your survey at any time, by going to the **Preview** tab. If you have no further changes click **Finish** to go back to the Management Interface.

[Click here to open the Help window.](#)

Survey Design

[Help](#)

[General](#) [Questions](#) [Order](#) [Preview](#) [Finish](#)

This is a preview of how this survey will look. In the preview the survey navigation buttons are inactive, use the section number buttons to view different sections. Some navigation buttons may not appear on your final survey, depending on what access it is assigned. The survey will use the background color of the document in which it is embedded. If you have no further changes click **Finish** at the bottom of this page.

ACADEMIC PATHWAYS STUDY SPRING 2007 SURVEY

PLEASE CLICK THE SUBMIT SURVEY BUTTON ONLY AFTER YOU HAVE COMPLETED THE SURVEY. FOR BEST VIEWING RESULTS, PLEASE MAXIMIZE YOUR BROWSER WINDOW.

1. **In the space provided, list 5 terms you would use to describe "engineering."**

2. **If you were asked the same question next week, how likely is it that you would list the same 5 terms?**

- Not likely
- Somewhat likely
- Likely
- Very likely
- Extremely likely

3. **In the space provided, list 5 activities you think engineers do at work.**

4. If you were asked the same question next week, how likely is it that you would list the same 5 activities?

- Not likely
- Somewhat likely
- Likely
- Very likely
- Extremely likely

5. In the space provided, list 5 terms you would use to describe "design."

6. If you were asked the same question next week, how likely is it that you would list the same 5 terms?

- Not likely
- Somewhat likely
- Likely
- Very likely
- Extremely likely

7. Of the twenty-three design activities below, please put a check mark next to the SIX MOST IMPORTANT.

- Abtracting
- Brainstorming
- Bulking
- Communicating
- Decomposing
- Evaluating
- Generating alternatives
- Goal setting
- Identifying constraints
- Imagining
- Iterating
- Making decisions
- Making trade-offs
- Modeling
- Planning
- Prototyping
- Seeking information
- Sketching
- Synthesizing

- Testing
- Understanding the problem
- Using creativity
- Visualizing

8. Of the twenty-three design activities below, please put a check mark next to the SIX LEAST IMPORTANT.

- Abstracting
- Brainstorming
- Building
- Communicating
- Decomposing
- Evaluating
- Generating alternatives
- Goal setting
- Identifying constraints
- Imagining
- Iterating
- Making decisions
- Making trade-offs
- Modeling
- Planning
- Prototyping
- Seeking information
- Sketching
- Synthesizing
- Testing
- Understanding the problem
- Using creativity
- Visualizing

9. For the following engineering design activities, please indicate your level of confidence. For example, if you have little or no confidence in your ability to model engineering solutions, then mark poor. If you are extremely confident in your ability, mark excellent.

	Poor	Fair	Good	Very Good	Excellent
Defining what the problem really is	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Searching for and collecting information needed to solve the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thinking up potential solutions to the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Detailing how to build the solution to the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assessing and passing judgment on a possible or planned solution to the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comparing and contrasting two solutions to the problem on a particular dimension such as cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Selecting one idea or solution to the problem from among those considered	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicating elements of the design in sketches, diagrams, lists, and written or oral reports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. For the following engineering design activities, please indicate how often you engaged in the activity in your coursework in the current academic year.

	Never	1-2 times per term	1-2 times a month	Once a week	2-3 times a week	Daily
Defining what the problem really is	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Searching for and collecting information needed to solve the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thinking up potential solutions to the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Detailing how to build the solution to the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assessing and passing judgment on a possible or planned solution to the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comparing and contrasting two solutions to the problem on a particular dimension such as cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Selecting one idea or solution to the problem from among those considered	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicating elements of the design in sketches, diagrams, lists, and written or oral reports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. For the following engineering design activities, please indicate how well you think your courses are preparing you to engage in the activity. For example, if you think they are not preparing you at all, then mark poor. If you think they are preparing you extremely well, then mark excellent.

	Poor	Fair	Well	Very well	Excellent
Defining what the problem really is	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Searching for and collecting information needed to solve the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thinking up potential solutions to the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Detailing how to build the solution to the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assessing and passing judgment on a possible or planned solution to the problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comparing and contrasting two solutions to the problem on a particular dimension such as cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Selecting one idea or solution to the problem from among those considered	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicating elements of the design in sketches, diagrams, lists, and written or oral reports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. You have been asked to design a playground. You have a limited amount of time and resources to gather information for your design. From the following list, please put a check mark next to the FIVE kinds of information you would MOST LIKELY NEED as you work on your design:

- Availability of materials
- Body proportions
- Budget
- Handicapped accessibility
- Information about the area
- Labor availability and cost
- Legal liability
- Maintenance concerns
- Material costs
- Material specifications
- Neighborhood demographics
- Neighborhood opinions
- Safety
- Supervision concerns
- Technical references
- Utilities

13. You have been asked to design a playground. You have a limited amount of time and resources to gather information for your design. From the following list, please put a check mark next to the FIVE kinds of information you would LEAST LIKELY NEED as you work on your design:

- Availability of materials
- Body proportions
- Budget
- Handicapped accessibility
- Information about the area
- Labor availability and cost
- Legal liability
- Maintenance concerns
- Material costs
- Material specifications
- Neighborhood demographics
- Neighborhood opinions
- Safety
- Supervision concerns
- Technical references
- Utilities

14. Of the 20 items below, please put a check mark next to the FIVE you think are MOST IMPORTANT to practicing engineers.

- Business knowledge
- Communication
- Conducting experiments
- Contemporary issues
- Creativity
- Data analysis
- Design
- Engineering analysis
- Engineering tools
- Ethics
- Global context
- Leadership
- Life-long learning
- Management skills
- Math
- Problem solving
- Professionalism
- Science
- Societal context
- Teamwork

15. Please rate how well prepared you are to incorporate each of the following items while practicing as an engineer:

	Not at all prepared	...	Somewhat prepared	...	Very well prepared
Business knowledge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conducting experiments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contemporary issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- Creativity
- Data analysis
- Design
- Engineering analysis
- Engineering tools
- Ethics
- Global context
- Leadership
- Life-long learning
- Management skills
- Math
- Problem solving
- Professionalism
- Science
- Societal context
- Teamwork

16. You are an engineer working for a silicon chip manufacturing company. Your company's current facilities in California are close to maximum capacity and the company is out of land to expand at the current site. The company needs to build a new factory in a new location. There are three potential sites: in the U.S. in Alabama or Illinois; or in Asia in Thailand. You have been asked to evaluate the sites for locating the plant.

Please list FIVE factors you think would be important in your evaluation of the sites.

17. Please rate how well prepared you are to consider each of the following items as a practicing engineer:

- | | Not at all prepared | ... | Somewhat prepared | ... | Very well prepared |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Economic context | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Global context | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Natural context | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Societal context | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Technological context | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

18. During your undergraduate years, how many months of experience have you had with academic research or professional engineering?

- | | None | 1-2 months | 3-4 months | 5-6 months | 7-8 months | 9-10 months | more than 10 months |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Part-time, academic research work on campus | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Full-time, academic research work on campus | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Part-time engineering work (e.g., internship, coop, summer job)

Full-time engineering work (e.g., internship, coop, summer job)

19. Please provide a short description of your experience(s) with academic research and/or professional engineering.

The survey title and other general fields are on the **General** tab. Individual survey questions are added and modified on the **Questions** tab. Questions may be re-ordered or deleted from the **Order** tab. You may see a preview of your survey at any time, by going to the **Preview** tab. If you have no further changes click **Finish** to go back to the Management Interface.
[Click here to open the Help window.](#)