Chemical Engineering Year-End Survey 2016

Q1 Dear Chemical Engineering Student: This annual survey is being taken by MSU chemical engineering students at the sophomore, junior, and senior levels. Its results are a very important part of our regular student feedback process and help us improve your chemical engineering program at MSU. It also contributes to our compliance with ABET accreditation criteria, and we have an evaluation visit coming up in Fall, 2016! Please complete all questions as appropriate for your class. YOU MUST COMPLETE THE SURVEY TO GET THE DESIGNATED CREDIT OR OTHER CONSIDERATION IN YOUR COURSE. The survey should take less than 10 minutes to complete. A free-response opportunity is provided at the end of the survey for you to add any comments about topics that weren't covered in the survey questions. Taking this survey will have no negative effect on your course grade. Your responses are confidential, and your survey responses will be de-identified before they are analyzed. If you have questions about this survey or its results, please contact Dr. Daina Briedis, briedis@egr.msu.edu. THE SURVEY WILL BE OPEN FROM TODAY THROUGH MARCH 25, 2016. You must complete the survey within this time period in order to receive any designated credit from your instructor. Thanks for your input! Go GREEN!

Q2 By clicking "yes," I consent to take this survey.
✓ Yes (1)
✓ No (2)
If No Is Selected, Then Skip To End of Survey
Q3 Please select the course in which you were asked to complete this survey. If you are taking two of these courses, please check the higher number course. You will be given extra credit in both courses if designated by the instructor.

- CHE 201 (1)
- CHE 312 (2)
- CHE 473 (3)

Q4 Based on your progress into the chemical engineering curriculum (not on total credits), please identify your class standing.

- Sophomore (1)
- Junior (2)
- Senior (3)
- Graduating senior (May or August, 2016) (4)

Q5 The chemical engineering curriculum offers six concentrations. You may or may not be taking a concentration. Please check which, if any, concentration your are taking.

- Biomedical engineering (1)
- Biochemical engineering (2)
- Bioenergy (3)
- Environmental engineering (4)
- Food science (5)
- Polymer science (6)
- None of the above (straight chemical engineering) (7)
- Undecided (8)
- Wasn't aware that concentrations existed (9)

Q24 Are you taking a minor?

- Yes (1)
- No (2)

If No Is Selected, Then Skip To Are you taking a second major?

Q7 What minor are you taking?

Q25 Are you taking a second major?

- Yes (1)
- No (2)

If No Is Selected, Then Skip To CURRICULUM

Q22 What second major are you taking?
Q8 CURRICULUM
Regardless of your progress through the curriculum, please RATE YOURSELF on your knowledge and ability in each of the areas listed below. Please be truthful! This will help us improve our courses!

<table>
<thead>
<tr>
<th>Area</th>
<th>Low knowledge/ability (1)</th>
<th>Some knowledge/ability (2)</th>
<th>Average knowledge/ability (3)</th>
<th>Good knowledge/ability (4)</th>
<th>Excellent knowledge/ability (5)</th>
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</thead>
<tbody>
<tr>
<td>Problem-solving skills (1)</td>
<td>〇</td>
<td>〇</td>
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<td>Ability to apply math or science in chemical engineering problems (2)</td>
<td>〇</td>
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<td>Ability to use engineering tools (software, equipment, resources)</td>
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<td>in chemical engineering problems (3)</td>
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<td>Design skills (4)</td>
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<td>Ability to conduct experiments (5)</td>
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<td>Ability to analyze experimental data (e.g., with statistics) (6)</td>
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<td>ORAL communication skills (7)</td>
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<td>WRITTEN communication skills (8)</td>
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<td>Ability to</td>
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<td>Identify and analyze potential ethical issues (9)</td>
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<td>Ability to exercise professional behavior (10)</td>
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<td>Ability to work in teams (11)</td>
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<td>An understanding of global and societal issues in chemical engineering (12)</td>
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<td>An understanding of economic issues in chemical engineering (13)</td>
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<td>An understanding of environmental issues in chemical engineering (14)</td>
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<td>Ability to learn on my own—to engage in life-long learning (15)</td>
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<td>An understanding of contemporary</td>
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<td>ry issues of chemical engineering (16)</td>
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Q10 WORK EXPERIENCE

Q11 Have you had any post-high school work experience?
☐ Yes (1)
☐ No (2)
If No Is Selected, Then Skip To In which organizations have you parti...

Q12 Please check the categories that best describe your work experience. You may choose more than one to fully describe your work experience.
☐ Full-time (1)
☐ Part-time (2)
☐ Internship (3)
☐ Co-op (4)
☐ Job related to engineering/science (5)
☐ Job NOT related to engineering/science (6)
☐ Summer job on campus related to engineering/science (7)
☐ Summer job on campus NOT related to engineering/science (8)
☐ Summer job off campus related to engineering/science (9)
☐ Summer job off campus NOT related to engineering/science (10)
☐ Other (please fill in below) (11) ____________________

Q13 In a typical school week, how many hours do you work? (beyond studying and attending class)
☐ 0-5 (1)
☐ 6-10 (2)
☐ 11-15 (3)
☐ 16-20 (4)
☐ More than 20 (5)
Q14 In which organizations have you participated during your time at MSU? Please check all that apply.

- AIChE (1)
- Omega Chi Epsilon (2)
- NOBCCChe (3)
- Tau Beta Pi (4)
- ISPE (5)
- NSBE (6)
- SPE (7)
- SWE (8)
- BME Society (9)
- Phi Sigma Rho, engineering sorority (10)
- Triangle, engineering fraternity (11)
- Other sorority (12)
- Other fraternity (13)
- Marching Band (14)
- Student athlete (varsity or club) (15)
- ChemE Car (16)
- Student Ambassador (17)
- Cru (18)
- Navigators (19)
- Other STEM-related club (21)
- Other non-STEM (social) club (22)
- Other (20) ____________________
Q17 FINAL QUESTIONS & COMMENTS

Q18 The space below is for you to provide any additional comments about your experiences in the chemical engineering program.

Q19 Your gender
   ☐ Male (1)
   ☐ Female (2)

Q20 Select the range in which your grade point average lies. Please be honest.
   ☐ 4.0-3.5 (1)
   ☐ 3.49-3.0 (2)
   ☐ 2.99-2.5 (3)
   ☐ 2.49-2.0 (4)
   ☐ 1.99-1.5 (5)
   ☐ Below 1.5 (6)