Workshop Measuring Impact
ASEE Benchmarking Surveys

American Society for Engineering Education
Department of Assessment, Evaluation, and Institutional Research
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March 8, 2016
ASEE Engineering Research Council Annual Conference
AEIR conducts extensive research on diverse issues in STEM education and carries out both grant-funded and contract-based program evaluation activities, aligned with ASEE’s core missions and values.
ASEE Benchmarking Surveys

Profiles of Engineering and Engineering Technology Colleges

ASEE Faculty Salary Survey

Undergraduate Engineering Retention Survey
PROFILES of ENGINEERING & ENGINEERING TECHNOLOGY COLLEGES
What is Profiles of Engineering and Engineering Technology Colleges Survey?

This survey collects data annually from ABET-accredited US and Canadian engineering schools on programs and degrees offered; program personnel; admission requirements; faculty counts; and enrollment, graduation, and expenses for both undergraduate and graduate students.

Why does ASEE collect this data?

ASEE publishes this data in the form of a directory, which allows both students and administrators to compare schools using a range of characteristics from location and degrees offered to student expenses and enrollment information.

Does it cost to participate?

Yes. The fee also covers the cost of a hard copy of the Profiles directory and one year access to ASEE Data Management System, an interactive, longitudinal database tracking college profiles information since 1998.

Currently 360 schools participate in this survey.

Important Dates:
Survey opens: September
Survey closes: December

http://www.asee.org/profiles
Run Reports

1. Select Report

Choose either "My reports" or "ASEE-created reports", then select the report to use from the drop-down menu.

- My reports
- ASEE-created reports

2. Select Group

Choose either "My groups" or "ASEE-created groups", then select the group to use for the report from the drop-down menu.

- My groups: All U.S. Engineering Schools
- ASEE-created groups: Regional

3. Select Year(s)

Choose the year(s) for which you would like to run the report.
<table>
<thead>
<tr>
<th>PEDS UnitID</th>
<th>Year</th>
<th>Discipline</th>
<th>School</th>
<th>Af_Amer M Bachelor's</th>
<th>Af_Amer F Bachelor's</th>
<th>As_Amer M Bachelor's</th>
<th>As_Amer F Bachelor's</th>
<th>Hisp M Bachelor's</th>
<th>Hisp F Bachelor's</th>
</tr>
</thead>
<tbody>
<tr>
<td>200800</td>
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<td>Aerospace Engineering</td>
<td>The University of Akron</td>
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<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
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<td>The University of Alabama</td>
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<td>3</td>
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<td>0</td>
<td>12</td>
<td>0</td>
<td>22</td>
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</tbody>
</table>
What is Faculty Salary Survey?

At the request of the Engineering Deans Council, every year ASEE collects data on "real" faculty salaries from ABET-accredited engineering schools; the results are not skewed by salaries of Deans, Associate Deans, Department Chairs, and Associate Department Chairs.

Important Dates:
• Survey opens: November
• Survey closes: March

https://salarysurvey.asee.org/

What salary information does the survey collect?

ASEE collects data in the form of descriptive statistics (average, median, upper-lower quartiles, upper-lower deciles, and faculty counts) for equivalent 9-month salaries for junior lecturers, tenured or tenure-track assistant professors, associate professors, and full professors.

Does it cost to participate?

Yes. The fee covers the cost of a set of aggregated salary reports and one-year access to a longitudinal salary database, going back to 2007, from which participating schools may generate their own reports based on a set of schools they select.

Currently 180 schools participate in this survey.
# ALL INSTITUTIONS

<table>
<thead>
<tr>
<th>Departments</th>
<th>Junior Lecturer</th>
<th>Assistant</th>
<th>Associate</th>
<th>Full</th>
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<tbody>
<tr>
<td>Aerospace</td>
<td>$53,395</td>
<td>$88,438</td>
<td>$103,190</td>
<td>$141,654</td>
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<tr>
<td>Agricultural</td>
<td>x</td>
<td>$80,348</td>
<td>$91,183</td>
<td>$125,321</td>
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<tr>
<td>Architectural</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Biomedical</td>
<td>$74,158</td>
<td>$90,218</td>
<td>$106,588</td>
<td>$155,555</td>
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<tr>
<td>Chemical</td>
<td>$73,059</td>
<td>$89,507</td>
<td>$103,403</td>
<td>$147,802</td>
</tr>
<tr>
<td>Civil &amp; Environmental</td>
<td>$65,073</td>
<td>$83,171</td>
<td>$97,437</td>
<td>$130,435</td>
</tr>
<tr>
<td>Computer Science (inside engineering)</td>
<td>$68,515</td>
<td>$91,947</td>
<td>$104,486</td>
<td>$138,846</td>
</tr>
<tr>
<td>Electrical &amp; Computer</td>
<td>$72,667</td>
<td>$89,870</td>
<td>$102,276</td>
<td>$138,189</td>
</tr>
<tr>
<td>Engineering (general)</td>
<td>$66,237</td>
<td>$80,408</td>
<td>$94,710</td>
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<tr>
<td>Engineering Management</td>
<td>x</td>
<td>$82,049</td>
<td>x</td>
<td>$131,988</td>
</tr>
<tr>
<td>Engineering Science &amp; Engineering Physics</td>
<td>x</td>
<td>x</td>
<td>$93,350</td>
<td>$115,255</td>
</tr>
<tr>
<td>Engineering Technology</td>
<td>$63,226</td>
<td>$77,118</td>
<td>$87,596</td>
<td>$107,086</td>
</tr>
<tr>
<td>Industrial &amp; Manufacturing</td>
<td>$75,741</td>
<td>$85,609</td>
<td>$101,162</td>
<td>$135,262</td>
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<tr>
<td>Mechanical</td>
<td>$72,210</td>
<td>$85,747</td>
<td>$97,712</td>
<td>$133,152</td>
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<tr>
<td>Metallurgical &amp; Materials</td>
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<td>$90,589</td>
<td>$107,644</td>
<td>$153,024</td>
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<tr>
<td>Mining</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>$138,781</td>
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<tr>
<td>Nuclear</td>
<td>x</td>
<td>$89,903</td>
<td>$112,103</td>
<td>$151,755</td>
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<tr>
<td>Petroleum</td>
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<td>$90,287</td>
<td>$106,480</td>
<td>$144,613</td>
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<tr>
<td>Other Engineering Disciplines</td>
<td>$76,283</td>
<td>$85,463</td>
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<td>$141,505</td>
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<tr>
<td>Total College</td>
<td>$69,142</td>
<td>$86,978</td>
<td>$100,745</td>
<td>$135,827</td>
</tr>
</tbody>
</table>

** An 'x' value represents insufficient data for that field. Please see website for more details.
In what reporting formats can I view the data?
Two reports can be generated – at the national level or for a group of selected peer institutions.
- Longitudinal retention and Time-to-Graduation Report
- Yearly Interquartile Benchmark report

Why is ASEE conducting this survey?
Currently there is no national-level, public source of information for engineering retention rates and time-to-graduation. This data allows administrators to:
- Develop successful retention strategies;
- Have peer benchmarking metrics;
- Explore partnerships with institutions successfully retaining a diverse and high-performing student population.

Who can participate in this survey?
Colleges and universities with an ABET-accredited engineering program can participate in this survey.

Does it cost to participate?
No, but the participants will be given access to the reporting tools for a fee.

IMPORTANT DATES:
SURVEY OPENS: JUNE
SURVEY CLOSES: AUGUST
https://retention-survey.asee.org/
If you wish to explore national retention and time-to-graduation benchmarks based on characteristics, you must select your desired cohort and then a school characteristic. You will then need to select the report you wish to view: Longitudinal Retention and Time-to-Graduation Benchmark Report or Yearly Benchmark Report. After you select the report, you can toggle between school characteristics using the drop-down menu.

**Peer Group Benchmark**

If you wish to create your own peer group, click "add peer group" and select the schools to include in your school against. Please note you must select at least 10 or more schools to display a result. To create your peer group, click the type of display and year. You will be able to view aggregated results, such as your school's rank within your pre-selected peer group or the interquartile range of schools similar to your school's rank within the pre-selected peer group. After you use a school to create a peer group, the report may not include that school in another benchmark.

**Peer Group Benchmark**

Reporting on specific peer groups is available via a paid subscription. Purchase access today to unlock known peer groups today.

**National Benchmark**

Select the criteria for a basic group to see a list of available reports:
<table>
<thead>
<tr>
<th>All</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
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<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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<tr>
<td>Freshman year at the institution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total head count</td>
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<td>26889</td>
<td>27018</td>
<td>34560</td>
<td>37666</td>
<td>39155</td>
<td>40522</td>
<td>41663</td>
<td>43033</td>
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<tr>
<td>Persisted to 2nd year</td>
<td>77.8%</td>
<td>78.2%</td>
<td>77.9%</td>
<td>77.3%</td>
<td>77.5%</td>
<td>78.2%</td>
<td>78.7%</td>
<td>78.8%</td>
<td>79.5%</td>
</tr>
<tr>
<td>Persisted to 3rd year</td>
<td>64.1%</td>
<td>64.9%</td>
<td>65.2%</td>
<td>65.0%</td>
<td>65.5%</td>
<td>66.1%</td>
<td>66.8%</td>
<td>67.0%</td>
<td>68.2%</td>
</tr>
<tr>
<td>Persisted to 4th year</td>
<td>58.8%</td>
<td>59.5%</td>
<td>60.1%</td>
<td>60.2%</td>
<td>60.8%</td>
<td>61.1%</td>
<td>62.0%</td>
<td>62.2%</td>
<td>63.9%</td>
</tr>
<tr>
<td>Degree attained within 4 years</td>
<td>25.5%</td>
<td>25.7%</td>
<td>26.6%</td>
<td>25.4%</td>
<td>26.4%</td>
<td>27.2%</td>
<td>27.9%</td>
<td>28.6%</td>
<td>30.1%</td>
</tr>
<tr>
<td>Persisted to 5th year</td>
<td>32.0%</td>
<td>32.9%</td>
<td>32.1%</td>
<td>35.8%</td>
<td>35.4%</td>
<td>35.1%</td>
<td>35.0%</td>
<td>37.5%</td>
<td>36.8%</td>
</tr>
<tr>
<td>Degree attained within 5 years</td>
<td>49.3%</td>
<td>49.6%</td>
<td>50.1%</td>
<td>50.9%</td>
<td>51.6%</td>
<td>52.0%</td>
<td>52.9%</td>
<td>53.6%</td>
<td>56.4%</td>
</tr>
<tr>
<td>Persisted to 6th year</td>
<td>8.3%</td>
<td>8.9%</td>
<td>8.6%</td>
<td>12.2%</td>
<td>12.3%</td>
<td>11.9%</td>
<td>13.5%</td>
<td>14.5%</td>
<td></td>
</tr>
<tr>
<td>Degree attained</td>
<td>53.8%</td>
<td>54.2%</td>
<td>55.2%</td>
<td>55.9%</td>
<td>56.4%</td>
<td>56.8%</td>
<td>58.0%</td>
<td>58.0%</td>
<td></td>
</tr>
</tbody>
</table>
### Female - 6122 students included in this report

<table>
<thead>
<tr>
<th></th>
<th>Persisted to 2nd year</th>
<th>Persisted to 3rd year</th>
<th>Persisted to 4th year</th>
<th>Degree attained within 4 years</th>
<th>Persisted to 5th year</th>
<th>Degree attained within 5 years</th>
<th>Persisted to 6th year</th>
<th>Degree attained within 6 years</th>
<th>Persisted to 7th year</th>
<th>Degree attained within 7 years</th>
<th>Persisted to 8th year</th>
<th>Degree attained within 8 years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Minimum</strong></td>
<td>35.0%</td>
<td>29.2%</td>
<td>23.3%</td>
<td>1.1%</td>
<td>2.1%</td>
<td>10.8%</td>
<td>0.3%</td>
<td>13.5%</td>
<td>0.0%</td>
<td>19.2%</td>
<td>19.2%</td>
<td></td>
</tr>
<tr>
<td><strong>Maximum</strong></td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>75.5%</td>
<td>90.9%</td>
<td>89.6%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>80.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td><strong>Upper decile</strong></td>
<td>91.4%</td>
<td>82.8%</td>
<td>78.4%</td>
<td>58.0%</td>
<td>53.4%</td>
<td>74.4%</td>
<td>20.0%</td>
<td>76.8%</td>
<td>12.0%</td>
<td>78.2%</td>
<td>81.0%</td>
<td></td>
</tr>
<tr>
<td><strong>Upper quartile</strong></td>
<td>85.1%</td>
<td>75.4%</td>
<td>71.4%</td>
<td>37.6%</td>
<td>40.0%</td>
<td>63.3%</td>
<td>10.5%</td>
<td>66.7%</td>
<td>4.8%</td>
<td>66.8%</td>
<td>67.2%</td>
<td></td>
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<tr>
<td><strong>Median</strong></td>
<td>78.1%</td>
<td>64.3%</td>
<td>56.3%</td>
<td>25.9%</td>
<td>25.4%</td>
<td>49.3%</td>
<td>6.7%</td>
<td>53.1%</td>
<td>1.9%</td>
<td>55.6%</td>
<td>55.6%</td>
<td></td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>74.4%</td>
<td>62.2%</td>
<td>56.7%</td>
<td>28.6%</td>
<td>29.4%</td>
<td>49.4%</td>
<td>11.0%</td>
<td>54.1%</td>
<td>5.3%</td>
<td>55.5%</td>
<td>56.0%</td>
<td></td>
</tr>
<tr>
<td><strong>Lower quartile</strong></td>
<td>64.9%</td>
<td>50.0%</td>
<td>42.9%</td>
<td>15.0%</td>
<td>16.7%</td>
<td>38.1%</td>
<td>3.7%</td>
<td>43.3%</td>
<td>0.4%</td>
<td>43.5%</td>
<td>44.8%</td>
<td></td>
</tr>
<tr>
<td><strong>Lower decile</strong></td>
<td>53.7%</td>
<td>40.0%</td>
<td>33.3%</td>
<td>8.7%</td>
<td>9.1%</td>
<td>20.0%</td>
<td>2.0%</td>
<td>32.9%</td>
<td>0.0%</td>
<td>35.4%</td>
<td>35.4%</td>
<td></td>
</tr>
<tr>
<td><strong>Minimum</strong></td>
<td>35.3%</td>
<td>25.0%</td>
<td>12.5%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>11.1%</td>
<td>0.0%</td>
<td>11.1%</td>
<td>11.1%</td>
<td></td>
</tr>
</tbody>
</table>

### Hispanic / Latino - 1921 students included in this report

<table>
<thead>
<tr>
<th></th>
<th>Persisted to 2nd year</th>
<th>Persisted to 3rd year</th>
<th>Persisted to 4th year</th>
<th>Degree attained within 4 years</th>
<th>Persisted to 5th year</th>
<th>Degree attained within 5 years</th>
<th>Persisted to 6th year</th>
<th>Degree attained within 6 years</th>
<th>Persisted to 7th year</th>
<th>Degree attained within 7 years</th>
<th>Persisted to 8th year</th>
<th>Degree attained within 8 years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Minimum</strong></td>
<td>35.3%</td>
<td>25.0%</td>
<td>12.5%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>11.1%</td>
<td>0.0%</td>
<td>11.1%</td>
<td>11.1%</td>
<td>--------------------------------</td>
</tr>
</tbody>
</table>

**Note:** The data represents the percentage of students who persisted and attained their degrees within the specified years.
Thank you!
b.yoder@asee.org
https://aeir.asee.org
aeir@asee.org