School of Engineering and Applied Science

Undergraduate Class of 2019

Career Plans Survey Report

Methodology

Career Services at the University of Pennsylvania annually surveys graduating students to provide a snapshot of their post-graduation plans.

This report looks at 472 School of Engineering and Applied Science undergraduates who received their degrees from August 2018–May 2019. Students were surveyed up to six months from their graduation date, with a 59% response rate. Additional information was then collected via LinkedIn and other sources, bringing the total knowledge rate up to 78%, a total of 366 known graduate outcomes.

Sections

1. Post-Graduation Plans
   Full-Time Employment
2. Industries & Top Hiring Employers
3. Job Function
4. Geography
5. Job Offers & Hiring Timeline
6. Salary & Bonuses
   Continuing Education
7. Graduate Programs & Degree Level
8. First Destinations by Major*
   (*Coming soon!)
97.0% of graduates were either employed, enrolled in continuing education, volunteering, serving in the military, or not seeking in the first 6 months after graduation.

Post-Graduation: 5 Year Trends

*Employed includes full-time employed, part-time employed, military service and volunteer service
Full-Time Employment

Top Hiring Employers by Industry

**Consulting**
1. McKinsey & Company (7)
2. The Boston Consulting Group (5)
3. Deloitte (3)
4. Bain & Company (2)

**Financial Services**
1. Goldman Sachs (10)
2. Bridgewater Associates (5)
   - Capital One (5)
3. Morgan Stanley (3)
   - Moelis & Company (3)

**Technology**
1. Google, Inc. (18)
2. Microsoft (14)
3. Facebook (11)
4. Amazon (4)

**Other**
1. SpaceX (4)
   - The Walt Disney Company (4)
3. Boeing Company (3)
   - University of Pennsylvania (3)

Employment by Industry

255 responses

- **Technology** 39%
- **Financial Services** 22%
- **Consulting** 11%
- **Biomedical Products/Pharmaceuticals** 5%
- **Aerospace** 4%
- **Other** 3%
- **Media/Journalism/Entertainment** 3%
- **Education** 2%
- **Electronics/Robotics** 2%
- **Energy/Natural Resources/Utilities** 2%
- **Consumer Products** 1%
- **Marketing/Advertising/Public Relations** 1%
- **Healthcare** 1%
- **Manufacturing - Other** 1%
- **Retail/Wholesale** 1%
- **Nonprofit** 1%
- **Engineering** 1%
- **Design/Fine Arts** 1%
Full-Time Employment

Employment by Job Function

253 responses

Software Development/Engineering: 97 / 38%
- Research & Development: 22 / 9%
- Consulting: Management/Strategy: 22 / 9%
- Product/Project Management (Technology): 14 / 6%
- Finance: Investment Banking: 11 / 4%
- Data Analytics: Data Analytics: 10 / 4%
- Consulting: Technology: 9 / 4%
- Data Analytics: Data Science: 8 / 3%
- Manufacturing: 7 / 3%
- Entrepreneur/Founder: 6 / 2%
- Systems Engineering/Analysis: 6 / 2%
- Research: Biomedical: 4 / 2%
- Business Development: 4 / 2%
- Finance: Trading: 3 / 1%
- Finance: Financial Planning & Analysis (non-bnkg): 3 / 1%
- Testing/Quality/Evaluation: 3 / 1%
- Other: 3 / 1%
- Energy Exploration and Production: 3 / 1%
- Product Design/Development: 2 / 0.8%
- Management: 2 / 0.8%
- Finance: Investment Management/Counsel: 2 / 0.8%
- Consulting: Research: 2 / 0.8%
- Animation: 2 / 0.8%
- Finance: Private Equity: 2 / 0.8%
- Legal Support: 1 / 0.4%
- Writing: Technical Writing (Scientific): 1 / 0.4%
- Production (Media): 1 / 0.4%
- Administration: 1 / 0.4%
- Construction: 1 / 0.4%
- Technology Analysis: 1 / 0.4%
Full-Time Employment

Employment by State

25% of those who reported their location were working in New York City

Internationally
7 students in 6 countries
3% of those who reported their location

Hong Kong
Kenya
Liberia
Saudi Arabia
Switzerland
United Kingdom (2)

International Students
Of the 33 respondents working full-time who identified as “foreign nationals,” 30 (91%) were employed in the U.S.

U.S. Employers of Foreign Nationals

Biomedical Products /Pharmaceuticals
Novartis

Consulting
Deloitte
McKinsey & Company

Education
Information Sciences Institute

Financial Services
BlackRock
Bridgewater Associates
E*TRADE Financial
Evercore
Morgan Stanley
MUFG
Schonfeld Strategic Advisors

Technology
Asana
DocuSign
Facebook
Formlabs
Google, Inc.
Mastercard
Microsoft
Snap, Inc.
**Full-Time Employment**

### Hiring Timeline

- **145 responses**

<table>
<thead>
<tr>
<th>Month</th>
<th>Received Offer</th>
<th>Accepted Offer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jul &amp; earlier</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Aug</td>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td>Sep</td>
<td>28%</td>
<td>23%</td>
</tr>
<tr>
<td>Oct</td>
<td>19%</td>
<td>19%</td>
</tr>
<tr>
<td>Nov</td>
<td>11%</td>
<td>8%</td>
</tr>
<tr>
<td>Dec</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Jan</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Feb</td>
<td>1%</td>
<td>4%</td>
</tr>
<tr>
<td>Mar</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>Apr</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>May</td>
<td>5%</td>
<td>1%</td>
</tr>
<tr>
<td>Jun</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Jul</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>Aug</td>
<td>23%</td>
<td>4%</td>
</tr>
<tr>
<td>Sep &amp; later</td>
<td>19%</td>
<td>7%</td>
</tr>
</tbody>
</table>

- **68% of graduates working full-time accepted offers before January,** primarily working in **early recruiting industries** like Technology, Finance, and Consulting.

### Offer Method

- **130 responses**

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Career Services</td>
<td>42%</td>
</tr>
<tr>
<td>Applied Directly</td>
<td>22%</td>
</tr>
<tr>
<td>Previous Employer (Non-OCI)</td>
<td>18%</td>
</tr>
<tr>
<td>Penn Contacts</td>
<td>9%</td>
</tr>
<tr>
<td>Non-Penn Contact</td>
<td>7%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
</tr>
</tbody>
</table>

- **42% of full-time opportunities were found through Career Services.**

- **39% accepted return offers from a previous employer,** primarily in **Technology and Financial Services.**

- **37% accepted offers from On Campus Interviews** (through a previous employer or through OCI directly).

- **16% heard about the opportunity through word of mouth** (via a connection in or outside of Penn).
Full-Time Employment

Average Starting Salary

<table>
<thead>
<tr>
<th></th>
<th>Respondents</th>
<th>Average</th>
<th>Median</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SEAS</strong></td>
<td>136</td>
<td>$99,079</td>
<td>$100,000</td>
<td>$30,000</td>
</tr>
<tr>
<td>SEAS Only</td>
<td>99</td>
<td>$98,417</td>
<td>$100,000</td>
<td>$30,000</td>
</tr>
<tr>
<td>Women</td>
<td>42</td>
<td>$96,028</td>
<td>$95,340</td>
<td>$45,000</td>
</tr>
<tr>
<td>Men</td>
<td>57</td>
<td>$100,176</td>
<td>$100,000</td>
<td>$30,000</td>
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<tr>
<td><strong>SEAS/CAS – Dual Degree</strong></td>
<td>6</td>
<td>$103,167</td>
<td>$100,000</td>
<td>$72,000</td>
</tr>
<tr>
<td>Women</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Men</td>
<td>4</td>
<td>$105,500</td>
<td>$112,500</td>
<td>$72,000</td>
</tr>
<tr>
<td><strong>SEAS/NUR – Dual Degree</strong></td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Women</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Men</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>SEAS/WH – Dual Degree</strong></td>
<td>31</td>
<td>$100,403</td>
<td>$85,000</td>
<td>$72,500</td>
</tr>
<tr>
<td>Women</td>
<td>3</td>
<td>$105,000</td>
<td>$85,000</td>
<td>$80,000</td>
</tr>
<tr>
<td>Men</td>
<td>28</td>
<td>$99,911</td>
<td>$87,500</td>
<td>$72,500</td>
</tr>
</tbody>
</table>

*Fewer than 3 reported salaries not published to maintain confidentiality.*
Continuing Education

Top Graduate Schools Accepting by Discipline

Engineering
1. University of Pennsylvania (51)
2. Columbia University (3)
3. University of Chicago (2)
   University of California (2)
   Imperial College London (2)

Medicine
1. University of Pennsylvania (1)
   Cornell University (1)
   Icahn School of Medicine at Mount Sinai (1)
   Thomas Jefferson University (1)
   University of California (1)

Other
1. University of Pennsylvania (4)
2. Stanford University (2)
   Massachusetts Institute of Technology (2)

Continuing Education by Field of Study

Engineering, 81%
- University of Pennsylvania (51)
- Columbia University (3)
- University of Chicago (2)
- University of California (2)
- Imperial College London (2)

Medicine, 6%
- University of Pennsylvania (1)
- Cornell University (1)
- Icahn School of Medicine at Mount Sinai (1)
- Thomas Jefferson University (1)
- University of California (1)

Science (non-medical), 5%

Other, 4%

Continuing Education Degree Level

Masters, 66%
Doctorate, 30%
Other, 4%

84 responses

83 responses