METHODOLOGY

During the summer of 2012 an alumni survey was conducted of all Penn undergraduates from SEAS, College of Arts & Sciences, Nursing, and Wharton who graduated in 2006 and 2007. Multiple emails, using addresses provided by the Registrar’s office, were sent to the graduates asking them to complete the on-line survey. The overall response rate for the 2006/2007 survey across all Penn undergraduate schools was 34.3%. The following details were provided by the Engineering alumni who responded to the survey.

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Total # of School of Engineering& Applied Science Responses: 191

<table>
<thead>
<tr>
<th>Gender Breakdown</th>
<th>% Male</th>
<th>% Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>71.3%</td>
<td>28.7%</td>
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</tbody>
</table>

CURRENT PURSUITS
Includes all SEAS Respondents

- Full Time Employment 71.7%
- Graduate School 25.1%
- Short Term Employment 2.1%
- Seeking 0.5%
- Other 0.5%

Prepared by: Rosette Pyne, Senior Associate Director
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## SEAS ALUMNI CURRENT LOCATION

![Map of SEAS Alumni Current Location]

- Canada (1)
- China (1)
- France (1)
- Hong Kong (1)
- India (1)
- Israel (2)
- Russia (1)
- Singapore (1)
- Switzerland (2)
- Taiwan (1)
- United Kingdom (3)

## CAREER HISTORY

<table>
<thead>
<tr>
<th>Metric</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Employers Post-Graduation</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1.88</td>
</tr>
<tr>
<td>Female</td>
<td>1.85</td>
</tr>
<tr>
<td><strong>Number of Years with Current Employer</strong></td>
<td>2.49</td>
</tr>
<tr>
<td><strong>Number Reporting Changing Careers</strong></td>
<td>49 (25.6%)</td>
</tr>
<tr>
<td><strong>Time Taken Off After Graduation</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>9.4%</td>
</tr>
<tr>
<td>Female</td>
<td>5.2%</td>
</tr>
<tr>
<td><strong>Number Reporting Having International Experience</strong></td>
<td>35 (18.3%)</td>
</tr>
<tr>
<td>(Travel/Study Abroad/Volunteer Service)</td>
<td></td>
</tr>
<tr>
<td><strong>Percent Reported Having a Leadership Role</strong></td>
<td>85%</td>
</tr>
<tr>
<td>(Titles include Technical Lead, Project Manager, Research Coordinator, Supervisor)</td>
<td></td>
</tr>
</tbody>
</table>
INDUSTRIES EMPLOYING SEAS ALUMNI

- Financial Services: 26.1%
- Technology: 16.4%
- Consulting: 12.7%
- Manufacturing: 10.4%
- Healthcare: Hospital: 9.0%
- Energy/Natural Resources/Utilities: 6.0%
- Legal Services: 3.7%
- Government: 3.7%
- Education: 3.7%
- Communications: 3.0%
- Retail/Wholesale: 1.5%
- Insurance: 1.5%
- Hospitality/Leisure/Sports: 1.5%
- Transportation: 0.7%

EMPLOYED SEAS RESPONDENTS BY JOB TYPE

- Finance: 20.0%
- Information Technology: 18.5%
- Consulting: 16.5%
- Engineering: 13.3%
- Healthcare: 8.1%
- Management: 5.2%
- Law: 3.7%
- Scientific Research: 3.0%
- Other: 2.2%
- Marketing: 2.2%
- Real Estate: 1.5%
- Insurance: 1.5%
- Government: 1.5%
- Education: 1.5%
- Communications: 1.5%
### SALARIES

<table>
<thead>
<tr>
<th>Undergraduate Degree Only</th>
<th>Average Salary</th>
<th>Salary Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>$91,332</td>
<td>$42,500-$175,000</td>
</tr>
<tr>
<td>Male</td>
<td>$92,861</td>
<td>$48,000-$175,000</td>
</tr>
<tr>
<td>Female</td>
<td>$84,931</td>
<td>$42,500-$160,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bonuses</th>
<th>Average</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>$48,087</td>
<td>$1,000-$250,000</td>
</tr>
<tr>
<td>Female</td>
<td>$29,377</td>
<td>$800-$120,000</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Graduate Degrees</th>
<th>Average Salary</th>
<th>Salary Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>$76,375</td>
<td>$42,500-$135,000</td>
</tr>
<tr>
<td>JD</td>
<td>$136,833</td>
<td>**</td>
</tr>
<tr>
<td>MD</td>
<td>$51,575</td>
<td>$44,000-$60,000</td>
</tr>
<tr>
<td>MBA</td>
<td>$101,117</td>
<td>$72,000-$140,000</td>
</tr>
<tr>
<td>MS</td>
<td>$86,982</td>
<td>$53,000-$115,000</td>
</tr>
</tbody>
</table>

**Salary ranges not provided for 3 or fewer responses.

### GRADUATE DEGREES

60.2% reported receiving advanced degrees (single and dual)

**Graph showing the distribution of graduate degrees with the following degrees and their respective percentages: MS 34.1%, MBA 24.2%, MD 24.2%, PhD 12.1%, and JD 5.5%.**
GRADUATE SCHOOLS ATTENDED BY UNDERGRADUATE MAJOR

Applied Science – Biomedical Science
Columbia University, MBA
Drexel University, MD
Georgetown University, MS
Harvard University, MBA, MD
New York Medical College, MD
St. George's University, MD
Stanford University, PhD
University of Medicine and Dentistry of New Jersey, MBS
University of Pennsylvania, DMD, MBA, MD, MS
University of South Florida, PhD
Vanderbilt University, MD
Washington University in St. Louis, MD, MSCI

Applied Science – Computer Science
Oxford University, MSc
Rockefeller University, PhD
Stanford University, PhD
University of Southern California, PhD

Applied Science – Individualized Major
Georgetown University, JD
London Business School, MBA
University of Pennsylvania, MBA, MSE, PhD
University of Southern California, MCM
Villanova University, MBA

Bioengineering
Boston University, MA, MS, PhD
Cleveland Clinic Lerner College of Medicine, MD
Dartmouth College, MD (2)
Ecole Polytechnique Federale de Lausanne, PhD
Georgetown University, MS
Harvard University, MD (2), MS, PhD
Howard University, MD
Jefferson Medical College, MD (2)
Medical College of Virginia, MS
Mount Sinai School of Medicine, MS
New York University, JD, MS
Northwestern University, MEd
Rockefeller University, PhD
St. George's University, MD
Stanford University, MA, MD (3), PhD
Touro College of Osteopathic Medicine, DO
University of California, San Diego, MD, MSE
University of Iowa, MD
UMDNJ, Robert Wood Johnson Medical School, MD
University of Pennsylvania, MB, MSE (2)
University of Southern California, MBA
University of Virginia, MD (2), PhD
Vanderbilt University, MS
Washington University in St. Louis, MD, PhD
Yale University, MD
Chemical and Biomolecular Engineering  
California Institute of Technology, MS  
Massachusetts Institute of Technology, MFin, PhD (2), SM  
Oxford University, MBA  
Princeton University, PhD  
Stanford University, PhD  
University of Houston, MBA  
University of Illinois, MS  
University of Iowa, MD  
University of Pennsylvania, MB, MSE  

Computer and Telecommunications Engineering  
University of Pennsylvania, MSE  

Computer Science and Engineering  
ETH Zurich, MSc  
Massachusetts Institute of Technology, SM  
New York University, JD  
Rensselaer Polytechnic Institute, MS  
Rotman School of Business, MFin  
Stanford University, MS  
University of California San Diego, MS  
University of Maryland, College Park, MS, PhD  
University of Pennsylvania, MSE  
University of Washington, PhD  

Digital Media Design  
University of Pennsylvania, MSE  

Electrical Engineering  
Harvard University, PhD  
Rice University, MBA  
Stanford University, MA, MBA  
University of Texas Austin, PhD  
University of Pennsylvania, MBA, MSE (2)  
University of Pittsburgh, MBA  

Materials Science and Engineering  
University of California Santa Barbara, MS  
University of Cambridge, PhD  
University of Pennsylvania, MBA  

Mechanical Engineering and Applied Science  
George Washington University, JD  
Georgia Institute of Technology, MS  
Harvard University, MBA  
New York University, MBA  
University of Notre Dame, MBA  
University of Pennsylvania, MSE (2)  
University of Chicago, MPP
REFLECTIONS ON SKILLS LEARNED AT PENN

Alumni were asked to indicate the most important skills they learned while at Penn.

- Critical Thinking: 27.7%
- Analytical: 16.7%
- Quantitative Proficiency: 15.3%
- Teamwork: 14.5%
- Research: 8.5%
- Leadership: 6.8%
- Speaking: 4.4%
- Writing: 3.6%
- Listening: 1.4%
- Other: 1.1%

SEAS ALUMNI COMMENTS

Alumni were asked what advice they would give to students. The following is a sampling of their direct quotes:

- “Utilize all the resources Penn has available to you and do not limit yourself to one area of interest as it is important to be open to different career paths and academic interests.”
- “Aggressively pursue summer internships and try to leverage that experience and network into a full time job.”
- “Even in technical jobs, it's all about team work and communication. So get comfortable with inter-personal dynamics, presentation skills, etc.”
- “Look for companies that are still hiring and that you would be interested in working for after graduating and try to get an internship (paid or unpaid) with that company. Getting your foot in the door is an invaluable step. Participate in mock interviews to improve you interview skills. Have your resume reviewed by someone who knows what employers are looking for.”
- “Study hard. Get good grades. That will increase your chances for getting an internship and/or job. Also, it's okay to experiment and try alternate jobs when you are young. This will help you better understand what you like and what you don't like, which can help you narrow down career choices.”
• “Work or do research while you're in school. This greatly distinguishes students from others who just took classes.”
• “Have fun. Challenge yourself. Meet cool people. Create stuff. Take advantage of Penn's resources while you are there.”
• “Be diligent in your involvement in co-curricular activities and engagements. The ability to work and lead collaboratively will be of great value throughout your career.”
• “Find something you enjoy doing. Success will follow.”
• “Feeling entitled to a position or job without displaying any exemplary qualities is the quick path to disappointment. Don't expect to be given anything.”
• “Keep your options open. Experience everything.”
• “Take the classes you need to graduate, but also take the classes that really interest you. If you find yourself very interested in higher level classes then take the time to go to grad school (if it is not an MBA). Do an internship(s) and you'll find the job that suits your dreams. Don't rush into things. In the long term, this is all a drop in the bucket. Just make sure you get your education right.”
• “Don't be afraid to do what other people think you cannot do if you thought it through.”
• “Enjoy your classes, if you treat them as subjects just to study for a test and forget you'll regret it later. I wish I remembered half the things I learned.”
• “Study what you really want to do - and think about your passion. No more formula careers and formula life paths.”
• “Don't feel like you have to take a consulting or finance job, or that you're a failure if you don't get a job at a big company. You CAN make money doing what you love, even if it's untraditional. Now is this time to go for your dreams, because you have nothing to lose…”
• “Develop relationships with professors. Never too early to start networking.”
• “Spend your time wisely, and with balance between studies, personal pursuits, and social time. Figure out what you don't want to do, and keep trying to find the intersection of your interests and your strengths.”
• “Meet as many people as possible and cultivate deep relationships with the ones you really find interesting.”
• “Work very hard, adapt by being flexible. Do what you love. Enjoying your work pays very large dividends.”
• “Your pursuits should strike a balance between what you're good at and what you love to do.”
• “Take full advantage of all the classes offered, you may not get another chance to study something again later.”
• “Be involved in clubs and activities that you are interested in, not just those that look good on the resume.”
• “Go abroad if it works with your school / sports schedule. I highly regret not studying abroad while at Penn.”
• “1. Network and do informational interviews to learn more about industries, companies and jobs. 2. Find a mentor in the field that you want to be in. 3. Look for internships/jobs where you will develop the skills that you want to develop because your skills and work experiences are the foundation of your resume.”
• “Work hard, make connections, get involved in research/community projects or anything to set yourself apart from the crowd, stay in touch with classmates and faculty.”
• “Take full advantage of all of the resources that Penn has to offer. Study abroad. Take classes that are outside of your comfort zone to gain a broader exposure.”
• “Work on group projects; if you can get course credit, great, but if not, do it anyway. It helps a lot on a resume and in interviews.”
• “Try and gather as much information as possible about a prospective career. Don't get caught up in the hype of working in 'X' industry and instead make sure the day-to-day work is something you're interested in. Ask lots of direct questions of potential employers to make sure it's a good fit.”
• “If you have a special talent or opportunity that is limited time (i.e. opportunity to continue athletic career) - take it! You can work your whole life but the ability to be an athlete at the professional level is a very short term opportunity.”
• “Pick some way to be involved - getting good grades (even the best grades) is not enough. Anyone can study, but employers are looking for well-rounded employees who have interests and social abilities and an interest in the world around them. Find something non-degree related about which you are passionate and commit some time to becoming more of an expert. Willingness to learn on your own is a very desirable attribute so find a way to demonstrate that willingness and a commitment to growth.”
“Your major matters! Having a degree from a good school is a good start. Ideally, to land a good job your degree should be in a field with high demand, e.g. STEM fields. Also, keep in touch with your professors. You never know when you might need a letter of recommendation for grad school.”

Alumni were asked, in retrospect, what they would have done differently during their time at Penn? The following is a sampling of their direct quotes:

- “I would have taken more diverse classes and taken advantage of different programs.”
- “I would study abroad and get more international experience. I didn't apply to several companies because I didn't think they'd give me an offer. This was wrong. I should have applied everywhere I was interested and if I didn't get an offer, at least I knew I tried.”
- “I would have been more active in campus activities and volunteering in Philadelphia.”
- “I would have taken a few more business classes.”
- “Be more focused in my academic pursuits.”
- “Focused more on my core classes instead of taking a hodgepodge of classes and extra-curriculars.”
- “Meet more people.”
- “I would participate in more organizations and meet more people.”
- “Would have made more effort in trying to find my ‘passion’ instead of a steady safe career.”
- “Taken more classes for enjoyment instead of only doing things in my degree.”
- “Ask more questions.”
- “I would spend more time working on research projects with professors, speaking to professors about topics I was interested in after class, and trying to work on startup ideas with fellow students.”
- “Spend more time in class and with people, and less on personal pursuits.”
- “Study abroad.”
- “I would have spent a bit less time studying and more time building my network. I was a great student but I sometimes feel that I lack the strong network and the connections that I could potentially have built.”
- “I would have focused more on academics during freshman and sophomore year because it would have provided a better base for all of the stuff I was really interested in junior and senior year.”
- “Probably would've tried to be more involved in learning in my classes instead of just getting by. I started to do this during my last year and wish I had put more effort in during my first two years. Also taking greater advantage of extra-curriculars.”
- “I probably would have spent a little less time studying and more time interacting with my classmates and developing stronger bonds with more people.”
- “I would have spent more time meeting new people!”
- “Not stress so much and have more fun.”
- “Engaged in more research and community projects.”
- “I would have been more involved in extracurricular activities.”
- “I would have taken more electives just to have a more balanced perspective.”
- “Took more classes outside my major.”
- “I would have participated in more summer internships at different industries to explore various options that interested me after graduation.”
- “Explore my interests more before committing to a major and degree program.”
- “Study less. Socialize more and be more involved in the community.”
- “More emphasis on developing skills in math, statistics, and computer science. Skills in these areas are at a premium these days.”