## Sectors of Known First Position for Graduates of the PhD Program in Industrial Engineering and Management Sciences; Ten-Year Trend

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduates</td>
<td>6</td>
<td>11</td>
<td>10</td>
<td>7</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>14</td>
<td>9</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Percent of Graduates with Placement Info</td>
<td>100%</td>
<td>91%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>20%</td>
<td>91%</td>
</tr>
<tr>
<td>Grads Average Time to Degree in Years*</td>
<td>5.25</td>
<td>4.57</td>
<td>5.48</td>
<td>5.82</td>
<td>5.38</td>
<td>6.85</td>
<td>5.25</td>
<td>5.18</td>
<td>5.56</td>
<td>5.13</td>
<td>5.44</td>
</tr>
<tr>
<td>Grads Median Time to Degree in Years*</td>
<td>4.63</td>
<td>4.25</td>
<td>5.25</td>
<td>4.75</td>
<td>5.50</td>
<td>5.50</td>
<td>5.00</td>
<td>5.00</td>
<td>5.25</td>
<td>5.00</td>
<td>5.01</td>
</tr>
</tbody>
</table>

*Time to degree represents the time in years from the graduates’ first admission to TGS until their graduation term.
**Quarterly graduation started in Summer 2010. Each year spans Summer to Spring graduation terms.

### Possible Placement Categories

#### Possible Career Sectors/Industries
- Academia
- Advertising, Marketing, & Public Relations
- Arts
- Communication & Media
- Computer Science, Information, & Internet Technology
- Consulting
- Consumer Products & Retail
- Energy & Sustainability
- Engineering, Manufacturing, & Transportation
- Farm, Fish, & Food Manufacturing & Distribution
- Finance
- Government & Public Policy
- Healthcare, Medical Devices & Services, & Pharmaceuticals
- Law
- Nonprofit
- Publishing
- Teaching & Educational Institutions

#### Possible Position Types
- Additional Training
- Administration
- Consulting
- Counseling
- Design
- Development
- Education
- Engineering
- Faculty
- Finance
- Information Technology
- Medical Professional
- Outreach
- Postdoc
- Practice/Performance
- Purchasing
- Research
- Sales
- Student
- Teaching
- Writing/Creative
- Other

Placement information is captured by the TGS Career Outcomes Database using graduate responses from the Exit Survey and Survey of Earned Doctorates, and updated with the help of faculty and staff after each graduation. The database is intended to capture all first placement information, as well as subsequent placements since graduation. This summary presents the placement information TGS has captured on graduates’ first placements, including temporary positions.

In Summer Quarter 2015, TGS began a transition to a new Career Outcomes Database. Position types and sectors may not necessarily align with placement categories from previous years. These new sectors help to more accurately track career placements outside of the traditional academic path.

### Category Definitions

- **Career Sector/Industry**: Refers to the primary purpose of the organization (e.g. an engineer working for an energy company would indicate "Energy & Sustainability," not "Engineering").
- **Position Type**: Refers to the day-to-day work of the graduate (e.g. working in Information Technology at a law firm).
- **Organization**: Name of employer.

Source: TGS Career Outcomes Database As of 3/8/16

Academia: 41%  
Finance: 16%  
Consulting: 13%  
All Other Sectors: 30%

Source: TGS Career Outcomes Database  
n = 73  
As of 3/8/16
Top Employers (by Sector) of Known First Position in Industrial Engineering and Management Sciences  
Ten-Year Trend; Sorted by Frequency, then Alphabetically

<table>
<thead>
<tr>
<th>Academia</th>
<th>Finance</th>
<th>Consulting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northwestern University (3)</td>
<td>Discover (4)</td>
<td>Quantitative Risk Management, Inc. (2)</td>
</tr>
<tr>
<td>University of Illinois - Urbana-Champaign (3)</td>
<td>Chicago Trading Company (1)</td>
<td>Beghou Consulting (1)</td>
</tr>
<tr>
<td>The State University of New Jersey (Rutgers) (2)</td>
<td>Credit Suisse (1)</td>
<td>Booz-Allen &amp; Hamilton (1)</td>
</tr>
<tr>
<td>University College London (2)</td>
<td>Deutsche Bank Asset Management (1)</td>
<td>MITRE Corporation (1)</td>
</tr>
<tr>
<td>Cheng Kung University (1)</td>
<td>Jump Trading (1)</td>
<td>Protiviti (1)</td>
</tr>
<tr>
<td>Manhattan College (1)</td>
<td>Merrill Lynch (1)</td>
<td>QRM, Inc. (Quantitative Risk Management, Inc.) (1)</td>
</tr>
<tr>
<td>Rensselaer Polytechnic Institute (1)</td>
<td>Morgan Stanley (1)</td>
<td>SAS Institute Inc. (1)</td>
</tr>
<tr>
<td>Shanghai Jiao Tong University (1)</td>
<td>Quantlab Financial (1)</td>
<td>Ziena Optimization LLC (1)</td>
</tr>
<tr>
<td>UNIST (1)</td>
<td>Union Bank of Switzerland (1)</td>
<td>ZS Associates (1)</td>
</tr>
<tr>
<td>University of Missouri - Rolla (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Texas - Austin (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Wisconsin - Madison (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia Commonwealth University (1)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(#) = number of graduates at organization

Source: TGS Career Outcomes Database