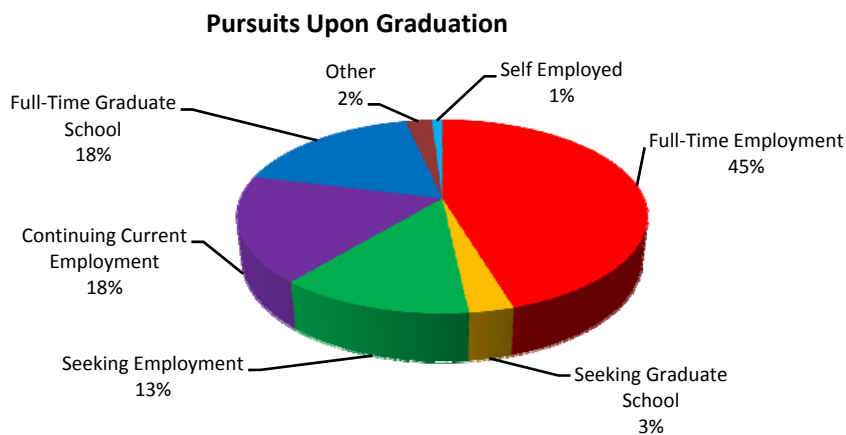


### Overview

Each year, Career Services surveys SEAS students who earned Master's degrees to gather information about their post-graduation plans. This report includes data from students who graduated in December 2007, May and August 2008. Information was gathered on two hundred and three (70.97%) of the two hundred eighty-six Master's degree recipients. We do not survey graduates from the Executive Masters in Technology Management Program.

The top industries in which graduates accepted positions included aerospace, telecommunications, financial services, scientific research and consulting. 51% of the graduates employed in engineering jobs were in Systems Engineering positions. This is in part a reflection of the students who were continuing employment with a major aerospace manufacturer while attending Penn part-time. One industry sector realized the most gains in students accepting positions: finance was up 25%. The number of students pursuing careers in consulting decreased by 50% over the previous year. In all sections of this report, average salaries include respondents who were beginning full-time employment or were continuing current employment. The overall average salary for SEAS Master's respondents was \$69,373, a 3.7% change from last year.

Prepared by: Rosette Pyne, Senior Associate Director  
January 2009



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## METHODOLOGY

A complete list of graduating Master's students, excluding students in the Executive Masters of Technology and Management program, was provided by the SEAS Academic Programs Office. Engineering students graduating with a Master's degree in December 2007, May and August 2008 responded to two email requests (one from Career Services and one from the Academic Programs Office in SEAS) to complete the Career Plans Survey on line between March and August 2008. A link was added to the Engineering section of the Career Services website for easy student access.

### SECTION 1 – ANALYSIS OF EMPLOYED RESPONDENTS

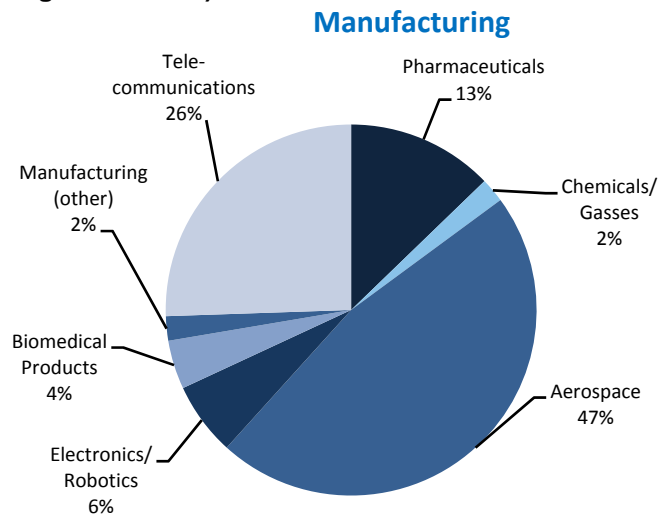
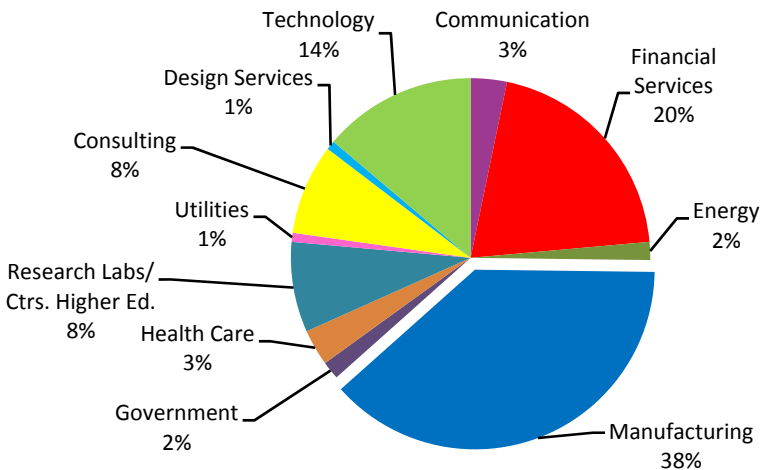
#### GEOGRAPHIC DISTRIBUTION OF EMPLOYMENT

Area	Number	Percent
United States		
Midwest	7	5.6%
Northeast	5	3.9%
Northeast Corridor	80	63.5%
Northwest	8	6.3%
Southeast	2	1.6%
West	18	14.3%
Abroad	6	4.8%
<b>TOTAL</b>	<b>126</b>	<b>100.0%</b>

#### EMPLOYMENT BY INDUSTRY

Number	Industry
22	Aerospace
15	Investment Banking
14	Software Products
12	Telecommunications
10	Consulting, Higher Education Scientific Research
6	Financial Services (other), Pharmaceuticals
4 in each	Health Care, Higher Education
3 in each	Electronics & Robotics, Venture Capital/Private Equity, Publishing
2 in each	Biomedical Products, Government
1 in each	Film, Energy Products, Petroleum, Design, Chemicals & Gases, Insurance, Manufacturing (other), Utilities, Internet Services (other), On Line Information Provider, Interactive Entertainment Software

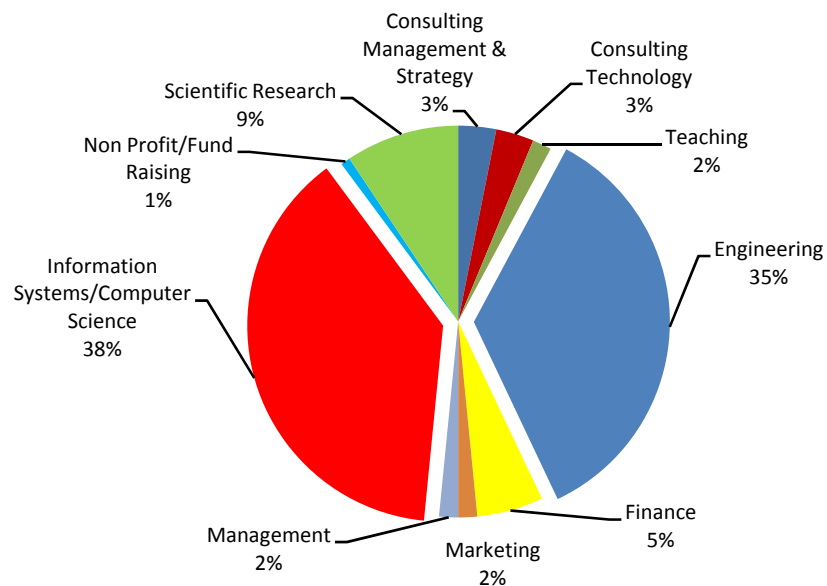
#### EMPLOYMENT BY INDUSTRY (with Manufacturing Breakdown)



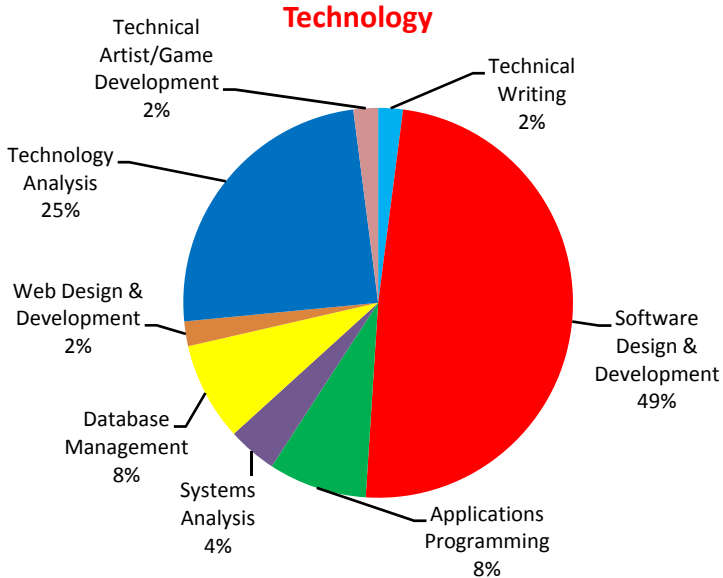
## EMPLOYMENT BY JOB TYPE

Number	Job Type
24	Software Design & Development
23	Systems Engineering
12	Scientific Research, Technology Analysis
9	Engineering R&D
7	Finance
6	Project Management
4 in each	Engineering Design, Consulting Management & Strategy, Technical Consulting, Applications Programming, Database Management
2 in each	Management, Systems Analysis, Quality Assurance, Teaching, Marketing
1 in each	Technical Artist/Game Development, Web Design/Development, Engineering Testing, Technical Writing, Non Profit Fund Raising

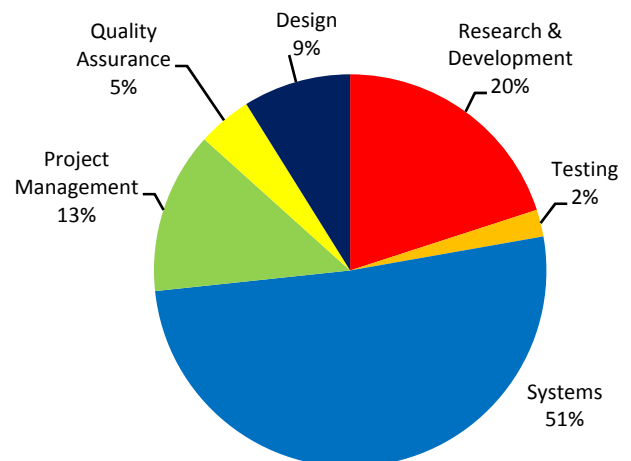
### EMPLOYMENT BY JOB TYPE (with Engineering and Technology Breakdowns)



### Technology



### Engineering



## RANGE AND AVERAGE NUMBER OF JOB INTERVIEWS PER STUDENT

	Range	Average
On-Campus Recruiting (OCR) Interviews	1 – 20	5.9
Interviews Resulting from Career Services Leads (Career Day, Job Postings, PennLink)	1 – 10	3.7
Interviews on Their Own	1 – 20	3.5
All Interviews Combined	1 – 45	8.2

## RANGE AND AVERAGE NUMBER OF JOB OFFERS PER STUDENT

	Range	Average
On-Campus Recruiting Offers	1 – 5	1.7
Career Services Offers (Career Day, Email Postings, PennLink)	1 – 5	1.5
Offers from Sources other than OCR and Career Services	1 – 4	1.5
All Offers Combined	1 – 8	2.1

## AVERAGE SALARY BY YEAR

The average salary for graduates in full-time positions and those continuing current employment was \$69,373. An increase of 3.7% over the previous year.

The range of salaries reported for 2008 was \$35,000 - \$108,000.

The average sign on bonus for graduates accepting full-time positions was \$7,756.

## LIST OF EMPLOYERS BY MAJOR

### Bioengineering

BioCentury Publications, Chicago, IL, Research Analyst  
Guideline, New York, NY, Research Analyst  
Merck, West Point, PA, Staff Engineer  
UCSF Medical Center, San Francisco, CA, Staff Research Associate II

### Biotechnology

Aderans Research Institute, Philadelphia, PA, Research Scientist  
BioReference Laboratories, Elmwood Park, NJ, Associate Product Manager  
Booz Allen Hamilton, Middle East, Consultant  
Bristol-Myers Squibb, Wallingford, CT, Position Not Provided  
De Novo Ventures, Palo Alto, CA, Venture Associate  
GlaxoSmithKline Biologicals, Marietta, PA, Sr. Cell Culture Associate  
GTCR Golder Rauner, LLC, Chicago, IL, Vice President  
Hospital of the University of Pennsylvania, Philadelphia, PA, Research Scientist  
Merck, Lansdale, PA, Position Not Provided  
Pegasus Capital Advisors, New York, NY, Analyst  
Tengion, East Norriton, PA, Senior Technology Specialist  
Thomas Jefferson University, Philadelphia, PA, Contract Specialist  
University of Pennsylvania, Philadelphia, PA, Senior Research Investigator  
University of Pennsylvania, Philadelphia, PA, Research Specialist  
University of Pennsylvania, Philadelphia, PA, Research Specialist B  
University of Pennsylvania, Philadelphia, PA, Research Specialist  
University of Pennsylvania, Philadelphia, PA, Research Specialist  
Wistar Institute, Philadelphia, PA, Research Associate III

### **Chemical and Biomolecular Engineering**

Children's Hospital of Philadelphia, Philadelphia, PA, Research Assistant  
Employer Not Provided, Location Not Provided, Title Not Provided  
Morningstar, Inc., Chicago, IL, Data Analyst  
The Dow Chemical Company, South Charleston, WV, Process Engineer

### **Computer Graphics & Game Technology**

Dreamworks Animation SKG, Glendale, CA, Technical Director  
High Moon Studios, Carlsbad, CA, Programmer  
Microsoft Corporation, Redmond, WA, SDE  
Microsoft Corporation, Redmond, WA, Title Not Provided

### **Computer and Information Science**

Arris Systems, Wayne, PA, Systems Engineer  
Barclays Capital, New York, NY, Analyst  
BlackRock, New York, NY, Analyst  
Cisco Systems, Inc., San Jose, CA, Software Engineer II  
Credit Suisse, New York, NY, IT Technical Associate  
Goldman Sachs, New York, NY, Technology Analyst  
Goldman Sachs, New York, NY, Analyst  
Google, New York, NY, Software Engineer  
Insight Catastrophe Solutions, New York, NY, Software Developer  
M3-Group, Philadelphia, PA, Web/Database Developer  
Mc Graw-Hill Companies / Standard, Jersey City, NJ, Database Developer  
MFR Consultants, Philadelphia, PA, Director of Strategic Development  
Microsoft Corporation, Redmond, WA, SDET  
Microsoft Corporation, Redmond, WA, Software Development Engineer  
MIT Lincoln Lab, Lexington, MA, Associate Researcher  
Oracle, Redwood Shore, CA, Software Engineer  
Oracle, Redwood City, CA, Product Manager  
SIG, Bala Cynwyd, PA, Technology Associate  
UBS AG, Stamford, CT, Technology Analyst  
UBS Investment Bank, Jersey City, NJ, Technology Analyst

### **Computer and Information Technology**

Goldman Sachs, New York, NY, Technology Analyst  
Merck, PA, Position Not Provided  
Monetate Inc., West Conshohocken, PA, Software Developer  
Ternary Software, Exton, PA, Software Developer  
UBS AG, Stamford, CT, Software Developer  
University of Pennsylvania, Philadelphia, PA, Metadata Specialist  
University of Pennsylvania, Philadelphia, PA, IT Support Specialist

### **Electrical Engineering**

Argus Information, White Plains, NY, Analyst  
Cisco Systems, Inc., San Jose, CA, Software Engineer  
Cisco Systems, Inc., San Jose, CA, Software Engineer  
Cisco Systems, Inc., San Jose, CA, Software Engineer  
Cisco Systems, Inc., San Jose, CA, Software Engineer  
Cisco Systems, Inc., San Jose, CA, Title Not Provided  
City of Philadelphia- Mayor's Office of Information Service, Philadelphia, PA, GIS Developer  
Employer Not Provided, Location Not Provided, Title Not Provided  
Exeter Group, Cambridge, MI, Technical Consultant  
General Electric, Aktobe, Kazakhstan, Technical Advisor  
Goldman Sachs, New York, NY, Business Analyst  
IBB Consulting Group, LLC., Philadelphia, PA, Analyst  
L3 Communications, Camden, NJ, Hardware Engineer  
Lockheed Martin, King of Prussia, PA, Systems Engineer  
Lockheed Martin, Moorestown, NJ, Member of Engineering Staff

### **Electrical Engineering (continued)**

Merrill Lynch, New York, NY, Technology Analyst  
Michael Page International, New York, NY, Consultant  
Microsoft Corporation, Redmond, WA, Software Development Engineer in Test  
Morgan Stanley, New York, NY, IT Analyst  
Morgan Stanley, New York, NY, IT Analyst  
Motorola, Horsham, PA, Title Not Provided  
Qualcomm, San Diego, CA, Systems Engineer  
The Mathworks Inc., Natick, MA, Application Support Engineer  
Wide Area Network Design Laboratory Inc., Piscataway, NJ, System Engineer

### **Mechanical Engineering & Applied Mechanics**

Consolidated Edison, New York, NY, Engineering Management Associate  
ExxonMobil, VA, Title Not Provided  
Lockheed Martin, Moorestown, NJ, Associate Member Engineering Staff  
Morgan Stanley, Hong Kong, Analyst  
Oliver Wyman, Dubai, United Arab Emirates, Analyst  
Public Authority for Applied Education, Adailiya, Kuwait, Assistant Lecturer  
Siemens Building Technologies, Syracuse, NY, Performance Assurance Engineer  
Tyco Thermal Controls, Malvern, PA, Proposals  
WorleyParsons, Reading, PA, Member of Technical of Staff

### **Materials Science & Engineering**

Boeing Corporation, Tukwila, WA, Materials, Processing, and Physics Engineer 2  
Boston Consulting Group, Chicago, IL, Associate  
Nera Economic Consulting, New York, NY, Associate Analyst

### **Robotics**

BAE Systems, Bristol, Higher Scientist

### **Systems Engineering**

DSI, Conshohocken, PA, Consultant  
GlaxoSmithKline, Philadelphia, PA, Business Analyst  
JPMorgan, New York, NY, Analyst  
Lockheed Martin, Moorestown, NJ, Systems Engineering  
Lockheed Martin, Moorestown, NJ, Engineer  
Lockheed Martin, Moorestown, NJ, Member of Engineering Staff  
Lockheed Martin, King of Prussia, PA, Systems Engineer  
Lockheed Martin, Moorestown, NJ, Member Engineering Staff  
Lockheed Martin, Moorestown, NJ, Member of Engineering Staff  
Lockheed Martin, King of Prussia, PA, Systems Engineer  
Lockheed Martin, Moorestown, NJ, Senior Member Engineering Staff  
Lockheed Martin, Cherry Hill, NJ, Title Not Provided  
Lockheed Martin, Moorestown, NJ, Senior Member Engineering Staff  
Lockheed Martin, King of Prussia, PA, Deputy Program Manager  
Lockheed Martin, Moorestown, NJ, Title Not Provided  
Lockheed Martin, Moorestown, NJ, ELDP  
Lockheed Martin, Moorestown, NJ, Engineering Planner Sr.  
Lockheed Martin, Cherry Hill, NJ, Data Warehouse Analyst Sr.  
Lockheed Martin, King of Prussia, PA, Senior Systems Engineer  
University of Pennsylvania, Philadelphia, PA, Clinical Research Coordinator

### **Telecommunications**

A10 Networks, San Jose, CA, Title Not Provided  
Cisco Systems, Inc, San Jose, CA, Software Engineer  
Cisco Systems, Inc., San Jose, CA, Software Engineer II  
Cisco Systems, Inc., San Jose, CA, Software Engineer  
Cisco Systems, Inc., San Jose, CA, Software Engineer II  
Citadel Investment Group, Chicago, IL, Financial Technology Associate

### **Telecommunications (continued)**

Citadel Investment Group, Chicago, IL, Financial Technology Associate  
Lockheed Martin, Moorestown, NJ, Member Engineering Staff  
Lockheed Martin, Moorestown, NJ, Member Engineering Staff  
Microsoft Corporation, Redmond, WA, SDE  
Microsoft Corporation, Redmond, WA, SDET  
SIG, Bala Cynwyd, PA, Technology Associate  
Temple University, Philadelphia, PA, Instructor  
University of Pennsylvania, Philadelphia, PA, Network Engineer

## **SECTION 2 – ANALYSIS OF GRADUATE STUDY RESPONDENTS**

### **LIST OF GRADUATE PROGRAMS BY MAJOR**

#### **Bioengineering**

University of Pennsylvania, Bioengineering, PhD (2)

#### **Biotechnology**

Lehigh University, Chemical Engineering, PhD  
University of Pennsylvania, Cell and Molecular Biology, PhD

#### **Chemical and Biomolecular Engineering**

University of Pennsylvania, Chemical & Biomolecular Engineering, PhD (9)

#### **Computer and Information Science**

Harvard University, Systems Biology, PhD  
National University of Singapore, Computer Science, PhD  
School Not Provided  
University of Pennsylvania, Computer and Information Science, PhD (4)  
University of Utah, Computer Science, PhD

#### **Electrical Engineering**

Carnegie Mellon University, Electrical and Computer Engineering, PhD  
Columbia University, Electrical Engineering, PhD  
University of Pennsylvania, Electrical & Systems Engineering, PhD (2)  
University of Texas, Electrical & Computer Engineering, PhD  
Virginia Tech University, Robotics, PhD

#### **Mechanical Engineering and Applied Mechanics**

University of Pennsylvania, Mechanical Engineering & Applied Mechanics, PhD (5)

#### **Materials Science Engineering**

Massachusetts Institute of Technology, Materials Science and Engineering, PhD  
University of Pennsylvania, Materials Science and Engineering, PhD (3)