**Academic jobs**

- Educational Institution:
  - A faculty position, typically involving teaching and research

**Non-academic jobs**

- Educational Institution:
  - Alumni office
  - Grants and contracts
  - Public relations

- Business and Industry:
  - Consulting companies
  - Manufacturing
  - Financial institutions
  - Media outlets

- Not-for-profit organization:
  - Libraries
  - Museums
  - Professional societies

- Government:
  - Federal
  - State
  - Local
Outline

• How many people find jobs outside of academia?
• Why would someone want a job outside of academia?
• When should someone start looking for a job?
• What strategies could be used to look for jobs outside of academia?
• What resources are available?
Careers in Academia

**Positives**
- Intellectual freedom
- Flexible hours
- Interacting with students
- Access to many resources (libraries, equipment)
- Familiar setting, clear career path

**Negatives**
- Low pay
- Long hours
- Interacting with students
- Politics and hierarchy
- Living in undesirable locations
- Stressful working environment
- Limited job opportunities
- Isolation
Careers Outside Academia

**Positives**
- Good salaries
- Health insurance
- Work-life balance
- More social impact
- More interdisciplinary work
- Explore new career areas and use skills in different ways

**Negatives**
- Corporate culture
- Graduate degree may not be valued
- Less intellectual freedom
- Deadline- or product-driven environment
Reasons to Stay in Academia (Even If You Don’t Want To!)

- Your graduate degree will be “wasted”
- Your advisor won’t support you if you leave academia
- You’re a failure if you leave academia
- Your personal beliefs conflict with the corporate world
- You don’t know what’s out there
- You’re afraid of making a career change
- You don’t have any transferable skills
- Nobody will hire a PhD anyway
- You don’t have time to look for a job
- You’re over- and under-qualified for non-academic jobs
How Can You Overcome These Challenges?

Treat your career exploration as another research project
How Can You Overcome These Challenges?

Your graduate experience already taught you how to:

• Define a topic of interest by reading extensively
• Figure out what you know and don’t know
• Identify resources (books, websites, databases)
• Gather data
• Test your assumptions

Why not use this same approach to discover how you fit into the world outside academia?
Your Career Exploration Research Project

- **Background research to identify topics of interest**
  Identify your skills and what is important to you in your career

- **Gather data, locate resources, read, speak to experts**
  Learn about careers in which you could use those skills and fulfill your priorities

- **Synthesize and analyze large amounts of information**
  Process the information you found to see if any careers are a good fit with your skills, interests, and values

- **Articulate your findings and publicize**
  Apply for jobs!
Career Exploration Strategy
When Should You Begin Your Career Exploration?

The earlier, the better.

Why?

• Looking and applying for a job is time-intensive
• It can take up to 6-12 months to find a job
• If you start earlier, you have more options to explore careers and build your skills
  • internships, networking, conferences, on-campus volunteering
• If you start later, you will still be able to do informational interviews, network, and apply for jobs
Why Should You Spend Time Understanding Yourself?
Redefining Yourself

**Acadia:**
Job title (Professor)
Subjects (Mechanical Engineering)

**Outside of Academia**
What you’ve done and could do (transferable skills)

This may be why you feel as though you don’t fit anywhere but in academia
I am getting my PhD in chemical engineering.

I am skilled at writing, researching a wide variety of topics, collecting and synthesizing large amounts of information, and working independently in high-pressure environments.

- Tenure-track or adjunct professor
- High-school teacher
- Industry researcher

- Science journalist
- Consultant
- Grant officer
- Patent reviewer
- Science policy advisor
What Skills Do Employers Want?

Employers typically desire the following core competencies*:

- Content knowledge
- Professionalism and work ethic
- Oral and written communication
- Teamwork (including leadership) and collaboration
- Critical thinking and problem solving
- Ethics and social responsibility

What Jobs Can You Get With a Graduate Degree in Engineering?
Once you envision yourself based on your skills, you won’t have problems finding jobs.

You’ll have problems deciding what is a good fit.
Ways to Understand Yourself

Analyze your previous experiences

• Make a list what you like and what you didn’t like for each experience
• Next, make a list of things that are important to you in your future job
• Consider logistics (geography, salary, student loans/debt)
• Make a prioritized list of criteria for your job search
Ways to Understand Yourself

Assessments

• Myers-Briggs
• Strengths Quest
• SkillScan
Special Considerations for International Students

• What are the unique strengths or skills you can offer an employer that both Americans and other international students might not have?

• What is most important? Staying in US or having a specific career?

• Where do you want to live permanently?

• Visa considerations (ISSO talk yesterday: Visas After Graduation)

• What back-up plans could you have if you can’t find your ideal job in the US?
Explore Options: Resources
Online Resources

LinkedIn

CCNet
  • Cornell’s job posting and event advertisement system

Websites
  • VersatilePhD
  • Science Careers (AAAS)
  • Sloan Cornerstone
Online Resources

Career.cornell.edu,
Engineering.cornell.edu/resources/career_services/

- Link library
- Career apps
- Books in library (some online):
  Peter Fiske, *Put Your Science To Work*
  Susan Basalla and Maggie Debelius, “So What Are You Going To Do With That?": Finding Careers Outside of Academia
Online Resources: Databases

O*NET Dictionary of Occupational Titles
  • Job descriptions including required skills, US Dept. of Labor

JGSM (Management School) Library Databases
  • Hoovers
  • Uniworld
  • Factiva
  • Career Search

International Students: H-1B Visa Sponsorship
  • Myvisajobs.com
  • Look at employers on CCNet sponsoring international students
Organization’s Resources

Scientific societies
- American Society of Mechanical Engineers: Early Career Engineers website
- American Institute of Aeronautics and Astronautics

Nationwide organizations
- Engineers for a Sustainable World
- Society of Women Engineers
- Association for Women in Science
On-campus Resources

On-campus organizations

• Graduate Consulting Group
• Alpha Quant Club
• AguaClara

On-campus events

• University Career Fair Days (September every year)
• Engineering and Technical Career Fair (February 5, 2013)
• Nonprofit & Government Career Fair (February 21, 2013)
Networking Resources:
Informational Interviews

Short interviews conducted with individuals to learn:

• What positions and job duties might fit your interests and background
• What employers are really looking for in candidates
• How to translate your skills and abilities from past experiences into the language used by your field of interest
• What a particular company or career field is like
Take Action

- Understand Yourself
  - Interests
  - Values
  - Strengths
  - Goals
- Explore Options
  - Resources
  - Networking
  - Activities
  - Internships
- Take Action
  - Applications
  - Letters
  - Resumes
  - Interviews
Resources to Help Prepare Job Application Materials

Engineering Career Office
Optimal Resume (resume, interviews, cover letter)
Career Guide
Anne Poduska in 103 Barnes Hall

On-campus events

• Look for alumni networking events and alumni talks
• How to Maximize LinkedIn For Networking and the Job Search Nov 7
• Transitions to an International Careers Panel Nov 8
• VersatilePhD entrepreneurship panel Nov 12-16
Where Can I Get Additional Help?

Careers outside academia, international careers, international students → Anne Poduska
Cornell Career Services
103 Barnes Hall
Call 255-5296

Post-doctoral positions → Christine Holmes,
Director of Postdoctoral Studies
Caldwell Hall
ch18@cornell.edu

Faculty positions → Contact your special committee members and look for professional development programs from the Grad School
What Are Your Questions?