Where do Chemistry majors go?

According to the Graduating Student Surveys for 2012–2014 (with a 65.9% response rate for undergraduates in the Chemistry major), in the last few years:

- 82.7% of graduates were employed or going to graduate school.
  - 24.1% were employed
  - 58.6% had secure plans to attend grad school

Here are some examples of organizations that have hired Columbia Chemistry majors in recent years:

Here are some of the graduate schools Columbia Chemistry majors have attended in recent years:

What jobs do Chemistry majors do?

A degree in Chemistry provides knowledge and skills relevant to a wide variety of jobs across the career spectrum, including:

- **Agricultural Chemistry**: Agricultural Production (crops and livestock), Agrichemicals Development (herbicides, pesticides, fungicides, fertilizers, etc.), Agrichemicals Testing, Environmental Testing, Regulation
- **Analytical Chemistry**: Qualitative Analysis, Quantitative Analysis, Instrumentation Design, Experimental Design, Separations
- **Biochemistry**: Healthcare, Pharmaceuticals, Environment, Agriculture, Food Science, Cosmetics, Forensics
- **Chemical Engineering**: Bulk Chemicals, Fine Chemicals, Consumer Products, Biotechnology, Pharmaceuticals, Electronics, Environmental Safety and Health, Fuels and Energy Conversion, Materials
- **Geochemistry**: Analysis, Testing, Environmental Regulation, Environmental Remediation
• **Materials Science:** Metallurgy, Ceramics, Plastics/Polymers, Composites, Semiconductors and Electronic Materials, Optical Materials, Biomaterials, Nanomaterials, Extraction/Synthesis, Processing
• **Organic Chemistry:** Synthesis, Healthcare, Pharmaceuticals, Materials Science, Consumer Products, Biotechnology, Agrichemicals, Food Science, Fuels
• **Physical Chemistry:** Materials Science, Chemical Biology, Nanoscale Science, Molecular Modeling, Quantum Computing, Biosensors
• **Polymer Chemistry:** Synthetic Macromolecules, Biological Macromolecules, Analysis, Testing, Blending, Compounding, Consumer Products
• **Education:** Teaching Educational, Research
• **Healthcare:** Medicine, Dentistry, Optometry, Podiatry, Pharmacy, Veterinary Medicine, Allied Health (Occupational Therapy and Physical Therapy), Medical Technology, Nuclear Medicine
• **Other Professional Opportunities:** Sales, Marketing, Technical Writing, Scientific Journalism, Scientific Illustration, Intellectual Property/Patent Law, Informational Specialists

Use CCE’s [Industry Exploration](#) webpages to learn more about these, and other fields.

### What do employers want?

Most of the skills/qualities sought by employers are transferrable and/or soft skills that students can gain through classes, extracurricular activities, internships, volunteer experiences, or part time jobs including:

1. Ability to work in a team structure
2. Ability to make decisions and solve problems
3. Ability to verbally communicate with persons inside and outside the organization
4. Ability to plan, organize, and prioritize work
5. Ability to obtain and process information
6. Ability to analyze quantitative data
7. Technical knowledge related to the job
8. Proficiency with computer software programs
9. Ability to create and/or edit written reports
10. Ability to sell or influence others

*Source: National Association of Colleges and Employers, 2015 Job Outlook*

Your major can definitely demonstrate relevant coursework and knowledge to a prospective employer, but your studies aren’t the only aspect of your experience that employers are evaluating. They select people who they believe can do the job (have the right skills), want the job (have demonstrated an interest in the field) and are a personality fit for the team and organization.

### What value do Chemistry majors bring?

The Chemistry curriculum helps you to develop the following skills:

- Read and evaluate technical information
- Synthesize themes from diverse sources
- Perceive patterns and structures
- Present information logically
- Convey complex issues
- Write technical papers
- Formulate hypotheses
- Research design and implementation
- Collect and present data

### What if I’m an international student?

For international students at Columbia under student visas, selecting your major can play a significant role if you plan to work in the US after completion of your degree. Optional Practical Training is a work authorization that allows an international student to work in a job directly related to the student’s major area of study either before or after degree completion. Employer sponsored H1B Visas also have similar strict requirements. Students with more questions about this should visit the International Student & Scholars Office (ISSO) and view CCE’s International Students webpage at [careereducation.columbia.edu/students/International-Students](http://careereducation.columbia.edu/students/International-Students).