

# A Chemistry Degree—things you should know

## Types of Employers

Chemist employers are categorized as three types:

Industrial (private companies) like Merck, DuPont, Exxon, Johnson & Johnson, etc.

Government like FBI, EPA, Dept of Agriculture, SRS

Academic like high schools and colleges

## Fields to find work (partial list)

Archeology, Cosmetics, Education, Environmental, Food, Forensic, Paper, Petroleum, Pharmaceuticals, Plastics, Power (including Nuclear), Quality Assurance (QA)/Quality Control (QC)

## Types of Jobs (partial list)

Analyst, Engineer, Manager, Researcher, Salesman, Technician, Teacher

For full descriptions see [www.acs.org](http://www.acs.org) → careers → what chemists do

## Can you get a job/Do you have to continue school after the Bachelors?

Unemployment among chemists overall is 3.9% (highest since 2000) but is still low compared to the national rate of 9.5% (2009 data). In 2010, the unemployment rate was 3.8%.

Of chemists just getting a degree (U.S. data collected October-Dec 2009)

With a B.S.

32% employed full time; 7% part-time; 12% still looking

53% chemical engineers employed full time; 15% still looking

46% go on to a graduate or professional school (18% of engineers)

With an M.S.

43% employed full time; 8% part-time; 15% still looking

65% chemical engineers employed full time; 15% still looking

30% continue in graduate school (19% of engineers)

With a Ph.D.

45% employed full time; 3% part-time; 7% still looking

66% chemical engineers employed full-time; 15% still looking

44% continue in academics with a post-doc appointment (29% of engineers)

## What if I don't like the Lab?

Chemistry is also a great degree for students who plan to pursue careers in

Medicine, Pharmacy, Dentistry, Law or many other fields

A combination of a technical degree (like chemistry) and a non-technical masters (such as MBA or Law) is highly sought by a variety of companies, patent firms, financial institutions, etc. and is often both interesting and lucrative.

## Typical Salaries

Salary depends on degree, type of employer and actual job.

Normally, chemists in industry earn the most, then government, and academics make the least

2010 Salary Data for chemists of all experience levels:

Median Salaries for All Chemists		Median Salaries for Industrial Chemists	
B.S.	\$69,800	B.S.	\$72,000
M.S.	\$80,000	M.S.	\$86,300
Ph.D.	\$98,000	Ph.D.	\$114,000
Chem E (engineer)	\$108,000 (all levels)	Chem E	\$110,000

2009 Starting Salary Data (median salaries—2009):

type of employer	B.S.	M.S	Ph.D.
Industry	\$38,400	\$60,00	\$78,000
Government	\$41,000	i.d.*	\$82,500
Academics	\$36,400	i.d.*	\$50,000
Chemical Engineer	\$66,200	\$69,500	\$88,500
2011 All fields	\$40,000	\$46,700	\$85,000

\*i.d. = insufficient data

## Perks of being a Chemistry Major

\*Many schools are actively recruiting science majors and may give special consideration to students willing to enter math or science, particularly the physical sciences (physics and chemistry)

\*Because of the need for scientists and engineers, there are often scholarships geared to these disciplines. Keywords to search: chemistry, science, physical science, STEM (science, technology, engineering, math)

\*Chemistry departments often have opportunities for students not as available in other disciplines e.g., undergraduate research, lab assistant, professional meetings that encourage undergraduate attendance/participation

\*Chemistry departments are usually small so there may be substantial mentoring and student-faculty interaction.

\*Jobs actually working in chemistry are available at all degree levels: bachelors, masters, doctorate.

\*Graduate programs in chemistry actually PAY students to attend them and typically offer tuition waivers and stipends for acting as a teaching or research assistant. A typical stipend in 2011 is \$26,000 per year.

## References

American Chemical Society. Career Page. 2009 Salary Survey and 2009 Starting Salary Survey. [www.acs.org](http://www.acs.org)

