

BIOCHEMISTRY

What can I do with this degree?

AREAS

EMPLOYERS

STRATEGIES

RESEARCH

Basic
Applied
Medical
Grant Writing
Administration

University laboratories
Federal government laboratories/agencies including:
National Science Foundation
National Institutes of Health
Food and Drug Administration
Environmental Protection Agency
Department of Agriculture
Armed Services
State and local government laboratories/agencies
Public health departments
Hospital laboratories
Commercial medical laboratories
Private testing laboratories including forensics
Independent research foundations
Industry laboratories:
Pharmaceutical companies
Biotechnology firms
Food processors
Cosmetic manufacturers
Chemical and petroleum industries
Agricultural industry

Bachelor's degree in biochemistry, biology, or chemistry qualifies one for laboratory technician or research assistant positions.
Choose courses with laboratory work.
Get on the job experience in a laboratory and/or complete a senior research project.
Complete a certificate training program, usually one year, to learn specialized laboratory techniques.
Take a course in grant writing.
Earn master's degree in biochemistry for better positions, advancement opportunities, more responsibility and higher pay.
Obtain Ph.D. to direct research projects and lead research teams.

TEACHING

Elementary
Secondary
Post-secondary

Public and private elementary, middle, and high schools
Two-year community colleges/technical institutes
Four-year institutions
Medical schools

Complete an accredited teacher preparation program for certification/licensure in biology and/or chemistry.
Ph.D. required for college or university teaching.
Some teaching positions in two-year institutions may be available for those with a master's degree.
Prepare to attend graduate school by maintaining a high grade point average and securing strong faculty recommendations.
Serve as a tutor for high school or college students.
Learn to communicate effectively.

AREAS

EMPLOYERS

STRATEGIES

HEALTHCARE

Medicine
Dentistry
Optometry
Podiatry
Pharmacy
Veterinary Medicine
Allied Health
Occupational Therapy
Physical Therapy

Hospitals
Medical centers
Nursing homes
Private practice

Plan on attending medical school or other related graduate program.
Maintain an outstanding grade point average, particularly in the sciences.
Secure strong faculty recommendations.
Meet with a pre-health advisor periodically.
Join related student organizations. Demonstrate leadership abilities.
Volunteer to work in a hospital or healthcare setting.
Find a summer job or internship in a hospital.
Develop a back up plan in case medical/graduate school admission is denied.
Consider alternative but related careers such as physician assistants.
Research all of the various fields within medicine to determine a particular career goal.

OTHER PROFESSIONAL OPPORTUNITIES

Sales/Marketing
Technical Writing
Scientific Journalism
Scientific Illustration
Regulatory Affairs
Administration/Management
Scientific/Technical Recruiting
Intellectual Property/Patent Law

Biotechnology industry
Pharmaceutical and chemical companies
Publishers:
Textbook, magazine, newspaper, book
Software firms
Regulatory agencies
Search firms
Law firms
Legal departments of corporations

For sales positions, gain sales experience through internships, part-time work, or summer jobs.
Take business and/or computer classes.
Become familiar with desktop publishing and other software packages.
Develop strong written and oral communication skills.
Get experience writing for a school or local newspaper.
Obtain an MBA or Ph.D. to reach high levels of administration.
Plan on attending law school if interested in law.

GENERAL INFORMATION

- As an undergraduate, seek laboratory experiences such as research projects, volunteering with professors, summer jobs, or internships.
- Participate in research programs sponsored by organizations like the National Science Foundation and the National Institutes of Health.
- Consider a certificate program or specialized master's program to qualify for research technician positions.
- Earn master's degree for greater variety and autonomy on the job.
- Earn a Ph.D. to work on high-level research projects, to direct research programs, to enter high levels of administration, and to teach at four-year post-secondary institutions. Postdoctoral fellowships may also be required.
- Learn to work independently and as part of a team.
- Develop the ability to communicate clearly.
- Gain competencies in computers and mathematics.
- Read scientific journals and join related professional organizations.
- Combine an undergraduate degree in biochemistry with a degree in law, computer programming, business, education, information science, or other discipline to expand career opportunities.

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BIOCHEMISTRY

Biochemistry Links:

[Professional Science Masters](#)

[Science Careers](#)

[HireHealth.com \(Pharmaceutical Jobs\)](#)

[LifeSciencesWorld](#)

[Guide to Biotechnology](#)

[Biological and Medical Scientists from the Occupational Outlook Handbook](#)

[Veterinarians from the Occupational Outlook Handbook](#)

[Physicians from the Occupational Outlook Handbook](#)

[Physician Assistants from the Occupational Outlook Handbook](#)

[Science Technicians from the Occupational Outlook Handbook](#)

[Teachers-Postsecondary from the Occupational Outlook Handbook](#)

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Regulatory Affairs

Administration/Management

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Publishers: Textbook, magazine, newspaper, book

Software firms

Regulatory agencies

Search firms

Law firms

Legal departments of corporations

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Prepared by the Career Planning staff of Career Services at The University of Tennessee, Knoxville. (2005) UTK is an EEO/AA/Title VI/Title IX/Section 504/ADA /ADEA Employer