

BIOLOGICAL SCIENCES

What can I do with this degree?

AREAS

EMPLOYERS

STRATEGIES

BIOTECHNOLOGY

Research and Development
Laboratory Testing
Teaching

Colleges and universities
Pharmaceutical companies
Agricultural industry including:
 Fertilizer manufacturers, animal and plant
 breeding and production
Federal and state government laboratories and
agencies
Industry, particularly biotechnology firms

Develop excellent laboratory skills.
Acquire Ph.D. for college and university teaching and
advanced positions in research, development,
and management.
Learn federal and state government job application
process.
Take additional courses in science and mathematics.
Learn to problem solve.
Develop work habits that are systematic, precise and
patient.

GENETICS

Research and Development related to:
Animals
Plants
Humans

Colleges and universities
Pharmaceutical manufacturers
Large producers of seed, livestock and poultry
Large fur breeding farms
Government laboratories, including:
 Department of Agriculture
 Fish and Wildlife Service
 National Institutes of Health

Acquire broad background in sciences, mathematics
and computer technology.
Obtain Ph.D. for advanced positions in research and
management.
Learn federal government job application process.

MICROBIOLOGY

Research
Teaching
Production
Quality Control

Colleges and universities
Professional schools of medicine, dentistry, public
health, nursing, pharmacy, veterinary medicine
and agriculture
Private research foundations
Government research laboratories and service
agencies
Hospitals and public health facilities
Agricultural experiment stations
Food, chemical, pharmaceutical and cosmetic
companies
Industry including: wood products, paper, textiles,
optical equipment, leather and electrical
equipment
Environmental and pollution control agencies

Obtain Ph.D. for teaching and advanced research
and management positions.
Take additional courses in chemistry, biology,
mathematics and physics.
Take courses related to field of interest: botany,
plant pathology, chemical engineering.
Learn federal, state and local government job
application process.
May need to obtain specialized certification for some
medical areas.
Develop necessary eye-hand coordination and group
interaction skills.

AREAS

EMPLOYERS

STRATEGIES

MYCOLOGY

Teaching
Research

Colleges and universities
Professional schools of medicine, forestry and agriculture
Medical research laboratories
Private research institutes
Pharmaceutical industry
Public Health Service
Industries and laboratories involved in production of food, leather, textiles, and forestry products
Chemical manufacturers
State and federal government laboratories

Acquire knowledge and skills in specialized areas; knowledge of industry chemistry especially helpful.
Take courses in organic chemistry, biochemistry and physics.
Acquire graduate degree for more opportunities.
Obtain Ph.D. for teaching and advanced positions in research and management.
Learn federal and state government job application process.

SYSTEMATIC BIOLOGY

Teaching
Research
Field and Laboratory
Taxonomy
Toxicology
Consulting
Medicine

Private and public schools
Colleges, universities and agricultural colleges
Federal agencies including:
 Departments of Agriculture and Interior
Private research foundations
Museums
Botanical gardens and arboretums
Zoos and aquariums
State and local agencies
Public health laboratories
Hospitals
Oil companies
Organizations involved in ecological studies
National and international environmental research programs

Become certified/licensed for public school teaching.
Earn Ph.D. for college and university teaching and advanced research and management positions.
Learn federal, state and local government job application process.
Develop excellent laboratory skills.

Develop foreign language abilities for international opportunities.

ENTOMOLOGY

Teaching
Research
Biological Control
Toxicology
Biological Survey
Extension
Inspection

Colleges and universities, especially colleges of agriculture and veterinary medicine
Industry, including:
 Food producers and processors
 Chemicals for insect control
 Lumber and pulp

Acquire Ph.D. for college and university teaching and advanced research and management positions.

AREAS

EMPLOYERS

STRATEGIES

Entomology, Continued

Chemical companies
 Pest control companies
 Federal and state government
 Health agencies
 Agricultural experiment stations
 Inspection agencies and control boards
 Conservation agencies
 Museums

Entomology, Continued

Learn federal, state and local government job application process.
 Specialize in areas.

MARINE AND AQUATIC BIOLOGY

Food
 Research
 Inspection
 Teaching
 Analysis

Federal, state and local agencies
 International agencies
 Inspection organizations
 Private recreation organizations
 Research laboratories
 Colleges and universities
 Zoos
 Armed services
 Shipping industry
 Manufacturing
 Fish hatcheries and organizations raising fish

Develop good foundation in mathematics, computer science, statistics and humanities.
 Learn federal, state and local government job application process.
 Acquire Ph.D. for college and university teaching and advanced research and management positions.
 Obtain experience related to fishing and boating.

Specialize in fisheries science.

ZOOLOGY

Animal Care/Training
 Research
 Curator
 Teaching
 Specialized Areas

Wildlife preserves and parks
 Zoos, aquariums and other collections of animals
 Museums
 Research organizations
 Pharmaceutical, industry, chemical and agricultural service industries
 Federal and state agencies
 Colleges and universities

Acquire excellent communication skills.
 Obtain experience working with animals and various related laboratory equipment.
 Develop broad background in biology and other related-subjects--chemistry, physics, mathematics and statistics.
 Acquire graduate degree for advancement and specialized positions.
 Obtain Ph.D. for teaching and advanced research and management positions.
 Learn federal and state government job application process.

AREAS

BIOMEDICAL

Physiology
 Biophysics
 Biochemistry
 Pharmacology
 Nutrition
 Immunology
 Pathology
 Research
 Teaching
 Quality Control

Engineering

TECHNICAL WRITING

Editing
 Writing

ILLUSTRATION

TECHNICAL SALES

EMPLOYERS

Colleges and universities
 Professional schools including colleges of pharmacy, dentistry, medicine, veterinary medicine and agriculture
 Clinics and hospitals
 Private research foundations
 Drug companies
 Federal laboratories and regulatory agencies
 Independent testing laboratories
 Public health departments
 Agricultural experiment stations
 Industrial laboratories including:
 chemical, petroleum, food processing, drug and cosmetic manufacturers
 Armed services

Newspapers
 Publishing companies including:
 scientific magazines
 professional journals
 periodicals
 textbooks
 biological books

Publishing companies of:
 textbooks
 scientific magazines and books
 Medical and veterinary colleges

Manufacturing firms including:
 pharmaceuticals
 animal pharmaceuticals
 laboratory equipment
 medical supplies and prostheses

STRATEGIES

Obtain Ph.D. for college and university teaching and advanced research positions.
 Acquire background in physics, organic and physical chemistry, mathematics, and anatomy.
 Take courses in area(s) of specialization.
 Acquire advanced degrees in areas of specialization; some may require M.D.
 Learn federal, state and local government job application process.

Obtain degree in biomedical engineering or engineering technology.

Take technical writing classes or minor.
 Develop strong writing skills and command of English language.
 Minor in journalism.
 Acquire word processing and desktop publishing skills.

Double major or minor in graphic illustration.
 Find part-time, summer, co-op or internship position.

Develop excellent communication and interpersonal skills.
 Take courses in anatomy and pharmacology.
 Obtain retail or selling experience.
 Acquire a minor in business.
 Hold leadership positions in campus organizations.
 Join student American Marketing Association.

AREAS

EMPLOYERS

STRATEGIES

BIOLOGICAL PHOTOGRAPHY

Major medical, dental and veterinary schools
 Research centers
 Federal government
 Museums
 Zoological societies
 Pharmaceutical companies
 Publishing houses
 Free-lance

Acquire thorough knowledge of photographic procedures and technology.
 Become skilled with medical and scientific instruments including microscopes.
 Take specific courses in biological, medical and ophthalmic photography; courses in illustration and printing helpful.
 Learn federal government job application process.

LEGISLATION

Lobbyist

Federal and state government
 Companies and industries

Acquire internships in federal or state government.
 Develop excellent communications and interpersonal skills.
 Learn federal and state government job application process.
 Get experience in sales.
 Acquire Ph.D.

Congressional Fellows

Federal government

GENERAL INFORMATION

- A bachelor's degree will qualify for work as a laboratory assistant, technician, technologist or research assistant. These individuals work as part of a team performing practical operations, e.g., operating laboratory equipment, designing and constructing new equipment, making drawings, building models and assisting in interpretation of results.
- An undergraduate degree can be used for nontechnical work in writing, illustration, sales, photography and legislation.
- Graduate degrees will allow for more responsibility and advancement.
- Some work environments, particularly medical, require special certification.
- Learn laboratory procedures and become familiar with equipment.
- Obtain summer, part-time, volunteer, co-op or internship experience.
- Complete various training courses working with laboratory equipment and procedures to enhance job skills and abilities.
- Join professional associations and community organizations to enhance knowledge, abilities and contacts in the field.