

BOTANY

What can I do with this degree?

AREAS

EMPLOYERS

STRATEGIES

PLANT BIOLOGY

Anatomy
Biochemistry
Biophysics
Cytology
Ecology
Genetics
Molecular Biology
Morphology
Paleobotany
Physiology
Systematics/Taxonomy

Research organizations
Colleges and universities
Museums
Botanical gardens and arboreta
U.S. Department of Agriculture branches including: Medical Plant Resources Laboratory, Germplasm Resources Laboratory, Animal and Plant Health Inspection Service, National Arboretum, U.S. Forest Service
Federal agencies including: Departments of Interior and State, U.S. Public Health Service, National Aeronautics and Space Administration, the Smithsonian Institution, and Environmental Protection Agency
State agencies
Ecological consulting companies
Industries including petrochemical, chemical, and lumber and paper
Companies including pharmaceutical, food, seed and nursery, fruit growers, biological supply houses, and biotechnology firms
Environmental and biotechnical regulatory agencies

Obtain Ph.D. for teaching and advanced research positions.
Conduct undergraduate research project.
Learn high-technology techniques.
Learn federal and state government job application process.

APPLIED PLANT SCIENCE

Agronomy
Biotechnology
Breeding
Economic Botany
Food Science and Technology
Forestry
Horticulture
Natural Resource Management
Plant Pathology

College and universities including Departments of Agriculture
Research organizations
Agriculture industry including: lumber and paper, seed and nursery, fruit and vegetable growers, fermentation, food industry and biological supply houses
Biotechnology firms

Take courses or double major in area of interest.
Learn foreign language for international work.
Obtain Ph.D. for teaching, advanced research positions, and administration.

AREAS

EMPLOYERS

STRATEGIES

Applied Plant Science, Continued

Industries including: petrochemical, pharmaceutical and chemical
Ecological consulting companies
Federal, state and local government agencies
Environmental and biotechnical regulatory agencies

Applied Plant Science, Continued

Learn federal, state and local government job application process.

RESEARCH

Biotechnology
Genetics
Cell Membrane

Colleges and universities
Research organizations
Agricultural organizations
Federal government
Related industries

Pursue graduate degrees for advanced positions.
Develop excellent research and high-technology skills.
Learn federal government job application process.
Gain related work experience.

ORGANISMIC SPECIALITIES

Bryology
Lichenology
Microbiology
Pteridology
Mycology
Phycology

Colleges and universities
Research organizations
Federal and state government laboratories including Agriculture, Health, etc.
Pharmaceutical companies
Food and beverage industries including brewing and fermentation
Hospitals
Related industries

Learn high-technology techniques.
Become familiar with laboratory procedures and equipment.
Obtain graduate degree in area of interest.

EDUCATION

Teaching
Research
Administration

Colleges and universities
Museums, botanical gardens and herbaria
Non-profit organizations

Need master's degree as a minimum for most areas.
Obtain Ph.D. for positions in college teaching, research and advanced administration.

WRITING

Publishing companies including newspapers, magazines, books and textbooks
Professional associations
Scientific and educational software companies
Non-profit organizations

Take courses in technical writing.
Develop computer skills.
Obtain master's degree in scientific journalism.

AREAS

EMPLOYERS

STRATEGIES

LAW

Agricultural
Environmental
Biotechnological

Legal firms with environmental focus
Government agencies and regulatory agencies
Biotechnical regulatory firms or agencies

Obtain law degree.

MARKETING AND ADMINISTRATION

Sales
Marketing
Administration
Management

Pharmaceutical houses
Seed companies
Biotechnology firms
Scientific publishers
Biological supply houses

Complete minor in business.
Hold leadership positions in campus organizations.
Join student American Marketing Association.

ILLUSTRATION

Scientific publishers
Colleges and universities
Educational and scientific software companies
Non-profit organizations

Take double major or minor in illustration.
Become competent in computer-aided design.
Seek related work experience, internship or co-op position.

COMPUTER PROGRAMMING

Scientific and educational software companies

Take double major or minor in computer programming.
Seek related work experience, internship or co-op position.

GENERAL INFORMATION

- Bachelor's degree qualifies for laboratory technician or technical assistant positions in education, industry, government, museums, parks, and botanical gardens.
- Master's degree qualifies for some research and administrative positions.
- Ph.D. required for advanced research and administrative positions, college teaching and independent research.
- Obtain part-time, summer, co-op, volunteer, internship experience with government agencies, college/university labs, agricultural experiment stations, freshwater and marine biological stations, or private companies.
- Extremely helpful to arrange undergraduate research project to decide on specific area of interest in Botany.
- Enjoy outdoor activities.
- Join organizations directed to concern for world food supply and other related areas.
- Develop excellent mathematics and verbal and written communication skills.
- Select broad range of courses in English, social sciences, arts and humanities.
- Become proficient with computers.