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 Systems Ecology Taxonomy	Research organizations Colleges and universities Museums Botanical gardens and arboretums 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 a Ph.D. for teaching and advanced research positions. Conduct undergraduate research with professors. Apply for undergraduate research fellowships or other student research programs. Develop excellent computer skills. Join related professional associations. 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 your area of interest. Learn a foreign language for international work. Gain relevant laboratory research experience through volunteer positions, part-time work, or internships. Obtain a 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.
ORGANISMIC SPECIALTIES 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. Assist a professor with research or find a part-time job in a laboratory. Obtain a graduate degree in your area of interest.
EDUCATION Teaching Research Administration	Colleges and universities Museums, botanical gardens and herbaria Non-profit organizations	A master's degree is a minimum requirement for most areas. Obtain a Ph.D. for positions in college teaching, research, and advanced administration. Gain experience through tutoring. Learn to work well with different types of people.
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 word processing and desktop publishing skills. Find an internship with a magazine, newspaper, or publisher. Obtain a master's degree in scientific journalism.

AREAS	EMPLOYERS	STRATEGIES
LAW Agricultural Environmental Biotechnological	Law firms with environmental focus Government agencies and regulatory agencies Biotechnical regulatory firms or agencies	Obtain law degree after completion of bachelor's degree. Gain relevant experience by working at a law firm.
MARKETING AND ADMINISTRATION Sales Marketing Administration Management	Pharmaceutical houses Seed companies Biotechnology firms Scientific publishers Biological supply houses	Earn a minor in business. Hold leadership positions in campus organizations. Join student American Marketing Association. Develop good communication skills; take a course in public speaking. Learn various software packages including spread sheets, databases, and word processing.
ILLUSTRATION	Scientific publishers Colleges and universities Educational and scientific software companies Non-profit organizations	Double major or minor in illustration. Become competent in computer-aided design. Seek related work experience through internships or co-op positions.
COMPUTER PROGRAMMING	Scientific and educational software companies	Double major or minor in computer programming. Gain related work experience through internships or part-time and summer jobs.

GENERAL INFORMATION

- Bachelor's degree qualifies you for work as a laboratory technician or technical assistant in education, industry, government, museums, parks, and botanical gardens.
- Master's degree opens some opportunities in research and administration.
- Ph.D. is required for advanced research and administrative positions, college teaching, and independent research.
- Build good relationships with science professors and secure strong recommendations.
- Maintain a high g.p.a. for graduate school admission.
- Obtain part-time, summer, co-op, volunteer, or internship experience with government agencies, college/university labs, agricultural experiment stations, freshwater and marine biological stations, or private companies.
- Arrange to complete an undergraduate research project to decide on a specific area of interest in botany.
- Enjoy outdoor activities.
- Join organizations concerned with the world food supply and other related areas.
- Develop excellent mathematics and verbal and written communication skills.
- Select a broad range of courses in English, social sciences, arts, and humanities.
- Become proficient with computers.
- Read scientific journals related to botany.

Prepared by the Career Planning staff of Career Services at The University of Tennessee, Knoxville. (1995, Revised 2000)