GEOLOGY

What can I do with this degree?

AREAS	EMPLOYERS	STRATEGIES
ENERGY		
Stratigraphy/Sedimentation Structural Geology Paleontology Geophysics Management/Administration Geothermal Solar	Petroleum industry including oil and gas exploration, production, storage and waste disposal facilities Seismic survey organizations that determine sites for power plants, dams, buildings, highways and offshore oil platforms Independent drilling companies Federal government agencies including: Department of Energy Environmental Protection Agency Nuclear Regulatory Agency Private entrepreneurial companies Universities Small private companies	Gain related computer technology skills. Obtain related work experience in petroleum production industry. Obtain master's degree for advancement. Earn Ph.D. for research and development. Take a business minor for later management responsibilities. Learn federal government job application process.
CONSULTING AND ENGINEERING		
Soil Testing Site Locations Environmental Impact Research and Writing Meteorology	Large and small consulting or engineering firms providing services for: -high tech, oil, gas, mining and other industries -federal, state and local government -utility companies -attorney groups -developers Energy companies Federal and state government Trucking firms	Gain related fieldwork experience. Develop excellent field techniques. Acquire foreign language competency. Learn about other cultures. Develop excellent verbal and written communication skills. Have strong sense of ethics for consulting. May need additional degree in geologic or civil engineering (bachelor's or master's). Check on state certification and registration requirements. Minor in business. Develop skills in operations and project management, technical services and marketing. Learn federal, state, and local government job application process.

AREAS	EMPLOYERS	STRATEGIES
MINERALS AND METALS Exploration Development Mining Production Research	Mining companies including gold, silver, diamonds, sand and gravel Well services and drilling companies Large oil companies Railroad companies Small exploration companies Entrepreneurs, individuals and companies Federal government including: Bureau of Land Management	Get experience in support services of production of minerals. Acquire broad background in earth sciences. Minor in business and economics. Obtain law degree for work with land-use laws and legal matters. Learn federal government job application process.
FEDERAL GOVERNMENT Field Mapping Resource Evaluation Geochemical Water Studies Oil and Gas Resource Evaluation Leasing and Conservation Studies Research	Federal agencies including: U.S. Geological Survey Bureau of Reclamation Bureau of Mines Office of Surface Mining Bureau of Outdoor Recreation National Park Service Forest Service National Oceanic and Atmospheric Administration Army Corp of Engineers National Aeronautics and Space Administration Environmental Protection Agency	Learn federal government job application process. Develop excellent verbal and written communications skills. Obtain good research skills. Get advanced training or work experience with minerals and energy research or production.
STATE AND LOCAL GOVERNMENT Geologic and Soils Maps Resource Evaluation Public Information Service Consulting Writing	State agencies and departments including: Conservation Geological Surveys National Resources Highway Departments Public Health Offices Planning and Development Commissions Regional Planning Boards Divisions of Mines Water Boards Realtor Boards Local agencies and departments including: planning construction inspectors zoning commissions	Learn state and local government job application process. Positions may require several years' experience or graduate degree. Develop network to learn about position openings. Obtain broad educational background in other physical sciences, calculus, English composition, computer science and economics. Acquire graduate degree for advancement. Develop excellent verbal and written communications skills.

AREAS	EMPLOYERS	STRATEGIES
EDUCATION Teaching Research Administration	Elementary/secondary public or private schools Colleges and universities Private research companies National laboratories	Obtain certification/licensing for public school teaching. Obtain Ph.D. for higher education teaching and/or advanced research and administrative positions. Develop grant writing skills.
GEOPHYSICS Solid Earth Exploration Seismology Geodesy Hydrology Meteorology Ocean Sciences Space Sciences	Petroleum and natural gas companies Mining, exploration and consulting firms Research institutes Consulting firms Federal government agencies including: U.S. Geological Survey National Oceanic and Atmospheric Administration Department of Defense State government Private industry	Obtain double major in physics. Take advanced courses in mathematics, chemistry and engineering. Obtain graduate degree for advancement and research. Learn special techniques through fieldwork. Check on state licensing requirements.

GENERAL INFORMATION

- Bachelor's degree sufficient for entry-level industry positions.
- Master's degree preferred for state survey work and advancement in industry and government.
- Ph.D. required for college/university teaching and advanced research positions.
- Obtain volunteer, part-time, summer, internship, and/or co-op experience in local park/forest with surveyors, cartographers, urban planners, engineers, or with local waste management firms, seismologists, oceanographers, or mineralogists.
- Obtain experience, skills, and develop interest in mapping, surveying, measuring equipment, and laboratory equipment and processes.
- Have a love of outdoors, interest in nature and enjoy travel.
- Join groups directed toward improvement of natural resources, environment and pollution control.
- Join student branch or the professional organization(s) related to interest area(s).
- Learn foreign language since work is often done in other countries.
- Develop physical stamina due to research and work being completed in remote areas under various conditions.
- Excellent verbal and written communication skills are essential.
- Majoring in two subject areas can increase employability, for example, geology and physics for geophysics, geology and foreign language for overseas assignments.
- Develop computer skills.

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