# CHEMISTRY



### **KEY SKILLS**



### **CONCENTRATIONS/SPECIALIZATIONS**



- Analytical
- Attention to Detail & Accuracy
- Critical Thinking
- Data Collection
- Logical
- Math (Calculus & Statistics)
- Project Management
- Research
- Teamwork/Interpersonal

- Analytical
  - Qualitative/Quantitative Organic
- Biochemistry
  - Enzymology
  - Endocrinology
  - Clinical Biochemistry
  - Molecular Biochemistry
- Inorganic
  - Nuclear
  - Solid-state/Materials
  - Synthetic

- Industrial
- - Medicinal
  - Polymer
- Physical
  - Electrochemistry
  - Photochemistry
  - Surface
  - Thermochemistry
  - Quantum Mechanics
  - Spectroscopy

- Biochemistry (BS)
- Biological Anthropology (BS)
- Biology (BA, BS, BS/MS, MS, PhD)
- Biophysics (BS, MS, PhD)
- Biostatistics (MPH, MS, PhD)
- Forensic Molecular Biology (MFS)
- Human Paleobiology (MS, PhD)
- Neuroscience (BS)
- Secondary Education (Concentration in Biology) (MEd)



#### **SAMPLE OCCUPATIONS**

- Chemical Engineer
- Clinical Biochemist
- Cosmetic Chemist
- Crime Lab Analyst
- Forensic Chemist
- Food/Flavor Chemist
- Geochemist
- Hazardous Waste Manager/Chemist

- Materials Scientist
- Museum Conservator
- Pharmacist
- Project Manager
- Professor/Teacher
- Quality Control Analyst
- Research Scientist
- Toxicologist
- Water Quality Scientist



### **POSSIBLE WORK SETTINGS**

- Agricultural Organization
  Medical Laboratory
- Biotechnical Firm
- Chemical Company
- Consulting Firm
- Crime Lab
- Engineering Firm
- Federal Government
- Hazardous Waste Plant
- Local/State Agency

- Military
- Museum
- Petroleum Firm
- R&D Laboratory
- School
- University/College



### **SAMPLE STUDENT ORGS**

- Alpha Chi Sigma (Chemistry Fraternity)
- Association of Chemistry Graduate Students
- Association of Forensic Science Students
- Green GW
- **GW DATA Club**



### **PROFESSIONAL ORGS**

- American Association for the Advancement of Science
- American Chemical Society
- Chemical Heritage Foundation
- International Union of Pure and Applied Chemistry
- National Academy of Sciences
- National Science Foundation



## SAMPLE EMPLOYERS

- Alphident Technologies, Inc.
- **Amyris**
- **BASF Global**
- Bayer
- Booz Allen Hamilton
- **CDM Smith**
- Clean Harbors
- DC Public Schools
- Department of Navy
- Dow Chemical
- **Dupont Industries**
- Exxon/Mobil
- Food & Drug Administration
- Genecor International
- General Mills
- Georgetown University
- Gryphon Scientific
- Honeywell & Jackson
- Joule

- MedStar Health Research
- National Institutes of Health
- National Museum of Natural History
- Naval Research Lab
- Noblis
- Paragon BioServices
- PharmAgra Labs
- RTI International
- Sandia National Laboratories
- Smithsonian Institute
- Student Conservation Association
- The McConnell Group
- The George Washington University
- ThermoFisher Scientific
- US Environmental Protection Agency (EPA)

