

# APPENDIX A:

## ENGINEERING

### Aerospace Engineering

- Avionics
- Propulsion
- Mechanical systems
- Structures
- Space systems
- Environmental
- Aerodynamics/flight test engineering

### Agricultural Engineering

### Biosystems Engineering

- Agricultural
- Biotechnology
- Fisheries/aquaculture
- Environmental

### Biochemical Engineering

### Biomedical Engineering

### Bioresource Engineering

### Ceramic Engineering

### Computer Engineering

- Hardware design/architecture
- Information systems/data processing
- Software design
- System integration

### Chemical Engineering

- Chemical
- Process design or control
- Advanced materials & polymers
- Environmental
- System integration

### Civil Engineering

- Construction
- Environmental
- Municipal/urban
- Geotechnical
- Hydrotechnical
- Structural
- Transportation

### Communications Engineering

- Telecommunications

### Electrical Engineering

- Electrical
- Control systems
- Environmental
- Power generation/transmission/distribution
- Fire Protection
- Instrumentation

### Electronics Engineering

### Engineering Chemistry

### Engineering Physics

### Environmental Engineering

### Food Engineering

### Forestry Engineering

### Geological Engineering

- Geophysics
- Geochemistry
- Geology
- Hydrogeology
- Mining/rock mechanics
- Environmental
- Geotechnical

### Geomatics Engineering

### Industrial Engineering

- Industrial
- Environmental
- Production Systems

### Manufacturing Engineering

- Manufacturing Process
- Quality Assurance, quality control/safety

### Materials Engineering

### Mechanical Engineering

- Mechanical systems
- Controls/robotics
- Solid mechanics/material/stress analysis
- Heating, ventilation & air conditioning
- Thermodynamics/fluids
- Environmental

### Metallurgical Engineering

- Metallurgy
- Environmental

### Mineral Engineering

- Mineral Processing

### Mining Engineering

- Mining
- Mineral processing
- Exploration
- Environmental

### Naval Architectural/ Ocean Marine Engineering

### Petroleum Engineering

- Operations
- Refinery
- Environmental
- Oil and Gas
- Reservoir

### Software Engineering

### Surveying Engineering

### Systems Engineering

### Water Resources Engineering

## **GEOLOGY**

- General geology
- Environmental geology
- Geomorphology
- Glacial geology
- Marine geology
- Petroleum geology
- Igneous petrology
- Metamorphic petrology
- Sedimentary petrology
- Sedimentology
- Stratigraphy
- Structural geology
- Tectonics
- Atmospheric sciences
- Land use/urban geology

### **Economic Geology**

- General
- Coal
- Metals
- Non-metals
- Oil & gas
- Mineral exploration

### **Geochemistry**

- General geochemistry
- Analytical geochemistry
- Experimental petrology/ phase equilibria
- Exploration geochemistry
- Low-temperature geochemistry
- Marine geochemistry
- Organic geochemistry
- Stable isotopes

### **Paleontology**

- General paleontology
- Biostratigraphy
- Micropaleontology
- Paleobotany & palynology
- Vertebrate paleontology
- Invertebrate paleontology
- Paleobiology
- Paleoeology/  
paleoclimatology

### **Hydrology**

- General hydrology
- Ground water/hydrogeology
- Quantitative hydrology
- Surface waters
- Geohydrology

### **Soil Science**

- Soil physics/hydrology
- Soil chemistry
- Mineralogy
- Pedology/classification/  
morphology
- Forest soils/rangelands/  
wetlands
- Soil biology/biochemistry

### **Engineering Geology**

- General engineering geology
- Earthquake engineering
- Mining engineering
- Petroleum engineering
- Rock mechanics

## **GEOPHYSICS**

### **General Geophysics**

- Exploration geophysics
- Geodasy
- Geomagnetism &  
palcomagnetism
- Gravity
- Heat flow
- Seismology
- Marine geophysics

### **Petroleum Geophysics**

- Data acquisition
- Data processing
- Data interpretation

### **Environmental Geophysics**

- Data acquisition
- Data processing
- Data interpretation

### **Mining Geophysics**

- Data acquisition
- Data processing
- Data interpretation

### **Remote Sensing**

- Data acquisition
- Data processing
- Data interpretation

### **OTHER OCCUPATIONS**

If your area of specialization cannot be classified using one of the aforementioned descriptions, please specify.