AMERICAN INSTITUTE OF HYDROLOGY

Educational Criteria

Basic Requirements

Completion of a full course of study leading to a bachelor's or higher degree at an accredited college or university with a major in hydrology, physical or natural science or engineering.

The study must have included a minimum of:

- 4-5 semester hours or 8 quarter hours in Chemistry AND
- 4-5 semester hours or 8 quarter hours in Physics AND
- 4-5 semester hours or 8 quarter hours in Differential and Integral Calculus AND
- 25 semester hours or 37 quarter hours in the specialty areas.

Specialty Requirements

Completion of 25 semester hours or 37 quarter hours of which at least 10 semester or 15 quarter hours must come from Category I listing of courses and the rest from a combination of Category II and Category III listing of courses. Twenty semester hours or 30 quarter hours must be in the third or fourth year or graduate course studies.

Category I. Courses in hydrology, hydrogeology, or water quality - minimum of 10 semester or 15 quarter hours.

Category II. Courses in allied subjects in which hydrology, hydrogeology or water quality constitutes more than 10 percent of the course work - minimum of 9 semester or 13 quarter hours.

Category III. Supplemental courses - minimum of 6 semester or 9 quarter hours.

Note: The course titles listed are only indicative and are not all inclusive.

Category I. A. - Titles of Courses in Hydrology

Advanced Geohydrology

Advanced Ground-Water Hydrology

Advanced Hydraulics

Advanced Hydraulic Problems

Advanced Hydrologic Analysis

Advanced Hydrologic Analysis & Design

Advanced Hydrologic Laboratory

Advanced Hydrology

Advanced Water Chemistry

Agricultural Hydrology

Analytical Geohydrology

Applied Hydraulics

Applied Hydrology

Applied Subsurface Hydrology

Arctic Hydrology

Arid Zone Hydrology

Deterministic Methods in Hydrology

Drainage & Irrigation

Dynamic Hydrology

Dynamics of Flow Systems of the Earth

Engineering Hydrology

Field Hydrology Hydrology

Floods & Droughts

Flow in Porous Media

Fluid Flow in Porous Media

Fluid Mechanics

Fluvial Hydraulics

Forest Hydrology

Free Surface Flows

Geohydrology

Geohydrology of Drainage Basins

Ground-Water Hydrology

Hydraulics

Hydraulics of Open Channel

Hydraulics of Pipeline

Hydrochemistry

Hydrodynamics of Free Surface Flows

Hydrologic Forecasting

Hydrologic Investigations

Hydrologic Measurements

Hydrologic Models

Hydrologic Processes & Cybernetics

Hydrologic Properties of Soils

Hydrologic Simulation

Hydrologic Systems & Analysis

Hydrologic Transport Processes

Hydrology, I & II

Hydrology Field Camp

Hydrology Laboratory

Hydrology for Engineers

Hydrology of Lakes & Reservoirs

Hydrology Seminar

Hydrometeorologic Observations

Hydrology, Water Control

Hydrometeorology

Hydroscience

Land-Mass Hydrology

Numerical Methods in Hydrology

Open Channel Flow

Physical Hydrology

Range Hydrology

River Hydrology

Rural Hydrology

Seepage

Seminar in Geohydrology

Seminar in Hydrology

Simulations Methods in Surface & Subsurface

Snow Hydrology

Soil Hydrology

Soil Water Movement

Special Topics in Hydraulics & Fluid Mechanics

Special Topics in the Hydrology of Ground Water & Low Flows

Statistical Methods in Hydrology

Stochastic Methods in Hydrology

Stream Analysis

Subsurface Fluid Dynamics

Surface Water Dynamics

Surface & Subsurface Hydrology

Surface Water Hydrology

Surface Water Quality & Analysis

Urban Hydrology

Use of Computes in Hydrology

Water Chemistry

Water Resources Calculations

Watershed Hydrology

Watershed Modeling

Category I. B. - Titles of Courses in Groundwater Hydrology (Hydrogeology)

Advanced Ground Water Geology

Advances Ground Water Problems

Advanced Hydrogeology

Analysis of Ground Water Flow

Analysis of Ground Water Systems

Analytical Methods in Ground Water

Analytical Techniques of Ground Water Flow

Application of Hydrogeology Concepts

Applied Hydrogeology

Appraisal and Development of Ground Water

Aquifer Mechanics

Assessment of Ground Water Resources

Case Histories in Hydrogeology

Chemistry of Ground Water

Computer Modeling of Hydrogeologic Systems

Contaminant Hydrogeology

Development of Ground water Resources

Environmental Hydrologic Tracers

Field Hydrogeology

Field Methods in Hydrogeology

Field Methods in Contaminant Hydrogeology

Fundamental of Well Test Analysis

Geology of Underground Water Ground Water

Ground Water & Engineering Geology

Ground Water & Seepage

Ground Water Chemistry

Ground Water Contamination

Ground Water Dating

Ground Water Development

Ground Water Exploration and Development

Ground Water Flow & Drainage Design

Ground Water Flow Systems

Ground Water Geology

Ground Water Hydraulics

Ground Water Investigations

Ground Water Management

Ground Water Pollution

Ground Water Problems in Mining

Ground Water Resources Evaluation and Modeling

Ground Water Resources Management

Hydrogeochemistry Seminar

Hydrogeochemistry

Hydrogeologic Mapping

Hydrogeologic Measurements

Hydrogeologic Problems

Hydrogeologic Systems

Hydrogeology I & II

Hydrogeology & Human Affairs

Hydrogeology of Ground Water Pollution & Protection

Hydrothermal Fluids

Intro to Ground Water

Intro to Ground-Water Geology

Laboratory Methods in Hydrogeology

Mathematical Models of Hydrogeologic Systems

Mathematics of Ground Water Movement

Mechanics of Flow Through Soils

Mechanics of Underground Fluids

Methods of Ground Water Investigations

Modeling Subsurface Flow Systems

Monitoring Network Design

Numerical Methods in Hydrogeology

Numerical Methods in Subsurface Hydrology

Optimal Ground Water Management

Paleohydrogeology

Physics of Underground Fluids

Pollution of Ground Water

Principles of Ground Water

Principles of Hydrogeology

Prospecting for Ground Water

Quantitative Determination of Aquifer Performance

Quantitative Ground Water Hydrology

Quantitative Methods in Hydrogeology

Regional Ground Water Geology

Sedimentary Aquifers

Seminar in Ground Water

Seminar in Hydrogeology

Solutions to Ground Water Problems

Statistical Methods in Hydrogeology

Subsurface Hydrogeologic Methods

Subsurface Water Quality

Theory of Flow Through Porous Media

Theory of Ground Water Flow

Theory of Ground Water Motion/Movement

Transient Flow of Ground Water

Theory of Ground Water Motion/Movement

Transient Flow of Ground Water

Transient Phenomena in Natural Porous Media

Underground Fluids

Water Well Analysis

Water Well Design

Water Wells

Category I. C. - Titles of Courses in Water Quality

Advanced water chemistry

Analysis and design of Wastewater treatment

Aquatic chemistry

Aqueous geochemistry

Assessing ecological effects of pollution

Biological and chemical processes for wastewater treatment

Chemistry of aquifer systems

Chemistry and biology of natural waters

Ecology of polluted water

Environmental water chemistry

Environmental chemistry

Environmental health aspects of ground water systems

Geochemistry of aqueous systems

Geochemistry of natural water

Geochemistry of pollution

Geochemistry of river management

Geochemistry of sediments

Introduction to geochemistry

Land application of wastewater

Limnology

Low-temperature geochemistry

Modeling aquatic environments

Sanitary engineering

Solute transport geochemistry

Stream ecology

Water pollution biology

Water pollution control

Water quality

Water quality analysis

Water quality control

Water quality dynamics

Water quality engineering

Water quality management

Water quality investigations

Water quality measurements

Water quality for engineers

Water supply and pollution control

Water supply and treatment

Water supply and wastewater collection

Water supply and wastewater disposal

Water Well Design

Water Wells

Well Test Analysis

Category II. A. & B. - Hydrology and Hydrogeology

Advanced Hydrologic Engineering

Advanced Mechanics of Fluids

Advanced Sanitary Engineering

Advanced Subsurface Fluids Engineering

Advanced Meteorology

Applied Environmental Geology

Applied Physics

Applied Meteorology

Applied Environmental Geology

Climate and Weather

Conservation of Aquatic Resources

Drainage & Irrigation Engineering

Drainage & Irrigation Practice

Drainage Systems Design

Drilling Engineering

Drilling Practice & Well Completion

Ecology of Polluted Water

Engineering Geology

Engineering Hydraulics

Environmental Geochemistry

Environmental Geology

Environmental Health Aspects of Ground Water Systems

Evapotranspiration

Fluvial Geomorphology

Fluid Dynamics

Flood Control Engineering

Forest influences

Fundamental of Geological Engineering

Geochemistry of Aqueous Systems

Geochemistry of Natural Water

Geochemistry of Pollution

Geography of River Development

Geological Engineering

Geological Oceanography

Geology in Engineering Construction

Geology of Fluids

Geology in Engineering Construction

Geomorphology

Ground-water Engineering

Ground-water Protection

Hydraulic Engineering

Hydrochemical Systems

Hydrography

Hydrologic & Hydraulic Engineering

Hydrodynamics

Hydromechanics

Land Application of Wastewater

Limnology

Low-Temperature Geochemistry

Meteorology (micro, dynamic)

Microclimatology

Ocean & Coastal Engineering

Permafrost

Petroleum Engineering

Petroleum Geology

Petroleum, Natural Gas & Ground Water

Physical Aspects of Sedimentology

Physical Geology

Physical Oceanography

Physiography

Physics of Soil Water Movement

Plant/Water Relationship

Pollution of Natural Waters

Public Water Supplies

Quaternary (Surficial) Geology

Remote Sensing of the Environment

River & Harbor Engineering

Road Drainage

Rural Water Supplies

Sanitary Engineering

Sedimentation

Sediment Transport

Small Watershed Engineering

Soil & Water Conservation

Soil Drainage

Soil Moisture

Soil, Water & Air

Soil Water Dynamics

Solute Transport Geochemistry

Stream Ecology

Stream Pollution

Thermodynamics

Urban Water Systems

Water Analysis

Water Chemistry Laboratory

Water Conservation

Water Microbiology

Water Pollution Control

Water Power Engineering

Water Quality Analysis

Water Quality Dynamics

Water Quality in Water Resources Development

Water Quality Investigations & Control

Water Quality Measurements

Water Quality Seminar

Water Resources

Water Resources Development

Water Resources Engineering

Water Resources Instrumentation

Water Resources Investigation & Development

Water Resources Management

Water Resources Microbiology, Bacteriology

Water Resources Science and Technology

Water Analysis & Problems

Watershed Management

Water Supply & Pollution Control

Water Supply & Treatment

Water Supply & Wastewater Collection

Water Supply & Wastewater Disposal

Water Supply & Engineering

Water Supply Geology

Water Supply - Water Wells

Water Utilization

Waves & Coastal Processes

Well Completion & Simulation

Well Drilling

Well Logging

Category II. C. Allied Courses in Water Quality

Algae physiology

Analytical chemistry

Aquatic entomology

Aquatic plants

Biology of algae

Ecology of animal plankton

Ecology of fish

Freshwater algae

General microbiology

Ichthyology

Microbial ecology

Organic chemistry

Production biology of fishery environments

Wetland Ecology

Category III. A. B. & C. - Titles of Supplemental Courses

Advanced Geology

Advanced Soil Science

Agricultural Engineering

Air-photo Interpretation

Analysis & Design of Water Res. Systems

Aquatic Ecology for Nonbiologists

Aquatic Environments

Bioclimatology

Biology of Water & Water Treat. Res.

Biostratigraphy

Chemical Properties of Soils

Chemistry of Soil & Water Systems

Civil Engineering Technology

Conservation of Natural Resources

Earth Science

Earth & Physical Sciences

Ecological Dimensions of Environ. Impact

Ecology

Economics of Water Supply

Engineering Properties of Soils

Environmental Conservation

Environmental Economics

Environmental Health

Environmental Health Engineering

Environmental Impact Analysis

Environmental Impact Statement

Environmental law, Toxic Subs. & Conservation

Environmental Legislation

Environmental Management

Environmental Planning

Environmental Pollution Control

Environmental Quality Management

Environmental Radiation

Environmental Toxicology

Exploration Geology

Exploration Geophysics

Field Geology

General Geography

General Geology

Geochemistry

Geology for Engineers

Geophysical Exploration

Geophysical Prospecting

Geophysics

Glacial Geology

Government & Natural Resources

Ground Water Law

Heat Transfer

Hydrotechnical Structures

Hydropower Engineering

Intro to Statistical Methods

Intro to Water Resources

Land & Water Use Policy

Land Use Controls

Lithology

Man, Chemicals & Environment

Maps & Airphotos

Marine Environments/Ecology

Marine Engineering

Marine Geology

Mining Geology

Modeling & Analysis of Environ. Systems

Natural Resources Economics

Natural Resources Law

Natural Resources Management

Natural Resources Planning

Numerical Methods in Geoscience

Optimization & Simulation of Water Resources Systems

Petrography

Petrology

Petroleum

Photogeology

Physical Climatology

Physics of Soil & Water

Principles of Electric Exploration

Protection of Natural Resources

Public Health Engineering

Radiochemical Laboratory

Regional Geology

Reservoir Engineering

Reservoir Operation

Science & Government

Seminar in River Basin Planning

Seminar in Water Resources

Sewage and Sewage Treatment

Soil Mechanics

Soil Physics/Chemistry

Soil Rock Behavior

Soil Science

Soils & Environmental Pollution

Soils & Land Use

Soils Mapping & Evaluation

Stratigraphy

Stream Sanitation

Structural Geology

Subsurface Exploration

Stream Sanitation

Structural Geology

Subsurface Exploration

Surface & Subsurface Geology

Wastewater Treatment

Water Law

Water Resources Economics

Water Resources Institutions & Policies

Water Resources Planning

Water Resources Systems Simulations

Water Quality & Water Resources Development

Water Rights Law

Watershed Instrumentation

Watershed Problems/Operations

Water, Society & the Environment

Water Studies Seminar

Waterways Engineering

Waterways & Ports