

Hydrologic Sciences Graduate Program Application

Please complete the following form and email to: hydrogrd@colorado.edu.

Also attach:

- 1) a **letter of intent** describing your research interests including which aspect of hydrologic sciences (physical, chemical or biological) you wish to pursue and
- 2) a copy (official or unofficial) of your **undergraduate and graduate transcripts**.

Today's Date _____ Intended Graduation Date _____

Name _____ Student ID Number _____ - _____ - _____

Email Address _____ Phone Number _____

Home Department _____ Faculty Advisor _____

*You are required to take 2 Core Courses and 3 electives from the pre-approved list that follows this form**. If you feel another course would be appropriate to your studies, you may include that course here and explain why you are requesting that course in your letter of intent.*

Please list the courses to be taken for the certificate program and when they were taken or are planned.

Course Number	Course Title	Semester	Year
<i>Hydrologic Sciences Core Courses</i>			

Hydrologic Sciences Elective Courses

** A list of courses is attached to this application, but also visit: <https://www.colorado.edu/program/hydrosciences/academics/courses>

Master of Science Students, please provide your thesis topic and the Hydrologic Sciences Faculty member that will be serving on your committee, if you have one.

Thesis Topic: _____

Faculty Committee Member: _____

PhD Students, please provide your dissertation topic and the 2 Hydrologic Sciences Faculty members that will be serving on your committee, also indicate if you are applying for the certificate or the PhD in Hydrologic Sciences

Dissertation Topic: _____

Faculty Committee Members: _____ and _____

Certificate _____ or PhD Program _____

Student's Signature

Faculty Advisor's Signature

For more information, visit <http://hydrosciences.colorado.edu> or email hydrogrd@colorado.edu

List** of Courses for the Hydrologic Sciences Graduate Certificate and PhD Programs

Required Courses: a total of 5 courses are required (two core + three electives)

Core Courses (Choose two, but at least one must be from List A)

List A	List B
ATOC 5050 (3) Atmospheric Thermodynamics and Dynamics	ATOC 5051 (3) Introduction to Physical Oceanography
ATOC 5060 (3) Dynamics of the Atmosphere and Oceans	ATOC 5061 (3) Advanced Ocean Dynamics and Air-Sea Coupled ENSO Mechanisms
CVEN 5313 (3) Environmental Fluid Mechanics	CVEN 5333 (3) Physical Hydrology
CVEN 5353 (3) Groundwater Hydrology	CVEN 5404 (3) Water Chemistry
GEOL 5110 (3) Geomechanics	GEOG 5321 (3-4) Snow Hydrology
	GEOL 5080 (3) Advanced Hydrogeology and Modeling Concepts

Electives Courses (3 needed, additional classes from the core list can also be electives)

ATOC 5235 (3) Introduction to Atmospheric Radiative Transfer and Remote Sensing
ATOC 5550 (3) Mountain Meteorology
ATOC 5600 (3) Physics and Chemistry of Clouds and Aerosols
ATOC 5730 (3) Physical Oceanography and Climate
ATOC 5750 (3) Desert Meteorology and Climate
ATOC 5780 (3) Ice Sheets and Climate
ATOC 5850 (3) Numerical Methods Laboratory
CHEM 5141 (3) Environmental Water and Soil Chemistry
CVEN 5323 (3) Applied Stream Ecology
CVEN 5343 (3) Transport and Dispersion in Surface Water
CVEN 5363 (3) Modeling of Hydrologic Systems
CVEN 5383 (3) Applied Groundwater Modeling
CVEN 5404 (3) Water Chemistry
CVEN 5454 (3) Statistical Methods for Natural and Engineered Systems
CVEN 5537 (3) Numerical Methods in Civil Engineering
CVEN 5833 (3-4) Special Topics: Env. Transp. Disp. Proc
CVEN 6383 (3) Flow and Transport through Porous Media
CVEN 6414 (3) Aquatic Surfaces and Particles
EBIO 5030 (3) Limnology
ENVS 5840/GEOL 5305 (3) Global Biogeochemical Cycles
GEOG 5023 (4) Advanced Quantitative Methods for Spatial Data
GEOG 5093/GEOL 5093 (4) Remote Sensing of the Environment
GEOG 5241 (3-4) Topics in Physical Geography: Watershed Biogeochemistry
GEOG 5241 (3-4) Topics in Physical Geography: Fluvial Geomorphology
GEOG 5251 (4) Fluvial Geomorphology
GEOG 5271 (3) The Arctic Climate System
GEOG 5303 (4) Geographic Information Science: Spatial Programming
GEOL 5093/GEOG 5093 (4) Remote Sensing of the Environment
GEOL 5270 (3) Marine Chemistry and Geochemistry
GEOL 5280 (3) Aqueous and Environmental Geochemistry
GEOL 5305/ENVS 5840 (3) Global Biogeochemical Cycles
GEOL 5430 (3) Paleooceanography and Paleoclimatology
GEOL 5060 (4) Oceanography
GEOL 5700 (3-4) Geological Topics Seminar: Terrestrial Hydrology
GEOL 5700 (3-4) Geological Topics Seminar: Sedimentary Modeling
Please check our website for course updates: <https://www.colorado.edu/program/hydrosciences/academics/courses>