# **Natural Hazards Resilience Certificate Application**

Eligibility

The certificate program in Natural Hazards Resilience is open to master’s and Ph.D. students from all departments at the University of North Carolina at Chapel Hill that have identified an advisor in their home department that is willing to work with the head of the Natural Hazards Resilience certificate program or an advisor that is actively participating in the certificate program. The certificate program is not open to non-degree-seeking students. All students must receive a P or higher in all certificate coursework.

Overview of the Program

The 10-credit hour certificate program is focused on the study of natural hazards resilience. Emphasis is placed on the nexus between the threats and impacts of natural hazards and disasters on human settlements, including those exacerbated by climate change, and how individuals, organizations, communities, and larger systems of governance prepare for, respond to, mitigate against, recover from, and adapt to these events. The concept of disaster resilience, or “the ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events” (National Research Council 2012), serves as a key organizing principle. The curriculum provides students with an academic and practice-based exposure to the science underlying our understanding of natural hazards phenomena and a critical analysis of the policies, programs, and plans in place that are intended to help societies manage the effects of natural hazards and disasters, to include an emphasis on those actions that increase disaster resilience.

Certificate Program Requirements

Following acceptance to the program, the completion of the following courses are required:

* PLAN 755: Planning for Natural Hazards and Climate Change Adaptation (3 hours, Fall)
* PLAN 756: Survey of Natural Hazards and Disasters (3 hours, Spring)
* PLAN 754: Natural Hazards Resilience Speaker Series Course (1 hour, Spring)
* Elective course (3 hours). Students may choose from the elective courses below, or may select other options, including independent study courses, subject to approval by the Program Director.
  + GEOG 811 Climate Change (3)
  + GEOL 508 Hydroclimatology (3)
  + GEOL 522 Physical Volcanology (3)
  + GEOL 807 Physics of Earthquakes (3)
  + GEOL 710 Advanced Coastal Environmental Change (3)
  + ENEC 530 Principles of Climate Modeling(3)
  + LAW 262 Ocean and Coastal Law (3)
  + MASC 506 Physical Oceanography (GEOL 506) (4)
  + PLAN/ENEC 641: Ecology and Land Use Planning (3)
  + PLAN 740 Land Use and Environmental Policy (3)
  + PLAN 744 Development and Environmental Management (3)
  + PUBA (Public Administration) 553 Disasters and Public Policy (3)
  + SOWO 709 Helping Families and Children Managing the Effects of Disasters (3)

Students are strongly encouraged to gain experience through summer internships and/or fieldwork. Students may choose a 3-hour capstone option in fulfillment of the 3-hour elective requirement. This may include either a student internship or fieldwork (see a description of both options in the detailed program description). Capstone courses will follow the rules and procedures established for independent studies (see information on the Office of the University Registrar’s website under the title “[UPM #30 Independent Study Policy](http://registrar.unc.edu/academic-services/policies-procedures/university-policy-memorandums/independent-study-policy/)”).

Admissions Process

The Program Director and Certificate Coordinating Committee will review applications for admission (see application on the following page). The Program Director and Certificate Coordinating Committee will also be responsible for assessing other certificate compliance issues, such as course credits, the transfer of courses from other universities (if applicable), the appropriateness of fieldwork or student internships, or other issues that may arise. It is important to note that only 40% of certificate program courses (i.e. one 3-hour course and one 1-hour course) can be double-counted towards the applicant’s degree program.

In the case of existing University of North Carolina at Chapel Hill students, they should meet with their advisor and/or their department chair to discuss applying to the certificate program. Prospective students that are in the process of applying to the university should include in their graduate school application an application to the certificate program and permission from their primary department.

Applicants to the program must submit an essay (not to exceed 2 pages in length) describing their interest in the program and their rationale for applying. Prospective applicants must identify a requested start date (i.e., year and fall or spring semester) and provide full contact information. All of this information is part of the application form on page 3 of this document. The applicant must identify a certificate program faculty advisor, who may be the same or different from their primary graduate advisor. If the applicant cannot identify an advisor and they are accepted into the certificate program, the Program Director and Certificate Coordinating Committee will attempt to identify an appropriate advisor.

Additional Information about the Certificate Program

For more information about the Certificate Program you may also contact Gavin Smith at gavin\_smith@unc.edu, Anna Schwab at akschwab@email.unc.edu or Sandra Lazo de la Vega at sandral@unc.edu

# Natural Hazards Resilience Certificate Application Form

## Applicant Information

|  |  |
| --- | --- |
| Name |  |
| Address |  |
| Telephone |  |
| Email |  |
| PID |  |

## Current Degree Program

|  |  |
| --- | --- |
| Anticipated degree |  |
| Anticipated degree date |  |
| Campus Box |  |
| Requested Start date (Semester & Year) |  |

### Double Counting Restrictions

By signing below the student certifies that they understand **only 40% of the credits** (i.e., one 3 hour course and the 1 hour Natural Hazards Resilience Speaker Series Course) **can double count toward certificate and degree requirements**.

|  |  |
| --- | --- |
|  |  |
| Student Signature | Date |

By signing below, the student’s advisor and Director of Graduate Studies approve of the student enrolling in the Graduate Certificate in Natural Hazards Resilience.

|  |  |
| --- | --- |
|  |  |
| Advisor Signature | Date |

|  |  |
| --- | --- |
|  |  |
| Director of Graduate Studies Signature | Date |

#### SUBMIT APPLICATION

Email the completed application to Sandra Lazo de la Vega at [sandral@unc.edu](mailto:sandral@unc.edu)

Statement of Interest: Why are you interested in pursuing the certificate at this time? Your response should be no more than 2 pages in length