



NATURAL HAZARDS RESILIENCE CERTIFICATE

These certificate courses train researchers and practitioners who can help the public, non-profit, and private sectors become more resilient in the face of natural hazards and disasters and adapt to the effects of a changing climate.

To apply to this certificate, students must have completed a bachelor's degree. This certificate program is hosted by the Department of City and Regional Planning, but it is designed for students from a range of academic disciplines, such as public policy, geography, climate science, and engineering.

Course Requirements

Code	Title	Hours
Core Courses		
PLAN 655	Planning for Natural Hazards and Climate Risk	3
PLAN 656	 Climate Change Impacts and Adaptation	3
PLAN 754	Natural Hazards Resilience Speaker Series	1
Electives		
3 minimum credit hours of elective courses are required from the lists below. These lists are not exclusive. With advisor or director approval, additional courses may fulfill this requirements.		3
Minimum Hours		10

Code	Title	Hours
UNC Electives		
ENVR 525	Water, Sanitation, Hygiene, and Global Health	3
ENVR 600	Environmental Health	3
ENVR 765	Space Time Exposure Mapping and Risk Assessment	3
ENVR 788	Managing Environmental Financial Risk	3
ENVR/PLAN 548	Sustainable Energy Systems	3
GEOG 804	Research Seminar in Social Geography	3
GEOG 811	Seminar/Readings in Earth System Science and Biophysical Geography	3
HPM 420	Community and Public Health Security: Disasters, Terrorism, and Emergency Management	3
HPM 422	Emergency Management I: Analytic Methods	3
PLAN 647	 Coastal Management Policy	3
PLAN 740	Land Use and Environmental Policy	3
PLAN 741	Land Use and Environmental Planning	3
PLAN 744	Development and Environmental Management	3
PLAN 745	Development Impact Assessment	3
PLAN 752	Project and Site Planning	3
PLAN/ENEC 641	Watershed Planning	3
SOWO 709	Special Topics in Human Behavior and Social Environment	1-6
Duke Electives ¹		
ECS 550		3
ECS 570		3
ENV 550		3
ENVIRON 775		3
LAW 298		3

NC State Elective¹

LAR 535	3
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¹ Please note that Duke and NC State courses will have to be transferred to UNC.

Non-Course Certificate Requirements