Disaster Resilient Policy, Engineering and Design (Certificate)

Certificates are opportunities to add a specialization to a graduate degree in architecture. The areas of specialization offered by the School of Architecture reflect faculty depth in a particular area of inquiry. Interested students should apply to the certificate program before their last semester. The certificates are also available to non-degree seeking students.

More Information

Disaster Resilient Policy, Engineering and Design Program Website (https://design.ncsu.edu/admissions/certificates/disaster-resilient-ped/)

Applicants to the Graduate Certificate in Disaster Resilient Policy, Engineering and Design must complete an application form to be considered for the program provided below. New applications will be reviewed at the department/program level.

Applicant Information

- **Delivery Method:** On-Campus
- **Entrance Exam:** None
- **Interview Required:** None

Application Deadlines

Please visit The Graduate School Application Deadlines (https://grad.ncsu.edu/admissions/deadlines/) page for more information.

Plan Requirements

Code	Title	Hours	Counts towards
Core Courses		**7**	
LAR 552	Survey of Natural Hazards and Disasters		
LAR 554	Disaster Resilient Policy, Engineering and Design		
LAR 607	Natural Hazards, Disasters and Climate Change Adaptation Lecture Series		
Track Courses		**6**	
Select one of the focus tracks listed below			
Total Hours		**13**	

Policy Track

Code	Title	Hours	Counts towards
Select a minimum of two of the following courses in conjunction with the academic committee: [1]		**6**	
PA 553	Disaster, Crisis and Emergency Management and Policy		
PA 507	The Public Policy Process		
PA 511	Public Policy Analysis		
PA 798	Special Topics in Public Administration and Policy (Collaborative Governance and Public Networks)		
PA 550	Environmental Policy		
PA 546	Seminar in Program Evaluation		
PA 514	Management Systems		

[1] Other PA courses as identified (including special topics, field study-see, for instance, firechasers program) subject to approval of instructor and track coordinator

Design Track

Code	Title	Hours	Counts towards
Select a minimum of two of the following courses in conjunction with the academic committee: [2]		**6**	
ARC 503	Advanced Architectural Design (Series) [3,4,5]		
or LAR 507	Advanced Topics Studio in Landscape Architecture and Environmental Planning		
LAR 545	City Planning and Design - Building Great Communities		
LAR 546	The Landscape Imperative		
LAR 535	Environmental Social Equity and Design		
LAR 547	Greenway Planning and Design		

LAR 520	Environment and Culture
LAR 582	Special Topics In Landscape Architecture (Design for Resilient Food Systems)
or ARC 590	Special Topics in Architecture
LAR 582	Special Topics In Landscape Architecture
LAR 630	Independent Study
ARC 590	Special Topics in Architecture (Resilient Thinking)
ARC 520	Sustainable Architecture
ARC 548	Vernacular Architecture
ARC 563	Public Interest Design Seminar: Case Studies and Current Issues
ARC 544	American City Planning History
ARC 590	Special Topics in Architecture

[2] Other LAR and/or ARC courses as identified – subject to approval of instructor and track coordinator.

[3] Subject to topical area and approval by the Certificate Coordinator.

[4] Non-ARC/LAR students are subject to approval of studio instructors and these student may seek to take ARC 503/LAR 507 as a 3-credit hour course (focused on specific class sub-tasks that do not require design studio training/education).

[5] ARC students are subject to a lottery to get into studios.

Construction, Civil and Environmental Engineering Track

Code	Title	Hours	Counts towards
Select a minimum of two of the following courses in conjunction with the academic committee: [6]		**6**	
CE 746	Soil Dynamics and Earthquake Engineering		
CE 581	Fluid Mechanics in Natural Environments		
CE 596	Special Topics in Water Resource and Environmental Engineering (Coastal Hydrodynamics)		
CE 596	Special Topics in Water Resource and Environmental Engineering (Coastal Modeling)		
CE 567	Risk and Financial Management in Construction		
CE 578	Energy and Climate		
CE 583	Engineering Aspects Of Coastal Processes		
CE 725	Earthquake Structural Engineering		
CE 786	Hydroclimatology		
CE 790	Advanced Topics In Civil Engineering		
MEA 517	Fundamentals of Climate Change Science		
MEA 593	Special Topics in Atmospheric Science (Fundamentals of Climate Change Science)		
MEA 593	Special Topics in Atmospheric Science (Climate Risk Analysis for Adaptation)		
MEA 519	Barriers to Climate Change Literacy		
COM 538	Risk Communication		
COM 579	Climate Change Communication		
COM 566	Seminar In Crisis Communication		

[6] Other CE courses as identified – subject to approval of instructor and track coordinator.