

Environmental Design and GIS

Program: Bachelor of Architecture Students
Level: Semester VI

The main course objective is to understand the guiding principles for the successful design of urban public spaces through contextual analysis of various parameters related to climate, topography, culture, and human behavior.

The Assignment aimed at understanding the process of Georeferencing using GIS software. Different areas were selected by students near and around Nirma University and they studied those areas to understand built form and built/open ratio in the region.




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Urban Resilience and Adaptation for India and Mongolia:
curricula, capacity, ICT and stakeholder collaboration to support green & blue infrastructure and nature-based solutions
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Selection of the Area/ Region for the assignment



Topo sheets for the specific area was downloaded to understand the physical features of the place.



The google earth imagery of the selected region was downloaded.



ARC GIS Application is used to digitize the entire area. Different tools such as Georeferencing, etc. were used in the assignment



The Topo sheet was georeferenced using the latitude and longitude given on the sheet. The google earth image was georeferenced on the topo sheet using different control points.



A new shape file was created with Polygon features to digitize the entire area selected. Using the Georeferenced Image the building footprints and boundaries were marked in a shape file. The Building footprints and the Plots were given different attributes according to the existing situation.



Different uses of Land/ Building such as Residential, Commercial, Institution, Utilities and Services, etc. were marked and presented in form of a final map for the assignment.







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P12_Knowledge Dissemination Series Prepared By Utsavi Shah

Bachelors of Architecture
Students: Selvi, Ritika, Prachi, Krity
Faculty: Dr. Aparna Prof. Purni Jadhav

URGENT Cross-Cutting Theme:
Credits: 2 ECTS
Semester: VII Sem

Environmental Design and GIS Applications (New Course)
6. Observation, information and communication for NBS, including ICT and media
Credits: 2 ECTS
Type of Course: Elective
Semester: VII Sem Year: 2022



INSTITUTE OF ARCHITECTURE & PLANNING
NAAC ACCREDITED 'A+' GRADE