OVERVIEW:

This course is an interdisciplinary design workshop involving seminars, case study presentations, and collaborative design projects focusing on the design green infrastructure. Green infrastructure is not only concerned with contemporary stormwater management practices and utility but also with site design of architecture projects and the design in the public domain which involves amenity, recreation, and community education.

There are two primary objectives of the workshop.

First is for students, from multiple disciplines, to learn about water and its importance in project planning and design for sustainable communities, from the scale of the building to neighborhood to city and region.

Second is for students from different disciplines – architecture, planning, engineering – to participate together in interdisciplinary teams to design collaborative for a green infrastructure design project.

LEARNING OUTCOMES

**Understand** water as fundamental to sustainable design in the relationships among ecological, economic and social systems, from the scale of buildings, to sites, to neighborhoods and cities.

**Understand** the history and development of urban stormwater management and contemporary efforts to make green and blue infrastructure as the foundation of sustainable communities.

**Understand** the hydrologic cycle and **be able** to calculate stormwater flow characteristics for small drainage basins and sites using simplified methods, including familiarity with more advanced stormwater modeling tools.

**Understand** topography, grading and other technical considerations of site and project design and **be able** to apply those to the design of a collaborative green infrastructure project.

**Understand** the range of green infrastructure tactics and their technical and construction requirements and **be able** to apply those tactics to a project design strategy and assess their potential performance.

**Understand** the importance of water resources and sustainable stormwater design in the transformation of our professions – architecture, urban design, planning, building construction and engineering.