

## Introduction and Rationale

Sustainable urban development is vital in the 21<sup>st</sup> century because it engages the totality of design, including Architecture, Landscape Architecture, urban design and Urban Planning. More than 50% of the global population lives in urban areas. In 2009, Africa's total population for the first time exceeded 1 billion, of which almost 40% lived in urban areas. There is an increasing need for urban design professionals (in private companies, public agencies at all levels of government, as well as within non-governmental organizations) to tackle various challenges in urban development. It requires excellent planning, design and management, and a collaborative, multi-disciplinary approach. These challenges include the following:

1. Guiding higher density infill developments in consolidated urban centres
2. Retrofitting obsolescent suburban developments
3. Proposing sustainable development at the sprawling metropolitan fringes
4. Designing basic transportation and mobility infrastructure to promote local economic development and support social justice
5. Enhancing the role of public space in city development and quality
6. Mitigating the vulnerabilities in the face of climate change
7. Promoting social inclusivity in urban governance
8. Promoting mixed use and social mix that considers the economic, social and environmental components

Significant changes have been seen in how urban growth and development have been managed over the past 30 years. Traditional master plans are making way for more strategic plans and for 'urban projects' that improve key sites in metropolitan areas. As cities must deal with the obsolescence of old industrial areas and face growing competition for knowledge workers, their officials and civic leaders recognize the need for high-quality urban and natural environments. They are doing so increasingly in partnerships linking the public and private sectors and with significant public input.

# MASTER OF SUSTAINABLE URBAN DEVELOPMENT

This is a post graduate programme.

## Programme Learning Outcomes

The broad objective of the programme is to train professionals in the field of Urban Design and Planning. The professionals are equipped with knowledge and skills urban design, and management based on scientific understanding of natural processes, informed by history, culture and social dynamics. They are trained to develop a taste for beauty, admiration for the surrounding natural and built world, appreciation of natural environmental habitats. It is a built environment based profession. As a discipline it is broad in scope developing into the design, planning and management urban areas.

The programme has the following specific learning objectives

- (a) To train students with a bias on practical/ experiential orientation based on scientific knowledge in advancement of sustainable urban development.
- (b) To develop professional personnel in design, planning and management of urban areas
- (c) To establish a foundation for the graduate to practice, pursue and/or participate in professional activities/development in the urban milieu
- (d) To engage in research on various aspects related to the urban environment
- (e) To train students who will create, conserve, restore and offer leadership on useful and culturally valuable and historic urban environments.
- (f) To establish a broad basis of debate on the critical environmental, social, cultural, economic and design issues confronting contemporary urban societies, and the role that sustainable urban development can play in addressing these fundamental issues
- (g) To define and analyze current urban development issues.
- (h) To develop successful strategies for the implementation of urban development initiatives
- (i) To develop an understanding of urban environmental issues, by developing vital and sustainable urban design concepts.
- (j) To apply theory to specific projects by working successfully with public, private and international planning institutions. The course is project-oriented and stress will be put on the importance of its connection to the broader decision-making context of an urban milieu in innovative ways.

On successful completion of the course, it is intended that each student will have achieved an advanced understanding of, and have significant abilities in:

- i. Experimentation with different approaches to sustainable urban development in an environmentally sustainable manner.
- ii. Integration of analytical research within the urban design and planning projects, actively utilizing data from a wide range of sources and fields such as history, theory, communications, sociology, architecture, engineering, landscaping, economics, political science, history, geography etc.
- iii. The production of an intensive series of proposals which lead to a comprehensive urban intervention project by the end of the year, as well enter into specialized areas in some detail.
- iv. Production of work in a variety of appropriate media, including analogue and digital drawings, physical and computational models, photography, animations, film, etc.