Structure of the Subject

Inclusive Urban Planning

proposed to be included in

Model Curriculum
for
Bachelor of Planning

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Ministry of Social Justice and Empowerment
Government of India

Proposed by

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Ministry of Social Justice & Empowerment
Government of India

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Course Curriculum
Inclusive Urban Planning

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Type of Course (preferred option)	**BPC – Planning Core Course** *(ref: clause E of AICTE Model Curriculum for Bachelor of Planning, 2023)*		
Credits:	L-T-P: 2-1-0 *(ref: Table on pg 6 of AICTE Model Curriculum for Bachelor of Planning, 2023)*	Semester	6th
Prerequisite:	None		
Type of Course (alternate option)	**BPOE - Open Elective Courses (Cross Discipline Electives)** *(ref: clause E of AICTE Model Curriculum for Bachelor of Planning, 2023)* *It may replace the subject Universally Accessible Built Environment* - BPOE 8.5 *(Open Elective – V)*		
Credits:	**L-T-P: 2-1-0** *(ref: Table on pg 7 of AICTE Model Curriculum for Bachelor of Planning, 2023)*	Semester	8th
Prerequisite:	None		
Type of Course (alternate option)	**BPE – Professional Elective Course** *(ref: clause E of AICTE Model Curriculum for Bachelor of Planning, 2023)* *It may replace the subject Universally Accessible Built Environment* - BPPE 8.4 *(Professional Elective – V)*		
Credits:	**L-T-P: 2-1-0** *(ref: Table on pg 7 of AICTE Model Curriculum for Bachelor of Planning, 2023)*	Semester	8th
Prerequisite:	None		

Course Overview:

The course is meant primarily for undergraduate students (particularly those who are doing a Bachelor of Planning), to familiarize them with need, challenges, issues, objectives, framework, process and techniques of inclusive urban planning and development. Through study of theoretical perspectives, guidelines, standards, operational policies, and good practices, the course underscores crucial elements in planning for inclusivity, with a focus on people from vulnerable groups (People with Disabilities, Elderly, Children, Women). Based on the foundational principles of equity and the right to the city, this course provides a holistic framework for the analysis and resolution of urban disparities.

Course Objectives:

1. Highlight the need, rising concerns, and benefits of Universal Planning and Design with respect to Indian cities.
2. Provide a holistic understanding of traditional as well as contemporary theories, notions and principles associated with inclusive urban planning, development, financing and management.
3. Introduce all types of vulnerable groups who would benefit from accessible built environment and all stakeholders in the process.
4. Explain the global and national guidelines, standards, charters, resolutions, acts and provisions on inclusive urban planning, development, financing and management.
5. Explain nuances of inclusive planning, development, financing and management for all sectors of urban life - housing, physical and social infrastructure, outdoor environment, livelihood, transportation and urban mobility, digitization, governance, citizen participation, tourism and recreation.

	6.	Systematically explain the steps towards mainstreaming inclusion in urban planning, development, financing and management –, Evidence based planning, data driven policies and plans, participatory approach, need assessment, implementation, financing, management, citizen participation, third party evaluation and monitoring.

Course Content:

Unit 1	:	**Background or need for Inclusive Urban Planning - a rising concern**
		L = 2 hours, T = 2 hours
		
		• Definition of vulnerable population (people with disabilities, elderly, women, LGBTQ and children). References to be drawn from Census of India and RPWD Act 2016 along with UN definitions.
		• Global and national statistics on vulnerable groups along with their socio-economic profiling – their special needs and aspirations.
		• Identification of different categories of barriers in cities - physical, psychological, social and institutional.
		• Levels of Access - Reasonable Accommodation, Visitable, Barrier-free and Universal Design
		   • Need and benefits of benefits of Inclusion of vulnerable groups in urban planning and development with the help of role-playing exercises in different urban context for early sensitization of the students.
		   • Concept of Intersectionality among vulnerable groups

Unit 2		**Theories, Principles, Policies and Models on Inclusive Urban Planning** L = 4 hours, T = 1 hours • Concept of Human Right and Right to the city • Visionary and theoretical approaches towards inclusive urban planning and development • Statutory provisions, government schemes and city level initiatives • Universal Design Standards and Guiding Principles for Inclusive Cities • Global good practices of inclusive urban planning and development (showcasing role of various stakeholders in creating equitable communities, promoting socio-cultural integration, providing accessible housing, public spaces, services, infrastructure and transportation, fostering community engagement, addressing disparities related to education, health and economic opportunities, ensuring public safety, special consideration for the vulnerable population during various types of natural and man-made disasters etc). • Vision of Inclusive City
Unit 3		**Global and National acts, guidelines, standards, charters, chapters, conventions, and conferences on inclusive city planning** L = 4 hours, T = 1 hours Some examples are Universal Declaration of Human Rights (1948), UN Convention on the Rights of the Child (1989), UN Convention on Rights of Persons with Disabilities (2006), Incheon Strategy and Beijing Declaration (2012), Sendai Framework for Disaster Risk Reduction (2015), UN Habitat III – New Urban Agenda (2016), The WHO Age-friendly Cities Framework, Disability Inclusion & 2030 Agenda for Sustainable Development, Universal Design India Principles (2011), Accessible India Campaign (2015), The Rights of Persons with Disabilities Act, (2016), Harmonised Guidelines & Standards for Universal Accessibility in India (2021), URDPFI (2021) et-cetera. *(the list is not holistic and need to be updated from time to time)*
Unit 4	:	**Components and Indicators of Inclusive Cities** L = 12 hours, T = 8 hours • Holistic understanding of multiple aspects of inclusive planning and development in all sectors like housing, physical and social infrastructure, outdoor environment, urban mobility and public transport, digitalization, governance, public participation, livelihood, recreation & tourism. This will include exhaustive practical component with real-life audit exercises following checklist.

		The audits will happen at various scales like premises, community, neighbourhood, public places, transport terminals and also at pan-city level following purpose-specific travel routes. - Explain the various stakeholders in the process along with their roles and responsibilities. - Practitioners' guidelines towards creating safe, accessible and inclusive Indian Cities (both greenfield as well as retrofitting approach) - Inclusive City Framework (ICF) – prepared as a set of policies and strategies including a Strategic Accessibility Audit Checklists of 196 indicators, which Urban Local Bodies / Smart City Boards and other relevant agencies can follow for mainstreaming inclusion into the process of urban planning, development, management and financing. - Successful examples of different types of redevelopment projects /sectoral plans and projects, Pan-city initiatives, Greenfield projects on Inclusive planning, development, management and financing from India. This will involve visit to good examples.
Unit 5	:	**Digital Accessibility and Application of Artificial Intelligence (AI), Digital Twin for barrier identification and scenario generation in inclusive urban planning** L = 4 hours, T = 1 hours - Role of digital technology in promoting safety and inclusion in all sectors of urban life - Accessibility to information and communication technologies (ICT)- making public documents and websites accessible - Role and impact of AI in inclusive urban planning, development, management and financing - Global and national good practices on AI-powered technologies for urban inclusion - Concept of digital twin - creating a virtual model of the physical city, barrier identification and scenario generation, real-time monitoring, control, analysis, and decision support, enables analytics, and simulation)

Practical Assignments (Compulsory): Simulation Exercise (Role-playing activities) and Strategic Accessibility Audits for first-hand experiencing the barriers to safety, accessibility and inclusivity within urban places, services and systems.

Study Tour (Compulsory): Visits to sites and urban areas / institutions which showcase good examples of inclusive planning, development and practices. Learnings from the course can be integrated with studio work of a particular semester.

Suggested List of Tutorials:

Simulation exercises and Audit exercises can be conducted at different levels to sensitize students and also make them aware of technical nuances of inclusive urban planning. Some suggestions are:

(a) Neighbourhood level
- A route taken by a child from home to school
- A route taken by an adult from home to shopping of essential commodities
- An un-signalized busy road
- A stretch on a footpath
- A NH Park
- An ATM Counter
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(b) Zonal level
- An inter-city bus terminus / railway junction / station
- An auditorium / cinema hall / exhibition ground
- A bank

(c) City level
- A route taken by a person to visit a hospital / city office / central facility from residence in another location by using public transport.
- Steps to be followed to pay Property tax / avail health insurance post hospitalization / link UDID card with Aadhar / get a (on-line and offline mode)

Suggested Laboratory Requirements (Optional)

- **Full-scale Simulation Lab (audit-based approach):** A research lab that will allow full scale simulation exercises in a controlled environment with potential to simulate in real-world situation – facilitate ergonomic research based on principles of human-environment interaction. The lab needs to be equipped

with flexible partitions to create different spaces along with assistive devices and technologies to simulate and understand the challenges faced by people with disabilities in urban environment.

- **Inclusive Urban Planning and Design Lab (project-based approach):** This would engage students under the tutelage of faculty members to have hands-on experience on some of the most critical challenges faced by Indian cities related to mainstreaming inclusion into urban planning and development. The activities will be based on "Real-life problem identification and solution" approach and the institutions will tie up with ULBs / SCBs to identify targeted projects for group work and discussions. The lab will be equipped with whiteboards, projectors with video-conferencing facilities and seating arrangements.
- **Digital Twinning Lab (AI – based approach):** This will facilitate research on application of AI and techniques of digital twining for identification of barriers in an urban setting, scenario – generation and problem solving.
- **Supportive facilities:** There can be a **Model Making space** for creating physical models of urban spaces, including tools and materials such as foam boards, cutting tools, and adhesives. A **Computer Laboratory** equipped with GIS software for mapping and analysing urban data (particularly disaggregated data on disability), and conducting statistical analysis for data interpretation and inferences.

Text Books and Reference:

1. Inclusive Cities—Urban Area Guidelines.
   https://www.adb.org/sites/default/files/publication/776806/inclusive-cities-urban-area-guidelines.pdf
2. AASCTF Gender Equality and Social Inclusion Strategy.
   https://www.adb.org/sites/default/files/institutional-document/729371/aasctf-gender-equality-social-inclusion-strategy.pdf
3. Ministry of Housing and Urban Affairs [MoHUA], Government of India. (2021). Harmonised Guidelines & Standards for Universal Accessibility in India.
   https://cpwd.gov.in/Publication/HarmonisedGuidelinesUA2021.pdf
4. Rights of Persons with Disabilities Act [RPwD]. (2016). No. 49 of 2016. Government of India.
   https://lddashboard.legislative.gov.in/sites/default/files/A2016-49_1.pdf
5. URDPFI (2021)
6. Inclusive City Framework (2021). Copyright © 2021 NIUA & IIT-Kharagpur. Published by the National Institute of Urban Affairs, Ministry of Housing and Urban Affairs
7. A Guide for Inclusive, Accessible, Safe and Resilient Urban Development.
   https://niua.in/intranet/sites/default/files/2346.pdf
8. Accessibility for the Disabled – A Design Manual for a Barrier Free Environment by the United nation [available online] http://www.un.org/esa/socdev/enable/designm/index.html.
9. Pineda, V.S. (2019) Building the Inclusive City: Governance, Access, and the Urban Transformation of Dubai, Palgrave Macmillan, London
10. Stephanidis, C. (2017) The Universal Access Handbook, CRC Press, Boca Raton, Florida.
11. Indian Building Congress (2012) Guidelines for Design of Universally Accessible Built Environment, Indian Building Congress, New Delhi.
12. Bednar, M.J., Barrier Free Environments.
    Harkness, S., Building without Barriers for the Disabled.

Course Outcome

- The students will gain professional expertise on techniques of mainstreaming inclusion at all stages like data collection, auditing, conceptualizing, planning, implementation, monitoring and financing.
- The subject will exhaustively deal with all urban sectors like housing, physical and social infrastructure, outdoor environment, transportation and urban mobility, livelihood, citizen's participation, tourism and recreation.
- An exhaustive checklist for conducting strategic accessibility audit will be taught which will be professionally useful for planning greenfield inclusive cities as well as for framing retrofitting strategies for existing urban areas.
- Various planning organizations (specially ULBS) who desire to make their city safe, accessible, and inclusive will have a pool of professionals knowledgeable about all prevailing standards, guidelines and statutory provisions.