

## SEMESTER –III

<b>COURSE: URBAN DESIGN STUDIO-III</b>			
Course Code:	22UDC31	CIE Marks	50
Teaching hours /Week (L:P:SDA)	2:8:0	SEE Marks	50
Total Hours of Pedagogy	10	Total Marks	100
Credits	10	Exam Hours	Viva Voce
<p><b>Course Learning Objectives:</b></p> <ol style="list-style-type: none"> <li>1) The primary goal of the studio shall be to look at “urban design proposal” as a catalytic force in ensuring future growth with “design” content, yet feasible within the existing policy, economic and political frame work.</li> <li>2) The objectives of the studio are; a) To understand and evolve policy level guidelines which ensure an imagined future physical scenario, b) To understand the process of evolving urban design guidelines c) To illustrate such guidelines with a multiuse facility.</li> </ol>			
<p><b>Studio Outline</b></p> <ol style="list-style-type: none"> <li>1. The chosen project shall be in an area of high potential in an identified urban environment. Project proposals shall be divided into two phases in which a policy and guideline evolution shall precede the actual design project. The project would involve a) identification of various stake holders and their role in policy level guidelines, and b) working and illustrating the economic feasibility and infrastructure development needed for implementation of proposal.</li> <li>2. The project shall end in a detailed design of a group of buildings or (depending on the scale) an architectural project which illustrates the process of urban design as a necessary and inevitable need for architectural projects.</li> </ol>			
<b>Teaching Learning Process</b>	Lecture sessions, Site visits, Student presentations, Group discussions and presentation, Periodic Reviews, Workshops are part of the Teaching Learning Process		
<p><b>Assessment Details (Both CIE and SEE)</b></p> <p>Assessment Details (both CIE and SEE) The weight age of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 50% of the maximum marks. Minimum passing marks in SEE is 40% of the maximum marks of SEE. A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/ course if the student secures not less than 50% in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together.</p> <p><b>Continuous Internal Evaluation:</b> Continuous Internal Evaluation will be based on Internal Reviews, External Reviews and Final studio report and individual project Submission/VIVA VOCE</p> <p><b>Semester End Examination:</b> Viva-voce: The viva voce shall be conducted for a duration of 20 minutes (per student) for the subjects listed under viva voce for all the semesters</p>			
<p><b>Suggested learning Resources</b></p> <ol style="list-style-type: none"> <li>1. The Kinetic City &amp; Other Essays, Rahul Mehrotra, ArchiTangle GmbH; 2021</li> <li>2. Public Places Urban Spaces: The Dimensions of Urban Design-Matthew Carmona</li> <li>3. The Cultured Landscape: Designing the Environment in the 21st Century- Ken Fieldhouse and Sheila Harvey.</li> </ol>			
<b>Web links and Video Lectures (e-Resources)</b>	<ol style="list-style-type: none"> <li>1. <a href="https://www.youtube.com/watch?v=HBMIQZeXMiA">https://www.youtube.com/watch?v=HBMIQZeXMiA</a></li> <li>2. <a href="https://www.youtube.com/watch?v=sw9zpH717ts">https://www.youtube.com/watch?v=sw9zpH717ts</a></li> <li>3. <a href="https://www.youtube.com/watch?v=ys07tEScaSo">https://www.youtube.com/watch?v=ys07tEScaSo</a></li> </ol>		

**Skill Development Activities suggested**

1. Study, research and place reading and representation techniques and the influence of urban Policy and guidelines on the city morphology.
2. Mapping the observation and inferring at region/city/precinct/built form scale
3. Skills that enable analysis and identify the Urban design issues and identify the stake holders
4. Ability to program urban design strategies, Design project along with economic feasibility and implementation strategies.

**Course outcome (Course skill set)**

1. Ability to study urban environment and its influence by policy and its ability to make positive effect on urban environment
2. Ability to demonstrate design skill and detail at built/space level.

**At the end of the course the student will be able to:**

SI No	Description	Blooms level
CO1	Able to identify urban study which may find an opportunity to apply the policy and guidelines to generate better urban condition	IV
CO2	Engage with the place, people/stakeholders, method of data collection/documentation of the practices/parameters that influences the city and built fabric	V
CO3	Able to Identify issues/conflicts that influence city, precinct and typology	V
CO4	Able to generate UD strategies, economic feasibility and implementation strategies	IV
CO5	Urban Design intervention and design demonstration	VI

**Program outcome of this course**

SI No	Description	POs
1	Ability to read relate to theme and the city	1,2,9
2	Ability to engage, interact and document the place and stakeholders	3,7,10
3	Able to generate strategies to address the UD issues and implementation strategies	4,6,10
4	Ability to demonstrate urban design solution	5,9

**Mapping of CO s and PO s**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	2	-	-	-	-	-	-	1	-
CO2	2	3	1			1	2	2	2	1
CO3	1	3	3	1	1	1	2	2	2	1
CO4	-	2	3	2	3	-	2	1	1	2
CO5	-	-	1	2	3	1	1	1	2	3
<b>Average</b>	<b>1.2</b>	<b>2.0</b>	<b>1.6</b>	<b>1.0</b>	<b>1.4</b>	<b>0.6</b>	<b>1.4</b>	<b>1.2</b>	<b>1.6</b>	<b>1.4</b>

**Graduate attributes**

Knowledge	Analytical skills	Application of research	Application of latest technology and tools	Generate design/solution	Ethics	Societal concern	Environmental concern	Collaborative aptitude	Opportunity for continued learning
PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10

Mapping correlation	Low	Medium	High	No
	1	2	3	--

<b>COURSE: DISSERTATION PHASE-I</b>			
Course code:	22UDC32	CIE Marks	100
Teaching hours /Week (L:P:SDA)	2:2:2	SEE Marks	---
Total Hours of Pedagogy	5	Total Marks	100
Credits	5	Exam Hours	---
<b>Course Learning Objectives:</b>			
A studio class where third semester students undertake various reading and writing exercises in the process of identifying and refining their dissertation topics.			
<b>Outline:</b>			
<ol style="list-style-type: none"> <li>1. This course is intended to help students to arrive at a conceptual framework for their dissertation Phase-II in the IV semester.</li> <li>2. The final product at the end of course shall be a proposal that provides a detailed dissertation proposal that consists of a working title, literature review, objectives, and study methodology.</li> <li>3. The course will be run as a weekly four-hour seminar class with student presentations on issues related to their chosen dissertation topics.</li> </ol>			
<b>Teaching Learning Process</b>	Introduction to the course content through subject introduction, discussion, debate and presentation.		
<b>Assessment Details (Both CIE and SEE)</b>			
The weight age of Continuous Internal Evaluation (CIE) is 100%. The minimum passing mark for the CIE is 50% of the maximum marks.			
<b>Continuous Internal Evaluation:</b> Continuous Internal Evaluation will be based on assignments, group or individual assignment/ presentation and submission.			
Suggested learning resources:			
<ol style="list-style-type: none"> <li>1. Proceedings: 2nd IUDI National Urban Design Thesis Seminar 2010, held at CEPT University, Ahmedabad, 29th-30th October 2010 by compiled and edited by P.V.K. Rameshwar</li> <li>2. Architectural Research Methods- by Linda N. Groat and David Wang</li> <li>3. Writing your doctoral Dissertation –invisible rules for success –Rita S Brause</li> </ol>			
<b>Web links and Video Lectures (e-Resources)</b>	1. <a href="https://www.youtube.com/watch?v=r0MfpzITGrU">https://www.youtube.com/watch?v=r0MfpzITGrU</a>		
<b>Skill development activities suggested</b>			
<ol style="list-style-type: none"> <li>1. Systematic approach in cataloguing the readings, references and bibliography.</li> <li>2. Writing the dissertation synopsis</li> </ol>			

**Course outcome (course skill set)**

- able to theorize the urban design issues at different scale
- Able to understand the urban design project from beginning to end as comprehensive process as involving multi professional.

**At the end of the course the student will be able to:**

SI No	Description	Blooms level
CO1	Able to identify the literature of relevance and formulate broad research interest	IV
CO2	Able to understand various stages of making of Dissertation	IV
CO3	Able to theorize the urban design issues at different scale	IV
CO4	Able to formulate and structure the UD enquiry	V
CO5	Able to apply the understanding of UD issues/conflicts and select demonstration site/area/city	V

**Program outcome of this course**

SI No	Description	POs
1	Familiarization of existing literature and research on selected research direction	1,2,8,9
2	Formulate the study structure	2,7,9
3	Knowledge on existing subject research	3,7,8
4	Exposure to the making of UD enquiry	5,7,8,10

**Mapping of CO's and Po's**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	2	2	-	-	-	1	2	2	2
CO2	3	2	1	-	-	-	2	2	3	2
CO3	1	3	2	-	-	-	2	2	2	3
CO4	1	3	2	-	-	-	2	2	2	2
CO5	1	2	2	3	-	2	2	1	1	2
Average	1.8	2.4	1.8	0.6	-	0.4	1.8	1.8	2.0	2.2

**Graduate attributes**

Knowle dge	Analytic al Skills	Applicat ion of Research	Applicat ion of latest technol ogy/too ls	Generat e Designs /Solutio ns	Ethics	Societal Concer n	Environ mental concern	Collabo rative aptitud e	Opport unity for continu ed learning
PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10

Mapping Co-relation	Low	Medium	High	No
	1	2	3	-



<b>COURSE: INFRASTRUCTURE AND TRANSPORTATION PLANNING</b>			
Course code:	22UDS33	CIE Marks	50
Teaching hours /Week (L:P:SDA)	2:1:0	SEE Marks	50
Total Hours of Pedagogy	3	Total Marks	100
Credits	3	Exam Hours	03
<b>Objective:</b>			
The course is intended as an introduction to the infrastructure needs of an urban environment and fundamental concepts which cater to such needs. It is also intended as an introduction to the issues related to Traffic and Transportation in cities. In addition, it is intended to provide an overview of the Transportation Planning process.			
<b>Module-1</b>			
Urban Form - Elements of urban form-Growth of Urbanization- Impacts –Urban Design-Transportation and Urban form-Functional Classification of Urban Roads.			
Teaching Learning Process	Introduction to the course content through lectures, discussion, debate and case study presentation		
<b>Module-2</b>			
Urban Infrastructures and city – Concepts, Physical and Social Infrastructure, History of infrastructure, Layout of urban area, siting of services and land use and efficiency. Basics of service network. - Water supply, sewerage/drainage and waste management. Urban Social infrastructure; Qualitative and Quantitative techniques of assessing requirements, planning amenities.			
Teaching Learning Process	Introduction to the course content through lectures and discussion.		
<b>Module-3</b>			
Smart Cities – Concepts- Goals- Proposals for Indian Cities.-Safe access and Street Design in Indian Cities Urban Transportation Characteristics- Factors for need of Transportation – Demand- Modes- Urban Transport Scenario in India- Components of urban Transport System-Introduction to general Traffic Engineering.			
Teaching Learning Process	Introduction to the course content through lectures, discussion and debate		
<b>Module-4</b>			
Introduction: Scope of urban transport planning, interdependency of land use and traffic system, system approach to urban transportation Planning- Stages in Transport Planning, Climate change, Transit oriented development. Transport Demand Modeling – Introduction- Transportation surveys- Definition of study area, zoning, types of surveys.			
Teaching Learning Process	Introduction to the course content through lectures, discussion, debate and presentation.		
<b>Module-5</b>			
Four Step Modeling (FSM)- Trip generation- Trip production- Trip distribution- modal split and Trip assignment.  Public Transportation modes: Systems in India, problems and prospects, present practices in urban transportation. Metro, mono, and high capacity buses. System selection.			
Teaching Learning Process	Introduction to the course content through lectures, discussion, debate and presentation.		

**Assessment Details (CIE and SEE)**

The weight age of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 50% of the maximum marks. Minimum passing marks in SEE is 40% of the maximum marks of SEE. A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/ course if the student secures not less than 50% in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together.

**Continuous Internal Evaluation:**

Continuous Internal Evaluation will be based on assignments, presentation and submission..

**Semester End Examination:**

Theory Examination shall be held for 3-hour duration, students are expected to answer FIVE full questions, one question from each module.

**Suggested learning resources:****Books:**

1. Hamada M .,Critical Urban Infrastructure Handbook © 2015 by Taylor & Francis Group, CRC Press New York
2. Papacostas and Prevendours, Transportation Engineering and Planning, PHI Publication ,2013
3. Kadiyali L.R. Traffic Engineering and Transportation Planning, Khanna Publications.
4. S. Ponnuswamy , Johnson Victor ., Urban Transportation: Planning, Operation and Management , Tata McGraw Hill- New Delhi 2014
5. Safe access manual:safe access to mass transit stations in Indian cities , Bangalore: EMBARQ India.-shah, sonal,sahanagoswami,lubainarangawala, Robin King, Himadri Das, Akhila Suri (2014)
6. ITDP and EPC(2011): Better Streets Better Cities : A Guide to Street Design in Urban India. Institute for Transport and Development Policy
7. Peter Calthorpe.(2011). *Urbanism in the Age of Climate Change*. Island Press. Washington DC
8. Hank Dittmar, Gloria Ohland.(2004). *The New Transit town: Best practices in Transit Oriented Development*. Island Press. Washington DC
9. Stephen Graham, S M (2001). *Splintering Urbanism, Networked Infrastructure, Technological Mobilities and the urban condition*. London. Routledge
10. Related reading materials

Web links and Video Lectures  
(e-Resources)

1. <https://www.youtube.com/watch?v=-u8Y13MPLNg>
2. <https://www.youtube.com/watch?v=M-r4DGPeys8&list=PLFGUksPYY9Qp5rLjedeUlwcU13eAeETkh&index=2>

**Skill development activities suggested**

The following skills with respect to transportation planning:

- Critical Reading
- Identifying other relevant perspectives

**Course outcome (course skill set)**

- At the end of the course the student will be able to: Understanding the fundamental concept/prospects of infrastructure, transportation/planning and its practice in India.

SI No	Description (refer module outcome)5 module=5outcome	Blooms level
CO1	Understand relation with urbanization and transportation	V
CO2	Development of urban infrastructure	IV
CO3	Concept of smart city and accessibility	IV
CO4	Study of Model- transportation planning and city	III
CO5	Technical aspects of study and practices in urban transportation	V

**Program outcome of this course**

Sl. No.	Description	POs
1	Able to identify various concepts of infrastructure practices in India	1,2,3
2	Able to relate the scope and parallel discipline that engage in urban transportation study	2,3
3	Able to comprehend the technological advance relates to transportation and concepts in managing urban development	5,3,4,7
4	Application of the study in urban design discipline	8,9,10

**Mapping of COs and POs**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	2	2	1	-	-	2	2	-	-	1
CO2	2	3	2	-	-	1	2	2	2	2
CO3	1	3	2	3	-	1	2	3	1	2
CO4	-	2	3	2	-	1	2	2	2	3
CO5	-	-	2	2	-	1	1	1	2	2
<b>Average</b>	<b>1.0</b>	<b>2.0</b>	<b>2.0</b>	<b>1.4</b>		<b>1.2</b>	<b>1.8</b>	<b>1.6</b>	<b>1.4</b>	<b>2.0</b>

**Graduate attributes**

Knowledge	Analytical skills	Application of research	Application of latest technology/tools	Generate design/solutions	Ethics	Societal concern	Environmental concern	Collaborative aptitude	Opportunity for continued learning
PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10

Mapping co-relation	Low	Medium	High	No
	1	2	3	-



<b>COURSE: URBAN GOVERNANCE AND PROJECT FINANCE</b>			
Course code:	22UDS34	CIE Marks	50
Teaching hours /Week (L:P:SDA)	2:1:0	SEE Marks	50
Total Hours of Pedagogy	3	Total Marks	100
Credits	3	Exam Hours	03
<b>Objective:</b>			
Introduction to the mechanism of urban governance and fiscal foundations of urban development.			
<b>Module-1</b>			
1. Basic concepts of urban governance and definitions. Principles of governance of urban areas. Local administration, Structure of local bodies and their role in urban governance, plan making and implementation. Recent amendments to the Constitution and their implications on governance. Concepts of capacity building and related issues of development of man power. Central and State systems of local administration.			
Teaching Learning Process	Introduction to the course content through lectures, discussion, debate and case study presentation		
<b>Module-2</b>			
People's participation- theories, concepts and methods. Participatory governance definition, processes and methods. Role of people's participation in plan making. People, NGOs and civil society and urban development.			
Teaching Learning Process	Introduction to the course content through lectures and discussion.		
<b>Module-3</b>			
The economics of geographical concentration -urbanization, history of urbanization, agglomeration economics, and simple theory of interurban location, location decisions of households			
Teaching Learning Process	Introduction to the course content through lectures, discussion and debate		
<b>Module-4</b>			
Finance mechanisms of local administration. Various forms of revenue generation and budgeting. Innovations in methods of revenue generation.			
Teaching Learning Process	Introduction to the course content through lectures, discussion, debate and presentation.		
<b>Module-5</b>			
Types of urban development projects, project cycle, Project identification, selection, preparation, appraisal, monitoring and evaluation.			
Teaching Learning Process	Introduction to the course content through lectures, discussion, debate and presentation.		
<b>Assessment Details (CIE and SEE)</b>			
The weight age of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 50% of the maximum marks. Minimum passing marks in SEE is 40% of the maximum marks of SEE. A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/ course if the student secures not less than 50% in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together.			
<b>Continuous Internal Evaluation:</b>			
Continuous Internal Evaluation will be based on assignments, presentation and submission.			
<b>Semester End Examination:</b>			
Theory Examination shall be held for 3-hour duration, students are expected to answer FIVE full questions, one question from each module.			

**Suggested learning resources:****Books:**

1. Maria Pinto, Metropolitan City Governance in India, Sage Publications, New Delhi.
2. John Abbott, Sharing the City: Community participation in urban Management, Routledge, Abingdon, 1996.
3. Jain R.B. Public Administration in India, 21<sup>st</sup> Century challenges for Good Governance. Deep and Deep Publications Pvt. Ltd, New Delhi.
4. Michael Bamarger and Eleanor Hewitt, Monitoring and Evaluating Urban development Programmes: A hand book for program managers. The World Bank, 1988.

**Web links  
and Video  
Lectures  
(e-  
Resources)**

1. Governance as theory: five propositions by Gerry Stoker.  
[https://mycourses.aalto.fi/pluginfile.php/1382648/mod\\_folder/content/0/AR3%20-%20Stoker%2C%201998.pdf?forcedownload=1](https://mycourses.aalto.fi/pluginfile.php/1382648/mod_folder/content/0/AR3%20-%20Stoker%2C%201998.pdf?forcedownload=1)
2. Urban Governance by Mike Raco, International Encyclopedia of Human Geography (Second Edition), 2020. <https://www.sciencedirect.com/topics/social-sciences/urban-governance>
3. World development report, 2017. <https://www.worldbank.org/en/publication/wdr2017>
4. Governance Matters by Daniel Kaufmann, Aart Kraay, Pablo Zoido-Lobaton  
<https://www.imf.org/external/pubs/ft/fandd/2000/06/pdf/kauf.pdf>
5. Urban Actors according to Economic and Social Commission for Asia and the Pacific (UNESCAP, 2009) [https://www.researchgate.net/figure/Urban-Actors-according-to-Economic-and-Social-Commission-for-Asia-and-the-Pacific\\_fig4\\_322581192](https://www.researchgate.net/figure/Urban-Actors-according-to-Economic-and-Social-Commission-for-Asia-and-the-Pacific_fig4_322581192)
6. Governance in the Twenty-first Century by James N Rosenau  
<https://www.jstor.org/stable/27800099>
7. Evaluating the quality of public governance: indicators, models and methodologies by Tony Bovaird and Elke Löffler  
[https://www.researchgate.net/publication/249688561\\_Evaluating\\_the\\_Quality\\_of\\_Public\\_Governance\\_Indicators\\_Models\\_and\\_Methodologies](https://www.researchgate.net/publication/249688561_Evaluating_the_Quality_of_Public_Governance_Indicators_Models_and_Methodologies)
8. Global governance and global rules for development in the post-2015 era by United Nations  
[https://www.un.org/en/development/desa/policy/cdp/cdp\\_publications/2014cdppolicynote.pdf](https://www.un.org/en/development/desa/policy/cdp/cdp_publications/2014cdppolicynote.pdf)
9. Transnational Governance and Democratic Legitimacy: A Conceptual Overview By Peter van Ham  
<https://www.clingendael.org/sites/default/files/2016-02/Transnational%20Governance%20and%20Democratic%20Legitimacy%20%28conceptual%20overview%29.pdf>
10. TRANSNATIONAL GOVERNANCE Introduction: A World of Governance – The Rise of Transnational Regulation by Marie-Laure Djelic and Kerstin Sahlin  
[https://www.researchgate.net/publication/258837392\\_TRANSNATIONAL\\_GOVERNANCE\\_Introduction\\_A\\_World\\_of\\_Governance\\_-\\_The\\_Rise\\_of\\_Transnational\\_Regulation](https://www.researchgate.net/publication/258837392_TRANSNATIONAL_GOVERNANCE_Introduction_A_World_of_Governance_-_The_Rise_of_Transnational_Regulation)
11. Governance network theory: past, present and future by Erik-Hans Klijn and Joop Koppenjan  
[https://www.researchgate.net/publication/272138186\\_Governance\\_Network\\_Theory\\_Past\\_Present\\_and\\_Future](https://www.researchgate.net/publication/272138186_Governance_Network_Theory_Past_Present_and_Future)
12. Governing Policy Networks: a Network Perspective on Decision Making in Network Society by Erik-Hans Klijn and Joop F.M. Koppenjan  
<https://research.tudelft.nl/en/publications/governing-policy-networks-a-network-perspective-on-decision-making>
13. Ladder of Citizen Participation, Sherry Arnstein 1978  
<https://organizingengagement.org/models/ladder-of-citizen-participation/?print=pdf>
14. Rapid rural appraisal, participatory rural appraisal and aquaculture by Philip Townsley, Chapter 3: <https://www.fao.org/3/w2352e/W2352E03.htm#ch3>
15. N. Narayanasamy, Participatory Rural Appraisal: Principles, Methods and Application (New Delhi, India: SAGE Publications India Pvt Ltd, 2009),  
25. <https://sk.sagepub.com/books/participatory-rural-appraisal>
16. Robert Chambers, "The Origins and Practice of Participatory Rural Appraisal," World Development 22, no. 7 (July 1994): 954-957

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**Skill development activities suggested**

The following skills with respect to urban governance and project finance

- Critical Reading
- Spatial understanding of city and governance
- Functioning of city
- Identifying other relevant perspectives

**Course outcome (course skill set)**

Students should be able proficient in

- Concepts of urban governance, overlapping of territory, various stakeholder and their role in the city
- Infrastructure and finance aspects of local administration.

SI No	Description(refer module outcome)5 module=5outcome	Blooms level
CO1	The application of people participation in the existing system	V
CO2	Role of NGOs and stakeholders in people participation	IV
CO3	Need for the people participation in making of Urban Design project	V
CO4	Existing municipal finance system and future	III
CO5	Identify the various project stages	IV

**Program outcome of this course**

Sl. No.	Description	POs
1	Able to relate theories involved in governance with development	1,2,3
2	Able to identify various methods and process involved in people planning	2,3
3	Understand the Structure of ULB and its functional relation with state	5,6,7
4	Prepare various stages involved in project cycle	8,9,10

**Mapping of COs and POs**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	2	2	1	-	-	2	2	-	-	1
CO2	2	3	2	-	-	1	2	2	2	2
CO3	1	3	2	3	-	1	2	3	1	2
CO4	1	2	3	2	-	1	2	2	2	3
CO5	-	-	2	2	-	1	1	1	3	2
<b>Average</b>	<b>1.2</b>	<b>2.0</b>	<b>2.0</b>	<b>1.4</b>		<b>1.2</b>	<b>1.8</b>	<b>1.6</b>	<b>1.6</b>	<b>2.0</b>

**Graduate attributes**

Knowle dge	Analytic al Skills	Applicat ion of Researc h	Applicat ion of latest technol ogy/too ls	Generat e Designs /Solutio ns	Ethics	Societal Concer n	Environ mental concern	Collabo rative aptitud e	Opport unity for continu ed learning
PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10

Mapping co- relation	Low	Medium	High	No
	1	2	3	-

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<b>COURSE: REAL ESTATE AND URBAN DESIGN</b>			
Course code:	22UDS35	CIE Marks	50
Teaching hours /Week (L:P:SDA)	1:1:2	SEE Marks	50
Total Hours of Pedagogy	3	Total Marks	100
Credits	3	Exam Hours	03
<b>Objective:</b>			
Introduction to the various aspects of Real estate development and its influence on city and development.			
<b>Module-1</b>			
<b>Urban Design and real estate-An Introduction</b> -Introduction to the Role of Real Estate, real estate forces and its influence in making of region, city, neighborhood, block and street. Impact on built form and social, cultural and environmental nature of cities, Case studies .			
Teaching Learning Process	Introduction to the course content through lectures, discussion, debate and case study presentation		
<b>Module-2</b>			
<b>Real estate, society and urban development</b> - land use and housing policies , development regulations and building codes, affordable housing, government regulations , ESG (Environmental, Social and Governance)criteria, case studies			
Teaching Learning Process	Introduction to the course content through lectures and discussion.		
<b>Module-3</b>			
<b>Real estate and finance and Law</b> - Land law, Contract law – formation and terms, Leases – commercial, agricultural and residential, Easements, Tort (public nuisance, trespass and negligence) online consumerism,& <i>Property Rights and Ownership</i> & global flow of capital, land value, financing model, case studies.			
Teaching Learning Process	Introduction to the course content through lectures, discussion and debate		
<b>Module-4</b>			
<b>Real estate development and marketing</b> : public private partnership, mortgage, bank loan and joint ventures, case studies .			
Teaching Learning Process	Introduction to the course content through lectures, discussion, debate and presentation.		
<b>Module-5</b>			
<b>Real estate and entrepreneurship</b> : new towns, new technology, smart building, case studies Case studies in Real estate development, development project			
Teaching Learning Process	Introduction to the course content through lectures, discussion, debate and presentation.		
<b>Assessment Details (CIE and SEE)</b>			
The weight age of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 50% of the maximum marks. Minimum passing marks in SEE is 40% of the maximum marks of SEE. A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/ course if the student secures not less than 50% in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together.			
<b>Continuous Internal Evaluation:</b>			
Continuous Internal Evaluation will be based on assignments, presentation and submission.			
<b>Semester End Examination:</b>			
Theory Examination shall be held for 3-hour duration, students are expected to answer FIVE full questions, one question from each module.			

**Suggested learning resources:Books:**

1. **Urban Design in the Real Estate Development Process: 46 (Real Estate Issues) by Steve Tiesdell and David Adams**
2. **Public and private spaces in the city-Ali madanipour**
3. **Real estate development and investment: A comprehensive approach –SP Peco**
4. **Land and the city: Patterns and process of urban change –Philip kivel**
5. **Land, development and design –Paul syms**
6. **Real estate principles-charles J Jacobus**
7. **Real estate modeling and forecasting –chris brooks, sotiristsolacos**

**Web links and Video****Lectures (e-Resources)**

1. <https://www.youtube.com/watch?v=xi6r3hZe5Tg>
2. <https://www.youtube.com/watch?v=SB2SmIAVt8U>
3. <https://www.youtube.com/watch?v=pyC9BqrEXso>

**Skill development activities suggested**

The following skills with respect to urban governance and project finance

- Critical Reading
- Cross discipline study
- Identifying other relevant perspectives

**Course outcome (course skill set)**

Students should be able proficient in

- Concepts of urban governance, overlapping of territory, various stakeholder and their role in the city
- Infrastructure and finance aspects of local administration.

SI No	Description(refer module outcome)5 module=5outcome	Blooms level
CO1	Introductory to real estate and city	V
CO2	Real estate and social relevance in access to housing	IV
CO3	Land related laws and its relevance in real estate	IV
CO4	Finance aspect of real estate	IV
CO5	New technology and future city	V

**Program outcome of this course**

Sl. No.	Description	POs
1	Able to identify various concepts of real estate and city	1,2,3
2	Able to understand the social concern related to housing	2,3
3	Able to apply the scope of Specific law related to land and built while design	3,4,7
4	Futuristic side of urban design and real estate and concerns to address	8,9,10

**Mapping of COs and POs**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	2	2	1	-	-	2	2	-	-	1
CO2	2	3	2	-	-	1	2	2	2	2
CO3	1	3	2	3	-	1	2	3	1	2
CO4	-	2	3	3	-	1	2	2	3	3
CO5	-	-	2	2	-	1	1	1	2	2
<b>Average</b>	<b>1.0</b>	<b>2.0</b>	<b>2.0</b>	<b>1.6</b>		<b>1.2</b>	<b>1.8</b>	<b>1.6</b>	<b>1.6</b>	<b>2.0</b>

**Graduate attributes**

Knowled ge	Analytic al skills	Applicati on of research	Application of latest technology/to ols	Generate design/solutio ns	Ethic s	Societ al concer n	Environment al concern	Collaborati ve aptitude	Opportuni ty for continued learning
PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10

Mapping co- relation	Low	Medium	High	No
	1	2	3	-

<b>COURSE: URBAN HOUSING</b>			
Course code:	22UDE361	CIE Marks	50
Teaching hours /Week (L:P:SDA)	1:0:2	SEE Marks	50
Total Hours of Pedagogy	2	Total Marks	100
Credits	2	Exam Hours	VIVA
<b>Course Learning Objectives:</b>			
The course is an introduction to the policies, market, finance and delivery of housing to various segments of urban population. Basically, however it shall be an exercise in the design of a large-scale housing project either as a Greenfield project or an intervention into an existing fabric of the city.			
<b>Course outline</b>			
1. Evolution of housing policies in India, introduction to housing need; demand and supply process; estimation of housing need and demand; review of housing policies in various planning periods in India; Basic concepts in understanding housing markets; market price and valuation; policies which affect the housing market; review of existing housing finance and institution of housing finance. Concepts of housing layouts; issues of density, open spaces, community spaces and accessible open areas. House types and their implication on layout. Technology and delivery of housing; private and public role in housing market. Low income and marginal income housing schemes and institutions involved in the production. Design guidelines for marginal housing schemes for varied socio-economic groups.			
<b>Teaching Learning Process</b>	Introduce each subsection through talk/presentation, case study and generate discussion through article reading		
<b>Assessment Details(CIE and SEE)</b>			
The weight age of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 50% of the maximum marks. Minimum passing marks in SEE is 40% of the maximum marks of SEE. A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/ course if the student secures not less than 50% in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together.			
<b>Continuous Internal Evaluation:</b>			
Continuous Internal Evaluation will be based on presentation, interaction and submission.			
<b>Semester End Examination:</b> Viva-voce: The viva voce shall be conducted for a duration of 20 minutes (per student) for the subjects listed under viva voce for all the semesters			
<b>Suggested learning resources:</b>			
1. Kavita Datta and G.A.Jones Housing Finance in developing countries, Routledge, London. 2. Cedric Pugh Housing and Urbanization, Sage Publications, New Delhi.			
<b>Web links and Video Lectures(e-Resources):</b>			
1. <a href="https://www.youtube.com/watch?v=M4ioHYkYT6E">https://www.youtube.com/watch?v=M4ioHYkYT6E</a> 2. <a href="https://www.youtube.com/watch?v=CexZXoIU2w8">https://www.youtube.com/watch?v=CexZXoIU2w8</a> 3. <a href="https://www.youtube.com/watch?v=7dAckA1Ef-M">https://www.youtube.com/watch?v=7dAckA1Ef-M</a> 4. <a href="https://www.youtube.com/watch?v=0U05_UiRALU">https://www.youtube.com/watch?v=0U05_UiRALU</a>			

**Skill development activities suggested**

1. To document the various housing and policies that influenced
2. Socio-cultural data for a specific settlement within the city to identify the spatial relation with housing and future need.

**Program outcome of this course**

Sl. No.	Description	POs
1	Able to illustrate evolution of housing in India	1,3,9,10
2	able to relate to the existing finance system related to housing	2,6,7
3	Socio economic influenced housing scheme and existing policies in India	4,8,10

**Mapping of COs and Pos**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
<b>CO1</b>	3	2	2	-	-	2	2	2	3	3
<b>CO2</b>	1	3	2	-	-	2	3	2	2	2
<b>CO3</b>	1	2	2	-	2	2	3	3	3	2
<b>Avg.</b>	<b>1.6</b>	<b>2.3</b>	<b>2</b>	<b>-</b>	<b>.6</b>	<b>2</b>	<b>2.6</b>	<b>2.3</b>	<b>2.6</b>	<b>2.3</b>

**Graduate Attributes**

Knowledg	Analytical skills	Application of research	Application of latest technology and tools	Generate design/solution	Ethics	Social concern	Environmental concern	Collaborative aptitude	Opportunity for continued learning
PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10

Mapping Co-relation	Low	Medium	High	No
	1	2	3	-



<b>COURSE: POLITICS OF DEVELOPMENT</b>			
Course code:	22UDE362	CIE Marks	50
Teaching hours /Week (L:P:SDA)	2:0:0	SEE Marks	50
Total Hours of Pedagogy	2	Total Marks	100
Credits	2	Exam Hours	VIVA
<b>Course Learning Objectives:</b> To critically discuss the motives and actions of different actors of state and society in driving urban development and distribution of resources in the city.			
<b>Course outline</b> The course explores the impact of the intentions, conflicting interests, pressures and policies on the social and morphological dimensions of the city. Various issues pertaining to the role of different actors in shaping urban developmental projects are discussed, using papers and literature on those topics. Topics discussed in this weekly four hour class include public and private developmental project, design commissions, social planning and spatial planning and planning processes in Indian cities.			
<b>Teaching Learning Process</b>	Introduce each subsection through talk/presentation, case study and generate discussion through article reading		
<b>Assessment Details(CIE and SEE)</b> The weight age of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 50% of the maximum marks. Minimum passing marks in SEE is 40% of the maximum marks of SEE. A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/ course if the student secures not less than 50% in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together.			
<b>Continuous Internal Evaluation:</b> Continuous Internal Evaluation will be based on presentation, interaction and submission.			
<b>Semester End Examination:</b> Viva-voce: The viva voce shall be conducted for a duration of 20 minutes (per student) for the subjects listed under viva voce for all the semesters			
<b>Suggested learning resources:</b> <ol style="list-style-type: none"> <li>1. Elizabeth Strom and John Mollenkopf (Eds), The Urban Politics Reader, Routledge Taylor &amp; Francis Group,2004</li> <li>2. Partha Chatterjee, The Politics of the Governed, New York: Columbia University Press, 2004.</li> <li>3. Nandan Nilekeni: Imagining India, Penguin Press, 2009.</li> <li>4. Champakalakshmi R ,Trade Ideology and Urbanisation in India, Oxford University Press, New Delhi, 1999</li> </ol>			
<b>Web links and Video Lectures(e-Resources):</b> <ol style="list-style-type: none"> <li>1. <a href="https://www.youtube.com/watch?v=mo3Gghkh49U">https://www.youtube.com/watch?v=mo3Gghkh49U</a></li> <li>2. <a href="https://www.youtube.com/watch?v=tkXlu34naUE">https://www.youtube.com/watch?v=tkXlu34naUE</a></li> </ol>			
<b>Skill development activities suggested:</b> <ol style="list-style-type: none"> <li>1. mapping of stake holders and their interest</li> <li>2. project framework and stake holders interest mapping chronologically</li> <li>3. project interest at larger scale and stake holders</li> </ol>			

- **Program outcome of this course** To critically analyze/understand the complexity of development/projects which involves not only stakeholders but also the conflicting interest

Sl. No.	Description	POs
1	Able to illustrate evolution of housing in India	1,3,9,10
2	able to relate to the existing finance system related to housing	2,6,7
3	Socio economic influenced housing scheme and existing policies in India	4,8,10

#### Mapping of COs and Pos

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
<b>CO1</b>	3	2	2	-	-	2	2	2	3	3
<b>CO2</b>	1	3	2	-	-	2	2	2	2	2
<b>CO3</b>	1	2	2	-	2	2	3	3	3	2
<b>Avg.</b>	<b>1.6</b>	<b>2.3</b>	<b>2</b>	<b>-</b>	<b>.6</b>	<b>2</b>	<b>2.3</b>	<b>2.3</b>	<b>2.6</b>	<b>2.3</b>

#### Graduate Attributes

Knowledge	Analytical skills	Application of research	Application of latest technology and tools	Generate design/solution	Ethics	Social concern	Environmental concern	Collaborative aptitude	Opportunity for continued learning
PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10

<b>COURSE: URBAN ECONOMICS</b>			
Course code:	22UDE363	CIE Marks	50
Teaching hours /Week (L:P:SDA)	2:0:0	SEE Marks	50
Total Hours of Pedagogy	2	Total Marks	100
Credits	2	Exam Hours	VIVA
<b>Course Learning Objectives:</b> To introduce the theoretical framework for understanding the spatial structure of cities and the nature of urban economy.			
<p><b>Course outline</b></p> <ol style="list-style-type: none"> <li>1. Introduction to the economics of geographical concentration, urbanization, history of urbanization, agglomeration economics, and simple theory of inter-urban location, location decisions of households</li> <li>2. Land Use and Location Theory</li> <li>3. The Contemporary City and Suburbanization/Sprawl</li> <li>4. The Economics of Zoning</li> <li>5. Housing, Segregation, Crime, and Poverty</li> <li>6. Local Government and governance</li> </ol>			
<b>Teaching Learning Process</b>	Introduce each subsection through talk/presentation, case study and generate discussion through article reading		
<b>Assessment Details(CIE and SEE)</b>			
<p>The weight age of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 50% of the maximum marks. Minimum passing marks in SEE is 40% of the maximum marks of SEE. A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/ course if the student secures not less than 50% in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together.</p>			
<b>Continuous Internal Evaluation:</b>			
Continuous Internal Evaluation will be based on presentation, interaction and submission.			
<b>Semester End Examination:</b> Viva-voce: The viva voce shall be conducted for a duration of 20 minutes (per student) for the subjects listed under viva voce for all the semesters			
<b>Suggested learning resources:</b>			
<ol style="list-style-type: none"> <li>1. O'Sullivan, Arthur, <i>Urban Economics</i> (Fifth Edition). Boston: Irwin/McGraw Hill, 1990, 2003.</li> </ol>			
<b>Web links and Video Lectures(e-Resources):</b>			
<ol style="list-style-type: none"> <li>1. <a href="https://www.youtube.com/watch?v=jR2ho31tor4">https://www.youtube.com/watch?v=jR2ho31tor4</a></li> <li>2. <a href="https://www.youtube.com/watch?v=IGk3MIgTx4Y&amp;list=PLswroYMOEWFYdAtnmcM3HLiiGvy9PFTEW">https://www.youtube.com/watch?v=IGk3MIgTx4Y&amp;list=PLswroYMOEWFYdAtnmcM3HLiiGvy9PFTEW</a></li> </ol>			

**Skill development activities suggested**

1. Reading of various theories related to economy and geography
2. Safety, housing and economy- observation and mapping

**Program outcome of this course proficiency in**

- Economy aspects of city and various theories that involve in defining urban situation.

Sl. No.	Description	POs
1	Urban economy theories and understand the spatial relation	1,3,9,10
2	Economy and its importance in zoning and development	2,6,7
3	Socio economic approach towards housing and related issues	4,8,10

**Mapping of COs and Pos**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
<b>CO1</b>	3	2	2	-	-	2	2	2	3	3
<b>CO2</b>	1	3	2	-	-	2	3	3	2	2
<b>CO3</b>	1	2	2	-	2	2	3	3	3	2
<b>Avg.</b>	<b>1.6</b>	<b>2.3</b>	<b>2</b>	<b>-</b>	<b>.6</b>	<b>2</b>	<b>2.6</b>	<b>2.6</b>	<b>2.6</b>	<b>2.3</b>

**Graduate Attributes**

Knowledge	Analytical skills	Application of research	Application of latest technology and tools	Generate design/solution	Ethics	Social concern	Environmental concern	Collaborative aptitude	Opportunity for continued learning
PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10

<b>COURSE: INTERNSHIP/PROFESSIONAL TRAINING</b>			
Course code:	22UDS37	CIE Marks	50
Teaching hours /Week (L:P:SDA)	0:0:3	SEE Marks	50
Total Hours of Pedagogy	-	Total Marks	100
Credits	3	Exam Hours	VIVA
<p><b>Course Learning Objectives:</b> To serve as an introduction to the various dimensions of professional practice in an Architectural and Urban Design firm.</p>			
<p><b>Outline:</b></p> <ol style="list-style-type: none"> <li>1. The student is expected to work in an architectural and urban design firm handling the following types of projects; a) large scale architectural projects like college/university campus, industrial units, commercial complexes, housing complexes, entertainment complexes etc. involving a number of related buildings, site planning and landscaping, b) architectural projects with focus on heritage conservation in an urban area, c) urban infill projects and d) revitalization projects of decaying parts of the city.</li> <li>2. The student is expected to familiarize himself/herself with the following; a) administration of office, b) soliciting and obtaining projects, c) client meetings, d) site visits, e) drawings and detailing and f) design process and presentation. For the viva examination, the following items need to be presented a) statement indicating the various types of works done by the student, b) drawings related to projects with which the student was associated c) photographs of project sites and d) any other material in support of student's involvement in the work.</li> <li>3. The eight weeks (56 days) should immediately precede the commencement of regular course work of third semester.</li> </ol>			
<p><b>Assessment Details(CIE and SEE)</b> The weight age of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 50% of the maximum marks. Minimum passing marks in SEE is 40% of the maximum marks of SEE. A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/ course if the student secures not less than 50% in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together.</p> <p><b>Continuous Internal Evaluation:</b> Continuous Internal Evaluation will be based on presentation, interaction and submission.</p> <p><b>Semester End Examination:</b> Viva-voce: The viva voce shall be conducted for a duration of 20 minutes (per student) for the subjects listed under viva voce for all the semesters</p>			