



# POORNIMA UNIVERSITY



## **FACULTY OF PLANNING & ARCHITECTURE**

***TEACHING SCHEME & SYLLABUS***  
**DEPARTMENT OF PLANNING**  
**MASTERS OF PLANNING**  
**(Batch 2023-25)**

# SCHEME & SYLLABUS

## BATCH: 2023-25



*Your Dreams Our Goal*  
**POORNIMA**  
UNIVERSITY

Member of Association of Indian Universities & Approved by UGC (Govt. of India) under 2(f) & 12(B)



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**Disclaimer:** The scheme, syllabus and other materials published in this booklet may be changed or modified as per the requirement after approval of competent authority. The decision taken by the management of Poornima University will be final and abiding to all.

### Student Details

Name of Student:		
Name of Program:		
Semester:	Year:	Batch:
Faculty		of:





# *Your Dreams Our Goal* POORNIMA UNIVERSITY

Member of Association of Indian Universities & Approved by UGC (Govt. of India) under 2(f) & 12(B)

## VISION

To create knowledge based society with scientific temper, team spirit and dignity of labor to face global competitive challenges.

## MISSION

To evolve and develop skill based systems for effective delivery of knowledge so as to equip young professionals with dedication and commitment to excellence in all spheres of life.

## QUALITY POLICY

To provide Quality Education through Faculty development, updating of facilities and continual improvement meeting University norms and keeping stake holders satisfied.



## Knowledge wheel

At Poornima, the academic atmosphere is a rare blend of modern technical as well as soft skills and traditional systems of learning processes.



## **About Program and Program Outcomes (PO):**

**Title of the Programme:** Masters of Planning (M.PLAN)

**Nature of the Programme:** M.PLAN. is a two-year full-time Programme.

### **Program Outcomes (PO) :**

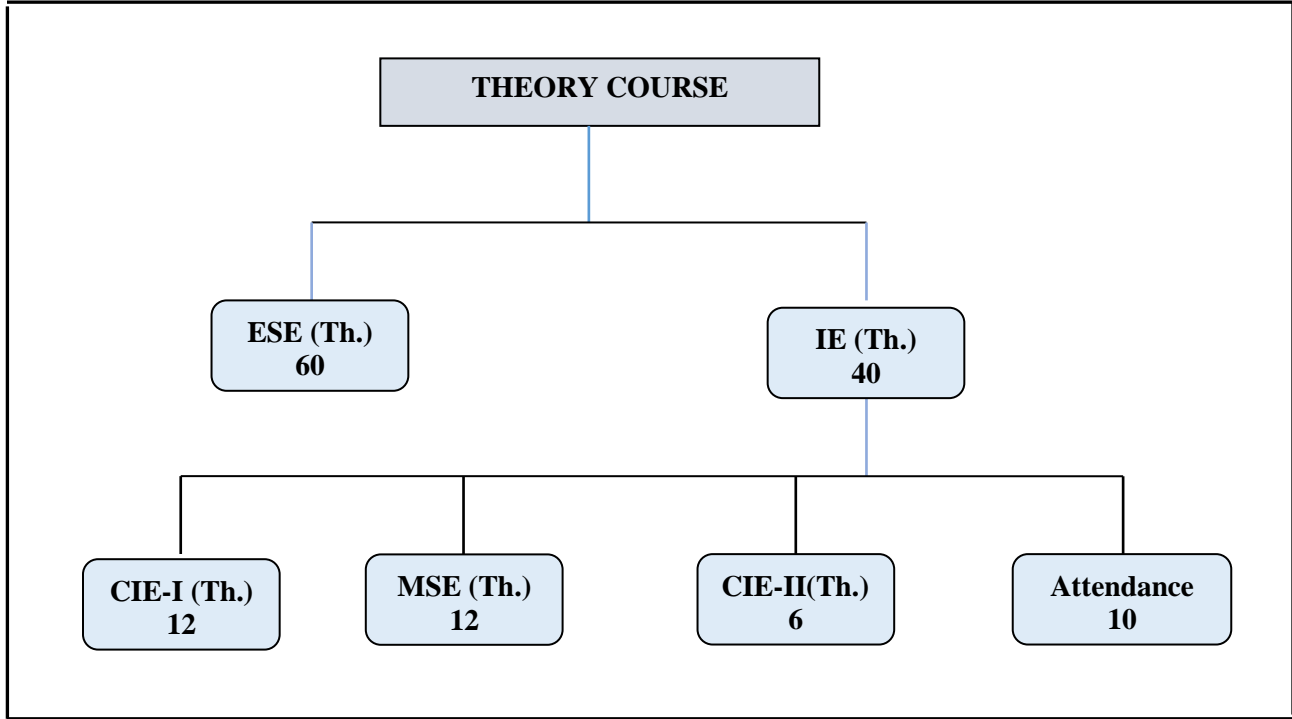
Masters of Planning Post Graduates will be able to do:

1. **Design Knowledge:** Apply the knowledge of design fundamentals, and a specialization to the solution of complex design problems.
2. **Problem analysis:** Identify, formulate, research literature, and analyze complex design problems reaching substantiated conclusions using elements and principles of design.
3. **Design/Development of solutions:** Design solutions for complex problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct Investigations of Complex Problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern designing and IT tools including prediction and modeling to complex designing activities with an understanding of the limitations.
6. **The Designer and Society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional design practice.
7. **Environment and Sustainability:** Understand the impact of the professional designing solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the designing practice.
9. **Individual and teamwork:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex design activities with the design community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project Management and Finance:** Demonstrate knowledge and understanding of the design and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning:** Recognize the need for and have the preparation and ability to engage in independent and life- long learning in the broadest context of technological change

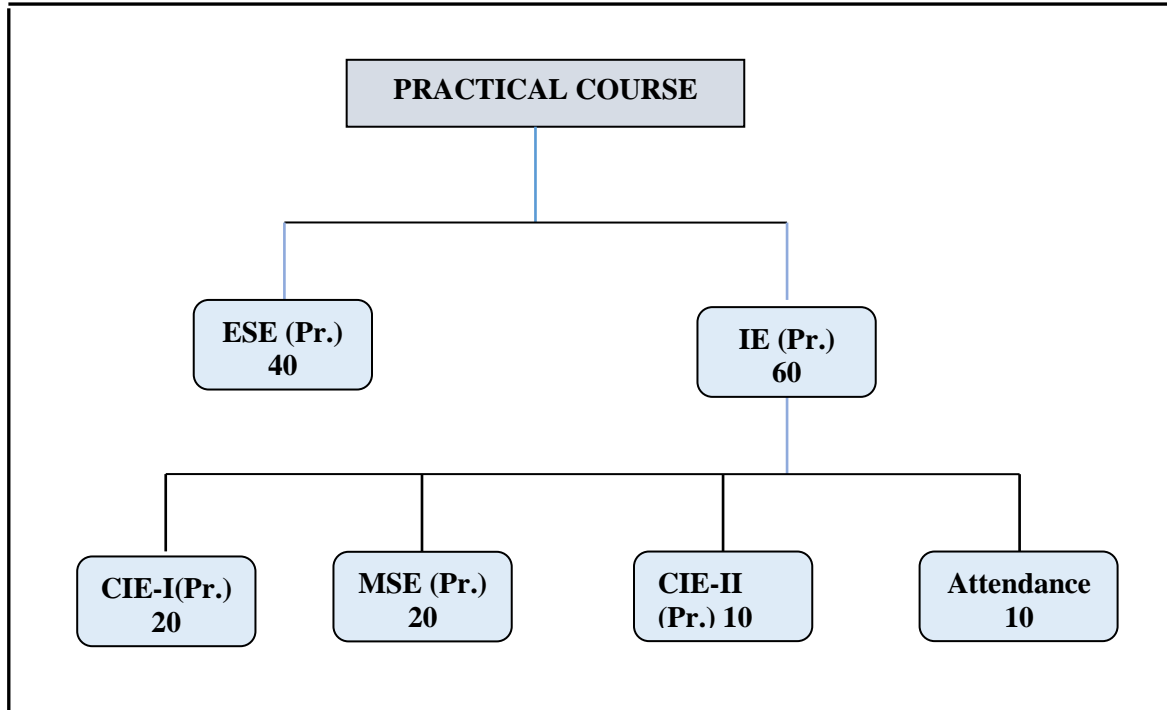


**Examination System:**

**(A) Marks Distribution of Theory Course:**



**(B).Marks Distribution of Practical Course :**



**Th.:** Theory, **Pr. :** Practical, **ESE:** End Semester Examination, **MSE:** Mid Semester Examination, **CIE:** Continuous Internal Evaluation.

### Marks Distribution of Attendance:

Guidelines for Marks Distribution of Attendance Component		
S No.	Total Course Attendance (TCA) range in Percentage	Marks allotted (out of 10)
1	$95\% \leq TCA$	10
2	$90\% \leq TCA < 95\%$	9
3	$85\% \leq TCA < 90\%$	8
4	$80\% \leq TCA < 85\%$	7
5	$70\% \leq TCA < 80\%$	6
6	$60\% \leq TCA < 70\%$	5
7	$50\% \leq TCA < 60\%$	4
8	$40\% \leq TCA < 50\%$	3
9	$30\% \leq TCA < 40\%$	2
10	$20\% \leq TCA < 30\%$	1
11	$TCA < 20\%$	0

### CO Wise Marks Distribution:

	Theory Subject		Practical/ Studio Subject	
	Maximum Marks	CO to be Covered	CO to be Covered	Maximum Marks
<b>CIE-I (Class Test)</b>	12 ( 6 + 6)	1 & 2	1 & 2	20 (10 + 10)
<b>MSE</b>	12 ( 6 + 6)	3 & 4	3 & 4	20 (10 + 10)
<b>CIE-II (Activity/ Assignment )</b>	6 (6)	5	5	10 (10)
<b>Attendance</b>	10	-	-	10
<b>ESE</b>	60	-	-	40
<b>TOTAL</b>	100	-	-	100

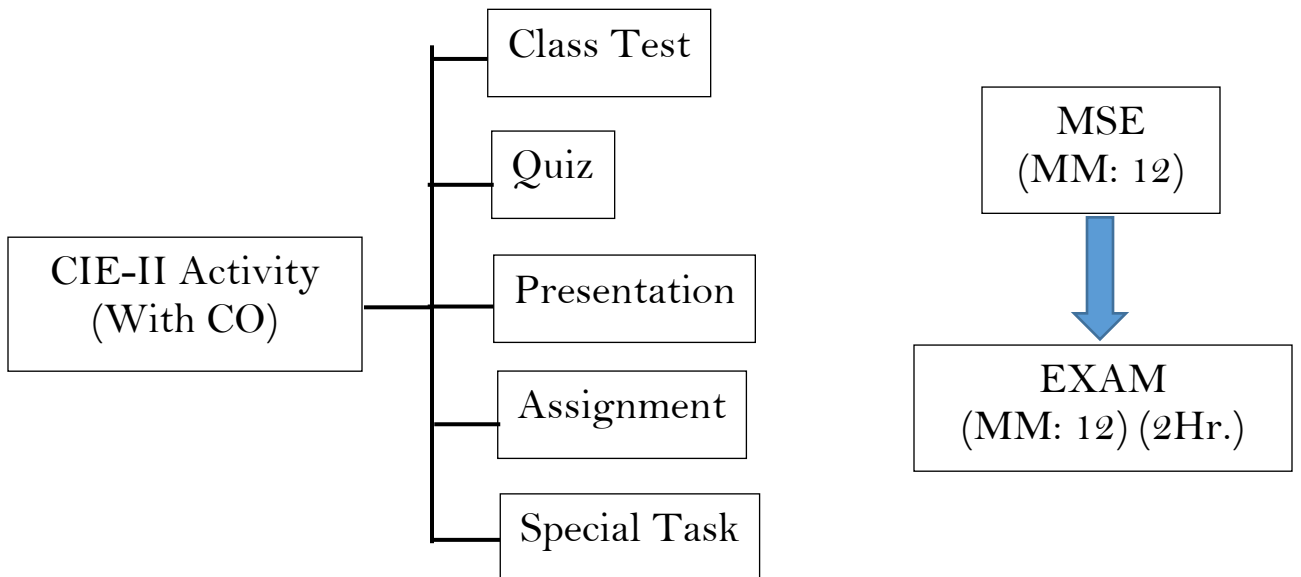




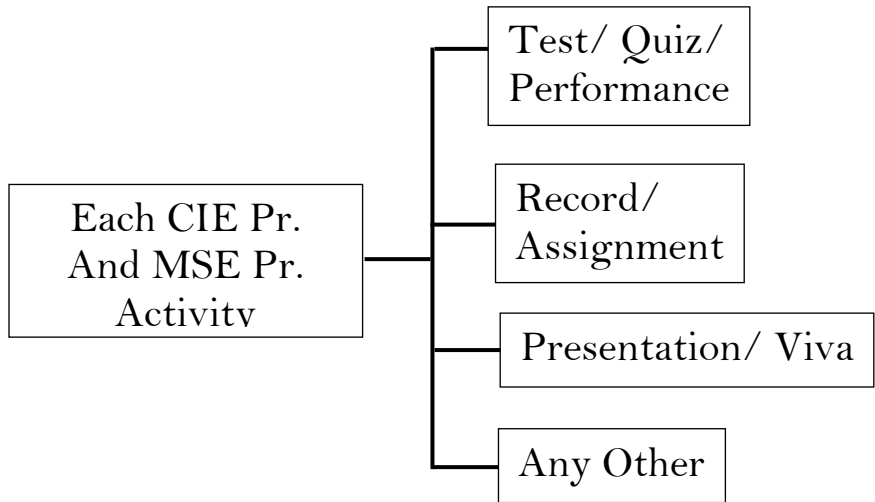
**Minimum Passing Percentage in All Exams:**

S. No.	Program	Minimum Passing Percentage in All Exam	
		ESE Component	Total Component
1	Course Work for Ph. D Registration	-----	50 %
2	B. Arch.	45 %	50 %
3	MBA, MHA, MPH, MCA, M. Tech., M. Plan. and M. Des.	40 %	40 %
4	B. Tech., B. Des., BCA, B.Sc., BVA, B. Voc., BBA, B.Com., B.A. and Diploma	35 %	40 %
5	B. Sc. (Hospitality & Hotel Administration)	35 %	40 % (Theory) & 50 % (Practical)

**Break-up of Internal Exam (Theory):**



**Break-up of Internal Exam (Practical):**



**Assessment & Grade Point Average: SGPA, CGPA:**

**SGPA Calculation**

$$SGPA = \frac{C_1G_1 + C_2G_2 + \dots + C_nG_n}{C_1 + C_2 + \dots + C_n}$$

$SGPA = \frac{\sum_i C_i \times G_i}{\sum_i C_i}$	<p>Where ( as per teaching Scheme &amp; Syllabus) :</p> <p>C<sub>i</sub> is the number of Credits of Courses i,</p> <p>G<sub>i</sub> is the Grade Point for the Course i and i = 1, 2.....n</p> <p>n = number of courses in a programme in the Semester</p>
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**CGPA Calculation**

$CGPA = \frac{\sum_i C_i \times G_i}{\sum_i C_i}$	<p>Where ( as per teaching Scheme &amp; Syllabus) :</p> <p>C<sub>i</sub> is the number of Credits of Courses i,</p> <p>G<sub>i</sub> is the Grade Point for the Course i and i = 1, 2.....n</p> <p>n = number of courses in a programme of all the Semester up to which CGPA is computed.</p>
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$$CGPA = \frac{C_1G_1 + C_2G_2 + \dots + C_nG_n}{C_1 + C_2 + \dots + C_n}$$



## Grading Table:

**Grading Table-A: For B.Arch. and course work for Ph.D. Registration**

Academic Performance	Grade	Grade Point	Marks Range ( in %)
Outstanding	A+	10	$90 \leq x \leq 100$
Excellent	A	9	$80 \leq x < 90$
Very good	B+	8	$70 \leq x < 80$
Good	B	7	$60 \leq x < 70$
Average	C	6	$50 \leq x < 60$
Fail	F	0	$x < 50$

**Grading Table-B: For all courses except B.Arch. and course work for Ph.D. Registration**

Academic Performance	Grade	Grade Point	Marks Range ( in %)
Outstanding	A+	10	$90 \leq x \leq 100$
Excellent	A	9	$80 \leq x < 90$
Very good	B+	8	$70 \leq x < 80$
Good	B	7	$60 \leq x < 70$
Average	C	6	$50 \leq x < 60$
Satisfactory	D	5	$40 \leq x < 50$
Fail	F	0	$x < 40$

Calculation of SGPA

$$SGPA = \frac{\sum C_i \times G_i}{\sum C_i}$$

$$SGPA = \frac{C_1G_1 + C_2G_2 + \dots + C_nG_n}{C_1 + C_2 + \dots + C_n}$$

Calculation of CGPA

$$CGPA = \frac{\sum C_i \times G_i}{\sum C_i}$$

$$CGPA = \frac{C_1G_1 + C_2G_2 + \dots + C_nG_n}{C_1 + C_2 + \dots + C_n}$$

where (as per teaching scheme & syllabus):  $C_i$  is the number of credits of subject  $i$ ,  $G_i$  is the Grade Point for the subject  $i$  and  $i = 1$  to  $n$ ,  $n =$  number of subjects in a course in the semester

## Award of Class:

CGPA	Equivalent Division
$7.50 \leq CGPA$	First Division with Distinction
$6.50 \leq CGPA < 7.50$	First Division
$5.50 \leq CGPA < 6.50$	Second Division
$4.50 \leq CGPA < 5.50$	Pass Class

The multiplication factor for conversion of CGPA to percentage is Equivalent % of Marks =  $(CGPA - 0.5) \times 10$ .

For Example if CGPA = 5.5 then % is  $(5.5 - 0.5) \times 10 = 50\%$ .



## **Guidelines for MOOC COURSES:**

1. Applicable from the session 2020 – 21 onwards, for students aspiring for HONOURS Degree.
2. The UGC has issued UGC (Credit Framework for Online Learning Courses) Regulation, 2016. These shall apply to all universities established or incorporated by or under a Central Act, a Provincial Act, or a State/Union Territory Act and all institutions recognized by or affiliated to such Universities and all institutions deemed to be universities under Section 3 of the UGC Act, 1956.
3. All India Council for Technical Education (AICTE) has introduced Model Curriculum for Bachelor programs of 4 years/ 3 Years, and additional credits will be required to be done for the degree of Bachelor program with Honours. These additional credits will have to be acquired with online courses (MOOCs) as per AICTE.
4. This creates an excellent opportunity for students to acquire the necessary skill set for employability through massive online courses where the rare expertise of world famous experts from academics and industry are available.
5. Students are required to complete additional credits through MOOCs within 4 years/ 3years of time (whatever be applicable time for the completion of registered program) so as to become eligible for Honours degree as per norms.
6. It is necessary to complete minimum MOOCs credit course as mentioned below for becoming eligible for the Honours degree in the registered program.
7. MOOC Course Credits shall be calculated as per details given below:
8. Student are required to give the prior information about MOOCs courses to his respective HOD and COE, in which he/she wants to register for online certification.
9. After getting permission from respective HOD, a student can register for the MOOC certification courses.
10. After successful completion of the said MOOC course, the student shall submit the certificate of completion to the respective department. If he/ she fails to provide the certificates of MOOC courses before last teaching day of the semester then these certificates will not be considered later.



**Required credits for Honours :**

S.No	Program Duration	Required credits for Honours
1.	2- Year	10- Credits
2.	3- Year	15- Credits
3.	4-Year	20- Credits

S. No	NPTEL/ SWAYAM Course duration (in weeks)	Equivalent Credits
1	4	2
2	8	3
3	12	4

**Attached Items:**

Open Elective Booklet	Annexure-1
Soft Skills Booklet	Annexure-2
Value Added Course Booklet	Annexure-3



POORNIMA UNIVERSITY								
Faculty of Planning and Architecture								
Department of Planning								
M.Plan (Urban Planning)								
Batch: 2023-25								
Teaching Scheme for First Semester (I Year)								
Course Code	Course Name	Teaching Scheme (Hrs per Week)			Marks Distribution			Credits
		Lecture (L)	Tutorials (T)	Practical (P)	IE	ESE	Total	
<b>A.</b>	<b>University Core Courses</b>							
	Nil	-	-	-	-	-	-	-
<b>B.</b>	<b>Department Core Courses</b>							
<b>B.1</b>	<b>Theory</b>							
MPLCPL1101	Planning History & Theory	2	-	-	40	60	100	2
MPLCPL1102	Housing & Environment Planning	2	-	-	40	60	100	2
MPLCPL1103	Socio Economic Base for Planning	2	-	-	40	60	100	2
<b>B.2</b>	<b>Practical</b>							
MPLCPL1201	Planning Studio-I	-	2	14	60	40	100	9
MPLCPL1202	GIS- Survey & Statistics	-	2	4	60	40	100	4
MPLCPL1203	Planning Techniques	-	2	4	60	40	100	4
<b>C.</b>	<b>Department Elective</b>							
	NIL							
<b>D.</b>	<b>Open Elective</b>							
	NIL							
<b>E.</b>	<b>Humanities and Social Sciences including Management courses(AECC)</b>							
	NIL							
<b>F.</b>	<b>Skill Enhancement Courses (SEC) OR Project work, Seminar and Internship in Industry or Elsewhere</b>							
	NIL	-	-	-	-	-	-	-
<b>G.</b>	<b>Discipline, Value Added Courses &amp; Social Outreach</b>							
MPLCPL1601	Discipline, Value Added Courses & Social Outreach							
	Talent Enrichment Programme (TEP)-I Library / MOOC / Online Certification Courses	-	-	1	50	-	50	1
	<b>Total</b>	<b>6</b>	<b>6</b>	<b>23</b>				
	<b>Total Teaching Hours</b>	<b>35</b>						<b>24</b>

**POORNIMA UNIVERSITY**

**Faculty of Planning and Architecture**

**Department of Planning**

**M.Plan (Urban Planning)**

**Batch: 2023-25**

**Teaching Scheme for Second Semester (I Year)**

Course Code	Course Name	Teaching Scheme (Hrs per Week)			Marks Distribution			Credits
		Lecture (L)	Tutorial (T)	Practical (P)	IE	ESE	Total	
<b>A.</b>	<b>University Core Courses</b>							
	NIL							
<b>B.</b>	<b>Department Core Courses</b>							
<b>B.1</b>	<b>Theory</b>							
MPLCPL2101	City & Metropolitan Planning	2	-	-	40	60	100	2
MPLCPL2102	Infrastructure and Transport Planning	2	-	-	40	60	100	2
MPLCPL2103	Planning Legislation & Urban Development Policies	2	-	-	40	60	100	2
<b>B.2</b>	<b>Practical</b>							
MPLCPL2201	Planning Studio-II	-	2	14	60	40	100	9
MPLCPL2202	Advanced Planning Techniques	-	2	4	60	40	100	4
<b>C.</b>	<b>Department Elective</b>							
MPLEPL2211	Project Planning and Management	-	2	4	60	40	100	4
MPLEPL2212	Sustainable Planning and Development							
<b>D.</b>	<b>Open Elective: Anyone</b>							
	NIL							
<b>E.</b>	<b>Humanities and Social Sciences including Management courses</b>							
	NIL							
<b>F.</b>	<b>Skill Enhancement Courses (SEC) OR Project work, Seminar and Internship in Industry or Elsewhere</b>							
	NIL							
<b>G.</b>	<b>Discipline, Value Added Courses &amp; Social Outreach</b>							
MPLCPL2601	Discipline, Value Added Courses & Social Outreach	-	-	1	50	-	50	1
	Talent Enrichment Programme (TEP)-II							
	Library / MOOC / NSP							
	<b>Total</b>	<b>6</b>	<b>6</b>	<b>23</b>				
	<b>Total Teaching Hours</b>		<b>35</b>					<b>24</b>



**POORNIMA UNIVERSITY**

**Faculty of Planning and Architecture**

**Department of Planning**

**M.Plan (Urban Planning)**

**Batch: 2023-25**

**Teaching Scheme for Third Semester (II Year)**

Course Code	Course Name	Teaching Scheme (Hrs per Week)			Marks Distribution			Credits
		Lecture (L)	Tutorials (T)	Practical (P)	IE	ESE	Total	
<b>A.</b>	<b>University Core Courses</b>							
	NIL							
<b>B.</b>	<b>Department Core Courses</b>							
<b>B.1</b>	<b>Theory</b>							
MPLCPL3101	Urban Development Management and Governance	2	-	-	40	60	100	2
MPLCPL3102	Legal Issues and Professional Practice	2	-	-	40	60	100	2
<b>B.2</b>	<b>Practical</b>							
MPLCPL3201	Planning Studio-III	-	2	14	60	40	100	9
MPLCPL3202	Practical Training	-	2	4	60	40	100	4
<b>C.</b>	<b>Department Elective</b>							
MPLEPL3211	Urban Risk & Disaster Management	-	2	4	60	40	100	4
MPLEPL3212	Community Planning and Participation							
<b>D.</b>	<b>Open Elective: Anyone</b>							
	NIL							
<b>E.</b>	<b>Humanities and Social Sciences including Management courses</b>							
	NIL							
<b>F.</b>	<b>Skill Enhancement Courses (SEC) OR Project work, Seminar and Internship in Industry or Elsewhere</b>							
	NIL							
<b>G.</b>	<b>Discipline, Value Added Courses &amp; Social Outreach</b>							
MPLCPL3601	Discipline, Value Added Courses & Social Outreach	-	1	-	50	-	50	1
	Talent Enrichment Programme (TEP)-II							
	Library / MOOC / NSP							
	<b>Total</b>	<b>4</b>	<b>7</b>	<b>22</b>				
	<b>Total Teaching Hours</b>		<b>33</b>					<b>22</b>





POORNIMA UNIVERSITY								
Faculty of Planning and Architecture								
Department of Planning								
M.Plan (Urban Planning)								
Batch: 2023-25								
Teaching Scheme for Fourth Semester (II Year)								
Course Code	Course Name	Teaching Scheme (Hrs per Week)			Marks Distribution			Credits
		Lecture (L)	Tutorials (T)	Practical (P)	IE	ESE	Total	
<b>A.</b>	<b>University Core Courses</b>							
	NIL							
<b>B.</b>	<b>Department Core Courses</b>							
<b>B.1</b>	<b>Theory</b>							
MPLCPL4101	Development Finance	2	-	-	40	60	100	2
<b>B.2</b>	<b>Practical</b>							
MPLCPL4201	Planning Thesis	-	2	22	60	40	100	13
<b>C.</b>	<b>Department Elective</b>							
MPLEPL4211	Inclusive cities	-	2	4	60	40	100	4
MPLEPL4212	Urban Heritage Conservation							
<b>D.</b>	<b>Open Elective</b>							
	NIL							
<b>E.</b>	<b>Humanities and Social Sciences including Management courses</b>							
	NIL							
<b>F.</b>	<b>Skill Enhancement Courses (SEC) OR Project work, Seminar and Internship in Industry or Elsewhere</b>							
	NIL							
<b>G.</b>	<b>Discipline, Value Added Courses &amp; Social Outreach</b>							
MPLCPL4601	Discipline, Value Added Courses & Social Outreach							
	Talent Enrichment Programme (TEP)- II	-	1	-	50	-	50	1
	Library / MOOC / Online Certification Courses							
	<b>Total</b>	<b>2</b>	<b>5</b>	<b>26</b>				
	<b>Total Teaching Hours</b>	<b>33</b>						<b>20</b>



## Masters of Planning (M.Plan.)



### First Semester Detailed Syllabus



**A.SUBJECT OBJECTIVES:**

The objective of this course is to initiate the student to the historic growth and development of settlements across civilizations and the evolution of civic planning as a discipline through theories and concepts of modern planning thought. The course shall be delivered through theoretical inputs and seminar presentations by students on selected topics.

**B.COURSE OUTCOME:**

**CO1** Contrast the history of urban form and describe different forces behind urban development in different times. Illustrate the contemporary urban patterns from a historical perspective

**CO2** Identify the various Models of Planning.

**CO3** Examine the various plans and inspect differences and similarities between them.

**CO4** Appraise the various theories of urbanization and understanding the Goal formulation, objective, scope, limitations; Plan making process, planning methodology and case studies.

**CO5** Elaborate the city-region relationship

**C. OUTLINE OF THE COURSE**

Unit	Title of the unit	Time Required for the Unit (Hours)
1	Planning History	6
2	Models of Planning	4
3	Types of Plans	4
4	Planning Theory	4
5	City-Region Relationship	6

**D.DETAILED SYLLABUS**

Module	Contents
1	<b>Planning History</b> Relevance of the study of Evolution; Hunter gatherer/farmer and formation of organized society; Cosmological and other influences origin & growth of cities, effects of cultural influence on physical form; Human settlements as an expression of civilization. Basic elements of the city, Concepts of space, time, scale of cities; Town planning in ancient India medieval, renaissance, industrial and post industrial cities; City as a living & spatial entity; Concepts of landmark, axis, orientation. City form as a living space. City as a political statement. New Delhi, Chandigarh, Washington D.C. Brazilia etc; Contribution of individuals to city planning. Lewis Mumford, Patric Geddes, Peter Hall etc; The dynamics of the growing city. Impact of industrialization and urbanization. Metropolis and Megalopolis; Generic and paracentric cities
2	<b>Models of Planning</b> Pluralism in Planning; Systems. Approach to Planning: Rationalistic and Incremental Approaches, Mixed Scanning, Advocacy Planning and Action Planning, Equity Planning
3	<b>Types of Plans</b>

	Master Plan, Development Plan, Structure Plan, Strategic Plan, Sectoral Plan, Zonal Plan, Local Area Plan, Action Area Plan Etc.
<b>4</b>	<b>Planning Theory</b>
	Definitions of town and country planning, Orthodoxies of planning ,sustainability and rationality in planning, Components of sustainable urban and regional development. Theories of urbanization including Concentric Zone Theory, Sector Theory, Multiple Nuclei Theory and other latest theories, Land use and land value theory of William Alonso; Ebenezer Howard's Garden City Concept; Green Belt Concept. City as an organism: a physical, social, economic and political entity Goal formulation, objective, scope, limitations; Plan making process, planning methodology and case studies.
<b>5</b>	<b>City-Region Relationship</b>
	Structure of City Regions, Area of Influence, Dominance; Rural- Urban Fringes; Metropolitan Region; Socio-Economic Impacts of Growth of Urban Areas; Push and Pull Factors; Rural-Urban Migration; Location of New Regional Economic Activities; Impact of Technology on Urban Forms; Transportation and Urban Form; Other Emerging Issues in Planning

#### E.MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:

MCQs / Quizes / Google Form

Seminar presentations (Student works open for all) / Multimedia presentations/ PPT's

Report writing / written assignment/ Google classroom.

#### F.RECOMMENDED STUDY MATERIAL:

Sr. N	Reference Book	Author	Edition	Publication
1.	Urban and Regional planning, a system approach	McLoughlin, J. B.	1969	Faber and Faber. , London.
2.	A reader in Planning Theory	Faludi, A.	1973	Pergamum Press, London
3.	Urban and Regional Planning,	. Peter, G.H. Tewdwr-Jones, M.	2011	Rutledge, Lonoo. Tewdwr-Jones, M. Fifth Editor..
4.	Cities of Tomorrow: An Intellectual History of Urban Planning and Design in the Twentieth Century,	Hall Peter	2001	Blackwell, London

#### G.RECOMMENDED ONLINE STUDY MATERIAL:

##### i) MOOCS

Sr. N	MOOCs Platform/ Journal	Reference / Link	Mode/	Date referred
1.	City Lab	<a href="https://www.citylab.com/design/2012/11/evolution-urban-planning-10-diagrams/3851/">https://www.citylab.com/design/2012/11/evolution-urban-planning-10-diagrams/3851/</a>	Online	15-06-2020

##### ii) Journals

Sr. N	Name of Journal	Reference Link	Volume/pp/ Impact Factor	Date of Publication	Date referred
1.	Journal of Planning History, Sage Journals	<a href="https://journals.sagepub.com/home/jph">https://journals.sagepub.com/home/jph</a>	1		



**A.SUBJECT OBJECTIVES:**

The course would have two sections on housing and environment and introduce the basics of both in relation to each other.

**Housing:** The objective of this course is to familiarize students with a wide spectrum of aspects related to housing viz., housing scenario, housing needs, housing design, building legislations and relevant methods for formulating housing strategies. The course is introductory in nature, aimed at providing basic knowledge of issues of urban development relevant to housing planning in India.

**Environment:** The objective of this course is to initiate the students to a discreet understanding of the environment and the interactions and inter-relationships of all living organisms with the physical surroundings. All social, cultural and technological activities being carried by human beings have profound influence on the environment. This course will enable a thorough understanding of all these aspects.

**B.COURSE OUTCOME :**

**CO1** Illustrate the determinants of housing form, Housing needs and various housing typologies

**CO2** Apply the concepts of Housing in development of family and community wellbeing, status and prestige related to housing, safety, crime and insecurity, deprivation and social vulnerability, ghettoism.

**CO3** Analyze the housing as an important land use component of city plan / master plan.

**CO4** Appraise the Planning for Modern, Traditional & contemporary Neighbourhoods and its design criteria.

**CO5** Develop and design a holistic neighbourhood planning.

**C.OUTLINE OF THE SUBJECT**

Unit	Title of the unit	Time Required for the Unit (Hours)
1	Concepts and Definitions	4
2	Social and Economic Dimensions	4
3	Housing and the City	4
4	Planning for Neighbourhoods	4
5	Environmental Planning	8

**D.DETAILED SYLLABUS**

Module	Content
1.	<b>Concepts and Definitions</b>
	Shelter as a basic requirement, determinants of housing form, Census of India definitions, Introduction to policies, housing need, demand and supply, dilapidation, structural conditions, materials of constructions housing age, occupancy rate, crowding, housing shortage, income and affordability, poverty and slums, houseless population. Various housing typologies viz. traditional houses, plotted development, group housing, multi-storied housing, villas, chawls, etc., slums and squatters, night shelters, public health issues related to housing, various

	theories of housing, concept of green housing, green rating of housing projects..
<b>2.</b>	<b>Social and Economic Dimensions</b>
	Housing as social security, role of housing in development of family and community well being, status and prestige related to housing, safety, crime and insecurity, deprivation and social vulnerability, ghettoism, gender issues, housing and the elderly Contribution of housing to micro and macro economy, contribution to national wealth and GDP, housing taxation, national budgets, fiscal concessions, forward and backward linkages
<b>3.</b>	<b>Housing and the City</b>
	Understanding housing as an important land use component of city plan / master plan, considerations for carrying out city level housing studies projections, land use provisions.Suitability of land for housing, housing stress identification, projecting housing requirements, calculating housing shortages, housing allocation
<b>4.</b>	<b>Planning for Neighbourhoods</b>
	Approaches to neighbourhood living in traditional and contemporary societies, elements of neighbourhood structure, Planning and design criteria for modern neighbourhoods, norms and criteria for area distribution, housing and area planning standards, net residential density and gross residential density, development controls and building byelaws, UDPFI guidelines, NBC 2005 provisions. Case studies of neighbourhood planning.
<b>5.</b>	<b>Environmental Planning</b>
	Global Environmental Concerns and Planning of Settlements, UN/ International Conferences/ Conventions (Global /National issues).Components, structure and meaning of the urban and environment. Environmental Policies and Initiatives,Strategies, Protocols, Treaties Sustainable Development (Concept and Methods), Environment planning Techniques, Environmental surveys- Methods of data collection, techniques, analysis Database for incorporation of environmental concerns in planning analysis Techniques of resource protection and conservation (land suitability analysis, carrying capacity, vulnerability analysis, Environmental Resources and assessment, Resources type, scale, inventory Resource Assessment - Land –Topographic analysis ,Water – quality standards Air and Noise – quality standards Biodiversity – basics of floral and fauna diversity assessment, Environmental Quality, Methods of addressing environmental quality Environmental Impact Assessment – an introduction EIA notification as related to human settlement planning

#### E.MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:

MCQs / Quizzes / Google Form

Seminar presentations (Student works open for all) / Multimedia presentations/ PPT's

Report writing / written assignment/ Google classroom.

#### F.RECOMMENDED STUDY MATERIAL:

Sr. No.	Reference Book	Author	Edition	Publication
1	Shelter in India: Sustainable Development Series	Aromar Revi	1990	Stosiusloc/ Advent Books IDivision
2	Housing : A factual Analysis	Beyer Glen H,	1958	The Macmillan Co. NY
3	Sustainable Urbanism: Urban Design with Nature	Douglas Farr	2007	John Wiley & Sons
4	People and Housing in Third World cities	Dwyer, DJ.	1981	Orient Lcogrna;
5	Fundamentals of Ecology,	Odom, E.P., Barrett, G.W., Brewer, R.,		

		Thomson Brooks,		
6	Ecology, Impact Assessment and Environmental Planning,	West man W.,		John Wiley and Sons
7	Integrated Environmental Planning,	James K. Lien,		Blackwell Publishing
8	AITP Reader on Ecology & Resource Development,	AITP		AITP

## G.RECOMMENDED ONLINE STUDY MATERIAL

### (i) MOOCS

Sr. N	MOOCs Platform/ Journal	Reference / Link	Mode/	Date referred
1	Housing Policy & Planning, Swayam	<a href="https://swayam.gov.in/nd1_noc20_ar14/preview">https://swayam.gov.in/nd1_noc20_ar14/preview</a>	Online	15-06-2020
2	United Nations	<a href="https://elearning.unep.org/moocs/courses">https://elearning.unep.org/moocs/courses</a>	Online	15-06-2020

### (ii) Journals

Sr. N	Name of Journal	Reference Link	Volume/pp/ Impact Factor	Date of Publication	Date referred
1	Journal of Housing and the Built Environment, The Springer	<a href="https://www.springer.com/journal/10901">https://www.springer.com/journal/10901</a>	Volume 35	2 June 2020	15-06-2020
2	Journal of Environmental Planning and Management (1992 - current)	<a href="https://www.tandfonline.com/loi/cjep20">https://www.tandfonline.com/loi/cjep20</a>	Volume 63	June 2020	15-06-2020



**A.SUBJECT OBJECTIVES:**

The objective of the course is to apprise students of the theoretical underpinnings in economics so as to enable them comprehend urban problems from the point of view of economic reasoning. The course is of an introductory level enabling students to acquire a fair amount of economic reasoning to analyze urban issues and would focus primarily on applications in the planning profession.

The primary objective of the course is to train the students in the sociological study of life and human interaction. The course is so designed as to enable the students follow the sociological interpretations of the structures, processes, changes and problems of an urban area and by doing so providing inputs for planning and policy making. Thus the overarching objective of the course shall be to educate students about the nature and changing character of the city and the urban experience - including the larger social, political, and economic dynamics of urban change - so as to provide a more nuanced appreciation of the contemporary, comparative, and historical context in which urban planning skills and sensibilities have been developed and could be applied.

**B.COURSE OUTCOME:**

**CO1** Interpret the sociological concepts, socio-cultural profile and urban transformation of Indian society.

**CO2** Apply the concepts and elements of inclusivity in the vulnerable Social Groups and city planning

**CO3** Acquire and analyse the social problems of slums and squatters communities , urban rural social transformation and its effects on social life

**CO4** Appraise the demand, supply, elasticity and consumer market and the concept of revenue cost, and Economies of scale.

**CO5** Develop the inclusive design with Human development index, poverty and income distribution, employment and livelihood.

**C.OUTLINE OF THE SUBJECT**

Unit	Title of the unit	Time Required for the Unit (Hours)
1	Nature and Scope of Sociology	4
2	Inclusive Cities	4
3	Community and Settlements	6
4	Elements of Micro and Macro Economics	6
5	Development economics and Lessons from Indian Experiences	4

**D.DETAILED SYLLABUS**

Module	Contents
1	<b>Nature and Scope of Sociology</b>
	Sociological concepts and methods, man and environment relationships; socio-cultural profile of Indian society and urban transformation; traditions and modernity in the context of urban and rural settlements ,Issues related to caste, age, sex, gender, health safety, marginalized group, un/underemployed, disabled population. .
2	<b>Inclusive Cities</b>
	Overview - Definition, Concepts, Elements of Inclusivity; Exclusion and Related Issues, Disparities, Social



	Fragmentation, Existing Divisiveness; Need for Inclusion of the Disadvantaged, Marginalized and other Weak and Vulnerable Social Groups.
<b>3</b>	<b>Community and Settlements</b>
	Social problems of slums and squatters' communities, urban and rural social transformation and its effects on social life, safety, security and crime in urban areas and its spatial planning implications, social structure and spatial planning; Role of socio-cultural aspects in the growth patterns of city and neighborhood communities; Social planning and policy; community participation; Marginalization and concepts of inclusive planning, Gender concerns. Settlement Policy: National Commission on Urbanization, Rural Habitat Policy – Experiences in developing countries regarding Settlement structure, growth and its spatial distribution.
<b>4</b>	<b>Elements of Micro and Macro Economics</b>
	Concepts of demand, supply, elasticity and consumer market; concept of revenue cost; Economies of scale, economic and social cost, production and factor market; Different market structure and price determination; market failure, cost-benefit analysis, public sector pricing; Determinants of national income, consumption, investment, inflation, unemployment, capital budgeting, risk and uncertainty, long-term investment planning
<b>5.</b>	<b>Development economics and Lessons from Indian Experiences</b>
	Economic growth and development, quality of life; Human development index, poverty and income distribution, employment and livelihood; Economic principles of land use planning; Policies and strategies of economic planning, balanced vs. unbalanced growth, public sector dominance; changing economic policies, implications on land and case studies

#### E.MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:

MCQs / Quizzes / Google Form

Seminar presentations (Student works open for all) / Multimedia presentations/ PPT's

Report writing / written assignment/ Google classroom.

Essays/ / Models based on individual exercises.

#### F.RECOMMENDED STUDY MATERIAL:

Sr. N	Reference Book	Author	Edition	Publication
1	Sociology,	Anthony Giddens,		Wiley
2	Urban Problems in Sociological Perspective	Shannon, Thomas R.		Waveland Press Inc
3	Economics – A Primer for India	G. Omkarnath,		Orient Blacks wan
4	General Economics	Deepashree,		Tata Mc Graw Hill Publication

#### G.RECOMMENDED ONLINE STUDY MATERIAL:

##### (i) MOOCS

Sr. N	MOOCs Platform/ Journal	Reference / Link	Mode/	Date referred
1	Greening the Economy: Sustainable Cities	<a href="https://www.coursera.org/learn/gte-sustainable-cities">https://www.coursera.org/learn/gte-sustainable-cities</a>	Online	15-06-2020



(ii) Journals

Sr. N	Name of Journal	Reference Link	Volume/pp/ Impact Factor	Date of Publication	Date referred
1	Socio-Economic Planning Sciences, The International Journal of Public Sector Decision Making.	<a href="https://www.journals.elsevier.com/socio-economic-planning-sciences">https://www.journals.elsevier.com/socio-economic-planning-sciences</a>	Volume -20		15-06-2020



**A.SUBJECT OBJECTIVES:**

The Planning studio is the introductory studio common to all specializations of Master of Planning. It aims to bring students of diverse backgrounds to a common platform and develop the essential skills of planning amongst the students opting for different specializations of planning.

The objective of the studio is to introduce the general concepts associated with physical planning and develop the skills of documentation, data analysis, spatial representation and written and verbal communication. Application of the theoretical inputs provided in other subjects in the semester is also a key focus. Technical report writing, data analysis techniques and verbal and visual presentation techniques would be focused on in all the assignments.

**B.COURSE OUTCOME:**

**CO1** Interpret and analyze real site conditions in an urban area, learn survey and documentation techniques, assessing needs and programming for planning intervention

**CO2** Apply different methodological approaches, technologies and foundation theories of urban planning.

**CO3** Inspect the forces that shape and develop cities, understand the form, structure and development process of cities

**CO4** Assess general theoretical models, analytical approaches to urban planning and contexts, technical knowledge's, stakeholder interests and ethical frameworks

**CO5** Develop the skills necessary for the effective practice of planning, including its purpose, schemes, methods and policy framework that envision future change, elements of plans, adoption, administration, and implementation of plans

**C.OUTLINE OF THE SUBJECT**

The thrust of the studio would broadly address the concepts of both urban and rural planning and integration of the city and region. The studio would consist of two assignments:

**Assignment 1****Understanding Human Settlement Systems (Individual Assignment)**

The assignment would be a short introductory exercise undertaken with the objective of initiating students with the concepts of urban planning by developing skills of observation and documenting the same in graphical ways.

The thrust of the studio would be on:

- Understanding the context of the city.
- Readings on the city and settlement systems
- Understanding the structure of networks and land uses
- City form and its visual impact.
- Identification of landmarks and public realms.
- Application of appropriate techniques of documentation and presentation of the data collected.

## Assignment 2

### Area Planning in Urban Areas (Individual Assignment)

The assignment would identify different urban zones based on land use characteristics and could also include predefined 'zones' for zonal plans. The objective of this exercise would be to learn various methods of surveying to collect different types of data and represent and interpret them to give meaningful observations on the planning and development of the area.

Thrust of the exercise would be on:

- Understanding the zone in the context of the city.
- Mapping of Networks and Linkages
- Preparation of Base Map of the area through primary surveys and updating secondary data
- Socio-economic profiling of the area through surveys
- Physical and Social infrastructure mapping
- Gap Analysis and issue identification
- Formulation of broad outlines of Intervention Strategies and Development Blueprint.

## Assignment 3

### Rural Planning (Group Assignment)

The main goal of the assignment is to expose students to the life and living in rural area as it is different from urban areas. This would help in conceptualizing the integration of urban and rural areas for regional planning.

Students will undertake study of a particular village in groups and conduct a primary survey on demographic profile, household income level, socio-cultural practices, etc. Information about development programmes shall be collected and resource mapping will be done. This exercise will aim at improving the understanding about the requirements of different categories of rural population. Conducting the primary survey will provide exposure to research methodology, techniques of data collection, data processing and analysis.

Thrust of the exercise would be on:

- Understanding the socio-economic aspects of the rural settlement
- Importance of location, spatial and economic linkages of the village.
- Explaining the social and physical infrastructure of the village.
- Understanding the availability and usage of local resources.
- Exposure to government programmes and institutional mechanism working for rural planning and development
- Identifying the present problems and future possibilities in the village.
- Proposing a strategy of improvement in the condition and development of the villages.

## Assignment 4

### Zonal Development Plan (Group Assignment)

A Zonal Development Plan is a detailed plan for a zone conceived and prepared within the framework of the Master Plan containing proposals for various land uses, roads and streets, parks and open spaces, community facilities, services and public utilities. Understanding city involves appreciating this multi direction, and include them in the city making process. A job of physical planner does not merely understand the current conflict in development but to



emerge out of this and to come out with a vision for the city. To arrive at this vision, a planner needs to understand dynamics of various components of the city and how and what level interventions can be made ,achieve that vision.

A group of students are expected to study a city in terms its present problems and issues and project a futuristic vision -in terms of scenario building.

**D.MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:**

MCQs / Quizes / Google Form

Seminar presentations (Student works open for all) / Multimedia presentations/ PPT’s

Report writing / written assignment/ Google classroom.

Essays/ / Models based on individual exercises.

**E.RECOMMENDED STUDY MATERIAL:**

Sr. N	Reference Book	Author	Edition	Publication
1	Rural Development, Principles, Policies and Management,	Katar Singh, Sage,		
2	Readings Material on Village Planning and Rural Development,	H.B Singh,		ITPI, New Delhi
3	The Role of Intermediate Towns in Regional Development : A Case Study,	National Institute of Urban Affairs (NIUA), NIUA, New Delhi		National Institute of Urban Affairs (NIUA), NIUA, New Delhi
4	Rural Development, Principles, Policies and Management,	Katar Singh, Sage,		

**F.RECOMMENDED ONLINE STUDY MATERIAL:**

**(i) MOOCS**

Sr. N	MOOCs Platform/ Journal	Reference / Link	Mode/	Date referred
1	Centre for Public Policy Research	<a href="https://www.cppr.in/urban-studies">https://www.cppr.in/urban-studies</a>	Online	15-06-2020
2	World Resource Institute	<a href="https://www.wri.org/resources/data-platforms">https://www.wri.org/resources/data-platforms</a>	Online	15-06-2020
3.	Indian Council for Research on International Economic Relations	<a href="http://icrier.org/publications/icrier-think-ink/">http://icrier.org/publications/icrier-think-ink/</a>	Online	15-06-2020

**A.SUBJECT OBJECTIVES:**

The objective of this course is to equip students with advanced concepts of GIS with special emphasis on applications in Urban and Regional Planning.

**B.COURSE OUTCOME:**

**CO1** Infer the diverse use of GIS software and its importance in Urban Planning. To apply this knowledge for data interpretation & analysis in the domain of Urban Planning.

**CO2** Apply the process of Remote Sensing, interpretation of satellite imagery and its application in Planning.

**CO3** Acquire and assess demographic data and population structures and determine their inter-relation with growth of urban settlements and sprawl.

**CO4** Appraise the techniques of data collection through sampling and assess its interpretation and accuracy through various statistical methods ( like co-relation regression)

**CO5** Develop the graphical and spatial representation of data for studio projects. To learn image processing and integration of GIS with GPS

**C.OUTLINE OF THE SUBJECT**

Unit	Title of the unit	Time Required for the Unit (Hours)
1	<b>Fundamentals of Cartography, Photogrammetry and Digital Image Processing</b>	4
2	<b>Basics of Remote Sensing</b>	4
3	<b>Remote Sensing</b>	6
4	<b>Basics of GIS and its Applications</b>	4
5	<b>GIS Hands on exercise</b>	6

**D.DETAILED SYLLABUS**

Unit	Contents
1.	<b>Fundamentals of Cartography, Photogrammetry and Digital Image Processing</b>
	<p><b>Introduction of unit-</b> Lithosphere, Geomorphic Processes and Landforms, Cartography.</p> <p><b>Aerial photography-</b>Introduction to aerial photography – Basic information and specifications of aerial photographs; Planning and execution of photographic flights Basic; Types of Aerial Photograph</p> <p><b>Photogrammetry-</b>Definitions and Development of Photogrammetry; Classifications of Photogrammetry; Uses of Photogrammetry;</p> <p><b>Photographic Scale-</b>Concept of Photographic Scale; Methods for Determining Photo Scale; Scale of a Vertical Photograph over Flat Terrain; Scale of a Vertical Photograph over variable Terrain;</p> <p><b>Stereo Photogrammetry-</b>Stereo Photogrammetry: Model deformation &amp; Rectification, Relief displacement, vertical</p>

	<p>exaggeration, Triangulation, Control &amp; Mapping.</p> <p><b>Fundamentals of Digital Image</b>-Concepts about digital image and its characteristics, Spectral, Spatial, Radiometric and Temporal resolution, Visual vs. Digital methods, Image data storage and retrieval, Visual and Digital Satellite Image Interpretation, Elements of Image Interpretation, Development of Interpretation Keys, Image restoration and Noise removal, Radiometric and Geometric correction technique, Interpolation methods – linear and nonlinear transformation for geometric corrections.</p> <p><b>Image Classification</b>-Principles of Image Classification-Image space, Feature space, Image classification; Image Classification process- Preparation for image classification, supervised image classification, unsupervised image classification.</p>
<b>2.</b>	<b>Basics of Remote Sensing</b>
	<p>Introduction; Definition and Scope; Stages of Remote Sensing data acquisition; Process of Remote Sensing data analysis; Type of Remote Sensing- Active and passive remote sensing; Advantages and Limitations of Remote Sensing.</p> <p><b>Electromagnetic energy</b>-Introduction; Electromagnetic energy- Electromagnetic spectrum, Radiation Principles; EMR interaction With Atmosphere- scattering, Absorption and Atmospheric Windows; EMR interaction with earth surface features - reflection, absorption, emission and transmission; Spectral response pattern - vegetation, soil, water bodies.</p> <p><b>Remote Sensing Platforms and Sensors</b>-Types and their characteristics; Satellites and their characteristics – Geo-stationary and sun-synchronous; Earth Resources Satellites- LANDSAT, SPOT, IRS, IKONOS, QUICKBIRD satellite series; Meteorological satellites – INSAT, NOAA, GOES; Sensors – Types and their characteristics, Across track (whiskbroom) and Along track (push broom) scanning; Optical mechanical scanners – MSS, TM, LISS, WiFS, PAN; Concept of Resolution – Spatial, Spectral, Temporal, Radiometric.</p>
<b>3.</b>	<b>Remote Sensing</b>
	<p><b>Image Interpretation</b>-Introduction; Fundamental of Visual Image Interpretation; Elements of Image Interpretation; Image Interpretation strategies; Image Interpretation keys.</p> <p><b>Remote Sensing Data Requirement and Ground Investigation</b>-Remote Sensing Data Products and their procurement, Ground Truth Collection –Spectral Signatures, Commonly used Ground Truth equipment's - use of Radiometers, Display Forms – Computer printouts, Thematic maps.</p>
<b>4.</b>	<b>Basics of GIS and GIS Applications</b>
	<p><b>Basics</b>-Definitions of GIS and Related Terms; Development of GIS; Components of GIS; Geographical Data Characteristics and GIS; Coordinate Systems, Datum's and Projections in GIS.</p> <p><b>Data Structures and Data Base Design</b>- Digital representation of Geographic Data; Raster and Vector models for Geographic Data Representation and Conversion; Digitization—Methods and Errors; Topology Building; GIS Data Standards—Concepts and Components; Data and Information Sources for GIS; GIS Data Base Management Systems-- Conceptual and Logical Data Modelling; Spatial Data Quality and Error Analysis; GIS Customization.</p> <p><b>Attribute Data and Data Exploration</b>-Attribute Data in GIS, Attribute Data Entry, Manipulation of Fields and Attribute Data, Data Exploration; Attribute Data Query, Raster Data Query, Map- Based Data Manipulation,</p> <p><b>Application Methodologies</b>-Spatial Analysis through GIS; DEM/DTM and Derivatives; Remote Sensing Data and GIS Integration; GIS Project Design and Planning Methodologies; GIS Information Products.</p> <p><b>Geo Statistical Analysis Techniques</b>-Introduction to Spatial Interpolation: Control Points, Global Method- Trend surface analysis, regression model, local methods- Thiessen polygons, density estimation, Inverse Distance weighted Interpolation, Kriging- Ordinary Kriging and Universal Kriging, GIS and decision support system, Introduction to AHP, basic principle of AHP. Principal and components of multiple criteria decision making.</p>
<b>5.</b>	<b>GIS Hands on exercise</b>

**GIS II (Practical)** - Georeferencing; Creation of Shape Files, Layers; On-Screen Digitization of Polygons, Points and Lines and adding Attributes; Conversions and Topology; Spatial Analysis, DEM. Digitization of maps, Land use land cover analysis, Demographic analysis, Roads and transportation analysis.

**E.MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:**

MCQs / Quizes / Google Form  
Seminar presentations (Student works open for all) / Multimedia presentations/ PPT's  
Report writing / written assignment/ Google classroom.  
Essays/ / Models based on individual exercises.

**F.RECOMMENDED STUDY MATERIAL:**

Sr. N	Reference Book	Author	Edition	Publication
1	Advanced Surveying: Total Station, GIS and Remote Sensing,	Satheesh Gopi		Pearson
2	Applied Remote Sensing in Urban Planning, Governance and Sustainability	Netzband, Springer, India		Ashoke K.Ghosh
3	Remote Sensing and GIS,	Basdudeb Bhatt		Oxford University Press
4	Geographic Information Systems and Science,	PA Longley et al,		John Wiley and Sons Ltd.

**G.RECOMMENDED ONLINE STUDY MATERIAL:**

(i) MOOCS

Sr. N	MOOCs Platform/ Journal	Reference / Link	Mode/	Date referred
1	Geographic Information Systems (GIS) Specialization	<a href="https://www.coursera.org/specializations/gis">https://www.coursera.org/specializations/gis</a>	Online	15-06-2020

(ii) Journals

Sr. N	Name of Journal	Reference Link	Volume/pp/ Impact Factor	Date of Publication	Date referred
1	GIS and Geospatial Academic Journals	<a href="https://guides.lib.utexas.edu/gis-and-geospatial-academic-literature/gis-and-geospatial-journals">https://guides.lib.utexas.edu/gis-and-geospatial-academic-literature/gis-and-geospatial-journals</a>			15-06-2020





**ASUBJECT OBJECTIVES:**

The objective of the course Planning Techniques is to introduce techniques used for planning at various stages from preliminary to advanced. As this is a subject from integrated course the techniques broadly used by all courses of specialization have been considered while designing this course. At the end of the course student should be able to use the techniques in respective studio works. Appropriate Software applications in CAD and GIS would also be taught as part of this course

**B.COURSE OUTCOME:**

**CO1** Infer the mapping , components and techniques of Physical survey& socio economic surveys

**CO2** Apply the concepts of urban database and data analysis in the planning process.

**CO3** Acquire and analyse the regions on the bases of its classification, its delineation techniques, SWOT, population forecasts and projections

**CO4** Appraise the planning standards, performance standards and benchmarks

**CO5** Develop the inclusive design with Geo informatics.

**C.OUTLINE OF THE SUBJECT**

Unit	Title of the unit	Time Required for the Unit (Hours)
1	Survey Techniques and Mapping	6
2	Demographic Methods	8
3	Analytical Methods	6
4	Planning Standards	4
5	Introduction to Geo informatics	6

**D.DETAILED SYLLABUS**

Module	Contents
1	<b>Survey Techniques and Mapping</b> Data base for physical surveys including land use, building use, density, building age, etc., and socio-economic surveys; Survey techniques; Land use classification or coding and expected outputs; Techniques of preparing base maps including understanding the concepts of scales, components and detailing for various levels of plans like regional plan, city plan, zoning plan, and local area plan.
2	<b>Demographic Methods</b> Methods of population forecasts and projections; Lorenz Curve, Ginni Ratio, Theil's index, rations: urban – rural, urban concentration, metropolitan concentration; Location dimensions of population groups – social area and strategic choice approach – inter connected decision area analysis.
3	<b>Analytical Methods</b> Classification of regions, delineation techniques of various types of regions, analysis of structure of nodes, hierarchy, nesting and rank size; Scalogram, sociogram, etc.; Planning balance sheet; Threshold analysis; Input output analysis, SWOT analysis;
4	<b>Planning Standards</b>

	Spatial standards, performance standards and benchmarks, and variable standards. UDPFI guidelines, zoning regulations and development controls
<b>5</b>	<b>Introduction to GIS</b>
	Basics-Definitions of GIS and Related Terms; Development of GIS; Components of GIS; Geographical Data Characteristics and GIS; Coordinate Systems, Datum's and Projections in GIS.

**E.MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:**

MCQs / Quizes / Google Form  
 Seminar presentations (Student works open for all) / Multimedia presentations/ PPT's  
 Report writing / written assignment/ Google classroom.  
 Essays/ / Models based on individual exercises.

**F.RECOMMENDED STUDY MATERIAL:**

Sr. N	Reference Book	Author	Edition	Publication
1	Concepts and Techniques of Geographic Information Systems	Lo C.P. and Yeung A.K.W.,		PHI Learning Private Limited
2	URDPFI Guidelines Volume 1,	Ministry of Urban Affairs and Employment Govt. of India, New Delhi		
3	Regional Planning,	Glasson J.,		Open University Press
4	Concepts and Techniques of Geographic Information Systems	Lo C.P. and Yeung A.K.W.,		PHI Learning Private Limited

**G.RECOMMENDED ONLINE STUDY MATERIAL:**

**(i) MOOCS**

Sr. N	MOOCs Platform/ Journal	Reference / Link	Mode/	Date referred
1	MIT OPEN COURSEWARE	<a href="https://ocw.mit.edu/courses/urban-studies-and-planning/">https://ocw.mit.edu/courses/urban-studies-and-planning/</a>	Online	15-06-2020

**(ii) Journals**

Sr. N	Name of Journal	Reference Link	Volume/pp/ Impact Factor	Date of Publication	Date referred
1	Journal of the American Institute of Planners	<a href="https://www.tandfonline.com/doi/abs/10.1080/01944367308977650">https://www.tandfonline.com/doi/abs/10.1080/01944367308977650</a>	Issue 2	26 NOV 2017	15-06-2020





## Masters of Planning (M.Plan.)



## Second Semester Detailed Syllabus



**A.SUBJECT OBJECTIVES**

The objective of the subject is to study the growth of metro and mega cities and their relationship with their respective regions and spatial planning approaches for their planned development, Regional linkages and problems of Metro and mega cities, urban development policies and problems.

**B.COURSE OUTCOME:**

**CO1** Illustrate the growth of the cities.Understand the dichotomy between technology transportation and urban form.

**CO2** Identify the various theories of urban structure and land use.

**CO3** Inspect the urban planning norms and standards. Understand how to develop indicators to measure various environmental, social and economic qualities of urban areas.

**CO4** Appraise the various approaches and techniques of planning for special areas. Understand the Concept and components, essential dimensions of inclusive planning ,the significance of city-region linkages and inter-dependence.

**CO5** Elaborate the best practices of city and metropolitan planning in India and abroad, inter-disciplinary policy issues and public actions for guiding metropolitan development

**C.OUTLINE OF THE SUBJECT**

Unit	Title of the unit	Time Required for the Unit (Hours)
1	Urban Structure and Growth Implications	4
2	Theories of Development and Emerging Concepts	4
3	Planning Norms and Standards	4
4	Preparation Approaches and Techniques Planning	8
5	Approaches for Special Areas	4

**D.DETAILED SYLLABUS**

Module	Contents
1	<b>Urban Structure and Growth Implications</b> Growth of cities; cities as engine of growth; urban sprawl; land value, economic attributes of activity location, economic forces in urban development; Structure of City Regions, area of influence, Impact of technology on urban forms; Transportation and urban form; location characteristics and impact of urban settlements.
2	<b>Theories of Development and Emerging Concepts</b> Theories of urban structure and land use- Centre place theory, urban realm model, core frame theory; New urbanism; Territorial Development Theory - Growth pole theory, urban bias critique, secondary cities and urban diffusion; Emerging Rural Urban Relationship models – urban rural linkage, expanding city, globalization and extended

	metropolitan region, Desakota model, Networked model; Territoriality of rural-urban interaction; Peri-urban Interface (PUI) case studies.
<b>3</b>	<b>Planning Norms and Standards</b>
	Spatial standards for residential , industrial, commercial , institutional, transport, ecological spaces , recreational areas etc.; space standards for facility areas, utilities and networks; performance standards
<b>4</b>	<b>Preparation Approaches and Techniques Planning</b>
	Approaches for preparation of Urban development plans, Master Plans, Structure plans and Strategy Plan; Public Participation and Plan Implementation; Techniques of urban renewal and redevelopment; System approach to planning; Threshold analysis, retail location and industrial location analysis; transport system analysis.
<b>5</b>	<b>Approaches for Special Areas</b>
	Special area planning- definition, types, attributes, requirements, planning process; inner areas ,peri-urban areas issues and planning approaches; Smart City – Concepts, Elements, Features, planning approach and strategies, policy efforts in India; Inclusive planning- Concept and components, essential dimensions of inclusive planning; growth of informal sector, characteristics, linkages with formal sector, Planning interventions, Inclusive zoning, development and building regulations, slum improvement;

#### E.MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:

MCQs / Quizes / Google Form

Seminar presentations (Student works open for all) / Multimedia presentations/ PPT's

Report writing / written assignment/ Google classroom.

Essays/ / Models based on individual exercises.

#### F.RECOMMENDED STUDY MATERIAL:

Sr. N	Reference Book	Author	Edition	Publication
1	City and metropolitan planning and design	ITPI		ITPI,New Delhi
2	Urbanization and urban systems in India	Ramachandran .R	1998	Oxford University Press, New Delhi
3	Regional Plan 2021	NCRPB	2005	NCRPB, New Delhi
4	Indian Metropolis: Urbanization, Planning and Management	Bawa V.K	1987	Inter-India Publications, New Delhi

#### G.RECOMMENDED ONLINE STUDY MATERIAL:

##### (i) (i) MOOCS

Sr. N	MOOCS Platform/ Journal	Reference / Link	Mode/	Date referred
1	City and metropolitan planning, Swayam	<a href="https://swayam.gov.in/nd2_cec20_ar01/preview">https://swayam.gov.in/nd2_cec20_ar01/preview</a>	Online	15-06-2020

##### (ii) Journals

Sr. N	Name of Journal	Reference Link	Volume/pp/ Impact Factor	Date of Publication	Date referred
1	Journal of urban management	<a href="https://www.sciencedirect.com/science/article/pii/S2226585616300036">https://www.sciencedirect.com/science/article/pii/S2226585616300036</a>	Volume 5, Issue 1	16-06-2016	15-06-2020



**A.SUBJECT OBJECTIVES:**

The course would include one part on the design principles of infrastructure planning services, utility networks and facilities and another on transport planning. The objective of Transportation Planning is to provide basic information on transportation issues. Students will be familiarized with (i) geometric design of road networks and (ii) traffic characteristics. Techniques of data collection and analysis would be taught as part of this course.

**B.COURSE OUTCOME:**

**CO1** Interpret the Importance of Infrastructure-Transport Integration, mobility patterns and need for sustainability.

**CO2** Identify the various norms for planning of infrastructure – water, sanitation and storm water.

**CO3** Inspect the various norms for planning of infrastructure-municipal wastes, power, fire.

**CO4** Determine the role of Transport system in development plans, Principles of traffic impact and its analysis

**CO5** Create the Transit Oriented Development (TOD) in detail and understanding the Case Studies on infrastructure - Transport Integration

**C.OUTLINE OF THE SUBJECT**

Unit	Title of the unit	Time Required for the Unit (Hours)
1	Role of Infrastructure in Development	4
2	Planning and Management of Water, Sanitation and Storm Water	6
3	Planning and Management of Municipal Wastes, Power and Fire	4
4	City Development and Transport Infrastructure Planning, Management and Design	4
5	Transit Oriented Development (TOD)	6

**D.DETAILED SYLLABUS**

Module	Content
<b>1.</b>	<b>Role of Infrastructure in Development</b>
	Elements of Infrastructure (physical, social, utilities and services); Basic definitions, concepts, significance and importance; Data required for provision and planning of urban networks and services; Resource analysis, provision of infrastructure, and land requirements; Principles of resource distribution in space; Types, hierarchical distribution of facilities, Access to facilities, provision and location criteria, Norms and standards, etc.
<b>2</b>	<b>Planning and Management of Water, Sanitation and Storm Water</b>
	Water – sources of water, treatment and storage, transportation and distribution, quality, networks, distribution losses, water harvesting, recycling and reuse, norms and standards of provision, institutional arrangements, planning provisions and management issues; Sanitation – points of generation, collection, treatment, disposal, norms and standards, grey water disposal, DEWATS, institutional arrangements, planning provisions and management issues. Storm water – rainfall data interpretation, points of water stagnation, system of natural drains, surface topography and

	soil characteristics, ground water replenishment, storm water collection and disposal, norms and standards, institutional arrangements, planning provisions and management issues;
<b>3</b>	<b>Planning and Management of Municipal Wastes, Power and Fire</b>
	Municipal and other wastes – generation, typology, quantity, collection, storage, transportation, treatment, disposal, recycling and reuse, wealth from waste, norms and standards, institutional arrangements, planning provisions and management issues. Power – Sources of power procurement, distribution networks, demand assessment, norms and standards, planning provisions and management issues. Fire – History of fire hazards, vulnerable locations, methods of fire fighting, norms and standards, planning provisions and management issues.
<b>4</b>	<b>City Development and Transport Infrastructure Planning, Management and Design</b>
	Role of transport, types of transport systems, evolution of transport modes, transport problems and mobility issues; Urban form and Transport patterns, land use – transport cycle, concept of accessibility; Hierarchy, capacity and geometric design elements of roads and intersections; Basic principles of Transport infrastructure design; Traffic and transportation surveys and studies, traffic and travel characteristics; Urban transport planning process – stages, study area, zoning, data base, concept of trip generation Transport, environment and safety issues; principles and approaches of traffic management, transport system management.
<b>5</b>	<b>Transit Oriented Development (TOD)</b>
	Planning for infrastructure and facilities for transport ,Transit Oriented Development- Definition, concepts and key components ; principles of TOD, planning norms and standards of TOD , pre-requisites of TOD , financing TOD , role of stakeholders, case studies of TOD, Best practices of Land use transport integration in India and abroad, inter-disciplinary policy issues and public action for guiding land use transport integration.

#### E.MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:

MCQs / Quizzes / Google Form

Seminar presentations (Student works open for all) / Multimedia presentations/ PPT's

Report writing / written assignment/ Google classroom.

Essays/ / Models based on individual exercises.

#### F.RECOMMENDED STUDY MATERIAL:

Sr. No	Reference Book	Author	Edition	Publication
1	Environmental Engineering,	Howard S. Peavy,	1990	Tata Mc Grawhill
2	Urban Planning Manual,	AIIILGS Reader	1958	Khanna Publishers \ /;;
3	Urban Transport: Planning and Management,	A K Jain,	2007	APH Publishing
4	Transportation Engineering and Planning,	C. S Papacostas, P. D Prevedouros,		PHI Learning

## G.RECOMMENDED ONLINE STUDY MATERIAL

### (i) MOOCS

Sr. N	MOOCs Platform/ Journal	Reference / Link	Mode/	Date referred
1	Urban Landuse and transportation planning	<a href="https://www.classcentral.com/course/swayam-urban-landuse-and-transportation-planning-20017">https://www.classcentral.com/course/swayam-urban-landuse-and-transportation-planning-20017</a>	Online	15-06-2020

### (ii) Journals

Sr. N	Name of Journal	Reference Link	Volume/pp/ Impact Factor	Date of Publication	Date referred
1	Journal of Landuse & Transport	<a href="https://jtlu.org/index.php/jtlu">https://jtlu.org/index.php/jtlu</a>	Vol. 13 No. 1 (2020)	Jan 2020	15-06-2020





**A.SUBJECT OBJECTIVES:**

Review of theoretical and legislative framework and related issues in urban planning. The objective of this course is to initiate students with the various legislations in existence in India which have an impact on urban and regional planning and development

**B.COURSE OUTCOME:**

**CO1**Infer the Concept of Legislation, its significance and Objectives.

**CO2** Apply the concepts of various urban planning acts referred in the procedures for preparation, implementation of regional plans, master plans and town planning schemes and understand the roles and responsibilities of Town & Country Planning Organization, Urban Development Departments, City Improvement Trust, Development Authorities, Municipal

**CO3** Appraise the interdisciplinary groups; community participation process in policy making. Identify the Policy Process - problem definition, policy objectives and options, policy implementation, policy evaluation and maintenance. Approaches and models; Inter-organizational relations and public policy implementation.

**CO4.** Appraise the various Urban Development Policies in India

**CO5** Appraise the Emerging Policy their Thrust Areas and Case Studies on Urban Development Policies.

**C.OUTLINE OF THE SUBJECT**

Unit	Title of the unit	Time Required for the Unit (Hours)
1	Concept of Planning Legislation	4
2	Planning and Development Organizations & Overview of Development Control Regulations-	6
3	Policy Making Process	6
4	Urban Development Policies in India	4
5	Emerging Policy Thrust Areas and Case Studies on Urban Development Policies	4

**D.DETAILED SYLLABUS**

Module	Contents
1.	<b>Concept of Planning Legislation</b>
	Significance and Objectives of Legislation; Constitutional basis and provisions relating to land, its development and use; Overview of legal tools in various components of Urban Planning & Development; Evolution of Planning Legislation in India; Types and description of various Acts- Town and Country Planning Acts, Regional Planning acts, Improvement Trust Act, Urban Planning and Development Authorities Act- objectives, contents, procedures for preparation and implementation of regional plans, master plans and town planning schemes; Various Acts related to urban governance; land resources, environment protection, public participation in statutory process.
2.	<b>Planning and Development Organizations &amp; Overview of Development Control Regulations-</b>

	Town & Country Planning Organization, Urban Development Departments , City Improvement Trust, Development Authorities, Municipal Corporation etc. – objectives, functions and duties, organizational structure, technical capacity , statutory obligations, budgetary outlays; coordination and implementation issues, Zoning, Sub-Division Regulations, Building Regulations and Bye Laws; Apartment Ownership Act ,Water Bodies Conservation Act; Environment Protection Act; 73rd and 74th Constitution Amendment Acts and other relevant acts e.g. Nagar Raj Act; Model Municipal Act
<b>3</b>	<b>Policy Making Process</b>
	Policy Process - problem definition, policy objectives and options, policy implementation, policy evaluation and maintenance; Policy making approaches- Power approaches, Institutional approaches, Strategic Planning, Rational approach and Simon’s Rationality Model; Decision-making process and techniques; Policy monitoring- approaches and techniques; Role of non-officials in policy making; Intergovernmental relations and public policy issues; Public policy implementation- Approaches and models; Inter-organizational relations and public policy implementation; Public Participation in Planning Process.
<b>4.</b>	<b>Urban Development Policies in India</b>
	National Urban Sanitation Policy, National Urban Housing & Habitat Policy , National Policy for Urban Street Vendors , National Environmental Policy , National Urban Transport Policy , National Water Policy , National Policy on Energy; Emerging policies and programmes of government- JNNURM, AMRUT , HRIDAY etc
<b>5.</b>	<b>Emerging Policy Thrust Areas and Case Studies on Urban Development Policies</b>
	Policies to promote efficient urban spatial development ; development of eco-friendly neighborhoods; flexible FSI in urban design and planning; transport and land use integration ; integrated spatial and economic planning; inclusionary zoning regulations; renewal of neglected historic districts and derelict inner city areas ; integrating environment in urban planning and development; green urban economy approach; environment and social opportunities of densities; green urban infrastructure ; green urban governance. Best practices of urban development and planning policies- approach and impacts; procedure and inter-disciplinary issues related to policies.

**E.MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:**

MCQs / Quizes / Google Form

Seminar presentations (Student works open for all) / Multimedia presentations/ PPT’s

Report writing / written assignment/ Google classroom.

Essays/ / Models based on individual exercises.

**F.RECOMMENDED STUDY MATERIAL:**

Sr. N	Reference Book	Author	Edition	Publication
1	Town and Country Planning Act (any State Act)			
2	Model Municipal Act, Ministry of Urban Development, Government of India			
3	Building Byelaws (any State Act )			
4	Development Authority Act (any State Act )			
5	Governance and Planning	Mishra, A. K.,		
6	Working papers from National Institute of Urban Affairs, Centre for Good Governance, United Nations Centre for Human Settlement and National Institute of Public Finance and Policy.	National Institute of Urban Affairs, Centre for Good Governance, United Nations Centre for		McGraw Hill



		Human Settlement and National Institute of Public Finance and Policy.		
7	Land Policy and Urban Growth,	Drabkin, H. D.,	1977	Pergamon Press,
8	Land Management: Challenges and strategies,	Iyyer, C.,	2009	Global India Publications

#### G.RECOMMENDED ONLINE STUDY MATERIAL:

##### (i) (i) MOOCS

Sr. N	MOOCs Platform/ Journal	Reference / Link	Mode/	Date referred
1	Urban Studies and Planning MIT	<a href="https://ocw.mit.edu/courses/urban-studies-and-planning/">https://ocw.mit.edu/courses/urban-studies-and-planning/</a>	Online	15-06-2020
2	Sustainable Urban Development, TU Delft	<a href="https://online-learning.tudelft.nl/courses/sustainable-urban-development-discover-advanced-metropolitan-solutions/">https://online-learning.tudelft.nl/courses/sustainable-urban-development-discover-advanced-metropolitan-solutions/</a>	Online	15-06-2020

##### Journals

Sr. N	Name of Journal	Reference Link	Volume/pp/ Impact Factor	Date of Publication	Date referred
1	Environmental and Planning Law Journal (EPLJ)	<a href="http://sites.thomsonreuters.com.au/journals/category/environmental-and-planning-law-journal/">http://sites.thomsonreuters.com.au/journals/category/environmental-and-planning-law-journal/</a>	Vol 37	June 1 2020	15-06-2020
2	International Journal for Sustainable Urban Development	<a href="https://www.tandfonline.com/toc/tjue20/current">https://www.tandfonline.com/toc/tjue20/current</a>	Volume 12	May 2020	15-06-2020



**A.SUBJECT OBJECTIVES:**

The thrust of the Planning studio will be on city-based study focusing on planning and design. The object is to collect, access and analyze the information required for the study. To understand the characteristics of the city for the development of Sustainable development Plan

**B.COURSE OUTCOME:**

**CO1** Illustrate the real site conditions in an urban area, learn survey documentation techniques, assessing needs and programming for planning intervention.

**CO2** Apply different methodological approaches, technologies and foundation theories of urban planning

**CO3** Demonstrate the forces that shape and develop cities, understand the form, structure and development process of cities

**CO4** Develop general theoretical models, analytical approaches to urban planning and contexts, technical knowledge's, stakeholder interests and ethical frameworks

**CO5** Develop the skills necessary for the effective practice of planning, including its purpose, schemes, methods and policy framework that envision future change, elements of plans, adoption, administration, and implementation of plans.

**C.DETAILED SYLLABUS**

Defining characteristics of identified areas

Case study and literature review of planning concepts and norms for the selected area/special area

Selection of site and collection data (field trip of 2 weeks duration)

Data analysis and presentation

Outline framework of development – sectoral and spatial

Implementation framework – capital investment and funding methods

Financial feasibility

Governance and management aspects.

**Assignment 1****Geo Informatics Laboratory Training**

The laboratory training will be conducted in accordance with the studio exercise. Introduction to Geo-Informatics, Introduction to remote sensing –aerial and satellite ;Introduction to GIS ,spatial data and attributes data; satellite images as input to GIS; collection and presentation to base line information.

**Assignment 2****Development Plan**

The studio exercise focuses on the planning ,development and design aspect ( in line with the other core and elective courses offered in the semester).The exercise pertains to large cities and emerging metropolitan cities and ranges from preparation of sustainable development plans to sector specific themes pertaining to tourism.SEZ s, etc. The



studio exercise enables students to develop an approach/framework for the task ;it is field based as a database in generated that is analyzed and the plan and strategies are formulated.

Initial studies involve understanding of the exercise through theories , studies of similar case studies, awareness of relevant norms and standards through extensive literature research. Students are required to prepare a comprehensive list of required data and identify probable sources before making a field visit to the case study town/city. Students are encouraged to translate learning from core and elective subjects to the studio exercise. The introduction of GIS in the studio enables them to apply it in the studio exercise. Students are expected to analyze the data collected and come out with proposals and recommendations for planned development of the city. The entire exercise is also documented in the form of technical report.

The second exercise is a short and intensive exercise of one month duration. It pertains to tropical issues that is property tax reforms ,informal sector, development of railway land etc. The study is based on primary surveys and students are expected to analyze the information and arrive at the recommendation.

#### D.MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:

MCQs / Quizes / Google Form

Seminar presentations (Student works open for all) / Multimedia presentations/ PPT's

Report writing / written assignment/ Google classroom.

Essays/ / Models based on individual exercises.

#### E.RECOMMENDED STUDY MATERIAL:

Sr. N	Reference Book	Author	Edition	Publication
1	An introduction to social research, quantitative and qualitative approaches	Punch, Keith	2005	Sage
2	Basics of social research qualitative and quantitative approaches	Neuinan, William	2007	Pearson, Allen & Bacon
3	Social research methods	Bryman ,Allan	2008	Oxford University press
4	Statistical methods for the social sciences	Finlay ,B.	2009	Pearson Publisher University of Florida, US

#### F.RECOMMENDED ONLINE STUDY MATERIAL:

##### (i) (i) MOOCS

Sr. N	MOOCs Platform/ Journal	Reference / Link	Mode/	Date referred
1	Sustainable Urban Land Use Planning World Bank	<a href="https://olc.worldbank.org/content/sustainable-urban-land-use-planning-self-paced">https://olc.worldbank.org/content/sustainable-urban-land-use-planning-self-paced</a>	Online	15-06-2020

##### (ii) Journals

Sr. N	Name of Journal	Reference Link	Volume/pp/ Impact Factor	Date of Publication	Date referred
1	ITPI	<a href="http://www.itpi.org.in/journals">http://www.itpi.org.in/journals</a>	Vol 32	May 2018	15-06-2020



**A.SUBJECT OBJECTIVES:**

The objective of the course Advanced Planning Techniques is to introduce techniques used for surveying at various stages from preliminary to advanced. Objective is to learn GIS Mapping .The course includes analytical planning techniques, report writing and presentation.

**B.COURSE OUTCOME:**

**CO1** Interpret the various survey & sampling techniques used in urban planning.

**CO2** Apply concept of GIS mapping on master plans

**CO3** Analyze the research design approaches and developing a method for research

**CO4** Appraise the techniques of data tabulation, interpretation and representation in urban planning

**CO5** Create an GIS based analysis using tools and techniques and representing them.

**C.OUTLINE OF THE SUBJECT**

Unit	Title of the unit	Time Required for the Unit (Hours)
1	Survey Techniques	4
2	Research Design and implementation	6
3	Research design and implementation	6
4	Analytical planning techniques, report writing and presentation.	4
5	Report writing and presentation.	4

**D.DETAILED SYLLABUS**

Module	Contents
1	<b>Survey Techniques</b> Database for physical surveys (including land use / building use/density/building age etc.) and socio economic surveys, questionnaire formulation, sampling and survey techniques etc. Land use classification/coding.
2	<b>Research design and implementation</b> Approaches in research, developing a method for research; Questionnaire Design, Types of data, sampling methods; developing aims, objectives, scope, limitations; and literature research – using library, accessing the Internet
3	<b>GIS Mapping</b> Coordinate system, Georeferencing and geo-coding; GIS data processing (Digitization, topology building and metadata creation), Data structures and modeling, GIS analysis (Buffer, proximity and overlay), Decision making through GIS, Information systems (Land Information system, Urban Information system for various activity sectors).
4	<b>Analytical techniques</b> Data tabulation; interpretation of information; graphical presentation of data ;spatial representation of data;
5	<b>Report writing and presentation.</b> Types of reports with specific focus on technical report writing; Organizing the report, structure chapter organization, Writing the report (analytical findings); Referencing in text, use of software in referencing

**E.MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:**

MCQs / Quizzes / Google Form

Seminar presentations (Student works open for all) / Multimedia presentations/ PPT's

Report writing / written assignment/ Google classroom.

Essays/ / Models based on individual exercises.



**F.RECOMMENDED STUDY MATERIAL:**

Sr. N	Reference Book	Author	Edition	Publication
1	Survey Methodology	Groves R.M.Fowler	2009	John wiley & Sons
2	Urban Planning and Development,Application of GIS	Easa S.ChanY.(ED)	2000	American society of civil engineers
3	Research Design	John W.Creswel	2003	Sage Publicationn,California
4	Writing the winning thesis,	Glatthorn A.A & Joyner R.L.	2005	Corwin Press, California

**G.RECOMMENDED ONLINE STUDY MATERIAL:****(i) (i) MOOCS**

Sr. N	MOOCs Platform/ Journal	Reference / Link	Mode/	Date referred
1	MIT OPEN COURSEWARE	<a href="https://ocw.mit.edu/courses/urban-studies-and-planning/">https://ocw.mit.edu/courses/urban-studies-and-planning/</a>	Online	15-06-2020

**Journals**

Sr. N	Name of Journal	Reference Link	Volume/pp/ Impact Factor	Date of Publication	Date referred
1	Journal of the American Institute of Planners	<a href="https://www.tandfonline.com/doi/abs/10.1080/01944367308977650">https://www.tandfonline.com/doi/abs/10.1080/01944367308977650</a>	Issue 2	26 NOV 2017	15-06-2020



**A.SUBJECT OBJECTIVES:**

The objective of the course on Project Planning and Management is to train the students in managing a project right from its conception to evaluation. The organization of the course has been so designed that it graduates from concept to application on all aspects of project management Besides imparting the application techniques relevant for the concerned topic, students would also be made familiar with Microsoft Project in performing simple project management tasks

**B.COURSE OUTCOME:**

**CO1** Infer the definition & concepts of project management and project life cycle

**CO2** Apply project appraisal concept using survey methods on a urban project.

**CO3** Analyze project planning & scheduling system for an urban project using various tools & techniques

**CO4** Appraise the project financing and assessment for an urban scale project

**CO5** Appraise the project monitoring and decision making criteria using principles on an urban scale project.

**C.OUTLINE OF THE SUBJECT**

Unit	Title of the unit	Time Required for the Unit (Hours)
1	Importance of Project Management	4
2	Project Appraisal	6
3	Project Planning and Scheduling	6
4	Project Financing	4
5	Project Monitoring and Evaluation	4

**D.DETAILED SYLLABUS**

Module	Contents
1	<b>Importance of Project Management</b> Definition of Project , Project Management – Definition and its importance; Stages of Project Life Cycle; Causes of Project Delay; Role of Project Manager; Attributes of a Successful Project Management..
2	<b>Project Appraisal</b> Introduction to Project Appraisal - Types of Feasibility, Financial and Economic Appraisals, Project Financial Appraisal Techniques; Market Analysis - survey methods, market characterization, demand forecasting; Technical analysis- materials, equipment, factors of production availability, implementation schedule, suitability of the plans, layout and design; supporting infrastructure requirements, capital budgeting, estimation of casting of components; social cost benefit analysis.
3	<b>Project Planning and Scheduling</b> Introduction to Project Planning- Process, Investment Phase; Project Work (Work Breakdown Structure), Manpower and Organization, Project Finance, Information System; Process of Project Formulation and constraints; Breakeven Analysis; Sensitivity Analysis; Project Budgeting; Project Scheduling - definition and steps; Network techniques and activity on Arc/Node; Forward Pass and Backward Pass; Critical Path and Slack; PERT; concept of Gantt Chart
4	<b>Project Financing</b>



	Project financing need assessment; sources of funds; disposition of funds, planning for project financing, Various financing models (Public-private Partnership etc.)
5	<b>Project Monitoring and Evaluation</b>
	Project Monitoring and criteria for decision making; Parameters and Tools of Control; Use of Network Analysis in Project Monitoring; Reporting and Corrective Actions; Resource Management and Project Reporting. Project Evaluation- Methods, tools, time frame and results; Project Cash Flows; Principles of Cash Flow Estimation; Project Benefits; Financial Closure, Presentation of evaluation findings.

#### E.MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:

MCQs / Quizzes / Google Form

Seminar presentations (Student works open for all) / Multimedia presentations/ PPT's

Report writing / written assignment/ Google classroom.

Essays/ / Models based on individual exercises.

#### F.RECOMMENDED STUDY MATERIAL:

Sr. N	Reference Book	Author	Edition	Publication
1	Construction Project Management : Planning, Scheduling and Controlling,	K.K. Chitkara,		Tata Mc Graw Hill
2	Project Management, Perspective	Clifford F Gray et all,		Tata Mc Graw Hill
3	Projects: Planning, Analysis, Selection and Review,	Prasanna Chandra,		Tata Mc Graw Hill
4	Project Planning, Scheduling and Control,	James P Lewis,		Tata McGraw-Hill Publishing Co. Ltd.

#### G.RECOMMENDED ONLINE STUDY MATERIAL:

##### (i) (i) MOOCS

Sr. N	MOOCs Platform/ Journal	Reference / Link	Mode/	Date referred
1	Coursera	<a href="https://www.coursera.org/courses?query=project%20management">https://www.coursera.org/courses?query=project%20management</a>	Online	15-06-2020

##### (ii) Journals

Sr. N	Name of Journal	Reference Link	Volume/pp/ Impact Factor	Date of Publication	Date referred
1	International Journal of Project Management	<a href="https://www.journals.elsevier.com/international-journal-of-project-management">https://www.journals.elsevier.com/international-journal-of-project-management</a>	Volume 38 Issue 2	2020	15-06-2020

**A.SUBJECT OBJECTIVES:**

The objective of this course is to initiate the students to a discreet understanding of the importance of sustainable planning and development. The students get aware that how sustainable development helps in saving the national budget ,fulfills the need of people, conserves natural resources help in coordination between the natural resources and people and conserves natural resources for future generation. The syllabus also make student aware of various concepts and parameters related to sustainable planning .The link between the climate change and sustainable development and how it effects globally will be studies under the syllabus.

**B.COURSE OUTCOME:**

**CO1** Interpret Sustainable development concepts and various initiatives by organizations.

**CO2** Apply sustainable planning principles for integrating diverse communities

**CO3** Analyse ecological planning principles and various models using case studies

**CO4** Assess the climate change and it's effect on nature

**CO5** Design environment management plan for an urban area by strategizing resources.

**C.OUTLINE OF THE SUBJECT**

Unit	Title of the unit	Time Required for the Unit (Hours)
1	Introduction to Sustainable Development	6
2	Principle of Sustainable Planning	4
3	Ecological Principles in Planning	4
4	Climate Change and its Impact	4
5	Urban Environmental Management, Low Carbon Urban Development	6

**D.DETAILED SYLLABUS**

Module	Contents
1	<b>Introduction to Sustainable Development</b> Sustainable Development- Definitions, Concepts and Parameters; Eco-City Approach; Kyoto Protocol, Intergovernmental Panel on Climate Change (IPCC), United Nations Framework Convention on Climate Change; Indian Network of Climate Change Assessment, Global Environment Facility, and Clean Development Mechanism; UNHABITAT policies, Sustainable Development Goals, New Urban Agenda, Sustainable Cities Programme (UNEP and UN-Habitat), Localizing Agenda 21 (UN-Habitat)
2	<b>Principle of Sustainable Planning</b> Concept of sustainable planning, Three pillars of sustainability and its implication in planning process; Environmental preservation; commerce and livability; Walkability and Connectivity; Integration of diverse community features; Strong sense of place.
3	<b>Ecological Principles in Planning</b> Natural drainage and water bodies; Application of Ecological Principles in Sustainability; Carrying Capacity Based Planning- Concept, Parameters and Indicator Measures; Models and Case Studies in Urban and Regional Development

<b>4</b>	<b>Climate Change and its Impact</b>
	Basic concepts and definitions of Climate Change; Urban Heat Islands; Climatic Change and Human History; Impacts of Climate Change; Climate as Forcing Variable, Location Attributes, Sensitivity and Vulnerability of Different Sectors; Extreme events and their effects
<b>5</b>	<b>Urban Environmental Management, Low Carbon Urban Development</b>
	Urban Environmental Management and Planning; Human activities and energy in Cities; Contribution to GHGs; Environmental Impact and Strategic Environmental Assessment for Urban Areas; Ecological Footprint Analysis of Cities; Sustainable Lifestyle Assessment. Low carbon urban development strategies- concept of 3-Rs: “Recycle-Reuse and Recovery”; Low carbon transport modes and mobility options; Land Capability and Suitability Analysis; Compact City Concept; Use of Non-Conventional Energy Sources; Urban Water Treatment, Recycling and Harvesting; Pollution Control Measures for Industrial Wastes, Hazardous Wastes, Biomedical Wastes, Domestic Waste Water, Air Pollutants and Noise.

#### E.MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:

MCQs / Quizzes / Google Form

Seminar presentations (Student works open for all) / Multimedia presentations/ PPT’s

Report writing / written assignment/ Google classroom.

Essays/ / Models based on individual exercises.

#### F.RECOMMENDED STUDY MATERIAL:

Sr. N	Reference Book	Author	Edition	Publication
1	Eco-City Planning: Policies, Practice and Design,	Tai-Chee Wong and Belinda Yuen,		Springer
2	AITP Reader on Ecology & Resource Development,	AITP New Delhi		AITP New Delhi
3	Eco-City Planning: Policies, Practice and Design,	Tai-Chee Wong and Belinda Yuen,		Springer
4	AITP Reader on Ecology & Resource Development,	AITP New Delhi		AITP New Delhi

#### G.RECOMMENDED ONLINE STUDY MATERIAL:

##### (i) (i) MOOCS

Sr. N	MOOCs Platform/ Journal	Reference / Link	Mode/	Date referred
1	Coursera	<a href="https://www.coursera.org/learn/sustainable-development">https://www.coursera.org/learn/sustainable-development</a>	Online	15-06-2020

##### (ii) Journals

Sr. N	Name of Journal	Reference Link	Volume/pp/ Impact Factor	Date of Publication	Date referred
1	Sustainable Development Goals	<a href="https://sustainabledevelopment.un.org/resources/publications">https://sustainabledevelopment.un.org/resources/publications</a>	Volume 10	May 2019	15-06-2020





## Masters of Planning (M. Plan.)



### Third Semester Detailed Syllabus



**A.SUBJECT OBJECTIVES:**

The primary purpose of this course is to apprise the students of the local governance framework at sub provincial level and resource mapping of local governments with special emphasis on municipal governments in our country. The course intends to acquaint the students with the governance structure and fiscal and financial background of the local governments and tools and techniques to strengthen them. The course would include Constitutional Provision for Local Finance, Municipal Finance, Innovations in Local Resource mobilisation and Local Government fiscal regime..

**B.COURSE OUTCOME:**

**CO1** Illustrate the basics of Development Management and its Role of management in developing economy

**CO2** Identify the Land Economics and Real Estate Development, concepts of Urban Redevelopment

**CO3** Inspect the various Urban Governance, Institutional and Organizational framework

**CO4** Appraise the Urban Local Governance and its Reforms

**CO5** Appraise the Participatory Process in Urban Governance

**C.OUTLINE OF THE SUBJECT**

Unit	Title of the unit	Time Required for the Unit (Hours)
1	Introduction to Development Management	4
2	Land Economics and Real Estate Development, Urban Redevelopment	4
3	Urban Redevelopment	4
4	Urban Governance, Institutions and Organizations	6
5	Urban Local Governance and its Reforms	6

**D.DETAILED SYLLABUS**

Module	Contents
1	<b>Introduction to Development Management</b>
	Definition, objectives and scope of management; Role of management in developing economy; Decision making process and corporate activity in urban development; Application of management techniques in urban planning and development.
2	<b>Land Economics and Real Estate Development, Urban Redevelopment</b>
	Economic concepts of land, land pricing/ valuation; economic principles of land use; demand forecasting for land use: factors affecting land supply and demand; land development methods, supply management, Demand side management; real estate markets, type of property development and its impact on supply and demand, method of development, environmental considerations.
3	<b>Urban Redevelopment</b>
	Strategies and evaluation of redevelopment; role of public sector agencies in redevelopment; Area based redevelopment Initiatives; Property led redevelopment policies; Investment and Funding of Urban Redevelopment

	Schemes; Role of private sector; Development Potential and Pricing; Plot reconstitution; Renewal through Housing and Mixed Use Development; Community Participation
<b>4</b>	<b>Urban Governance, Institutions and Organizations</b>
	Urban Governance- Definition, concepts and components; hierarchy and structure, form of governance Institutional and organizational framework, existing institutional and organizational setting for urban management in India; distribution of responsibilities ; special purpose vehicles (SPV's) in the urban sector ; significance of organizational framework; Difference between institutions and organizations;
<b>5</b>	<b>Urban Local Governance and its Reforms</b>
	Urban local governance- type, organization, power , functions, resource, state supervision control and their working; improvement trust- organizations, scope of their powers and functions and their working; City development authorities: organizations, scope of their power and functions, resources, and their working; administrative reforms in local governance; Organisational Restructuring of Local Governments; capacity building; NGO's, Participatory Process in Urban Governance.

#### E.MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:

MCQs / Quizes / Google Form

Seminar presentations (Student works open for all) / Multimedia presentations/ PPT's

Report writing / written assignment/ Google classroom.

Essays/ / Models based on individual exercises.

#### F.RECOMMENDED STUDY MATERIAL:

Sr. N	Reference Book	Author	Edition	Publication
1	India: The Challenges of Urban Governance,	O.P. Mathur,		National Institute of Public Finance and Policy, New Delhi
2	Urban Governance and Management: Indian Initiative,	P.S.N. Rao,		Kanishka Publishers
3	People's Participation in Urban Governance,	K.C. Sivaramkrishnan,		CSS, New Delhi
4	Local Governance in India	Niraja Gopal et all.,		Oxford University Press

#### G.RECOMMENDED ONLINE STUDY MATERIAL:

##### (i) (i) MOOCS

Sr. N	MOOCs Platform/ Journal	Reference / Link	Mode/	Date referred
1	Urban governance and Development Management (UGDM)/.Class Central	<a href="https://www.classcentral.com/course/swayam-urban-governance-and-development-management-ugdm-12887">https://www.classcentral.com/course/swayam-urban-governance-and-development-management-ugdm-12887</a>	Online	15-06-2020

##### (ii) Journals

Sr. N	Name of Journal	Reference Link	Volume/pp/ Impact Factor	Date of Publication	Date referred
1	Journal of Urban Affairs	<a href="https://www.tandfonline.com/doi/full/10.1080/07352166.2016.1271614">https://www.tandfonline.com/doi/full/10.1080/07352166.2016.1271614</a>	Volume 2019	2019	15-06-2020



**A.SUBJECT OBJECTIVES:**

To expose the students to the profession of planning and foster links with the industry so as to develop an understanding of professional nature of various organizations involved in the planning profession. The student is required to undertake summer training after 2 semesters of course work in any government, private or research organization undertaking urban and regional planning works. The practical training will commence during the summer break between second and third semester.

**B.COURSE OUTCOME:**

**CO1** Illustrate the basics of policy and legislation pertaining to urban development.

**CO2** Identify and understanding the laws pertaining to urban development.

**CO3** Inspect the Planning Legislation and Policy Formulation and Appraisal

**CO4** Infer the professional nature of various organizations involved in the planning profession

**CO5** Apply concept of Reporting, review, monitoring and evaluation; Dissemination and mainstreaming of project learning in the process of implementation

**C.OUTLINE OF THE SUBJECT**

Unit	Title of the unit	Time Required for the Unit (Hours)
1	Introduction	4
2	Understanding of Law	4
3	Planning Legislation and Policy Formulation and Appraisal	4
4	Professional Practice	6
5	Project Formulation and Implementation	6

**D.DETAILED SYLLABUS**

Module	Contents
1	<b>Introduction</b>
	Understanding the Interface between policy and legislation pertaining to urban development.
2	<b>Understanding of Law</b>
	Concepts, sources, terminologies, significance of law and its relationship to Urban Planning benefits of statutory backing for schemes - eminent domain and police powers; Indian Constitution: concept and contents; 73rd and 74th Constitution Amendment Act, provision regarding property rights.
3	<b>Planning Legislation and Policy Formulation and Appraisal</b>
	Evolution; An over view of legal tools connected with Urban Planning and Development, Town and Country Planning Act, Improvement Trust Act, Urban Planning and Development Authorities Act – objectives, contents, procedures for preparation and implementation of Regional Plans, Master Plans and Town Planning Schemes. Various Acts related to urban governance, planning and development organizations, land resources, environment protection, and public participation in statutory planning process; Approaches of formulation of policies, appraisal of policies.
4	<b>Professional Practice</b>

	Aims and objectives of professional Institutes, sister bodies, professional role and responsibility of planning consultants, professional ethics, code of conduct and scale of professional charges; Formulation of project proposal and outlines, consultancy agreements and contracts, managerial aspects; Role in inter disciplinary groups: Appreciation of the decision-making processes and the process in relation to varied consultancy assignments of planning., Project context; Project rationale and objectives; Bid documents, Tenders, Contracts ;Implementation approaches and methods, Work plan, Budget, Assumptions, risks and sustainability; Implementation arrangements; Organizational structure and stakeholder involvement mechanisms; Reporting, review, monitoring and evaluation; Dissemination and mainstreaming of project learning
<b>5</b>	<b>Project Formulation and Implementation</b>
	Introduction to Project Planning- Process, Investment Phase; Project Work (Work Breakdown Structure), Manpower and Organization, Project Finance, Information System; Process of Project Formulation and constraints; Breakeven Analysis; Sensitivity Analysis; Project Budgeting; Project Scheduling - definition and steps;; concept of Gantt Chart, Project financing need assessment; sources of funds; disposition of funds, planning for project Financing. Project Monitoring and criteria for decision making; Parameters and Tools of Control; Use of Network Analysis in Project Monitoring; Reporting and Corrective Actions; Resource Management and Project Reporting. Project Evaluation- Methods, tools, time frame and results; Project Cash Flows; Principles of Cash Flow Estimation; Project Benefits; Financial Closure, Presentation of evaluation findings.

#### E.MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:

MCQs / Quizes / Google Form

Seminar presentations (Student works open for all) / Multimedia presentations/ PPT's

Report writing / written assignment/ Google classroom.

Essays/ / Models based on individual exercises.

#### F.RECOMMENDED STUDY MATERIAL:

Sr. N	Reference Book	Author	Edition	Publication
1	India: The Challenges of Urban Governance,	O.P. Mathur,		National Institute of Public Finance and Policy, New Delhi
2	Urban Governance and Management: Indian Initiative,	P.S.N. Rao,		Kanishka Publishers
3	People's Participation in Urban Governance,	K.C. Sivaramkrishnan,		CSS, New Delhi
4	Local Governance in India	Niraja Gopal et all.,		Oxford University Press

#### G.RECOMMENDED ONLINE STUDY MATERIAL:

##### (iii) (i) MOOCS

Sr. N	MOOCS Platform/ Journal	Reference / Link	Mode/	Date referred
1	New MOOC: What do Architects and Urban Planners do?	<a href="https://www.wits.ac.za/news/latest-news/general-news/2020/2020-02/new-mooc-what-do-architects-and-urban-planners-do.html">https://www.wits.ac.za/news/latest-news/general-news/2020/2020-02/new-mooc-what-do-architects-and-urban-planners-do.html</a>	Online	15-06-2020

##### (iv) Journals

Sr. N	Name of Journal	Reference Link	Volume/pp/ Impact Factor	Date of Publication	Date referred
1	Policy Study Journal	<a href="https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1541-0072.1980.tb00970.x">https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1541-0072.1980.tb00970.x</a>		December 2010	15-06-2020





**A.SUBJECT OBJECTIVES:**

The studio is designed to expose the students to issues of urban planning and equip them with knowledge and techniques to enable them to analyze urban situations and develop logical decision-making processes to address the complex overlays of conceptualization, implementation and finance.

**B.COURSE OUTCOME:**

**CO1** Interpret and understand the real site conditions in an urban area, learn survey and documentation techniques, assessing needs and programming for planning intervention.

**CO2** Apply different methodological approaches, technologies and foundation theories of urban planning

**CO3** Inspect the forces that shape and develop cities, understand the form, structure and development process of cities

**CO4** Appraise the general theoretical models, analytical approaches to urban planning and contexts, technical knowledge's, stakeholder interests and ethical frameworks

**CO5** Develop the skills necessary for the effective practice of planning, including its purpose, schemes, methods and policy framework that envision future change, elements of plans, adoption, administration, and implementation of plans

**C.DETAILED SYLLABUS**

The studio is designed to study one particular urban area and analyze its issues and develop spatial plans with thrust on critical sectors. It focuses on the preparation of integrated development plan for a selected urban area analyzing all aspects of physical planning including socio-economic factors and physical infrastructure and also formulation of methods of implementation and projectization. The course deliverables would be designed based on specific projects undertaken, keeping in mind the overall objective of the course.

Identification of an urban area

Identification and Formulation of Planning Objectives for the project

Survey of the study area. Data collection through primary and secondary surveys

Analyses and presentation of data and information

Review of Planning Objectives post data analysis; Redefining objectives

Planning for urban area and its region (structure plan / development plan) with emphasis on: Land use, transportation networks and Infrastructure networks

Preparation of Detailed Project Report (case specific)

Identification and Detailing of Action Area, Local Area plans or Project Plans (case specific)

Plan Implementation strategies: Stake holder participation, project funding options

Implementation strategies including urban governance and management issues

#### D.MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:

MCQs / Quizzes / Google Form

Seminar presentations (Student works open for all) / Multimedia presentations/ PPT's

Report writing / written assignment/ Google classroom.

Essays/ / Models based on individual exercises.

#### E.RECOMMENDED STUDY MATERIAL:

Sr. N	Reference Book	Author	Edition	Publication
1	Urban and Regional planning, a system approach	Mcl.oughlin, J. B.	1969	Faber and Faber. , London.
2	A reader in Planning Theory	Faludi, A.	1973	Pergamum Press, London
3	Urban and Regional Planning,	. Peter, G.H. Tewdwr-Jones, M.	2011	Rutledge, Lonoo. Tewdwr-Jones, M. Fifth Editor.
4	Cities of Tomorrow: An Intellectual History of Urban Planning and Design in the Twentieth Century,	Hall Peter	2001	Blackwell, London

#### F.RECOMMENDED ONLINE STUDY MATERIAL:

##### (i) (i) MOOCS

Sr. N	MOOCs Platform/ Journal	Reference / Link	Mode/	Date referred
1	Sustainable Urban Land Use Planning World Bank	<a href="https://olc.worldbank.org/content/sustainable-urban-land-use-planning-self-paced">https://olc.worldbank.org/content/sustainable-urban-land-use-planning-self-paced</a>	Online	15-06-2020

##### (i) Journals

Sr. N	Name of Journal	Reference Link	Volume/pp/ Impact Factor	Date of Publication	Date referred
1	ITPI	<a href="http://www.itpi.org.in/journals">http://www.itpi.org.in/journals</a>	Vol 32	May 2018	15-06-2020



**A.SUBJECT OBJECTIVES:**

Students are required to undertake Practical Training in III Semester for 45 working days. They are to be trained under the supervision of practicing planners / Planning firms to enhance their skills for planning practice. After completion of training, the student is required to submit the practical training reports containing the works carried out during the course of training for seminar and subsequent evaluation

**B.COURSE OUTCOME:**

**CO1** Expose student to urban planning practice

**CO2** Develop the work ethics

**CO3** Apply the knowledge gained for construction and its execution

**CO4** Discover and explore the professional field work and its culture

**CO5** Compose a training Portfolio



**A.SUBJECT OBJECTIVES:**

The objective of this course is to initiate students with the issues of various types of natural and man-made Disasters and impart techniques of mitigation and management.

**B.COURSE OUTCOME**

**CO1** Infer the basics of urbanization and its impact. Also relate the associated risks.

**CO2** Illustrate the urban risks and the climate change

**CO3** Analyze the various Methods and approaches to urban risk assessment;

**CO4** Appraise the Disaster Types and Impacts, Disaster Vulnerability Preparedness.

**CO5** Elaborate the Disaster Mitigation and Management Framework and also understand the various Disaster Management Policies and Act

**C.OUTLINE OF THE SUBJECT**

Unit	Title of the unit	Time Required for the Unit (Hours)
1	Urbanization and Associated Risks	4
2	Urban Risks and Climate Change	4
3	Urban Risks Assessment	4
4	Disaster Types and Impacts, Disaster Vulnerability Preparedness	6
5	Disaster Mitigation and Management	6

**D.DETAILED SYLLABUS**

Module	Contents
<b>1</b>	<b>Urbanization and Associated Risks</b>
	Urbanization patters, resource consumption and environment versus economy and their impacts; Resource Depletion and Pollution; Environmental Concerns and Challenges , impact of human activity on environment; Inter-relation with urban risks; Causative factors; role of land-use planning, zoning and development control regulations in managing urban risks
<b>2</b>	<b>Urban Risks and Climate Change</b>
	Urban Risks- Definitions, Types and nature, Magnitude; Hazard, vulnerability and risks ; Climate Change- Risks and Resilience in cities
<b>3</b>	<b>Urban Risks Assessment</b>
	Methods and approaches to urban risk assessment; hazard impact assessment, institutional assessment; socioeconomic assessment, Risk Mitigation and Risk Transfer; Causes and risk mitigation strategies for industrial, chemical and biological disasters
<b>4</b>	<b>Disaster Types and Impacts, Disaster Vulnerability Preparedness</b>
	Disasters- Definitions, types and examples of disasters across the World; Natural disasters and manmade Calamities, Degree of Damage, Frequency of Occurrences and Other Historical Facts; Classification of Disasters in India; Impacts of disasters, land use planning, building bye laws and disaster safe construction practices for different types of disasters. Identification of Disaster prone areas; Forecasting and early warning systems for various types of disasters; communication and information technology in disaster management; Disaster Vulnerability Mapping; Disaster Preparedness, Response and Post Disaster Recovery and Rehabilitation

	Measures; Disaster management principles; local, district and State disaster management groups , structures and functions; prevention and preparedness activities; response and recovery activities; disaster declaration arrangements
<b>5</b>	<b>Disaster Mitigation and Management</b>
	Kyoto Framework of Disaster Mitigation and Management; Disaster Management Policies and Act – National and States; Select Global Practices. Disaster Coordination Centers – functions, logistics, operations and planning; Developing and Assessing Disaster Management Plans; Community engagement; Standard Emergency Warning Signal (SEWS); and the Emergency Alert System, Basic Principles of Incident Command System – Facilities, Resource Management, Event Planning Process, Emergency response management principles and concepts; ICT in emergency responses and management;

**A. MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:**

MCQs / Quizzes / Google Form

Seminar presentations (Student works open for all) / Multimedia presentations/ PPT's

Report writing / written assignment/ Google classroom.

Essays/ / Models based on individual exercises.

**F.RECOMMENDED STUDY MATERIAL:**

Sr. N	Reference Book	Author	Edition	Publication
1	Disaster Management Handbook,	Pinkowski J.,		CRC Press
2	Earthquake Architecture: New Construction Techniques for Earthquake Disaster Prevention,	Garcia, Belen,		New York, Loft Publications
3	Environmental Hazards : Assessing Risk and Reducing Disaster,	Smith, K., David P., London,		Routledge Publications
4	Handbook of Disaster Research,	Rodriguez, H., ed., Quarantelli, E., ed., Dynes, R.R.,		ed., New York, Springer Science

**G.RECOMMENDED ONLINE STUDY MATERIAL:**

(i) (i) MOOCS

Sr. N	MOOCs Platform/ Journal	Reference / Link	Mode/	Date referred
1	Urban Disaster Risk Mitigation & Climate Resilient Development/ Swayam	<a href="https://www.classcentral.com/course/swayam-urban-disaster-risk-mitigation-climate-resilient-development-14349">https://www.classcentral.com/course/swayam-urban-disaster-risk-mitigation-climate-resilient-development-14349</a>	Online	15-06-2020

**A.SUBJECT OBJECTIVES:**

The basic objective of this course is to introduce to the students the concepts and strategies for Community planning and development.

**B.COURSE OUTCOME:**

**CO1** Interpret the Overview of communities , interpret the activity patterns , locational patterns; socio cultural aspects; community needs and spatial requirements ; socio-economic implication,

**CO2** Identify the Community planning- Principles, approaches and key considerations; spatial-socio-economic linkages.

**CO3** Inspect the various Participatory Learning (PLA) tools used in Mapping local context and problem identification, Focus Group Discussions, Audit of communities and its facilities; rapid assessment of community needs and planning intervention

**CO4** Analyze the Role of Community Participation

**CO5** Appraise the Process of People's Participation by analyzing the Case Studies on Community Participation

**C.OUTLINE OF THE SUBJECT**

Unit	Title of the unit	Time Required for the Unit (Hours)
1	Overview of Communities	4
2	Principles of Community Planning	4
3	Local Planning Tools and Techniques	4
4	Role of Community Participation	4
5	Process of People's Participation, Case Studies on Community Participation	8

**D.DETAILED SYLLABUS**

Module	Contents
1	<b>Overview of Communities</b> Overview of communities – definition, type, attributes , activity patterns , locational patterns; socio cultural aspects; community needs and spatial requirements ; socio-economic implication,
2	<b>Principles of Community Planning</b> Community planning- Principles, approaches and key considerations; spatial-socio-economic linkages; inclusion and quality of life; neighborhood planning ; local area planning
3	<b>Local Planning Tools and Techniques</b> Participatory Learning (PLA) tools: Mapping local context and problem identification, Focus Group Discussions, ; Audit of communities and its facilities; rapid assessment of community needs and planning intervention
4	<b>Role of Community Participation</b> Participatory process in housing and community development; Community participation- community involvement, community action; role of CBOs, NGOs, SHGs, etc.
5	<b>Process of People's Participation, Case Studies on Community Participation</b> Participatory approaches, Typology of participation, Key principles of applying participatory methods

and tools, Participatory attitudes and behavior, Teamwork skills in the context of participation, PLA/PID Tools, Participation as a process, Participatory Monitoring and Evaluation, Beneficiary Assessment, social assessment, stakeholder analysis, Detailed cases of community participation in areas of provision of housing/shelter, electricity, water supply, sanitation, solid waste disposal, transport , social infrastructure – health , education and cultural facilities; economic upliftment, resource mobilization; maintenance and management of community assets
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**E.MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:**

MCQs / Quizes / Google Form  
 Seminar presentations (Student works open for all) / Multimedia presentations/ PPT’s  
 Report writing / written assignment/ Google classroom.  
 Essays/ / Models based on individual exercises.

**F.RECOMMENDED STUDY MATERIAL:**

Sr. N	Reference Book	Author	Edition	Publication
1	Location, Transport and Land-Use: Modelling Spatial-Temporal Information,	Yupo Chan		Springer
2	Integrated Land Use and Transport Modelling,	Tomas De La Barra		Cambridge University Press.
3	Transportation Engineering and Planning,	C. S Papacostas, P. D Prevedouros		PHI Learning
4	Public Transportation Improvement,	Semiati Idris,		Lambert Academic Publishing

**G.RECOMMENDED ONLINE STUDY MATERIAL:**

**(i) MOOCS**

Sr. N	MOOCs Platform/ Journal	Reference / Link	Mode/	Date referred
1	Community Planning & Participation/University of Queensland	<a href="https://my.uq.edu.au/programs-courses/course.html?course_code=PLAN3005">https://my.uq.edu.au/programs-courses/course.html?course_code=PLAN3005</a>	Online	15-06-2020

**(i) Journals**

Sr. N	Name of Journal	Reference Link	Volume/pp/ Impact Factor	Date of Publication	Date referred
1	Community Planning Perspective and Its Role within the Social Policy of the Municipalities	mdpi.com/2076-0760/8/6/183/htm	Vol 1	2019	15-06-2020





## Masters of Planning (M.Plan.)



### Fourth Semester Detailed Syllabus





**A.SUBJECT OBJECTIVES:**

The basic objective of this course is to introduce to the students the concepts of Urban Governance and finance related to urban development.

**B.COURSE OUTCOME:**

**CO1** Interpret the Overview of development finance , its concept and components,process.

**CO2** Identify the various state and municipal finances,

**CO3** Inspect the Investment planning and its process.

**CO4** Analyze the Role of Public private partnership (PPP)

**CO5** Appraise the innovative methods of financing urban development.

**A. OUTLINE OF THE SUBJECT: Governance & Finance**

Unit	Title of the unit	Time Required for the Unit (Hours)
1	Overview of Development Finance	2
2	State and Municipal Finance	4
3	Investment Planning and Appraisal	6
4	Public Private Partnership (PPP)	6
5	Innovative Methods of Financing Urban Development	6

Module	Contents
1	<b>Overview of Development Finance</b>
	Development Finance- approaches, concepts, components, process, credits rating; Role of Improvement Trusts, Development Authorities, SEZs and Special Purpose Vehicles(SPV) in Urban finance Management.
2	<b>State and Municipal Finance</b>
	Central Finance Commission (CFC) and State Finance Commission (SFC)- Constitution, Powers and Functions; Consolidated Fund (Central and State); Centrally Sponsored Schemes; Municipal Finance- Categorization of Municipal Sources of Revenue, Internal Vs. External Revenue, Capital Vs. Revenue Receipt; Municipal Finance Assessment Framework; Reforms in Municipal Finance- Unit Area Method in Property Tax Calculation, Rationalization of User Charges; Streamlining Municipal Tax Administration
3	<b>Investment Planning and Appraisal</b>
	Investment Planning- Process, components and investment needs; budgeting, finance investments in infrastructure and services; Manpower planning- performance appraisal, motivational aspects. Integrated reporting system, works standard oriented cost control, turnkey system, inventory cost control technique, unified status index technique.
4	<b>Public Private Partnership (PPP)</b>
	Concept , need, preconditions for Partnerships; Advantages of Collaboration, Methods of Promoting Participation, Regulations and Administrative Procedures; Role of Government as Partner, Regulator and Enforcer; Principles of PPP- Contractual Framework, Selection of Service Provider, Payment Mechanism, Monitoring and Evaluation, Risk and Revenue Sharing; Regulatory Authority for PPP; Model Contract Agreement.

<b>5</b>	<b>Innovative Methods of Financing Urban Development</b>
	Monetary Exaction- Betterment Levy, Impact Fee, External Development Charges and Vacant Land Development Tax; Land Exactions- TDR, Town Planning Scheme , Monetization of Underutilized Public Assets; Valorization Charges; External Finance- Debt Financing, PPP, Financial Intermediaries, Municipal Bond, Pooled Finance.

**C.MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:**

MCQs / Quizzes / Google Form

Seminar presentations (Student works open for all) / Multimedia presentations/ PPT's

Report writing / written assignment/ Google classroom.

Essays/ / Models based on individual exercises.

**D.RECOMMENDED STUDY MATERIAL:**

Sr. N	Reference Book	Author	Edition	Publication
1	Public Finance: Policy Issues for India,	Sudipto Mundle,		Oxford University Press
2	Municipal Finance in India – An Assessment,	P.K. Mohanty et all,		Reserve Bank of India
3	Fiscal Federalism in India	Vithal & Sastry,		Oxford University Press
4	Costs and Challenges of Local Urban Services:	O.P. Mathur et all.		Oxford University Press

**E.RECOMMENDED ONLINE STUDY MATERIAL:**

(i) (i) MOOCS

Sr. N	MOOCs Platform/ Journal	Reference / Link	Mode/	Date referred
1	Urban governance and Development Management (UGDM)/.Class Central	<a href="https://www.classcentral.com/course/swyam-urban-governance-and-development-management-ugdm-12887">https://www.classcentral.com/course/swyam-urban-governance-and-development-management-ugdm-12887</a>	Online	15-06-2020

(ii) Journals

Sr. N	Name of Journal	Reference Link	Volume/pp/ Impact Factor	Date of Publication	Date referred
1	Journal of Urban Affairs	<a href="https://www.tandfonline.com/doi/full/10.1080/07352166.2016.1271614">https://www.tandfonline.com/doi/full/10.1080/07352166.2016.1271614</a>	Volume 2019	2019	15-06-2020



**A.SUBJECT OBJECTIVES:**

To develop independent critical thinking and design/research abilities and apply the knowledge gained, skills developed and professionalism inculcated over the last three semesters in an exercise of own interest and significant complexity. The students in this semester are expected to continue work on their research area finalized in previous semester and complete stages of data collection , data analysis , issues identification, impact assessment and formulation of strategies/proposals before completing their thesis and defending their thesis at viva voce examination.

**B.COURSE OUTCOME:**

**CO1** Infer the process of documentation, analyses and synthesis related to his/her specific topic and related area of work.

**CO2** Apply concept of relevant case studies and literature relevant to the planning thesis

**CO3** Inspect the research design approaches and developing a method for research

**CO4** Appraise the techniques of data tabulation, interpretation and representation in urban planning

**CO5** Design a urban planning project and develop the skills related to data collection , data analysis , issues identification, impact assessment and formulation of strategies/proposals

**B.DETAILED SYLLABUS**

- The thesis project is to be undertaken independently by each student on a topic of his/her choice related to urban planning, selected and approved by the faculty during the previous semester as part of course requirements of the subject seminar
- As part of the studio requirements, the student is expected to go through a process of documentation, analyses and synthesis related to his/her specific topic and related area of work.
- Initial stages would include study of relevant case studies and literature relevant to the topic, on the basis of which the space program would be determined.
- Alternative designs arrived at through an iterative process of prioritization and elimination would be developed in the next stage.
- Final stages of work would include detailed design of the best option selected. detailing would be largely dependent on the thrust and focus of the project selected and would vary from student to student.
- The student is required to work under the guidance of a supervisor allotted by the department and complete the requisite work in the course of the semester, ending in a viva-voce exam by a panel of examiners both external and internal.
- Progressive evaluation would be done by a panel of external and/or internal jurors during reviews held at intervals during the course of the semester.
- The student is required to defend his thesis through drawings, reports, study sheets, models and digital presentations and verbal communications in all the reviews and the final viva-voce

### C.MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:

MCQs / Quizes / Google Form

Seminar presentations (Student works open for all) / Multimedia presentations/ PPT's

Report writing / written assignment/ Google classroom.

Essays/ / Models based on individual exercises

### D.RECOMMENDED ONLINE STUDY MATERIAL:

#### (i) (i) MOOCS

Sr. N	MOOCs Platform/ Journal	Reference / Link	Mode/	Date referred
1	IGLUS/Coursera	<a href="https://iglus.org/innovative-governance-of-large-urban-systems-mooc/">https://iglus.org/innovative-governance-of-large-urban-systems-mooc/</a>	Online	15-06-2020



**A.SUBJECT OBJECTIVES:**

Urban renewal is critical to the recycling and revival of certain city areas, the objective of the course is to equip the students to deal with developments in existing cities. This course introduces students to basic concepts in urban renewal. The course provides an understanding of the principal academic discourse relating to processes of urban renewal and change, and a critical awareness of theory relating to the process or urban renewal, and its application to specific practice settings and questions.

**B.COURSE OUTCOME:**

**CO1** Interpret the importance of Inclusive development.

**CO2** Identify the role of stakeholders in inclusive urban development

**CO3** Analyzing the various principles of Inclusive city planning.

**CO4** Evaluating the different approaches and methods, of participatory planning,

**CO5** Discuss the management of inclusive cities.

**C.OUTLINE OF THE SUBJECT**

Unit	Title of the unit	Time Required for the Unit (Hours)
1	<b>Importance of Inclusive Development</b>	4
2	<b>Stakeholders in Inclusive Urban Development</b>	6
3	<b>Principle of Inclusive City Planning</b>	6
4	<b>Participatory Planning for Inclusive Development</b>	4
5	<b>Management of Inclusive Cities</b>	4

**D.DETAILED SYLLABUS**

Module	Contents
<b>1</b>	<b>Importance of Inclusive Development</b>
	Urban development patterns, inequities and need for Inclusive development, growth of informal sector ,Needs, access to shelter, services and livelihoods of informal sector ; Understanding inclusive growth concept, theories and components; essential dimensions of inclusive planning
<b>2</b>	<b>Stakeholders in Inclusive Urban Development</b>
	Disadvantaged groups –urban poor, informal sector, gender, children, elderly, disabled, displaced people; Causative factors, determinants, informal sector- location characteristics, functions, economic contributions, linkages with formal sector; impact of informal sector on urban development
<b>3</b>	<b>Principle of Inclusive City Planning</b>
	Inclusive city planning- Need, concept and pre-requisites, Affordable housing; resilient and sustainable urban form; social and economic development; key principles- Sustainability and Resilience, Accessibility, Diversity, Open Spaces, Compatibility, Incentives, Adaptability and Identity
<b>4</b>	<b>Participatory Planning for Inclusive Development</b>
	Importance of participatory planning for inclusive development; approaches and methods of participatory planning, role of stakeholders (including civil society organizations) , constraints, prerequisites

<b>5</b>	<b>Management of Inclusive Cities</b>
	Management of inclusive cities- need and approaches- Inclusive zoning, development and building regulations, slum improvement; related acts; five year plans, policies and programmes. Policies for inclusive city planning; Best practices of inclusive Planning in India and abroad-planning approach, procedures and impacts, inter-disciplinary policy issues ,public action and participation for guiding inclusive planning in cities.

**E.MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:**

MCQs / Quizzes / Google Form

Seminar presentations (Student works open for all) / Multimedia presentations/ PPT's

Report writing / written assignment/ Google classroom.

Essays/ / Models based on individual exercises.

**F.RECOMMENDED STUDY MATERIAL:**

Sr. N	Reference Book	Author	Edition	Publication
1	Urban Renewal: Theory and Practice,	Chris Coch, Macmillan.		UCL press, London.
2	Urban Planning and Development Process in Renewal,	D. Adams,		UCL press, London.
3	An Introduction to Urban Renewal,	Michael Gibson, Hutchinson.		JAI press.
4	Management of Regeneration,	Diamond and Little, Routledge, London.		UCL press, London.

**G.RECOMMENDED ONLINE STUDY MATERIAL:**

**(i) (i) MOOCS**

Sr. N	MOOCs Platform/ Journal	Reference / Link	Mode/	Date referred
1	The Best Moocs on Cities	<a href="http://www.makingofcities.org/journal/best-moocs-on-cities">http://www.makingofcities.org/journal/best-moocs-on-cities</a>	Online	15-06-2020

**(ii) Journals**

Sr. N	Name of Journal	Reference Link	Volume/pp/ Impact Factor	Date of Publication	Date referred
1	Journal of Urban Regeneration and Renewal	<a href="https://www.henrystewartpublications.com/jurr#:~:text=Journal%20of%20Urban%20Regeneration%20and%20Renewal%20is%20the%20essential%20peer,social%20regeneration%20of%20urban%20communities.">https://www.henrystewartpublications.com/jurr#:~:text=Journal%20of%20Urban%20Regeneration%20and%20Renewal%20is%20the%20essential%20peer,social%20regeneration%20of%20urban%20communities.</a>		April 2019	15-06-2020



**A.SUBJECT OBJECTIVES:**

The course comprises of two components of Urban Heritage and conservation.. The objective of this course is to acquaint student with the role of urban heritage and its conservation in Urban Planning and equip them with appropriate methods and techniques.

**B. COURSE OUTCOME:**

CO1 Infer the importance of Urban Heritage,its classification.

CO2 Apply the concept of Urban heritage conservation to the planning process.

CO3 Analyze the various principles of conservation and its management.

CO4 Appraise the Heritage and Tourism, Policies and Programmes, Legislation

CO5 Develop the Social / cultural / ecological / energy determinants of design

**C. OUTLINE OF THE SUBJECT**

Unit	Title of the unit	Time Required for the Unit (Hours)
1	<b>Introduction to Urban Heritage</b>	4
2	<b>Heritage Conservation</b>	4
3	<b>Heritage and Tourism, Policies and Programmes, Legislation</b>	4
4	<b>Design in Human Habitation</b>	6
5	<b>Principles of Conservation, Management of Urban Conservation Assets</b>	6

**D. DETAILED SYLLABUS**

Module	Contents
<b>1</b>	<b>Introduction to Urban Heritage</b>
	Typology / classification, inventories, mapping; Human habitation in historical context; Heritage as a motivating force in sustainable urban conservation and development,
<b>2</b>	<b>Heritage Conservation</b>
	Natural heritage conservation - typologies, policies for conservation, regulatory measures, community participation; Concept of Historic Urban Landscapes; Built heritage conservation - determinants of built form on heritage; Historic urban infrastructure and traditional water harvesting systems. Integration of historic monuments / areas / cores / urban systems in the developmental process and land use, regulatory measures and community involvement; Intangible cultural heritage and development: issues, conservation strategies. Preparation of conservation and heritage management plans.
<b>3</b>	<b>Principles of Conservation, Management of Urban Conservation Assets</b>
	Basic concepts of conservation values- overview and introduction; Principles for judging the conservation importance of sites, area and related typology; scope and basic technique of urban conservation; national policies and programmes. Legal and administrative aspects, archaeological acts/charters pertaining to conservation, development and conservation; case studies on management of urban conservation of sites/ area in India and abroad.

<b>4</b>	<b>Heritage and Tourism, Policies and Programmes, Legislation</b>
	Cultural and heritage based tourism - nature, potential and prospects, marketing aspects; Acts and laws recognizing conservation / regeneration; Heritage toolkit; Implications of 74th Constitution Amendment Act.
<b>5</b>	<b>Design in Human Habitation</b>
	Social / cultural / ecological / energy determinants of design; Imagibility of the city; Structure of urban spaces – location criteria of activities and urban uses; Urban Regeneration, renewal, rehabilitation, revitalization, reconstruction and redevelopment - concepts, interventions, processes, approaches and methods, tools.

**E. MODEL EXERCISE/ ASSIGNMENTS/ PROJECTS:**

MCQs / Quizzes / Google Form

Seminar presentations (Student works open for all) / Multimedia presentations/ PPT's

Report writing / written assignment/ Google classroom.

Essays/ / Models based on individual exercises.

**F. RECOMMENDED STUDY MATERIAL:**

Sr. N	Reference Book	Author	Edition	Publication
1	The Urban Design Reader,	Elizabeth Mcdonald,		Routledge, New York
2	Public Places Urban Spaces : Dimensions of Urban Design	Mathew Carmona, Steve Teisdell,		Architectural Press, London.
3	Urban Design: The Architecture of Towns & Cities,	Paul D. Spreiregen, R.E. Krieger Pub		Routledge, New York
4	My Idea of India,	Sunil Khilnani, Farrar Straus and Giroux.		Lambert Academic Publishing

**G. RECOMMENDED ONLINE STUDY MATERIAL:**

**(iii) MOOCS**

Sr. N	MOOCs Platform/ Journal	Reference / Link	Mode/	Date referred
1	Cultural Heritage and the City/Class Central	<a href="https://www.classcentral.com/course/cultural-heritage-cities-8833">https://www.classcentral.com/course/cultural-heritage-cities-8833</a>	Online	15-06-2020

**(iv) Journals**

Sr. N	Name of Journal	Reference Link	Volume/pp/ Impact Factor	Date of Publication	Date referred
1	Journal of Urban Design	<a href="https://www.tandfonline.com/toc/cjud/20/22/4?nav=toCList">https://www.tandfonline.com/toc/cjud/20/22/4?nav=toCList</a>	Volume 22	2017	15-06-2020

