

Course Title: Theory of Urban Form			
Course Code	2MAUD101	Scheme	2026-27
Type of Course	MAT/PCC	Semester	I
Teaching Hours/Week (L:T:P)	03Hours/Week	CIE Marks	50
Total Hours of Pedagogy per semester L /T/S/P/SL&TW:	42: 00 : 00 : 48 = 90	SEE Marks	50
Credits	03	Total Marks	100
Examination type (SEE)	TH	Exam Hours	03
Course outcome (Course Skill Set)			
At the end of the course, the student will be able to comprehend the study of Urban form, Processes, and Urban spaces in historical and theoretical terms.			
Module-1			
INTRODUCTION TO URBAN DESIGN AND URBAN FORM			
Urban design- (ideology/theory) and the various concerns (scope and objectives) of the discipline; components of urban design and their inter-dependencies. Urban form- morphology (significance of understanding Urban form and Urban Process). Determinants of urban form-natural and human-made determinants Teaching Learning Process: Introduction to the topic through lectures, readings, and discussions. Presentation of urban design case studies by faculty/students to understand the various scopes and objectives of urban design Number of Hours: 09			
Module-2			
STUDY OF URBAN FORM			
Comparison between the various perspectives of studying and analysing urban form- space; conservation, evolution, and the life of urban form.			
Urban space and form through history (overview):			
Western context: The Early Cities (Neolithic, classical antiquity), Medieval Towns, Renaissance and Baroque Planning, Form of modern city and early cities of capitalism (industrialization and influences City beautiful movement, City and Garden, Camilo Sitte); Modern Movement (Tony Garnier, Corbusier, F L Wright, Arturo Soria Y Mata, Antonio Sant 'Elia), post-World War II (Doxiades and Ekistics), Megastructure; Cities of sweat equity and highway; subsequent directions. Indian Context: The Early Cities, Mughal and Medieval Towns, Temple Cities, Colonial influences, post-independence, and modern cities (Chandigarh, Bhubaneshwar, Gandhinagar) and further developments. Teaching Learning Process: Introduction to the topic through lectures, readings, and discussions. Documentation and analysis of urban form (evolution, city at different scales, analysis of urban form determinants) through case studies from all or a few of the topics listed above/ Writing research paper/ Systematic on-site documentation of the physical urban form through measured drawings and mapped analysis of street networks, block structure, plot patterns, building typologies, density, edges, and public-private interfaces to understand spatial morphology and its determinants. Number of Hours:09			

Module-3

APPROACHES TO READING URBAN FORM AND SPACE (western, Islamic cities and influences)

City as patterns; diagrams; spaces and ideas (organic; grid; political-functional-secularist-socialist diagrams; grand manner; skyline; city edge; urban division; public spaces- various typologies including street and parks); subsequent direction and further developments.

Teaching Learning Process:

Introduction to the topic through lectures, readings, and discussions. Reading assignment: Students select a specific theme or chapter and critically interpret it through diagrams, comparative case examples, and spatial analysis (patterns, edges, public space typologies), culminating in a seminar that translates theory into visual and morphological understanding.

Number of Hours: 08

Module-4**URBAN PROCESS**

Rise and fall of cities; disaster; destruction and reconstruction; Haussmanization; incremental changes; urban renewal; contemporary issues and phenomenon shaping urban form and space (sprawl, sustainable growth, transportation).

Teaching Learning Process:

Introduction to the topic through lectures, readings, and discussions. Students in groups can select a city and map it across key phases (growth, disruption, renewal) to visualize how processes reshape urban form over time.

Number of Hours: 08

Module-5**THEORIZING URBAN FORM**

(Introduction to modern, post-modern perspectives and influences)

Utopias; ideas of Gordon Cullen, Jane Jacobs, William Whyte, Mumford, Kevin Lynch (Good City Form; Imageability and Memory), New Urbanism of Krier; Public and Private domains; Suburbs and periphery; Privacy, Territoriality and Proxemic theory; Defensible spaces; ideas of community through design; treatment of urban space; future of the city (contemporary practices and directions). Various theoretical views associated with nature of city form (normative, positive, substantive, and procedural theories); Cosmic, Machine and Organic Models; Descriptive and functional theories; Alternative theoretical postulations.

Teaching Learning Process: Introduction to the topic through lectures, readings, and discussions.

Students develop a short argument supporting one theoretical stance and defend it through structured class debates.

Number of Hours: 08

Suggested Learning Resources: (Text Book/ Reference Book/ Manuals):**Text books:**

1. Spiro Kostof, the City Assembled, Thames and Hudson.
2. Spiro Kostof, The City Shaped, Thames and Hudson.
3. Jon Lang, Urban Design Typology and procedures, Architectural Press
4. A.E.J. Morris, History of Urban Form, Longman Scientific and Technical.
5. Kevin Lynch, Good City Form, MIT Press.
6. Edmund Bacon, Design of Cities.
7. Geoffrey Broadbent, Emerging Concepts of urban Design

Web links and Video Lectures (e-Resources):

https://ocw.mit.edu/courses/4-241j-theory-of-city-form-spring-2013/video_galleries/video-lectures/

Suggested Learning Activities:

Group discussions about the form and structure of different cities by picking one example each
Shared reading from a list of key texts formulated. Presenting aspects of urban form of Indian cities through examples.

Assessment Structure:

The assessment in each course is divided equally between Continuous Internal Evaluation (CIE) and the Semester End Examination (SEE), with each carrying 50% weightage.

- To qualify and become eligible to appear for SEE, in the **CIE**, a student must score at least **50 % of maximum Marks for CIE**,
- To pass the **SEE**, a student must score at least **40 % of Maximum marks for SEE**.

Notwithstanding the above, a student is considered to have **passed the course**, provided the combined total of **CIE and SEE** is at least **50 out of 100 marks**.

Continuous Internal Evaluation (CIE):

Continuous Internal Evaluation will be based on weekly assignments, class presentations, participation in seminar discussions and term paper / report submission individual or group.

Semester End Examination (SEE):

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

CITY PLANNING PROCESS IN INDIA

Course Code	2MAUD102	Scheme	2026-27
Type of Course	PCC	Semester	I
Teaching Hours/Week (L:T:P)	03Hours /week	CIE Marks	50
Total Hours of Pedagogy per semester L /T/S/P/SL&TW:	42: 00 : 00 : 48 = 90	SEE Marks	50
Credits	03	Total Marks	100
Examination type (SEE)	TH	Exam Hours	03

Course outcome (Course Skill Set)

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

- To expose students to the process of city planning and implementation in India.
- To learn about the institutional context of city planning including national, state and local level policies, legislations and regulations used to monitor, aid, manage and design the growth and transformations in cities.
- To understand the issues and the impact of planning policies and regulations on the physical, social, economic and ecological environment of cities, and learn about current planning practices and strategies to address them.

4. To undertake a critical review of the planning, development and regulatory processes and practices shaping the Indian city.

Module-1

INTRODUCTION TO THE CITY PLANNING PROCESS

- A historical overview of city planning in the Indian context, the goals of planning and significance for urban design
- Planning legislations in India - A review of national, state and local level policies, programs, Acts and regulations used to monitor, aid, manage and design the growth and transformations in cities through history.

Scope and purpose of various plan types - Perspective plans, regional plans / structure plans, and master plans / comprehensive development plans, local area plans, special purpose plans, annual plans, projects / schemes.

Teaching Learning Process:

- Introduction to City Planning— lectures, videos, readings, class activities and discussion
- History of plan-making in India and study of plan types and legislations – readings, presentations and discussion seminar

Number of Hours: 09

Module-2

THE PLAN MAKING PROCESS

- Urbanisation challenges and planning process in the regional context, master planning, visioning, and development of planning strategies and policies
- Techniques of data collection, mapping, survey, projection of requirements; preparation of base map, developmental plan proposals and delineation of zones

Assessment of developmental issues for sectors such as land use, transportation, ecology and environment, urban poor and urban design among others.

Teaching Learning Process:

Understanding urbanization challenges and analyzing planning processes across sectors - group work to analyse various Master Plans, presentations, readings and discussion seminar

Number of Hours: 09

Module-3

LAND USE AND ZONAL REGULATIONS (Development tools)

- Land use zones: History of zoning, current zoning sub classification, permissible and prohibited activities, types of zoning, drawbacks of zoning, issues and limitations;
- Zoning tools: Impacts of FAR, TDR and floating FSI, incentive zoning and other regulatory mechanisms

Teaching Learning Process:

Discussion on implications of land use regulations and zoning tools - Case studies, readings and discussion seminar

Number of Hours:08

Module-4

EMERGING PLANNING PRACTICES AND CONCEPTS

- A review of land pooling, urban renewal, conservation and other redevelopment processes
- Understanding Indian cities' commitment to global Sustainable Development Goals and programs such as the National Action Plan on Climate change.
- Understanding concepts of smart growth, transit-oriented design, growth management strategies, advocacy planning, smart city mission, the 15-minute city model, and others
- Studying current schemes /programs including Local Area Plans (LAP), Town planning schemes (TPS), AMRUT, HRIDAY, PMAY and others.

Teaching Learning Process:

Understanding the planning practices and concepts - Case examples, Global and National policy/mission documents; readings and discussion seminar

Number of Hours:08

Module-5**PLAN IMPLEMENTATION, MONITORING MODALITIES AND CRITICAL REVIEW OF PLANNING PROCESS**

- Plan implementation and monitoring – Appeals process and appellate authority, and issues related to unauthorized and informal developments.
- Public private and people partnerships; resource mobilization; plan monitoring and review; public participation techniques; and zonal / ward level plans.
- Critical review – Discussion of alternatives to the master planning process in India.

Teaching Learning Process:

Discussion on outcomes and impacts of plan implementation and critical review of current planning practices – readings, case examples and discussion seminar

Number of Hours:08

Suggested Learning Resources: (Text Book/ Reference Book/ Manuals):**Text books/ Reference books / Manuals:**

(Includes but not restricted to the following)

1. . Taylor, John L and Williams, David G.1982. Urban Planning Practice in Developing Countries, Pergamon Press, ISBN: 978-0080222257
2. URDPFI Guidelines Volume I, IIA and IIB, 2014
3. Jain, A. K. 2017. Urban Transformation: Making Cities Inclusive, Safe, Resilient and Sustainable
4. Jain, A. K. 2018. Town Planning: Principles, Process and Practice
5. Kumar, A., Vidyarthi, S., & Prakash, P. 2020. City Planning in India, 1947–2017 (1st ed.). Routledge India.
6. Glaeser, Edward. 2012. Triumph of the City. London, England: Pan Books.
7. Master Plan documents of Bangalore, New Delhi, Mumbai, Chennai and other Indian cities
8. Selected readings provided in class

Web links and Video Lectures (e-Resources): (Includes but not restricted to the following)

1. URDPFI Guidelines 2014 (<http://moud.gov.in/URDPFI>).
 2. The Constitution (74th Amendment) Act, 1992.
(<http://indiacode.nic.in/coiweb/amend/amend74.htm>)
 3. Five-Year Plans Introduction
(https://mospi.gov.in/documents/213904/369745/Five_Year_Plan.pdf)
 4. City Planning in India, 1947-2017
(https://www.researchgate.net/publication/342252824_City_Planning_in_India_1947-2017)
 5. Understanding India's New Approach to Spatial Planning and Development: A Salient Shift?
(https://www.researchgate.net/publication/331486168_Understanding_India's_New_Approach_to_Spatial_Planning_and_Development_A_Salient_Shift)
 6. The Karnataka Town and Country Planning Act, 1961
([https://dpal.karnataka.gov.in/storage/pdf-files/11%20of%201963%20\(E\).pdf](https://dpal.karnataka.gov.in/storage/pdf-files/11%20of%201963%20(E).pdf))
- A. Srivathsan: 60 years of Planning – Lessons from Chennai, Urban Planning in India
(<https://soundcloud.com/crdfpodcast/a-srivathsan-60-years-of-planning-lessons-from-chennai>)

Suggested Learning Activities:

1. Group or individual case studies can be encouraged.
2. Reading sessions, Group discussions and debate can be enforced.
3. Master class guest talk can be conducted

Assessment Structure:

The assessment in each course is divided equally between Continuous Internal Evaluation (CIE) and the Semester End Examination (SEE), with each carrying 50% weightage.

- To qualify and become eligible to appear for SEE, in the **CIE**, a student must score at least **50 % of maximum Marks for CIE**,
- To pass the **SEE**, a student must score at least **40 % of Maximum marks for SEE**.
- Notwithstanding the above, a student is considered to have **passed the course**, provided the combined total of **CIE and SEE** is at least **50 out of 100 marks**.

Continuous Internal Evaluation (CIE):**Continuous Internal Evaluation:**

Continuous Internal Evaluation will be based on weekly assignments, class presentations, participation in seminar discussions and term paper / report submission.

Semester End Examination (SEE):

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

Social theory and Urban Design			
Course Code	2MAUD103	Scheme	2026-27
Type of Course	PCC	Semester	I
Teaching Hours/Week (L:T:P)	03 Hours/week	CIE Marks	50
Total Hours of Pedagogy per semester L /T/S/P/SL&TW:	42: 00 : 00 : 48 = 90	SEE Marks	50
Credits	03	Total Marks	100
Examination type (SEE)	TH	Exam Hours	03
Course outcome (Course Skill Set)			
At the end of the course, the student will be able to demonstrate the conceptual and theoretical perspectives of urban social theory.			
Module-1			
Classical Theoretical Perspectives: Karl Marx; (Capitalism and class); Friedrich Engels (Living conditions of the urban working class in post-industrialized towns); Ferdinand Tonnies (Community and Association), Emile Durkheim (Social solidarity); Georg Simmel (Urban experience, social distance, Philosophy of money); Max Weber (Social structure of city and urban community). Teaching Learning process: Introduction to the course content through lectures Students take on roles of different thinkers and debate how cities function socially under capitalism, industrialization, and urbanization. Number of Hours:09			
Module-2			
Contemporary Theoretical Perspectives: Robert Park (Human ecology, Symbiotic versus Societal organization, Dynamics and processes of human community: population, material culture (technological development), nonmaterial culture(customs and beliefs), Natural resources of the habitat, Societal pyramid, Differences between ecology and human ecology); Louis Wirth (urban theory on urbanism as a function of population density, size and heterogeneity); Ernest Burgess (Concentric Zone Theory); Homer Hoyt (Sector Theory); Harris and Ullman: Multiple Nuclei Theory). Teaching Learning process: Introduction to the course content through lectures. Students apply urban theories (concentric, sector, multiple nuclei) to map and test real cities, evaluating how closely theory aligns with actual urban form. Number of Hours:09			
Module-3			
Political Economy: Political and economic forces in a society with reference to works of Henri Lefebvre; Michael Storper and Richard Walker (Theory of location and labour); Manuel Castells; David Harvey; Logan and Molotch(City as Growth Machine); Saskia Sassen (Global City); John Friedmann (World City Hypothesis); Michael Dear (Los Angeles School/ Chicago School). Teaching Learning process: Introduction to the course content through lectures. Reading and presenting a selected research paper based on the theme. Number of Hours:08			
Module-4			
Social Life in the Public Realm (Discourses in the West): Michel de Certeau (Everyday life in the city); Fredrick Law Olmsted (The civilizing effect of park space in cities); Richard Sennet (Fall of the Public Man); Wilson & Kelling (Broken Windows Theory); Carr et al.			

(The Nature of Public Life); Mike Davis (The Fortress LA: The Militarization of Public Space); William Whyte (Social life in small urban public spaces), Jane Jacobs (eyes on the street; sidewalk ballet).

Teaching Learning process:

Introduction to the course content through lectures Students analyse a selected public space through contrasting lenses (e.g., Jane Jacobs vs Mike Davis) to evaluate inclusivity, control, and social life.

Number of Hours:08

Module-5

Social Theory and Urbanism in India:

M N Srinivas (rural sociology); Sudipta Kaviraj (public realm in Indian cities); Charles Correa (post-Independence Indian urbanism); Partha Chatterjee (civil society-political society); Rahul Mehrotra (static-kinetic city); Solomon Benjamin (occupancy urbanism); Ananya Roy (Informality in Indian cities).

Teaching Learning process:

Introduction to the course content through lectures Students analyze a selected public space through contrasting lenses (e.g., Jane Jacobs vs Mike Davis) to evaluate inclusivity, control, and social life.

Number of Hours:08

Suggested Learning Resources: (Text Book/ Reference Book/ Manuals):

Text books:

1. Borden, Iain, Tim Hall and Malcolm Miles (Eds.). 2003. The City Cultures Reader. Routledge
2. Benjamin, S. 2008. Occupancy Urbanism: Radicalizing Politics and Economy beyond Policy and Programs. International Journal of Urban and Regional Research, 32.3, 719-729.
3. Castells, Manuel. 1978. City, Class and Power (Sociology, politics & cities). Palgrave Macmillan
4. Chatterjee, Partha. 2006. Politics of the Governed: Reflections on Popular Politics In Most of the World. Columbia University Press.
5. Correa, Charles. 1989. The New Landscape: Urbanisation in the Third World. London. Butterworth Architecture
6. Correa, Charles. 2000. Housing and Urbanization. UDRI Mumbai
7. Davis, Mike. 1990. City of Quatrz: Excavating the Future in Los Angeles. Verso
8. Harvey, David. 2001. Spaces of Capital: Towards a Critical Geography. Blackwell/Wiley
9. Harvey, David. 2000. Spaces of Hope. University of California Press
10. Jacobs, Jane. 1961. The Death and Life of Great American Cities. Vintage
11. Kaviraj, Sudipta. 1997. Filth and the Public Sphere: Concepts and Practices about Space in Calcutta. Public Culture, 10 (1), 83-113.
12. Lin, Jan and Christopher Mele (eds.). 2012. The Urban Sociology Reader. Routledge
13. Mehrotra, R. (2008) Negotiating the Static and Kinetic Cities: The Emergent Urbanism of Mumbai, in Huyssen, A. (ed.) Other Cities, Other Worlds: Urban Imaginaries in a Global Age. Duke University Press: Durham and London. pp.205-18.
14. Roy, Ananya. 2005. Urban Informality: Towards an Epistemology in Planning, Journal of the American Planning Association, 71 (2), 147-158.

Web links and Video Lectures (e-Resources):

1. <https://www.youtube.com/watch?v=nBUq21iahpl>
2. <https://www.youtube.com/watch?v=gaw8iUi-i6E>

Suggested Learning Activities:

1. Walking around the city for photo-documentation and activity-mapping
2. Attending seminars, talks and workshops organized by parent institution and other institutions in the city and outside.

Assessment Structure:

The assessment in each course is divided equally between Continuous Internal Evaluation (CIE) and the Semester End Examination (SEE), with each carrying 50% weightage.

- To qualify and become eligible to appear for SEE, in the **CIE**, a student must score at least **50 % of maximum Marks for CIE**,
- To pass the **SEE**, a student must score at least **40 % of Maximum marks for SEE**.

Notwithstanding the above, a student is considered to have **passed the course**, provided the combined total of **CIE and SEE** is at least **50 out of 100 marks**.

Continuous Internal Evaluation (CIE):

Continuous Internal Evaluation will be based on weekly assignments, class presentations, participation in seminar discussions and term paper / report submission individual or group.

Semester End Examination (SEE):

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

UD Studio-I -Integrated with UDPT			
Course Code	2MAUD104	Scheme	2026-27
Type of Course	IPCC (Integrated Professional Core Course-I)	Semester	I
Teaching Hours/Week (L:T:P)	10 Hours/Week	CIE Marks	50
Total Hours of Pedagogy per semester L /T/S/P/SL&TW:	32:00:160:48=240	SEE Marks	50
Credits	08	Total Marks	100
Examination type (SEE)	VIVA VOCE	Exam Hours (Viva Voce)	20min /Candidate
Course outcome (Course Skill Set)			
At the end of the course, the student will be able to: 1. The goal of the studio-I shall be to understand that urban design at its core is a connective discipline. The objective shall be to understand, organize and synthesize in visual, tactile and measurable ways sustained improvements in the places that make up our urban living environment. 2. The objective of the course is to introduce students to the methods of reading and understanding the physical fabric of a city			
Studio Outline			
The studio will incorporate interdisciplinary principles, processes and interactions that are fundamental to Urban Design. The studio tasks will include the following; 1. Documenting, analyzing and understanding textures and places that make an urban area. 2. Understanding the nature of interrelation between in formal and formal issues connected with intervention into urban fabric.			

3. To identify and learn basic urban design tools.
4. To implement the same in a project of single use or multiuse built structure connected with place making and inclusive.

Project I will consist of documenting, analyzing and evolving proposals for urban components like streets, public open spaces, public gathering places, precincts of historically important buildings in the city. The focus will be on understanding the concepts of “Fabric, Texture and Weave”.

Project II will focus on the goals and objectives of “intervention to improve”. The project will identify a specific area in an identified city to understand the process of documenting the true picture of the area and creating scenarios which will clearly demonstrate the needs of intervention to improve. The project will end with the design of multi or single use-built forms.

Teaching Learning Process:

Lecture sessions, Site visits, Student presentations, Group discussions and presentation, Periodic Reviews, Workshops are part of the Teaching Learning Process

Suggested Learning Resources: (Text Book/ Reference Book/ Manuals):

1. A Place In The Shade: The New Landscape & Other Essays Paperback, Charles Correa , Penguin Books; 2010
2. Cities for People, Jan Gehl, Island Press; 2010
3. Design of Cities, Edmund N Bacon, Penguin Books; 1976
4. Essentials of Urban Design, Mark Sheppard CSIRO Publishing; 2015
5. Fundamentals of Sustainable Urban Design, Avi Friedman, Springer Nature Switzerland AG; 2021
6. Great Streets, Allan B. Jacobs, The MIT Press; 1995
7. Public Places Urban Spaces: The Dimensions of Urban Design, Matthew Carmona, Tim Heath, Taner Oc, Steve Tiesdell, Architectural Press; 2010
8. The Kinetic City & Other Essays, Rahul Mehrotra, ArchiTangle GmbH; 2021
9. Urban Design Reader, Matthew Carmona, Steve Tiesdell, Architectural Press; 2007
10. Urban Design: The Composition Of Complexity by Ron Kasperisin, Routledge; 2019

Web links and Video Lectures (e-Resources):

1. Urban Design, Center for Design Excellence,
<http://www.urbandesign.org/home.html>
2. Project for Public Spaces
<https://www.pps.org/>
3. Urban Design Lab
<https://urbandesignlab.in/resources/udl-digital-resources/>
4. Urban Design Group
<https://www.udg.org.uk/about/what-is-urban-design>
5. Urban Environment Management
<https://www.gdrc.org/uem/planning/urban-planning.html>
6. Planetizen
<https://www.planetizen.com/>
7. Space Syntax
<https://spacesyntax.com/>
8. <https://semanurcan.wordpress.com/2019/10/27/the-city-image-and-its-elements-by-kevin-lynch/>
9. <https://www.writingcities.com/2015/11/10/gordon-cullens-townscape/>

Suggested Learning Activities:

1. Urban design related place reading and representation techniques
2. Mapping the observation and inferring inferences and conclusion
3. Skills that enable analysis and identify the Urban design issues
4. Ability to come with Urban design strategy and Design project
5. Skills to read and analyze maps and translate through writing.
6. Learning the process of public outreach for data collection.
7. Analytical abilities to evaluate urban design challenges.

Assessment Structure:

The assessment in each course is divided equally between Continuous Internal Evaluation (CIE) and the Semester End Examination (SEE), with each carrying 50% weightage.

- To qualify and become eligible to appear for SEE, in the **CIE**, a student must score at least **50 % of maximum Marks for CIE**,
- To pass the **SEE**, a student must score at least **40 % of Maximum marks for SEE**.

Notwithstanding the above, a student is considered to have **passed the course**, provided the combined total of **CIE and SEE** is at least **50 out of 100 marks**.

Continuous Internal Evaluation: Continuous Internal Evaluation will be based on Internal Reviews, External Reviews and Final studio report and individual project Submission/VIVA VOCE

Semester End Examination: Viva-voce: The viva voce shall be conducted for a duration of 20 minutes (per student) for the subjects listed under viva voce for all the semesters

Ecology and Site Planning			
Course Code	2MAUD105A	Scheme	2026-27
Type of Course	PEC (Professional Elective Course-I)	Semester	I
Teaching Hours/Week (L: T:P)	03 Hours/Week	CIE Marks	100
Total Hours of Pedagogy per semester L /T/S/P/SL&TW:	42:00:00:48=90	SEE Marks	NA
Credits	03	Total Marks	100
Examination type (SEE)	NA	Exam Hours	NA
Course outcome (Course Skill Set)			
At the end of the course, the student will be able to Study and analyse the art of site planning and the concerns of environmental variables in the process of Urban Design.			
Course Outline:			
1. Introduction to physical geography, Study of natural and Manmade features of the site 2. Basic concepts of ecology, Man-environment interface towards sustainable development 3. Ecology and settlements, Sustainable urbanity and urban climate change 4. Application of site planning methods to design concepts			

Suggested Learning Resources: (Text Book/ Reference Book/ Manuals):

1. Kevin Lynch, Good City Form, MIT Press, Cambridge
2. Kevin Lynch and Gary Hack, Site Planning, MIT Press, Cambridge.
3. Peter Jacobs and Douglas Way, Visual Analysis of Landscape Development, Harvard Press.
4. Gary.O.Robinette (Ed), Landscape Planning and Energy Conservation. Van-Nostrand Reinhold.
5. Design with Nature: Ian L. McHarg.
6. The Landscape of Man: Geoffrey Jellicoe and Susan Jellicoe.
7. Geography of Settlements. *Author: R.Y. Singh. ISBN,*
8. Site Planning and Design Handbook. Thomas Russ (Author) / McGraw-Hill
9. RiverCentricUrban Planning Guidelines.TOWN AND COUNTRY PLANNING ORGANISATIONMINISTRY OF HOUSING AND URBAN AFFAIRSGOVERNMENT OF INDIA
10. Landscape Architecture, Fifth Edition: A Manual of Environmental Planning and Design

Web links and Video Lectures (e-Resources):

1. https://cpwd.gov.in/cty/writereaddata/eventdoc/EVENTFILE_23092019050925.pdf
2. <https://www.cseindia.org/environmental-clearance---the-process-403>
3. <https://www.britannica.com/science/urban-ecosystem>
4. <http://environmentclearance.nic.in/writereaddata/FormB/agenda/29012020OA101ANJSupplementaryProceedingofSEACmeetingheldon26122019.pdf>
5. https://books.google.co.in/books/about/Physical_Geography.html?id=wQgmjgEACAAJ&redir_esc=y

Suggested Learning Activities:

1. Observation of Natural setting to identify it as an outcome of, Geological, hydrological & climatic processes.
2. Bring to Note implications of ecology disturbances by human action in our current times.
3. Noting Good practices from Traditional knowledge as well New Research applications.
4. Learning from Awarded projects, workshops conducted.
5. Knowledge bank form Environmental laws, Legal cases, Critiquing Bye Laws.

Assessment Structure:

The assessment in each course is divided equally between Continuous Internal Evaluation (CIE) with carrying 100% weightage.

- To qualify and become eligible in the **CIE**, a student must score at least **50 % of maximum Marks for CIE**.

Continuous Internal Evaluation (CIE): Continuous Internal Evaluation will be based on Internal Reviews, Presentation, Quality of Discussion, Paper presentation, submission of Individual/Group work.

Semester End Examination (SEE): NA

Indian Urbanism			
Course Code	2MAUD105B	Scheme	2026-27
Type of Course	PEC (Professional Elective Course-I)	Semester	I
Teaching Hours/Week (L: T:P)	03 Hours/Week	CIE Marks	100
Total Hours of Pedagogy per semester L /T/S/P/SL&TW:	42:00:00:48=90	SEE Marks	00
Credits	03	Total Marks	100
Examination type (SEE)	NA	Exam Hours	NA
Course outcome (Course Skill Set) Objective: The course is intended to develop an understanding of key issues of urbanism in India, its dilemmas, ideologies and the new patterns that it has taken with neo-liberalism. Outline: The course covers on issues of Indian urbanism related to polity and colonial legacy, ideology of tenure and exchange, environment and water, daily life and informal sector, gender, art and media in the city. The course would be conducted through readings, discussions and invited lectures covering case studies and published research works. Outcome: students should be proficient in understanding of issues of urbanism in India and its new pattern through present			
Suggested Learning Resources: (Text Book/ Reference Book/ Manuals): 1. K. Sivaramakrishnan and Arun Agrawal (Edit), Regional Modernities: The Cultural Politics of Development in India, Stanford University Press, 2003. 2. Kenneth R Hall (Edit), Structure and Society in early South India, Oxford University Press, 2004. 3. Malcolm Miles and Tim Hall (Eds), The City Cultures Reader, Routledge Taylor & Francis Group, 2004. 4. Partha Chatterjee, The Politics of the Governed, New York: Columbia University Press, 2004. 5. Reader compiled by course instructor.			
Web links and Video Lectures (e-Resources): 1. https://www.youtube.com/watch?v=LCw2LOKqO-Q&t=776s 2. https://www.youtube.com/watch?v=qUU5CTICBq4 3. https://www.youtube.com/watch?v=esPJRNKEyHU 4. https://www.youtube.com/watch?v=Y40pp8OFubs			
Suggested Learning Activities: 1. Group or individual case studies can be encouraged. 2. Reading sessions, Group discussions and debate can be enforced. 3. Master class guest talk can be conducted 4. Observation of Natural setting to identify it as an outcome of, Geological, hydrological & climatic processes. 5. Bring to Note implications of ecology disturbances by human action in our current times. 6. Noting Good practices from Traditional knowledge as well New Research applications. 7. Learning from Awarded projects, workshops conducted. 8. Knowledge bank form Environmental laws, Legal cases, Critiquing Bye Laws.			

Assessment Structure:

The assessment in each course is divided equally between Continuous Internal Evaluation (CIE) with carrying 100% weightage.

To qualify and become eligible in the **CIE**, a student must score at least **50 % of maximum Marks for CIE**.

Continuous Internal Evaluation (CIE):

Continuous Internal Evaluation will be based on Internal Reviews, Presentation, Quality of Discussion, Paper presentation, submission of Individual/Group work.

Semester End Examination (SEE):

NA

Urban Land and Green Mapping

Course Code	2MAUD105C	Scheme	2026-27
Type of Course	PEC (Professional Elective Course-I)	Semester	I
Teaching Hours/Week (L:T:P)	03Hours/week	CIE Marks	100
Total Hours of Pedagogy per semester L /T/S/P/SL&TW:	42:00:00:48=90	SEE Marks	00
Credits	03	Total Marks	100
Examination type (SEE)	NA	Exam Hours	NA

Course outcome (Course Skill Set)

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

1. Understand the history of land and green system in the field of urban design
2. Able to read, document, represent and analyse various patterns of use of land and green in the Indian context
3. Develop and evaluate the green mapping in the field of urban design
4. Formulate and demonstrate the role and values of land and green system

Suggested Learning Resources: (Text Book/ Reference Book/ Manuals):**Reference books / Manuals:**

1. Design with Nature by Ian L. McHarg
2. The land systems of British India-B H Baden Powell
3. The Landscape Urbanism Reader edited by Charles Waldheim

Web links and Video Lectures (e-Resources):NA-**Suggested Learning Activities:**

1. Group or individual case studies can be encouraged.
2. Reading sessions, Group discussions and debate can be enforced.
3. Master class guest talk can be conducted

4. Observation of Natural setting to identify it as an outcome of, Geological, hydrological & climatic processes. 5. Bring to Note implications of ecology disturbances by human action in our current times. 6. Noting Good practices from Traditional knowledge as well New Research applications. 7. Learning from Awarded projects, workshops conducted. 8. Knowledge bank form Environmental laws, Legal cases, Critiquing Bye Laws.
Assessment Structure: The assessment in each course is divided equally between Continuous Internal Evaluation (CIE) with carrying 100% weightage. To qualify and become eligible in the CIE, a student must score at least 50 % of maximum Marks for CIE.
Continuous Internal Evaluation (CIE): Continuous Internal Evaluation will be based on Internal Reviews, Presentation, Quality of Discussion, Paper presentation, submission of Individual/Group work.
Semester End Examination (SEE): NA

City Images and Imagination			
Course Code	2MAUD105D	Scheme	2026-27
Type of Course	(Professional Elective Course-I)	Semester	I
Teaching Hours/Week (L:T:P)	03Hours/Week	CIE Marks	100
Total Hours of Pedagogy per semester L /T/S/P/SL&TW:	42:00 :00 :48 =90	SEE Marks	00
Credits	03	Total Marks	100
Examination type (SEE)	NA	Exam Hours	NA
The course is intent to focus and explores how people perceive, mentally map, and fictionalize urban spaces. The course is structured around study/exercises under Kevin Lynch's elements (paths, edges, districts, nodes, landmarks), semiotics of the city, collective memory, cinematic and literary representations, and digital urban futures			
Suggested Learning Resources: (Text Book/ Reference Book/ Manuals): 1. Kevin Lynch, <i>The Image of the City</i> 2. Italo Calvino, <i>Invisible Cities</i> 3. Roland Barthes, <i>Semiology and the Urban</i> 4. Gordon Cullen, <i>Townscape</i>			
Web links and Video Lectures (e-Resources): As per the direction and suggestion by the faculty			

Suggested Learning Activities: 1. Group or individual case studies can be encouraged. 2. Reading sessions, Group discussions and debate can be enforced. 3. Master class guest talk can be conducted 4. Noting Good practices from archives as well New Research applications. 5. Learning from Awarded projects, workshops conducted. 6. Knowledge bank can be formed.
Assessment Structure: The assessment in each course is divided equally between Continuous Internal Evaluation (CIE) with carrying 100% weightage. To qualify and become eligible in the CIE, a student must score at least 50 % of maximum Marks for CIE
Continuous Internal Evaluation (CIE): Continuous Internal Evaluation will be based on weekly assignments, class presentations, participation in seminar discussions and term paper / report submission.
Semester End Examination (SEE): NA

GIS-I			
Course Code	2MAUD106A	Scheme	2026-27
Type of Course	PEC (Professional Elective Course-II)	Semester	I
Teaching Hours/Week (L:T:P)	03 Hours/Week	CIE Marks	100
Total Hours of Pedagogy per semester L /T/S/P/SL&TW:	42:00:00:48=90	SEE Marks	00
Credits	03	Total Marks	100
Examination type (SEE)	NA	Exam Hours	NA
Course outcome (Course Skill Set) At the end of the course, the student will be able to: 1. Understand spatial intelligence as the foundation of evidence-based Urban Design. 2. Develop the ability to observe, measure and interpret urban systems using geospatial technologies. 3. Critically evaluate urban form through spatial datasets and apply GIS as a decision-support framework. 4. Build geospatial databases for Urban Design studios integrating physical, ecological, social and mobility datasets. 5. Observe, measure, represent and analyse the natural and built environment using the GIS framework.			
• History and development of GIS. • Spatial thinking & GIS as a decision support tool in Urban Design and stakeholder engagement. Global and Indian Spatial practice, Bhuvan, Bhoonidhi, State GIS, KRSAC • Sustainable Development Goals and the role of GIS in Urban Design Practice • Fundamentals of GIS and Spatial Data Models, vector and raster data, coordinate systems, Geospatial Knowledge Infrastructure and building an Urban Design geodatabase			

- Remote sensing fundamentals, data creation, Raster to vector conversion, acquisition, field data collection, Open data, API and use of advanced data collection tools and machines like drones/UAV, terrestrial laser scanning.
- Spatial analysis of natural & built environment, Terrain and surface analysis, Proximity and overlay analysis, Multi-Criteria Decision Analysis (MCDA)
- Urban spatial analysis of morphology, urban network, socio-economic and public infrastructure.
- Map composition using cartographic principles, Representation of analytical outputs using maps, charts, graphs.
- Thematic mapping and data classification to transform raw spatial data into structured, meaningful visual/ Business intelligence.

Suggested Learning Resources: (Text Book/ Reference Book/ Manuals):

Text books:

1. Longley, P.A., Goodchild, M.F., Maguire, D.J., & Rhind, D.W. (2015). *Geographic Information Science and Systems* (4th ed.). Wiley.
2. Bolstad, P. (2019). *GIS Fundamentals: A First Text on Geographic Information Systems* (6th ed.). Eider Press.
3. Chang, K-T. (2019). *Introduction to Geographic Information Systems* (9th ed.). McGraw Hill.
4. Geographical Information Systems A Practical Approach 2Ed (Pb 2025), Xuan Zhu ,Routledge

Reference books / Manuals:

1. Burrough, P.A., McDonnell, R.A., & Lloyd, C.D. (2015). *Principles of Geographical Information Systems* (3rd ed.). Oxford University Press.
2. Lo, C.P., & Yeung, A.K.W. (2007). *Concepts and Techniques of Geographic Information Systems* (2nd ed.). Prentice Hall.
3. Lillesand, T.M., Kiefer, R.W., & Chipman, J.W. (2015). *Remote Sensing and Image Interpretation* (7th ed.). Wiley. — supports Module 3.
4. QGIS Project. QGIS Training Manual (official, open-source, updated continuously) — docs.qgis.org.
Survey of India / NRSC-ISRO. Bhuvan and Toposheet User Manuals

Web links and Video Lectures (e-Resources):

1. NPTEL/SWAYAM
2. Bhuvan & Bhoonidhi(ISRO/NRSC) portal: bhuvan.nrsc.gov.in
3. SVAMITVA Scheme portal: svamitva.nic.in
4. PM Gati Shakti National Master Plan portal: pmgatishakti.gov.in
5. QGIS official tutorials and documentation: qgis.org
6. Kepler.gl documentation (for Module 5 web publishing): kepler.gl
7. Leaflet.js documentation (for Module 5 web publishing): leafletjs.com
8. Esri Training / Esri Academy — free GIS and cartography courses (if the institution has Esri access)
9. Karnataka State Remote Sensing Applications Centre (KSRSAC) / State GIS Portal — for local spatial data relevant to a Bengaluru-based studio. (<https://kgis.ksrsac.in/kgis1/portal.aspx>)
10. QGIS Training and Tutorial (<https://spatialthoughts.com/>)
11. ESRI Academy (<https://www.esri.com/training/>)
12. USGS (<https://earthexplorer.usgs.gov/>)
13. ArcGIS Living Atlas of the World (<https://livingatlas.arcgis.com/en/home/>)

Suggested Learning Activities:

1. Creating an Urban Geodatabase: Buildings, Roads, Parks, water bodies, Public Transport, Administrative Boundaries.
2. Urban Mapping: extraction, representation, analytical maps and interpretation
3. Accessibility and Walkability: Buffer, network & mobility analysis
4. Terrain and Environmental Analysis: Flooding areas, Drainage network, Buildable zone identification.
5. Multi Criteria Site Suitability Analysis: Identify the suitable location for urban facility (community centre, library, School, Park)
6. Urban Change Detection: urban expansion, green cover change.
7. Storytelling Through Maps: Thematic maps on urban issues (Housing, Mobility, Flooding, Heritage etc)
8. Interactive Web & GIS Dashboard

Assessment Structure:

The assessment in each course is divided equally between Continuous Internal Evaluation (CIE) with carrying 100% weightage.

To qualify and become eligible in the **CIE**, a student must score at least **50 % of maximum Marks for CIE**

Continuous Internal Evaluation (CIE): Continuous Internal Evaluation will be based on weekly assignments, class presentations, participation in seminar discussions and term paper / report submission.

Semester End Examination (SEE): NA

Spatial software for UD and presentation skills

Course Code	2MAUD106B	Scheme	2026-27
Type of Course	PEC (Professional Elective Course-II)	Semester	I
Teaching Hours/Week (L:T:P)	03Hours/week	CIE Marks	100
Total Hours of Pedagogy per semester L /T/S/P/SL&TW:	42:00:00:48=90	SEE Marks	00
Credits	03	Total Marks	100
Examination type (SEE)	NA	Exam Hours	NA

Course outcome (Course Skill Set)

Course Learning Objectives: This course aims at study and application of software skills that matters in the city reading and visual expression

1. Basic software skill (presentation): introduction and advance study in Photoshop, InDesign, Lumion, Prezi, Sketch up modeling etc.

Audio visual skill for effective presentation: Basics of Photography, Videography, editing techniques and its application in city reading and application of such tools in collection of city data (tangible and intangible), illustration through visuals/sound (movie making), graphical representation, expressing conceptual idea, processing and participatory planning, stake holders meeting etc.

Teaching learning process: Introduction to the course content through lectures, guest talk, case study, and practical exercises-use of appropriate tools and software
Suggested Learning Resources: (Text Book/ Reference Book/ Manuals): 1. Edmund N Bacon- Design of cities -A Penguin Book 2. Jacobs , Allan B, "Great streets "MIT press 1993
Web links and Video Lectures (e-Resources): 1. https://clipchamp.com/en/video-editor/ 2. https://www.youtube.com/watch?v=k5-8XQ24yjU 3. https://www.youtube.com/watch?v=MqwIW76sFCM 4. https://www.youtube.com/watch?v=gYO1uk7vIcc
Suggested Learning Activities: 1. Integration of visual techniques for better communication 2. Develop tools and techniques for internalization of the subject and interactive presentation 3. Group or individual case studies can be encouraged. 4. Reading sessions, Group discussions and debate can be enforced. 5. Master class guest talk can be conducted 6. Learning from Awarded projects, workshops conducted.
Assessment Structure: The assessment in each course is divided equally between Continuous Internal Evaluation (CIE) with carrying 100% weightage. To qualify and become eligible in the CIE , a student must score at least 50 % of maximum Marks for CIE
Continuous Internal Evaluation (CIE): Continuous Internal Evaluation will be based on weekly assignments, class presentations, participation in seminar discussions and term paper / report submission.
Semester End Examination (SEE):NA

Film and the City			
Course Code	2MAUD106C	Scheme	2026-27
Type of Course	PEC (Professional Elective Course-II)	Semester	I
Teaching Hours/Week (L:T:P)	03 Hours/week	CIE Marks	100
Total Hours of Pedagogy per semester L /T/S/P/SL&TW:	42:00:00:48=90	SEE Marks	00
Credits	03	Total Marks	100
Examination type (SEE)	NA	Exam Hours	NA

Course outcome (Course Skill Set) Students must be able to observe, relate and produce a relevant urban narrative in the form of film. reading the city through media, tracking how physical architecture translates to screens Using film excerpts to map the tangible and intangible patterns of urban movement. Translating narrative sequences into physical, spatial diagram The Observed City - Documenting existing street networks, public squares, and human activities using camera lenses. - Analysing the "Fabric, Texture, and Weave" of historical precincts. - Using filmmaking and short-form video collages to build design pitches for real-world municipal locations. - Proposing soft/hard urban upgrades to solve real-world infrastructure gaps.
Suggested Learning Resources: (Text Book/ Reference Book/ Manuals): As per the course demand and faculty suggestion
Web links and Video Lectures (e-Resources): As per the course demand and faculty suggestion
Suggested Learning Activities: - Group or individual case studies can be encouraged. - Reading sessions, Group discussions and debate can be enforced. - Master class guest talk can be conducted
Assessment Structure: The assessment in each course is divided equally between Continuous Internal Evaluation (CIE) with carrying 100% weightage. To qualify and become eligible in the CIE, a student must score at least 50 % of maximum Marks for CIE
Continuous Internal Evaluation (CIE): Continuous Internal Evaluation will be based on weekly assignments, class presentations, participation in seminar discussions and term paper / report submission.
Semester End Examination (SEE):NA

Urban Cyber security			
Course Code	2MAUD106D	Scheme	2026-27
Type of Course	PEC (Professional Elective Course-II)	Semester	I
Teaching Hours/Week (L:T:P)	3 hours/week	CIE Marks	100
Total Hours of Pedagogy per semester L /T/S/P/SL&TW:	42: 0 : 0 : 48 :90	SEE Marks	00
Credits	03	Total Marks	100
Examination type (SEE)	NA	Exam Hours	NA
Course outcome (Course Skill Set)			

1. At the end of the course, the student will be able to: Understand the concepts, principles and importance of cybersecurity in contemporary smart cities and digitally connected urban environments.
2. Analyse cyber threats, vulnerabilities and risks associated with urban infrastructure, digital governance and critical public services.
3. Evaluate cybersecurity frameworks, standards, policies and governance mechanisms applicable to urban systems and smart city infrastructure.
4. Develop strategies for securing urban digital infrastructure through resilient planning, risk management, privacy protection and emergency response.
5. Formulate cyber-resilient urban design and governance proposals integrating digital technologies, ethical practices and sustainable smart city principles

Introduction to Urban Cyber Security

Introduction to cybersecurity; evolution of digital cities and smart urban infrastructure; cyber-physical systems; Internet of Things (IoT) in cities; digital twins; urban data ecosystems; critical urban infrastructure; cyber risks in transportation, utilities, buildings and communication networks; concepts of confidentiality, integrity and availability; cyber resilience; emerging trends in smart city security.

Teaching Learning Process: Introduction to the course through lectures, documentaries, discussions, expert talks and case study presentations.

Cyber Threats, Vulnerabilities and Risk Assessment

Types of cyber threats including malware, ransomware, phishing, denial-of-service attacks and insider threats; vulnerabilities in smart transportation, energy grids, water supply systems, healthcare infrastructure and public surveillance systems; cyber risk assessment methodologies; vulnerability assessment; penetration testing concepts; threat modelling; security auditing; incident reporting; urban cyber risk mapping.

Teaching Learning Process

Lectures, demonstrations, simulation exercises, case study analysis and student presentations.

Cybersecurity Frameworks, Policies and Governance

Cybersecurity governance; international cybersecurity frameworks; ISO/IEC 27001 Information Security Management System; NIST Cybersecurity Framework; Zero Trust Architecture; cyber laws and digital governance; Digital Personal Data Protection Act (India); CERT-In guidelines; National Cyber Security Policy; cybersecurity standards for Smart Cities Mission; privacy, ethics and data governance; roles of government agencies and urban local bodies.

Teaching Learning Process

Lectures, policy reviews, seminars, debates and comparative analysis of national and international framework

Cyber-Resilient Smart Cities and Critical Infrastructure Protection

Cybersecurity for smart mobility, intelligent transportation systems, smart grids, water management, public safety systems, intelligent buildings and urban IoT networks; secure cloud infrastructure; artificial intelligence in cybersecurity; block chain applications for urban governance; disaster recovery; business continuity planning; cyber resilience; crisis management; international and Indian smart city case studies.

Teaching Learning Process

Lectures, case study presentations, workshops, group discussions and expert interactions

Urban Cyber Security Planning and Future Cities

Cybersecurity by design in urban planning; cyber risk management strategies; secure digital governance; cybersecurity audits for urban projects; resilience planning; digital infrastructure management; public awareness and cyber hygiene; ethical hacking concepts; cybersecurity operations centres for cities; future technologies including AI, quantum computing and autonomous urban systems; preparation of cyber-resilient smart city strategies and implementation frameworks.

Teaching Learning Process

Studio-based exercises, policy formulation workshops, group projects, expert lectures and final presentations.

Suggested Learning Resources: (Text Book/ Reference Book/ Manuals):**Text books:**

1. Charles J. Brooks, *Cybersecurity Essentials*.
2. Nina Godbole & Sunit Belapure, *Cyber Security: Understanding Cyber Crimes, Computer Forensics and Legal Perspectives*
3. William Stallings, *Network Security Essentials: Applications and Standards*

Reference books / Manuals:

4. NIST, *Cybersecurity Framework (CSF 2.0)*
5. ISO/IEC 27001:2022 – *Information Security Management Systems*.
6. Eric Cole, *Cyber Crisis: Protecting Your Business from Real Threats in the Virtual World*.
7. ENISA, *Smart Cities and Cybersecurity*
8. World Economic Forum, *Global Cybersecurity Outlook*

Web links and Video Lectures (e-Resources):

1. <https://www.nist.gov/cyberframework>
2. <https://www.cert-in.org.in/>
3. <https://www.nciipc.gov.in/>
4. <https://www.cisa.gov/>
5. <https://smartcities.gov.in/>

Suggested Learning Activities:

1. Smart city cyber risk assessment
2. Cybersecurity audit of urban digital infrastructure
3. IoT vulnerability assessment for smart buildings
4. Review of national cybersecurity policies.

Assessment Structure:

The assessment in each course is divided equally between Continuous Internal Evaluation (CIE) with carrying 100% weightage. To qualify and become eligible in the **CIE**, a student must score at least **50 % of maximum Marks for CIE**

Continuous Internal Evaluation (CIE): Continuous Internal Evaluation will be based on weekly assignments, class presentations, participation in seminar discussions and term paper / report submission

Semester End Examination (SEE): NA

Research Methodology and IPR			
Course Code	1MRMI108	Scheme	2026-27
Type of Course	NCMC	Semester	II
Teaching Hours/Week (L:T:P)	NA	CIE Marks	NA
Total Hours of Pedagogy per semester L /T/S/P/SL&TW:	Online course (online.vtu.ac.in)	SEE Marks	NA
Credits	PP	Total Marks	NA
Examination type (SEE)	NA	Exam Hours	NA
Course outcome (Course Skill Set)			
Non-Credit Mandatory Courses (NCMC): are aimed at enhancing students' knowledge, skills, and awareness beyond the core curriculum. Successful completion of the NCMC is compulsory for fulfilling the requirements of the academic program. It shall not be considered for the computation of SGPA, CGPA and vertical progression. Each student shall register for the prescribed NCMC(s) in the prescribed semester. A student who fails to qualify in the prescribed NCMC shall not be eligible for the conferment of the degree.			