

University of Mumbai

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Academic Authorities,
Meetings & Services (AAMS)
Room No. 128, M. G. Road, Fort,
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Re- accredited with A ++ Grade (CGPA 3.65) by NAAC
Category- I University Status awarded by UGC

No. AAMS_UGS/ICC/2025-26/30

Date: 22nd May, 2025

CIRCULAR:-

Attention of all the Principals of the Affiliated Colleges, Directors of the Recognized Institutions is invited to this office Circular No. AAMS_UGS/ICC/2022-23/79 dated 20th August, 2022 relating to the syllabus of M. Arch. (Landscape) (Sem I to IV) (CBCS).

They are hereby informed that the recommendations made by the Ad-hoc Board of Studies in Architecture at its meeting held on 13th January, 2025 and subsequently passed by the Board of Deans at its meeting held on 27th January, 2025 vide item No. 6.6 (R) have been accepted by the Academic Council at its meeting held on 27th January, 2025 vide item No. 6.6 (R) and that in accordance therewith **M. Arch. (Landscape) (Sem I to IV)** is revised as per appendix with effect from the academic year 2025-26.

(The said circular is available on the University's website www.mu.ac.in).

MUMBAI – 400 032
22nd May, 2025

(Dr. Prasad Karande)
REGISTRAR

To,

The Principals of the Affiliated Colleges, Directors of the Recognized Institutions.

AC 6.6 (R)/27/01/2025

Copy forwarded with Compliments for information to:-

- 1) The Chairman, Board of Deans,
- 2) The Dean, Faculty of Science & Technology,
- 3) The Chairman, Board of Studies in Architecture,
- 4) The Director, Board of Examinations and Evaluation,
- 5) The Director, Department of Students Development,
- 6) The Director, Department of Information & Communication Technology,
- 7) The Director, Centre for Distance and Online Education (CDOE), Vidyanaagari,
- 8) The Deputy Registrar, Admissions, Enrolment, Eligibility & Migration Department (AEM).

Copy forwarded for information and necessary action to :-	
1	The Deputy Registrar, (Admissions, Enrolment, Eligibility and Migration Dept)(AEM), dr@eligi.mu.ac.in
2	The Deputy Registrar, Result unit, Vidyanagari drresults@exam.mu.ac.in
3	The Deputy Registrar, Marks and Certificate Unit,. Vidyanagari dr.verification@mu.ac.in
4	The Deputy Registrar, Appointment Unit, Vidyanagari dr.appointment@exam.mu.ac.in
5	The Deputy Registrar, CAP Unit, Vidyanagari cap.exam@mu.ac.in
6	The Deputy Registrar, College Affiliations & Development Department (CAD), deputyregistrar.uni@gmail.com
7	The Deputy Registrar, PRO, Fort, (Publication Section), Pro@mu.ac.in
8	The Deputy Registrar, Executive Authorities Section (EA) eau120@fort.mu.ac.in He is requested to treat this as action taken report on the concerned resolution adopted by the Academic Council referred to the above circular.
9	The Deputy Registrar, Research Administration & Promotion Cell (RAPC), rapc@mu.ac.in
10	The Deputy Registrar, Academic Appointments & Quality Assurance (AAQA) dy.registrar.tau.fort.mu.ac.in ar.tau@fort.mu.ac.in
11	The Deputy Registrar, College Teachers Approval Unit (CTA), concolsection@gmail.com
12	The Deputy Registrars, Finance & Accounts Section, fort draccounts@fort.mu.ac.in
13	The Deputy Registrar, Election Section, Fort drelection@election.mu.ac.in
14	The Assistant Registrar, Administrative Sub-Campus Thane, thanesubcampus@mu.ac.in
15	The Assistant Registrar, School of Engg. & Applied Sciences, Kalyan, ar.seask@mu.ac.in
16	The Assistant Registrar, Ratnagiri Sub-centre, Ratnagiri, ratnagirisubcentar@gmail.com
17	The Director, Centre for Distance and Online Education (CDOE), Vidyanagari, director@idol.mu.ac.in
18	Director, Innovation, Incubation and Linkages, Dr. Sachin Laddha pinkumanno@gmail.com
19	Director, Department of Lifelong Learning and Extension (DLLE), dlleuniversityofmumbai@gmail.com

Copy for information :-	
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2	P.A to Pro-Vice-Chancellor pvc@fort.mu.ac.in
3	P.A to Registrar, registrar@fort.mu.ac.in
4	P.A to all Deans of all Faculties
5	P.A to Finance & Account Officers, (F & A.O), camu@accounts.mu.ac.in

To,

1	The Chairman, Board of Deans pvc@fort.mu.ac.in
2	Faculty of Humanities, Offg. Dean 1. Prof.Anil Singh Dranilsingh129@gmail.com Offg. Associate Dean 2. Prof.Manisha Karne mkarne@economics.mu.ac.in 3. Dr.Suchitra Naik Naiksuchitra27@gmail.com
	Faculty of Commerce & Management, Offg. Dean, 1 Prin.Ravindra Bambardekar principal@model-college.edu.in Offg. Associate Dean 2. Dr.Kavita Laghate kavitalaghate@jbims.mu.ac.in 3. Dr.Ravikant Balkrishna Sangurde Ravikant.s.@somaiya.edu 4. Prin.Kishori Bhagat kishoribhagat@rediffmail.com

	Faculty of Science & Technology Offg. Dean 1. Prof. Shivram Garje ssgarje@chem.mu.ac.in Offg. Associate Dean 2. Dr. Madhav R. Rajwade Madhavr64@gmail.com 3. Prin. Deven Shah sir.deven@gmail.com
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4	The Director, Board of Examinations and Evaluation, dboee@exam.mu.ac.in
5	The Director, Board of Students Development, dsd@mu.ac.in DSW directr@dsw.mu.ac.in
6	The Director, Department of Information & Communication Technology, director.dict@mu.ac.in

University of Mumbai



Revised Syllabus for
Master of Architecture Programme:
M. Arch. (Landscape)
Semester – (I to IV)
(Choice Based Credit System)

(With effect from the academic year 2025-26)

University of Mumbai



Syllabus for Approval

Sr. No.	Heading	Particular
1	O: _____ Title of Course	M. Arch. (Landscape)
2	O: _____ Eligibility	As per University Ordinance
3	O: _____ Standard of Passing	50% <i>Smita Aji</i>
4	No. of years/Semesters:	2 Years/4 Semesters
5	Level:	P.G
6	Pattern:	Semester
7	Status:	Revised
8	To be implemented from Academic Year :	From Academic Year: 2025-2026

Smita Aji

Dr. Smita Dalvi
Chairman,
Ad-hoc Board of
Studies, in

Dr. Deven Shah

Dr. Deven Shah
Associate Dean,
Faculty of Science and
Technology

Prof. Shivram Garje

Prof. Shivram Garje
Dean,
Faculty of Science and
Technology

Master of Architecture (M. Arch)

in Landscape

PREAMBLE:

The discipline of Landscape Architecture has been practiced and taught in India from the early 1970's. Cities like Delhi pioneered followed by Ahmedabad, Chennai, Pune and Bhopal and now Vijayawada and Nagpur. Mumbai University also joins them in offering a full-time masters degree programme in Landscape to serve the ecological and environmental needs of the growing metropolis.

Landscape Architects, in their work, synthesize a range of issues, design aspirations and inspirations to produce projects which engage individuals, communities and society with place in practical, personal, cultural and political ways. The learning, tools and skill sets needed for this have also expanded. The curriculum responds to these aspects and being learner centric, requires appropriate implementation support like required infrastructure including lecture halls and studios equipped for the use of ICT and Software Labs equipped in particular with Earth Analytical software like GIS, Grasshopper, and Rhino etc.

M. Arch (Landscape) is a two years (four semesters) full time programme. The Syllabus is revised with an objective to bring in changes to reflect the changing circumstances, socio-economical and technological landscapes of our times. The revised syllabus also brings the course, credits and marks structure in harmony with other PG programmes in Architecture, devised in line with the latest guidelines from the Council of Architecture (COA), available in 'Minimum Standards of Architectural Education-Post-graduate', vide CA/5/Academic/2022/Circular-PG Guidelines, dated December 14, 2022.

Objectives of the Programme:

- To prepare learners for the profession of Landscape Architecture in the prevailing social, technological, economic, and environmental scenario.
- To orient the learner towards developing career enhancing skills.
- To develop understanding of sustainable landscape design.
- To contribute positively to mitigate the effects of climate change in light of rapid urban development.
- To expose the learner to latest trends and future roles in the profession.
- To orient and prepare a learner towards seeking progressive solutions for environment and humanity.
- To prepare learners for serving and preserving life at large by applying their learning.
- To resolve the challenges of life and problem-solving using landscape design.

Dr. Smita Dalvi BoS (Ad hoc)-Chairman- Architecture	Prof. Shilpa Chandawarkar Chairperson Sub-committee
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Programme Specific Outcomes

- Graduates will develop advanced design skills, including the ability to create aesthetically pleasing and functional landscapes.
- Graduates will gain a comprehensive understanding of ecological systems and their role in landscape design.
- Graduates will develop an appreciation for the historical and cultural context of landscapes, enabling them to design spaces that respect and reflect local heritage.
- Graduates will promote sustainable practices in landscape design, considering environmental impact and resource management and the challenges of climate change.
- Graduates will acquire technical knowledge in Landscape Design to function as responsible professionals.
- Graduates will acquire skills to use advanced satellite and digital technologies.
- Graduates will acquire project management skills to oversee landscape projects from conception to completion.

Notes on the Courses in the Revised Syllabus:

- The programme consists of four semesters. Courses in the first three semesters are devised in the categories of Core Courses, Choice Based Electives, and Studio Courses. In the fourth semester, besides electives, the students will mainly focus on their final thesis projects.
- The core courses are of 3 credits each, they are meant to impart the core knowledge of the discipline.
- There are a total of six elective courses of 2 credits each spread across 4 semesters. Individual colleges will offer electives from which the student would choose as per their own interest. The colleges will design and develop the topics, objectives and contents of choice based elective courses based on the institutional vision and strength. For this, courses from SWAYAM- NPTEL platforms can be also be explored for supplementary learning or for credit transfer.
- The studio courses are of two types – Major Studio in Landscape will drive the principal studio project in semesters 1 to 3. Allied Studios are meant to supplement the program needs – with the topics and objectives specified in the syllabus. Individual colleges will devise their studio problems based on their vision and strength, keeping in view the objectives mentioned in the syllabus.
- Two core courses of 2 credits each are devoted to research methods, developing research proposals, and learning the ropes of conducting and writing research. This is done to provide a sound grounding to the students at Masters level to engage in research, to produce new knowledge and contribute to the innovation ecosystem in the profession.
- As per the Council of Architecture's (COA) guidelines in their Minimum Standard of Education, colleges and institutions imparting the UG and PG programmes in Architecture should have sufficient freedom to chart their directions. As such, the syllabus refrains from over-prescription, particularly for the term work and sessional work, where the course outcomes and details of exercises for term work are to be worked out by the individual colleges.

Suggested Choice Based Electives for M.Arch. in Landscape

- Global Landscape Advocacy and Governance
- Advanced Representation of Landscape Experience
- Nature-based Solutions in Landscape Design
- Groundwater Management
- Landscape Heritage: Documentation and Conservation
- Landscape Urbanism
- Digital Tools and visualisations in Landscape Design
- Environmental Psychology and Landscape Design
- Landscape and Climate Change
- Lighting Design in Landscape Architecture
- Horticultural Science
- Public Art and Landscape Design
- Landscape Project Implementation and Maintenance

Total Credits of M. Arch. (Landscape) programme	
Semester - I	22 Credits
Semester - II	21 Credits
Semester - III	21 Credits
Semester - IV	20 Credits
TOTAL	84 Credits

	SEMESTER I Exam Conducted by Individual College on behalf of the University									
COURSE CODE	COURSE NAME	TEACHING SCHEME (HRS)				CREDITS	EXAMINATION SCHEME			
		L	T	S	TOTAL		Theory	Int.	Ext.	Total
LA-C 101	Evolution of Landscape Architecture	3	--	--	3	3	50	50	--	100
LA-C 102	Earth Sciences - 1	3	--	--	3	3	50	50	--	100
LA-C 103	Plant Systematics and Ecology	3	--	--	3	3	50	50	--	100
LA-C 104	Landscape Engineering & Detailing	2	--	--	2	2	--	100	--	100
LA-E 105	Choice Based Elective- 1	2	--	--	2	2	--	100	--	100
LA-S 106	Major Studio in Landscape Design -1	1	4	6	11	6	--	200	200	400
LA-S 107	Allied Studio- 1: Site Planning and Development Process	1	--	4	5	3	--	100	--	100
	TOTAL	29				22				1000

	SEMESTER II Exam Conducted by the University									
COURSE CODE	COURSE NAME	TEACHING SCHEME (HRS)				CREDITS	EXAMINATION SCHEME			
		L	T	S	TOTAL		Theory	Int.	Ext.	Total
LA-C 201	Ecosystem Analysis and Environmental Economics	3	--	--	3	3	50	50	--	100
LA-C 202	Earth Sciences – 2	3	--	--	3	3	50	50	--	100
LA-C 203	Research Methods -1	2	--	--	2	2	--	100	--	100
LA-E 204	Choice Based Elective- 2	2	--	--	2	2	--	100	--	100
LA-E 205	Choice Based Elective- 3	2	--	--	2	2	--	100	--	100
LA-S 206	Major Studio in Landscape Design-2	1	4	6	11	6	--	200	200	400
LA-S 207	Allied Studio 2: Planting Design	1	--	4	5	3	--	100	--	100
	TOTAL	28				21				1000

	SEMESTER III Exam Conducted by Individual College on behalf of the university									
COURSE CODE	COURSE NAME	TEACHING SCHEME (HRS)				CREDITS	EXAMINATION SCHEME			
		L	T	S	TOTAL		Theory	Int	Ext	Total
LA-C 301	Landscape Conservation and Regional Planning	3	--	--	3	3	50	50	--	100
LA-C 302	Landscape Resources, Commons and Values	3	--	--	3	3	50	50	--	100
LA-C 303	Landscape Professional Practice and Project Management	2	--	--	2	2	--	100	--	100
LA-C 304	Research Methods- 2	2	--	--	2	2	--	100	--	100
LA-E 305	Choice Based Elective - 4	2	--	--	2	2	--	100	--	100
LA-S 306	Major Studio in Landscape Design -3	1	4	6	11	6	--	200	200	400
LA-S 307	Allied Studio -3	1	--	4	5	3	--	100	--	100
	TOTAL				28	21				1000

	SEMESTER IV Exam Conducted by the University									
COURSE CODE	COURSE NAME	TEACHING SCHEME (HRS)				CREDITS	EXAMINATION SCHEME			
		L	T	S	TOTAL		Theory	Int	Ext	Total
LA-E 401	Choice Based Elective - 5	2	--	--	2	2	--	100	--	100
LA-E 402	Choice Based Elective - 6	2	--	--	2	2	--	100	--	100
LA-S 403	Thesis	6	10	10	26	16	--	400	400	800
	TOTAL				30	20				1000

Note :

1 Credit = 1 Lecture Hour OR 2 Tutorial/Studio Hours for duration of 16 Weeks per semester.

SEMESTER-WISE COURSE DESCRIPTION

SEMESTER - I

SEMESTER - I Exam Conducted by Individual College on behalf of the University						
Course Code	Course Name	Teaching Scheme (HRS)				CREDITS
		L	T	S	TOTAL	
LA-C 101	Evolution of Landscape Architecture	3	--	--	3	3
LA-C 102	Earth Sciences – 1	3	--	--	3	3
LA-C 103	Plant Systematics and Ecology	3	--	--	3	3
LA-C 104	Landscape Detailing and Engineering	2	--	--	2	2
LA-E 105	Choice Based Elective 1	2	--	--	2	2
LA-S 106	Major Studio in Landscape Design -1	1	4	6	11	6
LA-S 107	Allied Studio- 1: Site Planning and Development Process	1	--	4	5	3
		Total/Semester			29	22

SEMESTER I Exam Conducted by Individual College on behalf of the University					
Course Code	Course Name	Examination Scheme			
		Theory Paper	Internal	External Viva	Total Marks
LA-C 101	Evolution of Landscape Architecture	50	50	--	100
LA-C 102	Earth Sciences – 1	50	50	--	100
LA-C 103	Plant Systematics and Ecology	50	50	--	100
LA-C 104	Landscape Engineering & Detailing	--	100	--	100
LA-E 105	Choice Based Elective 1	--	100	--	100
LA-S 106	Major Studio in Landscape Design -1	--	200	200	400
LA-S 107	Allied Studio- 1: Site Planning and Development Process	--	100	--	100
TOTAL					1000

LA-C 101 Evolution of Landscape Architecture

Course Title	Evolution of Landscape Architecture					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-C 101	3	3	50	50	--	100

Objectives:

The course intends to impart knowledge on historical evolution of landscape design, its theory and its social connections.

Course Content:

- History of Landscape architecture - World overview and detail study of the Indian Sub-Continent.
- Associations people had with their environment (Socio-Cultural constructs of Societies) at various points of time and across the globe.
- Parklands and other Urban Interventions; Cultural Landscapes: Identity, collective memory, landscape as text, landscape as art.
- Theory of Landscape Architecture- nature of theory in landscape architecture; design process, form meaning and experience; Society, language, representation of landscape, ecological design and aesthetics of sustainability.
- Chronological overview of development of Landscape Practices and their role in shaping the profession of Landscape Architecture.

Sessional work:

The individual colleges will detail the exercises based on the above topics—case studies, essay writing or term paper etc.

LA-C 102 Earth Sciences- 1

Course Title	Earth Sciences -1					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-C 102	3	3	50	50	--	100

Objectives:

The course intends to highlight the importance of earth sciences such as Geology, Geomorphology and Soil Sciences in Landscape Design and equip the students with requisite knowledge.

Course Content:

- Geology: Earth in space; origin and interior of the earth; early history of the Earth. The origin of life, understanding fossils, Earthquakes: causes and effects, seismic zones of India; Minerals and Metals; Rocks, Isostasy, plate tectonics, crustal deformation and mountain building; Structural geology, Stratigraphy
- Application of geological information in the interpretation of landscapes on maps and in the field; The relationships between geology, soils and vegetation: Practical examples.
- Geomorphology: Historical geomorphology, Geomorphological processes, Major processes and associated landforms; Climatic geomorphology and morphogenetic regions; Structural geomorphology, landforms developed on sedimentary sequences, volcanoes and volcanic landforms, pseudo structural landforms; Running water and underground water; channel networks and drainage basins; Hill slope geomorphology;
- Landforms related to the activities of organisms and man.
- Soil Sciences: Genesis, morphology and classification of soils; Properties of Soils: Physical, Chemical, Biological and Mineralogical; Soil use and Management; Soil evaluation and land-use planning; Soil and water conservation; Soil fertility and plant nutrition; Soil degradation control, remedial actions and reclamation techniques; Managing difficult soils.

Sessional work:

The individual colleges will detail the exercises based on the above topics—case studies, Report of a field visit either to a geology lab or site visit etc.

LA-C 103 Plant Systematics and Ecology

Course Title	Plant Systematics and Ecology					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-C 103	3	3	50	50	--	100

Objectives:

The course will comprehensively cover plant systematics and their ecological processes.

Course Content:

- Plant materials and their role in ecology.
- Plant taxonomy, Physiology and Plant Distribution
- Ecology, Ecological Processes, Growth and Limits to Growth. Ecological communities, spatial structure, succession, ecological niche and species diversity;
- Introduction to the Plant Kingdom; Basic plant structure/morphology/anatomy; Basic plant functions/growth & development/physiology; Principles of taxonomy / classification, identification and naming; Familiarity with local flora and vegetation;
- Photosynthesis and respiration mechanism; General account of enzymes and metabolism; Growth regulators; Phytogeographical Regions of India; Ecological and Botanical considerations in landscape design; Application of Plant Physiology and phytogeography to sustainable landscape design such as use of CAM (Crassulacean acid metabolism) plants in Green roofs etc.;
- Ecological Processes and cycles including energy flow and nutrient cycles; Population and Community Ecology; Abiotic factors including air, insolation, precipitation, soils, ionizing radiation and fire; Interaction of ecology and evolution; Human Ecology;
- Concepts of Ecological Ethics

Sessional work:

The individual colleges will detail the exercises based on the above topics -- a report of a field visit either to a herbarium or site visit etc.

LA-C 104 Landscape Engineering and Detailing

Course Title	Landscape Engineering and Detailing					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-C 104	3	3	--	100	--	100

Objectives:

The course intends to introduce principles of Landscape Engineering and train students in construction details relevant to landscape design.

Course Content:

- Contours and their characteristics, graphical representation, deriving contours by interpolation.
- Earth form Grading; symbols and annotations, basic grading principles, grading of terraces, roads across/along contours, Basics of road alignment (horizontal and vertical)
- Surface Drainage: Site planning for efficient drainage; understanding drainage pattern and watershed area, calculation of surface runoff, determination of catchments area and discharge rate; types of drainage systems, design of drainage elements: swales and culverts etc. Sub surface drainage planning.
- Earthworks cut and fill processes, volume computations and retention.
- Landscape Construction: Factors in relation to systems, structures and materials for Circulation: Roads and Parking, paths and plazas. Level Change, Planting: Planters, beds, edges and terraces. Water elements.
- Landscape simulation and site utilities
- Irrigation: broad systems and their utility as per plantation typology.
- Street furniture / site furnishings
- Landscape working drawings: Format and logical representation of information and organization with relevant cross-referencing methodology

Sessional work:

The individual colleges will detail the exercises based on the above topics—case studies, site visits etc..

LA-E 105 Choice Based Elective- 1

Course Title	Electives -1					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-E 105	3	3	--	100	--	100

Course Content:

Individual colleges will offer electives from which the student would choose as per their own interest. The colleges should design and develop the topics, objectives and contents of choice based elective courses based on their vision and strength. Sessional work for internal evaluation should be carried out in accordance with the course contents. Suggested exercises could be in the form of case study presentations, project work, essays, debates, seminar, quizzes or class tests.

LA-S 106 Major Studio In Landscape Design -1

Course Title	Major Studio in Landscape Design- 1					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-S 106	11	6	--	200	200	400

Objectives:

This studio will introduce the students to basics of Landscape Design by way of a studio project/s or similarly scaled exercises

Course Content:

- Introductory exercises in Art, Architecture & Landscape
- Specific exercises to develop reading, research, drawing skills (techniques and digital media) as well as language skills in verbal and written communication
- Site Analysis, Planning and Detailing of Landscape space for a medium sized site involving Landscape Design for small recreational or civic spaces

Sessional work:

The individual colleges will detail out the studio exercises based on the above pointers

LA-S 107 Allied Studio- 1: Site Planning and Development Process

Course Title	Allied Studio- 1: Site Planning and Development Process					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-S 107	6	3	--	100	--	100

Objectives:

The studio will introduce the students to the basics of site planning by way of studio exercises.

Course Content:

- Understanding of the significance of Site planning process and its relevance in establishing relationship between site characteristics and design requirements.
- Components of site planning- Site planning processes, study of environmental, economic, legal, and visual issues associated with the land planning, preparation of site inventory and analysis, program development and statement goals, synthesis of various above-mentioned components and implementation
- Use of relevant software and advanced mapping technology for analysis

Sessional work:

The individual colleges will detail out the studio exercises based on the above pointers

SEMESTER – II

SEMESTER - II Exam Conducted by the University						
Course Code	Course Name	Teaching Scheme (HRS)				CREDITS
		L	T	S	TOTAL	
LA-C 201	Ecosystem Analysis and Environmental Economics	3	--	--	3	3
LA-C 202	Earth Sciences – 2	3	--	--	3	3
LA-C 203	Research Methods -1	2	--	--	2	2
LA-E 204	Choice Based Elective- 2	2	--	--	2	2
LA-E 205	Choice Based Elective- 3	2	--	--	2	2
LA-S 206	Major Studio in Landscape Design-2	1	4	6	11	6
LA-S 207	Allied Studio 2: Planting Design	1	--	4	5	3
		Total/Semester			28	21

SEMESTER - II Exam Conducted by the University					
Course Code	Course Name	Examination Scheme			
		Theory Paper	Internal	External Viva	Total Marks
LA-C 201	Ecosystem Analysis and Environmental Economics	50	50	--	100
LA-C 202	Earth Sciences – 2	50	50	--	100
LA-C 203	Research Methods -1	--	100	--	100
LA-E 204	Choice Based Elective- 2	--	100	--	100
LA-E 205	Choice Based Elective- 3	--	100	--	100
LA-S 206	Major Studio in Landscape Design-2	--	200	200	400
LA-S 207	Allied Studio 2: Planting Design	--	100	--	100
TOTAL					1000

LA-C 201 Ecosystem Analysis and Environmental Economics

Course Title	Ecosystem Analysis And Environmental Economics					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-C 201	3	3	50	50	--	100

Objectives: The course will address ecosystem analysis from the lens of landscape architecture and offer an overview of environmental economics.

Course Content:

- Ecosystems their degrees of organization and self-regulation
- The interdependence of the biotic and abiotic environment
- Landscape as a performing entity contributing to economic value
- Global and Indian Ecosystems and Habitats
- Perspectives of Ecological Ethics and Land Justice
- Biogeographical Realms; ecoregions, biomes, floristic kingdoms, zoogeographic regions
- Habitats across scales and timelines
- Ecological communities
- Energy and matter in Ecosystems
- Spatial scaling methods for ecosystem analysis. Landscape Structure: Patches, corridors, matrix, network, and overall structure. Landscape Dynamics
- Natural Processes and Humans interacting with their environments as a system.
- Theoretical framework considering biological, social, and physical aspects of the organism within the context of their environments
- Flows between adjacent elements in a landscape and Landscape Functioning, Landscape change heterogeneity and management. Ecosystem degradation, factors causing it and various ways of understanding and classifying it.
- Environmental Economics – Introduction and theoretical construct. Important terminologies in Environmental Economics. Valuation of environmental services
- Models and Methods for economic analysis leading to sustainable planning e.g. Cost benefit analysis. Sustainable Development

Sessional work: Based on the course work

Term paper / Essay writing/Quadrat study and report

LA-C 202 Earth Sciences- 2

Course Title	Earth Sciences- 2					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-C 202	3	3	50	50	--	100

Objectives: The course will offer an in-depth understanding of hydrology and climatology and its application in landscape design.

Course Content:Climatology:

- Earth's Climatic Zones: Atmospheric dynamics, global air circulation, prevailing winds, oceanic currents, distribution of heat and precipitation, greenhouse gases, transfer of energy in the atmosphere, Solar Radiation.
- Effect of topography on local climates: Rain shadow effect,
- Indian Seasonal classification: Seasons and their interpretation, the growing season and conditions for plant growth, impact of seasons on vegetations
- Vegetation and Microclimate: Climate, location, and nature of biomass

Hydrology:

- Hydrological Cycle: Ground Water, Surface Water and Sub-surface water, Wetlands, Geological formations as aquifers, Precipitation, Weather duration for precipitation, Soil Moisture, Infiltration, Evaporation, Evapotranspiration, Runoff, Hydrograph, Runoff characteristics of streams, Field, Flow Duration Curve, Flow Mass Curve,
- Characteristics of precipitation in India: Relationship to vegetation, drainage basins, natural drainage patterns, Studies using GIS.

Sessional Work: Based on the course work

Mapping exercise in Hydrology, and/or a report related to Climatology

LA-C 203 Research Methods -1

Course Title	Research Methods- 1					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-C 203	2	2	--	100	--	100

Objectives:

Introduction to the basics of research methods shall help students to set the systematic procedures for exploring, investigating, understanding, and writing of issues in Landscape Design and related areas in an objective manner.

Course Contents:

- Purpose of research
- Data, Information and Knowledge
- Method and Methodology
- Literature Review
- Qualitative and Quantitative Research Methods
- Forms of Academic Writing
- Ethics of research and academic writing
- Citations and referencing styles

The course explores the fundamental principles, methods and process of research. The course enables the students to examine the need for research and methods to carry out the research. At the end students shall be able to understand, how to frame the research questions and execute the data and analyse them. They will also learn about ethics of conducting research and that of academic writing – such as confidentiality, consent, privacy, plagiarism, attribution, citations and referencing.

Sessional Work for internal evaluation:

The individual colleges will detail the exercises based on, but not restricted to the following pointers:

- Applications of qualitative and quantitative survey methods
 - Research Essay/Paper
-

LA-E 204 Choice Based Elective- 2

Course Title	Choice Based Elective- 2					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-E 204	2	2	--	100	--	100

Course Contents:

Individual colleges will offer electives from which the student would choose as per their own interest. The colleges should design and develop the topics, objectives and contents of choice based elective courses based on their vision and strength. Sessional work for internal evaluation should be carried out in accordance with the course contents. Suggested exercises could be in the form of case study presentations, project work, essays, debates, seminar, quizzes or class tests.

LA-E 205 Choice Based Elective- 3

Course Title	Choice Based Elective- 3					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-E 205	2	2	--	100	--	100

Course Contents:

Individual colleges will offer electives from which the student would choose as per their own interest. The colleges should design and develop the topics, objectives and contents of choice based elective courses based on their vision and strength. Sessional work for internal evaluation should be carried out in accordance with the course contents. Suggested exercises could be in the form of case study presentations, project work, essays, debates, seminar, quizzes or class tests.

LA-S 206 Major Studio in Landscape Design- 2

Course Title	Major Studio in Landscape Design -2					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-S 206	11	6	--	200	200	400

Objectives:

This studio will introduce the students to cultural landscapes (may be rural, peri urban or urban in nature and location) by way of a studio project/s

Course Content:

- Cultural landscapes - Interactions and inter-relationships between a diverse range of physical, environmental, social, and cultural factors influenced by human involvement
Landscape planning and design in the public realm, with a focus on community engagement issues including environmental and social justice, open space resources. May also include multi-modal transit ways, public health, recreation opportunities, community enhancements, water and food security etc.

Sessional work: Studio project/s that address the above content

LA-S 207 Allied Studio- 2: Planting Design

Course Title	Allied Studio- 2: Planting Design					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-S 207	5	3	--	100	--	100

Objectives:

This studio will introduce the students to basics of Planting Design by way of a studio project/s.

Course Content:

- The role of Plants and Planting as an element of design at various scales and typologies.
- Planting in varied habitats and environments like woodlands, grasslands, rolling terrain, hillsides, marshes, bogs, wetlands, waterside, aquatic planting etc.
- Preparation of Planting concepts and their various representations.
- Plant material - its structure, growth pattern & requirements, microclimatic effects with introduction to ecology and ecological processes in nature

Sessional work – Studio exercises based on the course work.

SEMESTER – III

SEMESTER - III Exam Conducted by Individual College on behalf of the University						
Course Code	Course Name	Teaching Scheme (HRS)				CREDITS
		L	T	S	TOTAL	
LA-C 301	Landscape Conservation and Regional Planning	3	--	--	3	3
LA-C 302	Landscape Resources, Commons, and Values	3	--	--	3	3
LA-C 303	Landscape Professional Practice and Project Management	2	--	--	2	2
LA-C 304	Research Methods- 2	2	--	--	2	2
LA-E 305	Choice Based Elective - 4	2	--	--	2	2
LA-S 306	Major Studio in Landscape Design -3	1	4	6	11	6
LA-S 307	Allied Studio -3	1	--	4	5	3
		Total/Semester			28	21

SEMESTER III Exam Conducted by Individual College on behalf of the University					
Course Code	Course Name	Examination Scheme			
		Theory Paper	Internal	External Viva	Total Marks
LA-C 301	Landscape Conservation and Regional Planning	50	50	--	100
LA-C 302	Landscape Resources, Commons and Values	50	50	--	100
LA-C 303	Landscape Professional Practice and Project Management	--	100	--	100
LA-C 304	Research Methods- 2	--	100	--	100
LA-E 305	Choice Based Elective - 4	--	100	--	100
LA-S 306	Major Studio in Landscape Design -3	--	200	200	400
LA-S 307	Allied Studio -3	--	100	--	100
TOTAL					1000

LA-C 301: Landscape Conservation and Regional Planning

Course Title	Landscape Conservation and Regional Planning					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-C 301	3	3	50	50	--	100

Objectives:

To introduce the need and relevance of landscape conservation and importance of regional planning

Course Content:

- Landscape conservation design – approach to achieve a sustainable, resilient socio-ecological landscape.
- The Regional Planning Process - gathering partners and stakeholders together to identify common priorities as well as focal resources, assessing vulnerabilities of these resources to current and future stressors.
- Conservation strategies and actions
- Evolving relationship between nature and society; emphasizing the ethics and values which underlie forest, park, and wildlife management.

Sessional work: based on course content

Case Study/Critical evaluation of Landscape Conservation Practices. Term Paper /Essay Writing

LA-C 302: Landscape Resources, Commons, and Values

Course Title	Landscape Resources, Commons, and Values					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-C 302	3	3	50	50	--	100

Objectives:

The course will look at a detailed understanding of the tangible and intangible landscape values and resources

Course Content:

- Recognizing Landscape Values as an intrinsic to Land
- Landscapes conceptualized as a resource, as a common good and its socio-economic values
- Landscape as a resource towards conserving landscapes while assessing the utility value of the resource considering the many complex facets of landscapes
- Understanding of landscape values (utilitarian values, socio-cultural values, economic values) as an essential means to support sustainable land use and spatial planning by citizen participation. To cater for the diverse nature of people-environment interactions, develop new integrative methods to study landscape values, including in-depth case-study research, landscape modelling, participatory mapping, and meta-studies

Sessional work: Based on course content

Documentation and mapping

LA-C 303: Landscape Professional Practice and Project Management

Course Title	Landscape Professional Practice and Project Management					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-C 303	2	2	--	100	--	100

Objectives:

The course will look at the existing nature of professional practice in the field and alternative paths for landscape professionals. It will also offer the basics of project management in landscape practice.

Course Content:

- Professional Practice: ethical practice; the character and operation of practices; legal requirements; cash flow and profitability; running a business; professional memberships and registration; risk and professional liability; and personal career planning.
- Project management: project stages; procurement and feasibility; statutory requirements; management of time, cost and quality; and contracts and contract administration in private and public realms.
- Alternative and innovative pathways through the profession
- Legal environment; concepts of ethics and professionalism

Sessional work: based on course content

Typical document preparation and analysis from stakeholder perspective /Debate

LA-C 304: Research Methods- 2

Course Title	Research Methods- 2					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-C 304	2	2	--	100	--	100

Objectives:

The course shall enable the students to acquire their own research interest, to frame their thesis topics, and formulate research proposals for minor and major research. It will also enable them to conduct minor projects, write reports and present them.

Course Contents

- Advance Research Methods
- Big Data Sourcing
- Formulating Research Proposal and Research Design
- Conducting and presenting a minor research project
- Writing Project Report

The course explores the advance principles, methods and process of research. It also explores the recent technique of Big Data sourcing and its application in framing the research questions.

Sessional Work for internal evaluation:

The individual colleges will detail the exercises based on, but not restricted to the following pointers:

- Conducting a minor research project and writing project report
- Seminar
- Research Proposal for Thesis

LA-E 305: Choice Based Elective -4

Course Title	Choice Based Elective- 4					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-E 305	2	2	--	100	--	100

Course Contents:

Individual colleges will offer electives from which the student would choose as per their own interest. The colleges should design and develop the topics, objectives and contents of choice based elective courses based on their vision and strength. Sessional work for internal evaluation should be carried out in accordance with the course contents. Suggested exercises could be in the form of case study presentations, project work, essays, debates, seminar, quizzes or class tests.

LA-S 306 Major Studio in Landscape Design -3

Course Title	Major Studio in Landscape Design -3					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-S 306	11	6	--	200	200	400

Objectives:

This studio will introduce the students to the principles of Regional Landscape Planning by way of a studio project/s.

Course Content:

- Regional Landscape Planning Design – Research and Identification of a Region, Delineation of a Region, Analysis of the region, Visual Assessment in Landscape Architecture, Landscape Character survey.
- Development of Sustainable landscape management policies and models for the region.
- Development of Landscape planning models and design program at various scales for the region.
- Ecological and environmentally sustainable planning models for the region.
- Formulate the Design solution and implementation strategies based on the Design Program.
- Detailing a Landscape Project – Preparation of execution drawings and documents.

Sessional work: Studio problem to be devised by individual college based on course content

LA-S 307 Allied Studio- 3

Course Title	Allied Studio -3					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-S 307	5	3	--	100	--	100

Objective:

In this semester, the topic of the Allied Studio is to be decided by individual colleges. The focus area should align to the major studio and/or address other advanced understanding of subjects already taught in the earlier semesters or look at newer issues in the profession.

Course Content:

May include the following (to be determined by individual colleges)

- Environmental Impact Assessment and Legislation OR
- Landscape Engineering and Project implementation OR
- As per focus area of college (To be decided by individual colleges)

Sessional work: Studio problem to be devised by individual college based on course content

SEMESTER IV

	SEMESTER IV Exam Conducted by the University					
Course Code	Course Name	Teaching Scheme (HRS)				CREDITS
		L	T	S	TOTAL	
LA-E 401	Choice Based Elective - 5	2	--	--	2	2
LA-E 402	Choice Based Elective - 6	2	--	--	2	2
L-S 403	Thesis	6	10	10	26	16
		Total/Semester			30	20

	SEMESTER IV Exam Conducted by the University				
Course Code	Course Name	Examination Scheme			
		Theory Paper	Internal	External Viva	Total Marks
UD-E 401	Choice Based Elective - 5	--	100	--	100
UD-E 402	Choice Based Elective - 6	--	100	--	100
UD-S 403	Thesis	--	400	400	100
Total/Semester					1000

LA-E 401 Choice Based Elective – 5

Course Title	Choice Based Elective- 5					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-E 401	2	2	--	100	--	100

Course Contents:

Individual colleges will offer electives from which the student would choose as per their own interest. The colleges should design and develop the topics, objectives and contents of choice based elective courses based on their vision and strength. Sessional work for internal evaluation should be carried out in accordance with the course contents. Suggested exercises could be in the form of case study presentations, project work, essays, debates, seminar, quizzes or class tests.

LA-E 402 Choice Based Elective – 6

Course Title	Choice Based Elective- 6					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-E 402	2	2	--	100	--	100

Course Contents:

Individual colleges will offer electives from which the student would choose as per their own interest. The colleges should design and develop the topics, objectives and contents of choice based elective courses based on their vision and strength. Sessional work for internal evaluation should be carried out in accordance with the course contents. Suggested exercises could be in the form of case study presentations, project work, essays, debates, seminar, quizzes or class tests.

LA-C 403 THESIS

Course Title	Thesis					
			Marks			
Course Code	Hrs/week	Credits	Theory	Internal	External Viva	Total
LA-S 403	26	16	--	400	400	800

Objectives:

Learner develops a research position as a landscape professional, conducts systematic research by developing a research methodology. Analysis and findings of the research based on the methodology. Site selection and analysis based on analytical framework developed. The students are required to demonstrate their Landscape Design acumen in a proposal based on research questions, methods and findings.

Course Contents:

- Locating the Area of Interest through suggested readings and literature review
- Identification of Knowledge gap, Action Gap, Policy Gap, Contextual Gap.
- Identification of problems and Issues
- Devising methods of investigation
- Data Collection/ Field Work and its analysis
- Strategies and intervention with policy formation with relevant details
- Development of Design Program, Objectives and Design Brief. Detailed landscape proposal reflecting knowledge gained in the entire program.

Sessional work:

The output of the thesis will be in the form of a thesis report (black book) that follows the norms of academic writing. In addition, proposal for intervention that uses a suitable representational system for communicating the proposal should be evolved in consultation with the thesis supervisors

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