RAMAIAH
Institute of Technology

CURRICULUM

for the Academic year 2019 – 2020

SCHOOL OF ARCHITECTURE

III & IV Semester M.ARCH. (LANDSCAPE ARCHITECTURE)

RAMAIAH INSTITUTE OF TECHNOLOGY
(Autonomous Institute, Affiliated to VTU)
Bangalore – 560054.

About the Institute:

Ramaiah Institute of Technology (RIT) (formerly known as M. S. Ramaiah Institute of Technology) is a self-financing institution established in Bangalore in the year 1962 by the industrialist and philanthropist, Late Dr. M S Ramaiah. The institute is accredited with "A" grade by NAAC in 2014 and all engineering departments offering bachelor degree programs have been accredited by NBA. RIT is one of the few institutes with prescribed faculty student ratio and achieves excellent academic results. The Institute was a participant of the Technical Education Quality Improvement Program (TEQIP), an initiative of the Government of India. All the departments have competent faculty, with 100% of them being postgraduates or doctorates. Some of the distinguished features of RIT are: State of the art laboratories and individual computing facility to all faculty members. All research departments are active with sponsored projects and more than 304 scholars are pursuing PhD. The Centre for Advanced Training and Continuing Education (CATCE), and Entrepreneurship Development Cell (EDC) have been set up on campus. RIT has a strong Placement and Training department with a committed team, a good Mentoring/Proctorial system, a fully equipped Sports department, large air-conditioned Library with over 1,35,427 books with subscription to more than 300 International and National Journals. The Digital Library subscribes to several online e-journals like IEEE, JET etc. RIT is a member of DELNET, and AICTE INDEST Consortium. RIT has a modern auditorium, several hi-tech conference halls all being air-conditioned with video conferencing facilities. It has excellent hostel facilities for boys and girls. RIT Alumni have distinguished themselves by occupying high positions in India and abroad and are in touch with the institute through an active Alumni Association. RIT obtained Academic Autonomy for all its UG and PG programs in the year 2007. As per the National Institutional Ranking Framework, MHRD, Government of India, Ramaiah Institute of Technology has achieved 64th rank in 2019 among the top 100 engineering colleges across India.

SCHOOL OF ARCHITECTURE

Ramaiah Institute of Technology (RIT), Bangalore, is a leading institution offering Undergraduate, Post graduate and Research programs in the areas of Engineering, Management and Architecture. The institute was established in the year 1962 under the aegis of Gokula Education Foundation. Its mission is to deliver Global quality technical education by nurturing a conducive learning environment for better tomorrow through continuous improvement and customization.

The School of architecture, RIT, Bangalore, was established in the year 1992. Since its establishment, the school has played a vital role in providing quality education. The Council of Architecture (COA) and AICTE has recognized this program.

The Mission of the school is to uphold RIT mission and thus provide quality education to the students and mould them to be excellent Architects with adequate management skills and noble human qualities.

Full time faculty members having postgraduate qualification from prestigious institutions in India and abroad are teaching in this school. Experienced and well respected practicing architects are invited to provide their experiences as visiting faculty. New milestones are continually being set and achieved. The synergy of the progressive management, committed faculty and students are ensuring in excellent academic results year after year. This is reflected in the high number of University ranks that are secured.

The School of Architecture is now autonomous (affiliated to VTU) providing scope for further improvement. The focus has been towards fostering novel concepts and solutions in architectural design. The student's response is very encouraging and the school recognizes and appreciates such good students by awarding them. Many of the students after graduation have pursued higher studies in various universities in the country and abroad. There is a good demand for the school graduates in the industry and is developing initiatives towards co-branding of the industry and the institution school. Many have started their own enterprise and architectural practice as well.

All this has been possible as a result of the efforts of the impeccable faculty of the school. The faculty is committed to the welfare and success of the students. The teachers of the school are also engaged in enhancing their knowledge and skills and many are engaged in research activities as well. The school has experts in specialized disciplines like Habitat Design, Product Design, Urban Design, Urban Planning, Landscape Architecture, Heritage Conservation and Interior Design. Faculties of the school also actively participate in National and International conferences and publish and present papers.

The school as part of consultancy started off with the maiden project to redevelop the RIT engineering college campus and is now involved in various campus designs.

The school is proud to have started the M.Arch programme in Landscape Architecture. This was started in the year 2011. The Master of Landscape Architecture is a 2 year full time postgraduate programme. The prescribed course is two years of full-time study.

The course consists of areas of study ranging from community-scale landscape planning to the details of landscape construction technology, with an emphasis on sustainable practices in landscape architecture. The course covers a broad spectrum of topics from local to regional scale. Balancing theory with hands-on practice, design aspects of landscape architecture is given equal prominence to direct the students towards a holistic approach to Sustainable Landscape Architecture. The course is structured to analyze and respond to critical issues facing contemporary landscape architectural design and development. Thus the students have the opportunity to explore alternative, innovative, and experimental design.

The course will enable design and construction professionals to enhance their understanding of the integral relationship between natural processes and human activity, and how sustainable design fits into everyday life, explore design options to address the same and examine policies, regulations, and standards in industry and government for implementation of the principles of sustainable design.

VISION OF THE INSTITUTE

To be an Institution of International Eminence, renowned for imparting quality technical education, cutting edge research and innovation to meet global socio-economic needs

MISSION OF THE INSTITUTE

MSRIT shall meet the global socio-economic needs through

- Imparting quality technical education by nurturing a conducive learning environment through continuous improvement and customization
- Establishing research clusters in emerging areas in collaboration with globally reputed organizations
- Establishing innovative skills development, techno-entrepreneurial activities and consultancy for socio-economic needs

QUALITY POLICY

We, at MS Ramaiah Institute of Technology strive to deliver comprehensive, continually enhanced, global quality technical and management education through an established Quality Management System, complemented by the synergistic interaction of the stake holders concerned

VISION OF THE DEPARTMENT

To achieve and propagate high standards of excellence in architectural education.

MISSION OF THE DEPARTMENT

- The school's commitment is to prepare people to make a difference;
- To create an environment that shall foster the growth of intellectually capable, innovative and entrepreneurial professionals, who shall contribute to the growth of the society by adopting core values of learning exploration, rationality and enterprise; and
- To contribute effectively by developing a sustainable technical education system to meet the changing technological needs incorporating relevant social concerns and to build an environment to create and propagate innovative designs and technologies.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs):

PEO 1: Use the knowledge and skills of Architecture to analyze the real life problems and interpret the results.

PEO 2: Effectively design, implement, improve and manage the integrated socio-technical systems.

PEO3: Build and lead cross-functional teams, upholding the professional responsibilities and ethical values.

PEO 4: Engage in continuing education and life-long learning to be competitive and enterprising.

PEO 5: To prepare students to excel in – urban context, historical landscape, specialized landscape situations, industrial landscapes, recreational landscapes etc as well as get an understanding ecologically sustainable development and familiarize the students to environmental legislation and its components and its role in checking the damage to the environment.

PEO 6: To educate the students on the various aspects of a Landscape design practice.

Curriculum breakdown structure:

The Post Graduate curriculum of Landscape Architecture program is so structured to include all the courses that together satisfy the requirements of the program specific criteria prescribed by the **Council of Architecture**. The Course code, Course title, the number of contact hours and the number of credits for each course are given in the following table. The courses are grouped in line with the major components of the curriculum namely: (i) Basic Landscape Architecture and Engineering courses (ii) Professional core courses (iii) Electives and (iv) Project and industry exposure/internship.

Breakup of Credits for M Arch Degree Curriculum. (I to IV Semester)

Sem	BAE	PCS	Electives	Project / Internship	Total Credits
I	12	13	-	-	**25**
II	7	15	3	-	**25**
III	7	13	2	3	**25**
IV	3	6	-	16	**25**
Total	**29**	**47**	**5**	**19**	**100**

BAE - Basic Architecture & Engineering -29

PCS - Professional Core Subjects -47

Elective - Professional Electives, relevant to the chosen specialization -5

Project / Internship - Project Work and Internship in Architect's office -19

Board of Studies for the Term 2019-2020

1.	Prof. (Dr.) Pushpa Devanathan	Chairperson
2.	Ar. Chitra Vishwanath	VTU Nominee
3.	Ar. Vidyadhar S. Wodeyar	External Industry Expert
4.	Ar. Ulhas Rane	External Industry Expert
5.	Dr. Rama RS	Academician
6.	Dr. Chidambara Swamy	Academician
7.	Ar. Subbiah T S	Alumni
8.	Prof. Vishwas Hittalmani	Member
9.	Prof. (Dr.) Rajshekar Rao	Member
10.	Prof. (Dr.) Jyotimay Chari	Member
11.	Dr. Rashmi Niranjan	Member
12.	Dr. Monalisa Vyas	Member
13.	Er. Vijayanand M	Member

SCHOOL OF ARCHITECTURE

TEACHING STAFF

Sl No	Name	Qualification	Designation
1.	Prof (Dr). Pushpa Devanathan	M.Arch., P.G.D.I.(PhD)	Professor & Head of Department
2.	Prof (Dr). Rajshekar Rao	M L Arch (PhD)	Professor & Head-M.Arch (Landscape Architecture)
3.	Ar. Prasad G	M L Arch	Professor (Tenure)
4.	Ar. Surekha R	M L Arch	Associate Professor
5.	Ar. Lavanya Vikram	M L Arch (PhD)	Assistant Professor
6.	Ar. Meghana K Raj	M L Arch	Associate Professor
7.	Ar. Tejaswini H	M L Arch	Associate Professor
8.	Ar. Mallika PV	M L Arch	Associate Professor (Tenure)
9.	Ar. Sivadeepti Reddy	M Arch	Assistant Professor
10.	Ar. Ranjitha Govindaraj	M L Arch	Assistant Professor
11.	Ar. Arpita Sarkar	M L Arch	Assistant Professor
12.	Ar. Jyotsna Rao	M L Arch	Assistant Professor
13.	Dr. Rajgopal Reddy	M.Tech PhD	Allied Faculty
14.	Dr. Raghavendra	M. Sc PhD	Allied Faculty
15.	Mr. Manjunath R	M.Tech	Allied Faculty
16.	Mrs. Shilpha	M.Tech	Allied Faculty
17.	Ar. Nina Chandavarkar	MS L Arch	Visiting Professor
18.	Ar. Bijoy Chacko	M L Arch	Visiting Professor
19.	Ar. Nivetha Paul	M L Arch	Visiting Faculty

ADMINISTRATIVE STAFF

1	Mrs. Padmavathy. B	MBA	FDA
2	Mrs. Ambika	M Tech	Assistant Instructor
3	Mr. Nagesh B.L	Dip.In Mech.Engg.	Assistant Instructor

SUPPORT STAFF

1	Mr. Ramachandra Chari	Attender
2	Mr. Penchaliah	Attender

SCHEME OF TEACHING & EXAMINATION – M ARCH
(LANDSCAPE ARCHITECTURE)

ACADEMIC YEAR 2019-2020

III SEMESTER – 2018 BATCH

Code	Subject	Credits	Total	Examination	CIE Marks	SEE Marks
LA301	Landscape Design III (Regional landscape)	8:0:1	9	SEE (Viva voce)	50	50
LA302	Planting Design –II	3:0:0	3	SEE	50	50
LA303	Remote sensing & GIS	2:0:0	2	CIE	100	
LA304	Environmental Impact Assessment	2:0:0	2	SEE	50	50
LA305	Landscape Resources & Management – II	3:0:0	3	SEE	50	50
LA306	Elective	2:0:0	2	SEE(Viva voce)	50	50
LA307	Practical Training / Vacation Assignment	0:0:3	3	SEE (Viva voce)	100	
LA308	Landscape Documentation	1:0:0	1	CIE	100	
	Total		**25**			

Evaluation Pattern : Marks allocation for SEE

Subject Code	Subject	Design	Drawing	Study Tour/Book Review
LA301	Landscape Design III (Regional landscape)	20	20	10

Subject Code	Subject Name	Portfolio	Assignment
LA303	Remote sensing & GIS	60	40

Subject Code	Subject Name	Design	Drawing	Viva Voce
LA306	Elective	25	15	10

Subject Code	Subject Name	Portfolio	Critical Appraisal	Material Analysis	Viva Voce
LA307	Practical Training / Vacation Assignment	50	20	10	20

Subject Code	Subject Name	Portfolio	Critical Appraisal	Analysis	Presentation
LA308	Landscape Documentation	50	20	20	10

Note:

- Educational Tour are part of Landscape Design. 1 credit weightage to be given to Educational Tour/ Site Visit.
- National / International tours may be arranged during vacation to students, to study examples of Landscape Architecture.
- Literature survey will be a requirement for landscape design study, periodical review by external experts for subjects going for viva voce.
- For all viva voce examinations one internal faculty and one external juror will conduct the exam.
- Portfolios have to be submitted for all **Viva voce** exam subjects and retained in the department for one year.
- All students have to register and submit the portfolios on the first day at the beginning of Viva voce exam.

SCHEME OF TEACHING & EXAMINATION – M ARCH
(LANDSCAPE ARCHITECTURE)
ACADEMIC YEAR 2019-2020

IV SEMESTER – 2018 BATCH

Code	Subject	Credits	Total	Examination	CIE Marks	SEE Marks
LA401	Landscape Architecture Thesis	16:0:0	16	SEE (Viva voce)	50	50
LA402	Landscape Conservation	3:0:0	3	SEE	50	50
LA403	Legal Aspects & Environmental Legislation	3:0:0	3	SEE	50	50
LA404	Professional Practice & Landscape Maintenance	3:0:0	3	SEE	50	50
	Total		**25**			

CIE = CONTINUOUS INTERNAL EVALUATION

SEE = SEMESTER END EXAMINATION

Evaluation Pattern : Marks allocation for SEE

Subject Code	Subject Name	Design	Drawing	Viva Voce
LA401	Landscape Architecture Thesis	25	15	10

Note:

- Educational Tour are part of Landscape Design. 1 credit weightage to be given to Educational Tour/ Site Visit.
- National / International tours may be arranged during vacation to students, to study examples of Landscape Architecture.
- Literature survey will be a requirement for landscape design study, periodical review by external experts for subjects going for viva voce.
- For all viva voce examinations one internal faculty and one external juror will conduct the exam.
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- All students have to register and submit the portfolios on the first day at the beginning of Viva voce exam.

SEMESTER –III

LANDSCAPE DESIGN III (Regional landscape)

Course Code: LA301 **Credits: 8:0:1**
Prerequisite: Nil
Course Coordinator: Prof. Rajshekhar Rao

Course objectives:
To develop the skill in students to investigate and record interdisciplinary regional scale projects integrating characteristics of soils, slopes, natural drainage systems, native plants communities, and wildlife habitat systems.

Course contents:

UNIT-I

The studio exercises will involve regional context, conservation, specialized landscape situations, ecology and the region. Understanding of ecologically sustainable development would be the underlying theme.

UNIT-II

The exercise includes documentation, to illustrate the process of understanding through study, in depth analysis of all the major issues, present status, scheme and policy decisions. Due importance to be given for the entire process that happens in site, studio and reviews.

UNIT-III

It can include a large area in a regional scale with strong justification with reference to conservation, ecological problems, environmental issues etc.

1. The studio shall begin with documentation and understanding the process followed in each of schemes. Documentation shall be intensive exercises with small groups who will identify the project and illustrate the entire process of design as well review the present status of the project and realization of stated objectives.
2. The main studio project shall be chosen in an area which is undergoing rapid changes triggered by an identifiable event or policy. The studio shall debate the needs of conserving the overall character of the chosen area with an in depth analysis on the social- cultural issues. Design of the proposed built element shall be preceded by a comprehensive scheme which shall be detailed.
3. Projects like; tourism development; conservation of natural and built heritage; intervention in an urban area which has not been able to maintain its cultural moorings due to market forces shall be attempted.

Preliminary work on thesis project is to be done.

Course outcome (COs):

The students will have the ability to

- To investigate and record the information available for analyzing natural and cultural processes that influence landscape planning and design.
- Adapt techniques and approaches to organizing and presenting environmental themes and parameters that guide planning and design decision-making.

REFERENCE BOOKS

1. Silent Spring- Rachael Carson
2. Small is Beautiful -EF Schumacher
3. Introduction to Landscape Design- John L. Motloch
4. Cities- Lawrence Halprin
5. The Wonder that was India- AL Basham
6. Land and Land Art

SEMESTER III

PLANTING DESIGN – II

Course Code: LA 302 **Credits: 3:0:0**
Prerequisite: Nil
Course Coordinator: Associate Prof. Meghana Raj

Course Objectives:

- Introduce the student to the technical representation of softscape and hardscape in landscape architecture.
- Introduce them to the methods of bill of quantities for the plant materials in landscape Design.
- Introduce them to different ecosystems their significant issues and suggestive plantation.
- Introduce them to Softscape maintenance and management

Course contents:

UNIT-I

Introduction to soft landscape working drawings, Planting concepts, planting plans, plants schedule, specifications, estimation and bills of quantity of plant materials. Design exercises oriented towards the use of plant material in specific situation such as courtyards, small open spaces.

UNIT-II

Plants and environment, role of plants against drought, flood etc, Plants for reclamation, influence of temperature, humidity and rainfall over plants. Windbreaks, shelter belts, erosion control, wild life, land rehabilitation, plant materials for high water table.

UNIT-III

Application in planting design, case studies working with perennials in the context of trees, shrubs, and the surrounding landscape.

UNIT-IV

Soil preparation, plant selection, and garden maintenance. Vertical gardening, plants for multistory buildings, organic composting, organic gardening etc maintenance and management of plant material.

Course Outcome (COs):

The students will be able to

- Gain the knowledge of technical representation of softscape and hardscape
  in landscape architecture.
- Identify the methods of doing bill of quantities for the plant materials in landscape Design.
- Identify them to different ecosystems their significant issues and suggestive plantation and softscape maintenance and management.

REFERENCE BOOKS

1. Residential Landscaping 1: Planning, Design, Construction - Walker, Theodore D.
2. Plants for Reclamation of Wasteland ICAR Publication
3. Plants & Environment - Daubenmire.
4. The Planting Design Handbook -Nick Robinson

SEMESTER III

REMOTE SENSING AND GIS

Course Code: LA 303 **Credits: 2:0:0**
Prerequisite: Nil
Course Coordinator: Asst Prof. Arpitha Sarkar

Course Objectives:

- GIS is being increasingly used worldwide for landscape planning and restoration projects.
- The objective of the course is to train the students in the application of GIS in Landscape design.

Course Contents:

UNIT-I

Remote sensing - An overview, application of techniques through case studies, sensors, sensor platform, types of camera film, interpretation of satellite imagery.
Image restoration, enhancement, classification, date merging and new sensor systems such as large format camera, solid state linear arrays, the Shuttle Imaging radar systems, the Landsat Thematic Mapper, the SPOT satellite system, NOAA Advanced Very High Resolution Radiometer (AVHRR)

UNIT-II

Image spectrometry and Lidar systems with extensive illustrations
Aerial photography - Needs, classification, types, stereoscopy, stereovision, conditions and causes, interpretation, application, photogrammetry.

UNIT-III

Classical elements of aerial photographic interpretation; Emphasis on non-photographic sensing systems and the analysis of data using digital image processing procedures.
GIS – Understanding, definition, evolution, concepts, components and software application.

UNIT-IV

Representing geographic features and other spatial phenomena graphically; Locational information of particular geographic features on earth's surface; Spatial relationship between features; Attribute information of geographic features.
Applications of remote sensing & GIS in landscape Architecture.

Course Outcomes (COs):

- Understands the advantages of using remote sensing over conventional methods.
- Understands the concept of GIS and its applications.
- Understands the application of remote sensing and GIS in Landscape Architecture.
- Techniques of Map preparation and analysis using maps.

REFERENCE BOOKS

1. Introduction to G.I.S – Kang Tsung Chang
2. Remote Sensing and Image Interpretation –Thomos M Lillis and,Ralph W
3. Fundamentals of Remote Sensing – George Joseph
4. Principles of G.I.S – Peter A Burrough, Rachael A McDonnel
5. Spatial Analysis and G.I.S – Michael F Goodchild

SEMESTER III

ENVIRONMENTAL IMPACT ASSESSMENT

Course Code: LA 304 **Credits: 2:0:0**
Prerequisite: Nil
Course Coordinator: Associate Prof. Surekha R

Course Objectives:

- Understanding of environmental issues and suggestive measures
- Introduction to techniques of environmental management
- Introduction to application of relevant legislations in landscape design
- Establishing links of environmental management and landscape architecture.

Course contents:

UNIT-I

Environment, pollution, human settlements industries, dams, National parks etc,

UNIT-II

Environmental Impact Assessment - Definitions, methodologies, techniques, data collection, identification of study area, scope, aim, standards & measurements. Indian scenario, legislation.

UNIT-III

Environmental planning and management– strategies, approaches environmental protection, ecological footprint, carrying capacity analysis, environmental auditing, introduction to Pollution monitoring & analysis, Role of landscape architects in EIA.

UNIT-IV

Environmental and town planning legislation relevant to EIA procedures: (Air act; Water act, EPA act), evolution of EIA across world and India.

Course Outcome (COs):

The students will be able to

- Identify changes in the environment due to increasing urbanization and development
- Identify strategies of environmental conservation to relevant landscape projects.
- Demonstrate scientific knowledge of methodologies and techniques of environmental management in landscape projects.

REFERENCE BOOKS

1. Our National Park Policy - John Ise
2. Parks and Recreational Needs in Urban area - Elinor C. Guggenheimer
3. Landscape Planning & Environmental Impact Design – Tom Turner

SEMESTER III

LANDSCAPE RESOURCES & MANAGEMENT – II

Course Code: LA 305 **Credits: 3:0:0**
Prerequisite: Nil
Course Coordinator: Associate Prof. Lavanya V

Course Objectives:
Students will learn

- Introduce them to the values of biodiversity at the regional scale and various terminologies.
- Introduce ecosystem as a landscape resources, its importance and need for conservation.
- Environmental pollution and their mitigation techniques. Disaster management and their mitigation through landscape.

Course contents:

UNIT-I

Introduction to biodiversity, values, environmental services to the planet. Biodiversity of India, biodiversity hotspot, threats and conservation of biodiversity and its types.
Empirical research within landscape ecology to the practical needs of resource managers

UNIT-II

Case-studies with political, economic and social factors that influence the use of landscape ecology and other data-based science around the world.
Introduction to ecosystem, desert, marine and estuary, aquatic ecosystem, flora, fauna threats and conservation measures of these ecosystem along with case studies. Study of trophic levels, sections through aquatic eco system.

UNIT-III

Environmental pollution: Classification of pollutant, Types of pollution – Air, Noise, Water, Soil, Radioactive, Light. Types affects, Control measures though landscapes.
Examples of interactions between people and landscapes in various parts of world along with case studies

UNIT-IV

Ecological and social dimensions. Threats to resources, water management, air quality, and vegetation cover. City development plans, controls, urban landscape. Solid waste management – its classification, Methods and Benefits. Role of government organization in for pollution reduction. Disaster Management – land slides, Earthquakes, and their mitigation process through landscape.

Course Outcome (COs):

The students will be able to

- Learn about the biodiversity existing in India at a regional.
- Identify different ecosystem, its importance for the habitat system to develop and their need for conservation.
- Learn types of Environmental pollution and their mitigation techniques. Learn different disaster management and their mitigation levels and techniques through landscape in India and international..

REFERENCE BOOKS

1. Project Management for the Design Professional - Burstein
2. Environmental Management – T.V Ramchandra
3. Landscape Ecology & Resource Management - John A. Bissonette, Ilse Storch

SEMESTER III

ELECTIVE

Course Code: LA 306 **Credits: 2:0:0**
Prerequisite: Nil
Course Coordinator: Prof. Rajshekar Rao

Aim of this Elective course is to broaden the knowledge of the student so as to enable the student to deal more effectively with various aspects of landscape architecture. Topics pertaining to environmental, ecological or other important issues in the field of landscape architecture like, Sacred landscape, Modern landscape, Eco- architecture, lake as water resource, Interior landscape design, Cultural landscape. Water as element in landscape,
Man-made Landscape etc.

SEMESTER III

PRACTICAL TRAINING AND VACATION ASSIGNMENT

Course Code: LA 307 **Credits: 0:0:3**
Prerequisite: Nil
Course Coordinator: Prof. Rajshekar Rao

Duration of Assignment: 7 weeks between 2nd& 3rd Semester.

Course Objectives: To provide exposure to the various dimensions of Landscape Architectural profession. The students are required to Study minimum two live Projects designed by landscape architects, Critical Analysis of the live projects designed by landscape architects.

Requirements of Practical Training and Vacation Assignment

The student is expected to be exposed to the preparation of working drawings, detailing, plumbing drawing, Electrical drawings, planting plan, list of plant materials, landscape elements used in the project, and documentation of projects through photographs etc.
Student has to discuss the progress of work with guide after every two weeks.

The students will be able to:

- Do the documentation of live site landscape projects
- Represent the different elements of landscape architecture
- Translate their ideas in the form of landscape drawings.

Performance will be evaluated through viva voce
The viva-voce marks will be awarded based on the following works:

- Portfolio of two live projects
- Landscape material portfolio

SEMESTER – III

LANDSCAPE DOCUMENTATION

Course code: LA 308 **Credits: 1:0:0**
Prerequisite: Nil **Contact hours:** 42 hours
Course coordinator: Prof. Rajshekar Rao

Course Objectives:

- Introduction to Landscape documentation and its methods
- To understand the Techniques and different methods of Landscape Documentation
- Introduction to format, procedure of Landscape documentation for different types of landscapes

Course contents:

Unit – I

Landscape documentation – Definitions, objectives, methodologies, Techniques .etc.

Unit – II

Documentation Method: Primary Survey and secondary survey, Questionaire.
Background research, Literature study, Archival, survey of historical map, flora and Fauna .etc.
Field work, GIS analysis, Landscape typology, Questionnaire, Photos .etc.
Assessment of Landscape and Recommendations – Evaluating existing condition, Integrity and Significance of landscapes

Unit – III

Landscape documentation Assignment - Identification of Study area, Surveys, Assessments, and Report.
Different types of Landscape that can be documented are:
Natural landscape, Prehistoric Landscapes, Cultural Landscapes, Heritage Landscapes, Rural Landscapes, Urban Landscapes .etc.

Course outcome (COs):

The students will be able to:

- Gain the knowledge about landscape documentation and its methodologies, techniques
- Able to work on Landscape documentation of various landscapes
- Performance will be evaluated through CIE
- The marks will be awarded based on the following works:
- Analysis assessment
- Landscape documentation portfolio, Critical appraisal, Analysis and Presentation.

SEMESTER –IV

LANDSCAPE ARCHTECTURE THESIS

Course Code: LA 401 **Credits: 16:0:0**
Prerequisite: Nil
Course Coordinator: Prof. Rajshekar Rao

Course objective:

To provide the students an opportunity towards application of the knowledge gained in an independent Thesis, with a design or a research focus, to arrive at a creative/ thoughtful design or findings, enriching the landscape architecture database.

Course contents:

- To provide an opportunity to prepare independent and original study at local or regional level. The study should be research based related to Urban or regional landscape issue.
- To provide an opportunity to prepare independent and original study at local or regional level pertaining to landscape architecture. To create a brief which sets the frame work for design.
- To demonstrate an advanced level of design ability to convert the brief set forth earlier into a speculative proposition of design.
- To articulate and delineate the proposition of design into a Landscape design solution addressing all the dimensions.
- Alternatively, the Thesis could be a research topic based on the accepted norms of research methods. The Thesis can either be a scholarly research on an issue (or set of issues) which has a bearing on Urban or regional issues or a project with a clearly demonstrated design development process. The project shall demonstrate competence in integrating various issues of social, formal and local concerns into the design.
- 16 credits include the contact between the students and teachers. Each student is expected to spend additional time in the week on the Thesis in terms of library reference, site visits, designing, drawing, use of computers etc.

Course outcome (COs):

1. A comprehensive understanding in handling a major Landscape design independently.
2. Understanding Practical application.
3. Solutions for real life Situations.

SEMESTER IV

LANDSCAPE CONSERVATION

Course Code: LA 402 **Credits: 3:0:0**
Prerequisite: Nil
Course Coordinator: Assnt. Prof. Ranjitha Govindaraj

Course objective:

- To understand the different types Landscape Assessment techniques and conservation
- To accommodate the knowledge of Landscape resources during planning.

Course contents:

UNIT-I

Introduction to Cultural Landscapes, Scale and boundary of Cultural Landscapes, Tangible and intangible records of history of Landscapes, Layers in Landscapes, Values in Landscapes – Burra Charter & Layers in Landscapes, Establishing Significance, UNESCO Cultural Landscapes – examples.

UNIT-II

Impact of Human activities on Historic Landscapes, Impact of Large scale projects on Landscapes – Dams, Reservoirs, mining and industries etc. Role of communities in Conservation of Landscapes.

UNIT-III

Methodology of Landscape Conservation, Documentation process, Documentation techniques, examples.
Introduction to the concept of Landscape Conservation, Relevance of Landscape Conservation in Modern Era, Principles of Landscape Conservation, Historical perspective of Landscape Conservation – Eurocentric and Indian.

UNIT-IV

Landscape conservation Policies – International, National, State, Regional and Local level.

Course outcome (COs):

- Understanding of Landscape Planning and Landscape Conservation with proper assessment results and cost benefit analysis.
- Knowledge on Landscape management at the regional scale.

REFERENCE BOOKS

1. Strategies for Sustainable Rural Development –Singh Surat
2. Sustainable Design: Towards New Ethic in Architecture and Town Planning – Contal, Marie-Helene
3. Green Architecture: Guide to Sustainable Design -- Crosbie, Michael J
4. Wetlands, A Threatened Landscape - Michael Williams
5. Architecture in Conservation: Managing Development at Historic Sites - James Strike

SEMESTER IV

LEGAL ASPECTS & ENVIRONMENTAL LEGISLATION

Course Code: LA 403 **Credits: 3:0:0**
Prerequisite: Nil
Course Coordinator: Associate Prof. Surekha R

Course Objectives:

- Introduction to legal aspects and terminologies
- Understanding of various environmental legislation applicable in the country and across the globe
- Understanding of various town planning legislationapplicable in the country
- Understanding the significance and application of the same in landscape projects

Course contents:

UNIT-I

India Constitution, concept of Law in India scenario, legal tools: Act, regulation, abatements to act etc, Evolution of Town planning and Environmental Legislation in India.

UNIT-II

Environmental legislation in India (Environmental Protection Act, Air act, Water Act, Wildlife protection act, Forest Act, Mining Act, Ancient monument protection Act, National Green tribunal Act, Biodiversity Act, and pertaining regulations), International Environmental regulation and treaties.

UNIT-III

Town Planning Legislations in India (73^{rd} and 74^{th} constitutional amendments, Land acquisition act 1894, Land acquisition bill 2015).

UNIT-IV

Town and country Planning Act, Developmental plans, hierarchy of green area in development plans, significance of green areas in town planning, Land policies etc.

Course Outcome (COs):

The students will be able to

- Understand provisions of various national and international legislations and legal aspects to ensure sustainable development in accordance to the global sustainable developmental goals
- Comply with the policy framework of the country by incorporating the legal provisions and legislative policies in the landscape projects to be dealt in profession

REFERENCE BOOKS

1. John Ise, Our National park policy, The John Hopkins Press, 1961
2. Commissioner Envor C. Cymoodhhames, Parks and Recreational Needs in Urban area, Twayne Publishers Inc. 1969
3. Rogers Professional Practice of Landscape Architecture
4. Burstein, Project Management for the Design Professional

SEMESTER IV

PROFESSIONAL PRACTICE & LANDSCAPE MAINTENANCE

Course Code: LA 404 **Credits: 3:0:0**
Prerequisite: Nil
Course Coordinator: Prof. Pushpa Devanathan

Course Objectives:

To educate the students on the various aspects of a Landscape design practice.

Course contents:

UNIT-I

The clients: different kinds of clients including public and local authorities engaging the services of Landscape Architect. The extent and variety of services performed by the landscape Architect; professional ethics and code of professional conduct.

UNIT-II

Methods of working: Surveys, reports, policy, preparation of policy and design proposals, Reports: Contents and production techniques.
Tender Documents, calling of tender, measurements, analysis of rates, plant materials earth grading, masonry, paving, drainage etc. Bills of quantities, abstract of cost.

UNIT-III

Contract documents: procedure involved in awarding the contract, condition of contract,
Specification, bill of quantities, cost estimation. Maintenance
Condition of engagement and scale of professional charges: Terms and conditions used by professional Institutes.

UNIT-IV

Landscape Architecture competition – Purpose, Types, Competition guide lines, conducting landscape architectural competition

Course outcome (COs):

- Knowledge about landscape consultancy practice, Contract management.
- Understand code of conduct
- Understand the process and role of an architect in project execution.

REFERENCE BOOKS

1. Rogers Professional Practice of Landscape Architecture
2. Project Management for the Design Professional - Burstein
3. Professional Practice of Landscape Architecture – Walter Rogers