

RAMAIAH Institute of Technology

# CURRICULUM

for the Academic year 2022 – 2023

# SCHOOL OF ARCHITECTURE

IX & X Semester B. ARCH

**RAMAIAH INSTITUTE OF TECHNOLOGY** 

(Autonomous Institute, Affiliated to VTU) Bangalore – 560054.

# About the Institute:

Dr. M. S. Ramaiah a philanthropist, founded 'Gokula Education Foundation' in 1962 with an objective of serving the society. M S Ramaiah Institute of Technology (MSRIT) was established under the aegis of this foundation in the same year, creating a landmark in technical education in India. MSRIT offers 17 UG programs and 15 PG programs. All these programs are approved by AICTE. All eligible UG and PG programs are accredited by National Board of Accreditation (NBA). The institute is accredited with 'A+' grade by NAAC in March 2021 for 5 years. University Grants Commission (UGC) & Visvesvaraya Technological University (VTU) have conferred Autonomous Status to MSRIT for both UG and PG Programs since 2007. The institute is also been conferred autonomous status for Ph.D program since 2021. The institute is a participant to the Technical Education Quality Improvement Program (TEQIP), an initiative of the Government of India. The institute has 380 competent faculty out of which 65% are doctorates. Some of the distinguished features of MSRIT are: State of the art laboratories, individual computing facility for all faculty members, all research departments active with sponsored funded projects and more than 300 scholars pursuing Ph.D. To promote research culture, the institute has established Centre of Excellence for Imaging Technologies, Centre for Advanced Materials Technology, Centre for Antennas and Radio Frequency systems (CARFS), Center for Cyber Physical Systems, Schneider Centre of Excellence & Centre for Bio and Energy Materials Innovation. M S Ramaiah Institute of Technology has obtained "Scimago Institutions Rankings" All India Rank 107 & world ranking 600 for the year 2022.

The Entrepreneurship Development Cell (EDC) and Section 8 company "Ramaiah Evolute" have been set up on campus to incubate startups. **M S Ramaiah Institute of Technology is recognized by Atal Ranking of Institutions on Innovation Achievements (ARIIA), MoE, Govt. of India.** MSRIT 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 good collection of book volumes and subscription to International and National Journals. The Digital Library subscribes to online e-journals from Elsevier Science Direct, IEEE, Taylor & Francis, Springer Link, etc. MSRIT is a member of DELNET, CMTI and VTU E-Library Consortium. MSRIT has a modern auditorium and several hi-tech conference halls with video conferencing facilities. The institute has excellent hostel facilities for boys and girls. MSRIT Alumni have distinguished themselves by occupying high positions in India and abroad and are in touch with the institute through an active Alumni Association.

As per the National Institutional Ranking Framework (NIRF), MoE, Government of India, M S Ramaiah Institute of Technology has achieved 67<sup>th</sup> rank among 1249 top Engineering Institutions & 17<sup>th</sup> Rank for School of Architecture in India for the year 2022 and is 1<sup>st</sup> amongst the Engineering Colleges affiliated to VTU, Karnataka.

# SCHOOL OF ARCHITECTURE

Ramaiah Institute of Technology (RIT), Bangalore, is a leading institution offering undergraduate, postgraduate 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 a 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 All India Council for Technical Education (AICTE) have recognized this program.

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

Full time faculty members having postgraduate qualifications from prestigious institutions in India and abroad are teaching at The School of Architecture. 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 excellent academic results year after year. This is reflected in the high number of University ranks that are secured by the students of the School.

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. After graduation, many students have pursued higher studies in various universities in the country and abroad. There is a great demand for the school graduates in the industry and the School is developing initiatives towards cobranding of the industry and the School. Many students have started their own enterprise and architectural practices 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, and Interior Design. The faculty also actively participates in national and international conferences and publishes and presents papers.

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

#### 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 socioeconomic 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.

**PEO 3:** 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.

# **PROGRAM OUTCOMES (POs):**

**PO1: Architectural knowledge:** Apply the knowledge of mathematics, science, architectural fundamentals, and an architectural specialization to the solution of complex architectural problems.

**PO2: Problem analysis:** Identify, formulate, review research literature, and analyse complex architectural problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO3: Design/development of solutions:** Design solutions for complex architectural problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO4: Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

**PO5: Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern architectural and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

**PO6: The architect and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional architectural practice.

**PO7: Environment and sustainability:** Understand the impact of the professional architectural solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

**PO8: Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the architectural practice.

**PO9: Individual and teamwork:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

**PO10: Communication:** Communicate effectively on complex architectural activities with the architectural community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

**PO11: Project management and finance:** Demonstrate knowledge and understanding of architectural and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

**PO12: Life-long learning:** Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

# **PROGRAM SPECIFIC OUTCOMES (PSOs):**

**PSO1:** Apply knowledge and skills of art and sciences based on function, form, materials, information, facilities, technology and analysis to Design and develop sustainable Architectural Projects.

**PSO2:** Ideate, formulate and solve industrial requirements and problems with a thorough knowledge of contemporary issues in industrial and service sectors and understand the impact of architectural design solutions in a global and societal context.

**PSO3:** Understand and respect professional and ethical responsibility and implement the concepts of project and construction management with the cutting edge technology.

# **BOARD OF STUDIES FOR THE TERM 2022 - 2023**

1.	Prof. (Dr.) Pushpa Devanathan	Chairperson
2.	Dr. Deepika Shetty	VTU Nominee
3.	Ar. Vidyadhar S. Wodeyar	External Industry Expert
4.	Ar. Prasad G	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.	Dr. Rajshekhar Rao	Member
10.	Dr. Rashmi Niranjan	Member
11.	Ar. (Dr.) Meghana K Raj	Member
12.	Ar. Reema H Gupta	Member
13.	Er. (Dr.) Vijayanand M	Member

# SCHOOL OF ARCHITECTURE

## TEACHING FACULTY

Sl No	Name	Qualification	Designation
1	Ar. Pushpa Devanathan	M Arch (Habitat Design), P.G.D.I, (PhD)	Professor & HOD
2	Ar. Vishwas Hittalmani	M Des	Professor
3	Dr. Rajshekhar Rao	M Arch (Landscape Architecture), PhD	Professor
4	Ar. Jotirmay Chari	M Arch (PhD)	Professor
5	Ar. Prasad G	M Arch (Landscape Architecture)	Professor (Tenure Faculty)
6	Dr. Rashmi Niranjan	MFA (Fine Arts), PhD	Associate Professor
7	Dr. Monalisa	M Arch, PhD	Associate Professor
8	Ar. Surekha R	M Arch (Landscape Architecture) (PhD)	Associate Professor
9	Ar. Lavanya Vikram	M Arch (Landscape Architecture) (PhD)	Associate Professor
10	Ar. Sudha Kumari	M Arch (Habitat Design)	Associate Professor
11	Ar. Meghana K Raj	M Arch (Landscape Architecture) (PhD)	Associate Professor
12	Ar. Tejaswini H	M Arch (Landscape Architecture) (PhD)	Associate Professor
12	Ar. Reema Harish Gupta	M Arch (Urban Design)	Associate Professor
13	Ar. Mallika P V	M Arch (Landscape Architecture)	Associate Professor (Tenure Faculty)
14	Ar. Sudhir Chougule	M Arch (Landscape Architecture)	Associate Professor (Tenure Faculty)
15	Ar. Nikhil V Wodeyar	P G Dip (Urban Design)	Associate Professor (Tenure Faculty)
16	Er. Vijayanand M	M Tech (PhD)	Assistant Professor
17	Er. Aruna Gopal	BE	System Analyst
18	Ar. Kriti Bhalla	B Arch	Assistant Professor
19	Ar. Aishwarya Yoganand	M Sc (Sustainable Building Systems)	Assistant Professor
20	Ar. Divya Susanna Ebin	M Arch (Urban Design) (PhD)	Assistant Professor

21	Ar. Yashas Hegde	M Arch (Urban Design)	Assistant Professor
22	Ar. Ranjitha Govindaraj	M Arch (Landscape Architecture)	Assistant Professor
23	Ar. Theju Gowda	M Sc (Architecture)	Assistant Professor
24	Ar. Akshata Shagoti	M Arch (Architectural Design)	Assistant Professor
25	Ar. Amala Anna Jacob	M Arch (Urban Design)	Assistant Professor
26	Ar. Meghana M	M A (World Heritage Studies)	Assistant Professor
27	Ar. Megha Ann Jose	MIAD (Interior Architecture & Design)	Assistant Professor
28	Ar. Pooja M Naik	M Arch (Urban Planning & Mgmt.)	Assistant Professor
29	Ar. Tanvi Katre	M Plan (Environmental Planning)	Assistant Professor
30	Ar. Anupama Doravari	M URP (Urban & Regional Planning)	Assistant Professor
31	Ar. Vidya Mohan	M Arch (Urbanism & Refurbishment)	Assistant Professor
32	Ar. Sreesha S Bhat	M Arch (Urban Design)	Assistant Professor
33	Ar. Harshita D	M Arch (Urban Design)	Assistant Professor
34	Ar. Joyce Sequeira	M Plan (Urban Planning)	Assistant Professor
35	Ar. Shwetha P E	M Arch (Urban Design)	Assistant Professor
36	Ar. Pinki Bose	M Arch	Assistant Professor
37	Ar. Aswini Mani	M Arch	Assistant Professor (Tenure Faculty)

# ADMINISTRATIVE STAFF

1	Mr. Nagesh B L	Dip. in Mech Engg.	Instructor
2	Ms. Swathi P	B. Com	SDA

# SUPPORT STAFF

1	Mr. Ramachandra Chari	Attender
2	Mrs. Parvathi	Attender

# BREAKDOWN OF CREDITS FOR B. ARCH DEGREE CURRICULUM (Semester I to X)

BATCH 2018 - 2023

(as per Council of Architecture)

SEMESTER	HUMANITIES & SOCIAL SCIENCES (HSS)	ARTS & SCIENCE (AS)	BASIC ARCHITECTURE & ENGINEERING (BAE)	PROFESSIONAL CORE SUBJECTS (PCS)	ELECTIVES	PROJECT/ INTERNSHIP	TOTAL CREDITS
Ι	1	7	7	11	-	-	26
II	-	8	7	11	-	-	26
III	-	6	8	11	-	1	26
IV	1	3	11	11	-	-	26
V	2	6	6	11	-	1	26
VI	2	-	13	11	-	-	26
VII	3	-	9	11	3	-	26
VIII	2	-	6	15	3		26
IX	-	-	-	-	-	26	26
Х	-	-	-	6	-	20	26
Total	11	30	67	98	6	48	260

# SCHEME OF TEACHING & EXAMINATION - IX SEMESTER B. ARCH ACADEMIC YEAR 2022 - 2023

2018 B	2018 Batch			Teaching scheme per week				Examination scheme		
					Practical (Study					
SI.			Lecture		Tour/ Case			CIE	SEE	
No	Code	Subject	/ Studio	Tutorial	Study)	Total	Exam	Marks	Marks	
1	AR901	Practical Training	0	0	26	26	SEE (viva voce)	50	50	

**SEE = SEMESTER END EXAMINATION** 

#### **EVALUATION PATTERN: Marks allocation for SEE**

Subject Code	Subject Name	Portfolio	Critical Appraisal	Material Analysis	Viva voce	Total
AR901	Practical Training	25	10	05	10	50

Note:

- For Practical training viva-voce exam, one internal faculty and two external faculty will conduct the exam.
- Portfolios and certificate have to be submitted which will be retained in the department.
- All students have to register and submit the portfolios and certificate from architect's office on the first day, at the beginning of the viva voce exam.

#### **AR1001 - PRACTICAL TRAINING**

#### **Requirements of Practical Training in an office:**

- Exposure to office work and practical experience
- Understanding of working drawings
- Understanding of construction details and innovative details
- Preparation of tender documents
- Regular visit to site to understand the practical problems
- Stacking methods of various building materials
- Understanding and taking measurements to prepare bill of quantities
- Understanding of local byelaws, rules and regulations
- Preparation of drawings for sanction purpose
- Maintaining day to day dairy with dates with signature of the architect
- At the end of the training period collect a certificate of experience and satisfactory performance from the architect. (Let the dates match with the semester beginning and closing dates)
- All the drawings are signed by the architect and your name shall be mentioned in the title block (This is a must in computer drawings)
- Photographs of various stages of the work and details

(The students are expected to familiarize themselves on the above topics even if works in some of the above listed areas are not part of the office works)

Present the case study of one well known work of the architect. Undertake a study of any building material, and make a presentation.

# SCHEME OF TEACHING & EXAMINATION - X SEMESTER B. ARCH ACADEMIC YEAR 2022 – 2023

2018 E	2018 Batch			eaching scl	neme per w	Examir	Examination scheme		
SI. No	Code	Subject	Lecture / Studio	Tutoria l	Practic al (Study Tour/ Case Study)	Total	Exam	CIE Marks	SEE Marks
1	AR1001	Architectural Design Project	20	0	0	20	SEE (viva voce)	50	50
2	AR1002	Dissertation	4	0	0	4	SEE (viva voce)	50	50
3.	AR1003	Real Estate management	2	0	0	2	ĆIE	10	00
		TOTAL	26	0	0	26			

**CIE =** CONTINUOUS INTERNAL EVALUATION

SEE = SEMESTER END EXAMINATION

#### **EVALUATION PATTERN: Marks allocation for SEE**

Subject Code	Subject Name	Portfolio	Critical Appraisal	Material Analysis	Viva voce	Total
AR1001	Architectural Design Project	25	10	05	10	50

Subject Code	Subject Name	Portfolio	Critical Appraisal	Material Analysis	Viva voce	Total
AR1002	Dissertation	25	10	05	10	50

Note:

- For Architectural Design Project viva-voce exam, one internal faculty and two external faculties will conduct the exam.
- All students have to register

# SEMESTER - IX

# PRACTICAL TRAINING

# Course Code: AR901 Prerequisite: Nil Course Coordinator: Prof. Pushpa Devanathan

# Course Credits: 0: 0: 26 Contact Hours: Internship

# **Course objectives:**

- To provide exposure to the various dimensions of architectural practice.
- To prepare working drawings and detailing.
- To prepare students to design and detail architectural projects with confidence.
- To enable students to develop skills to start their own practice.

# **Course Contents**

Preparation of working drawings and details.

Acquire knowledge of computer skills for drafting, design, 3D view etc

Understand how architectural offices function.

Through site visits gain practical knowledge and solve problems that arise during construction at site.

Discussion with clients.

Critical analysis of an Architect Designed building presented with a portfolio. Study a building material and its usage in practice.

# Textbooks:

- 1. Towards a New Architect- AIA
- 2. Space Planning Basics Mark Karlen
- 3. Electronic Workflow for Interior Designers and Architects- Andrew Brody

#### **References:**

- 1. Interior Architecture: From Brief to Build Jennifer Hudson
- 2. Digital Drawing for Designers: A Visual Guide to AutoCAD- Douglas R. Seidler
- 3. Sketch Up to Lay Out: The essential guide to creating construction documents with SketchUp Pro & Lay Out" Matt Donley

## Course outcomes (COs):

The students will be able to -

- 1. Conduct professional practice as per the demand of industry. (PO-6, PSO-2)
- 2. Carryout designing and detailing of architectural projects. (PO-3, PSO-1)
- 3. Demonstrate skills to start an independent practice. (PO-11, PSO-3)

# **Evaluation Pattern:** Marks allocation for SEE

Subject Code	Subject Name	Portfolio	Critical Appraisa	Material Analysis	Viva voce	Total
AR901	Practical Training	25	10	05	10	50

# Note:

Students should work under a registered architect from council of architecture and the registered architect should sign in the certificate along with the COA registration number.

Students are required to send a report of their progress and a log of works done every month to their respective proctors promptly.

#### SEMESTER - X

# ARCHITECTURAL DESIGN PROJECT

Course Code: AR1001 Prerequisite: Nil Course Coordinator: Prof. Pushpa Devanathan Course Credits: 20: 0: 0 Contact hours: 20hrs/wk

#### **Course Objectives:**

To enable the students to -

- Take up a design project of their choice of a suitable scale and complexity.
- Apply the knowledge of various subjects learnt in the earlier semesters while working towards a design solution addressing the technical, socio-economic, environmental, aesthetic, and functional and sustainability factors.
- To tackle issues relating to Bye laws, Zonal regulations, policies of Planning and Government legislations.
- To express and describe the design into an architectural solution defining all the dimensions using diagrams, analog or digital drawings and models

#### **Course Contents**

The Architectural Design Project should be run as a design studio with individual guidance from Project coordinators who will be available at the studios and under one or more guides.

The Architectural Design Project should ideally be a continuation with the Project Proposal submitted during Elective AR 705(conducted in the seventh semester) and augment on the architectural requirements and parameters that sets the premise for design detailing.

This being the last academic work of the student before entering the practical field, it is expected to be as close to professional work as possible. It is an opportunity for the student to display his/ her design abilities and reinforce the same by applying the technical skills garnered in the previous semesters. The student, in consultation with the faculty, is expected to demonstrate an innovative yet practical solution for the built environment. The project should clearly present an overview of almost all the subjects studied in the various semesters. The project should focus on actively engaging with the discipline by contributing new ideas, design solutions or exploring new dimensions to existing or current issues in the field.

This also includes the self-learning component, which is carried out through case studies, data collection, discussion with experts, site data collection etc.

The scope of the project should firmly be in the purview of architecture. All typology of projects should end with an Architectural design solution. A minimum of 3 interim reviews through the design process, typically at the conceptual ideas iteration stage, detailing stage, and the end review, shall be conducted to determine the progress of work completed.

The following units highlight the stages of work to be completed during the semester

#### UNIT - I

Project finalization, Synopsis with aims, objectives, limitation, and scope

Project title, Type of project, site, site location, surroundings, proximity, accessibility to be discussed.

Site Details and analysis, Zoning, Site Plan, Entry/exit, parking, pickup, drop off, Service entry/exit, service parking, loading/unloading.

Building byelaws, norms, fire and safety regulations, Design standards.

#### UNIT - II

Concept and preliminary architectural scheme of the overall, drawings and working models shall be the end products of this stage.

#### UNIT - III

The conceptual drawings to be taken up for design and detailing either as individual blocks or as a whole.

Drawings to be detailed as plans, sections and elevations along with 3D representations to demonstrate the total project

#### UNIT - IV

Interior design detailing, coordination of all services, landscape details integration with structures.

#### UNIT - V

Presentation drawings, project report, presentation model, Preparation of portfolio. The final output should include a report; detailed and completed inclusive of digital drawings.

a) The requirements pertaining to the differently abled, elderly and children are to be addressed in design and detailing.

- b) At the time of the Viva examination, the student shall show the jurors the portfolio containing the evolution of his/her design from the beginning to the final output.
- c) The Viva will be conducted by 1 internal and 2 external jurors.

# **References:**

- 1. Time Saver Standards for building Types- Joseph De Chiara & John Callender
- 2. Time Saver Standards for Architectural Design Data-- Joseph De Chiara &John Hancock Callender
- 3. The Story of the Bauhaus- Frances Ambler
- 4. Ecovillages around the World: 20 Regenerative Designs for Sustainable Communities- Frederica Miller
- 5. Martin Luther's Ninety-Five Theses- Martin Luther
- 6. Assignment and Thesis Writing- Jonathan Anderson
- 7. Writing your Thesis- Paul Oliver
- 8. 11 Steps to Architectural Thesis- Architect Professor Indranil Sen
- 9. Hotel and Resort Design-Anne M Schmid and Mar Scoviak-Lerner

# Course outcomes (COs):

The students will be able to -

- 1. Apply their understanding of site planning and site detailing developed over the previous architectural design projects. (PO-1, PSO-2)
- 2. Exhibit their learning of the evolution of building plans from the previous architectural design projects. (PO-3, PSO-1)
- 3. Develop building designs using a uniform design vocabulary. (PO-4, PSO-2)
- 4. Integrate the understanding of structures and building services. (PO-3, PSO-2)
- 5. Apply the standards pertaining to the elderly, differently abled as well as children (PO-6, PSO-3)

#### **Evaluation Pattern:** Marks allocation for SEE

Subjec	Subject Name		Design	Drawing	Viva	Model
t Code					Voce	
AR100	Architectural	Design	20	15	05	10
1	Project					

#### SEMESTER – X

# DISSERTATION

# Course Code: AR1002 Prerequisite: Nil Course Coordinator: Prof. Pushpa Devanathan

#### **Course Objective**

To enable the students to pursue an in-depth study in an area of special interest pertaining to the Architectural Design project.

#### **Course Contents**

#### UNIT - I

Introduction to Dissertation.

#### UNIT - II

Selection of topic, reason for selection, justification, synopsis.

#### UNIT - III

Literature studies and documentation, review of case study; usefulness of case study to the selected topic; conclusion from Literature studies.

#### UNIT - IV

Case studies and documentation, review of case study, usefulness of case study to the selected topic; conclusions from case studies.

#### UNIT - V

Presentation on the actual topic based on conclusions from case studies and research; preparation of report based on research conducted under various heads.

#### **References:**

- 1. Andrea Palladio's Architecture, in Four Books Containing a Dissertation-Andrea Palladio
- 2. The Dissertation: A Guide for Architecture Students Jain Borden
- 3. A Manual for Writers of Research Papers, Theses-Kate L. Turabian
- 4. Abstraction and Transcendence: Nature, Shintai, and Geometry in the Architecture of the Tadao Ando- Pham Thanh Hien

Course Credits: 4 : 0 : 0 Contact hours: 4 hrs /week

- 5. The Journey to Dissertation Success: For Construction, Property, and Architecture Students- Elizabeth Laycock
- 6. Dissertation Research and Writing for Built Environment Students- Shamil G. Naoum
- 7. Linda Groat and David Wang, Architectural Research Methods, John Wiley Sons, 2002
- 8. Iain Borden and Katerina Rüedi, The Dissertation, Architectural Press, 2000

## Course outcomes (COs):

The students will be able to -

- 1. Identify their areas for special interest to be researched further. (PO-12, PSO-3)
- 2. Describe scope of their study with synopsis. (PO-3, PSO-2)
- 3. Illustrate case studies and conclusions. (PO-2, PSO-1)
- 4. Generate documentation for their projects. (PO-4, PSO-1)
- 5. Present their design and information. (PO-3, PSO-2)

#### Evaluation Pattern: Marks allocation for SEE

Subject Code	Subject Name	Theory	Project
AR802	Dissertation	40	10

#### SEMESTER - X

# **REAL ESTATE MANAGEMENT**

# Course Code: AR1003 Prerequisite: Nil Course Coordinator: Prof. Pushpa Devanathan

Course Credits: 2: 0: 0 Contact hours: 2hrs /week

#### **Course Objective**

To enable the students to pursue an in-depth study in an area of special interest pertaining to the Architectural Design project.

#### **Course Contents**

#### UNIT - I

Land economics: definition, objectives and scope; Economic rent, land use and land values; Impact of economic forces on urban structure and land use pattern; Bid rent theory; Cities without land markets – use of land in socialist contexts; Regulatory frameworks determining land values and land uses.

#### UNIT - II

Basis of real estate planning; Overview of real estate sectors- residential, commercial, retail, hospitality etc.; Real estate market analysis; Demand assessment and supply mapping; Competitive benchmarking.

#### UNIT - III

Real estate consultants and their activities; Types of agreements between the consultants and principal; Knowledge base for assessment and forecasting the Real Estate market; Role and responsibilities of property managers; Real Estate investment, sources and related issues; Code of ethics for Real Estate participants.

#### UNIT - IV

Functions of Real Estate development like project formulation, feasibility studies, developing, costing and financing, managing including planning, scheduling and monitoring of real estate projects, risk management, facilities management, marketing/advertising, post construction management etc.; Interests in real estate; Documentation in real estate processes; Transfer of titles and title records; Real Estate appraisal and valuation; Role, scope, working characteristics and principal functions of real estate participant and stakeholders.

23

#### UNIT - V

Real estate development: regulatory provisions, Government policies and programmes; Land development charges and betterment levy; Land use restrictions and compensations; Urban land management and marketing techniques: bidding, reserve price, land reservation, land price subsidies.

Case studies of good practices in development of Real estate.

#### **References:**

- 1. Mike E Miles & Gayle S Berens, 2015.
- 2. Real Estate Development-Principles and Process.
- 3. Total Facility Management by Adrain Brooks
- 4. David G Cotts, 2009. The Facility Management Handbook, Chapter 15: The Construction Phase.
- 5. Michael Ball, Colin Lizieri, Bryan D. Macgregor-The Economics of Commercial Property Markets.
- 6. Adrienne Schmitz- Real Estate Market Analysis: A Case Study Approach.

# Course outcomes (COs):

The students will be able to -

- 1. Understand the concept of land economics. (PO-12, PSO-2)
- 2. Describe the underlying ideas of real estate planning. (PO-12, PSO-2)
- 3. Present the role of real estate consultants. (PO-12, PSO-2)
- 4. Understanding real estate participants and stakeholders (PO-12, PSO-2)
- 5. Identify various relevant regulatory provisions in the field (PO-12, PSO-2)