

SARA1702	PROFESSIONAL PRACTICE AND ETHICS - I	L	T	P	Credits	Total Marks
		2	0	0	2	100

COURSE OBJECTIVES:

- To expose of the important legal aspects and legislations practice and profession.
- To enable the students to understand the important laws and acts relevant to architecture.
- To construct knowledge on emerging trends in the practice of sustainable architecture, role of foreign architects.

UNIT 1 INTRODUCTION**6 Hrs.**

Importance of Architectural Profession - Role of Architects in Society - Career options open for Architects-Prerequisites for Private Practice - Types of practices (Partnership/ Proprietary Concern /Associate) - Architect's office and its management – organisation structure, responsibility towards employees, terms & conditions of engagement, letter of appointment. Location, Infrastructure requirement - Basic accounts - Legal requirements, Registration of Firm, Tax Liabilities, Relationship with clients, contractors, Associate consultants and product Manufacturers. Salaried appointment in public and private sector jobs, Scale of charges, applicable building bylaws, municipal approval, development controls, zoning regulations, National Building Code, Master plan, Zonal Plans.

UNIT 2 CODE OF CONDUCT AND ETHICS**8 Hrs.**

Role of Professional Body (The Indian Institute of Architects) History, Objectives, its relevance - Architects Act 1972 (Background, intent, objectives)- Council of Architecture (role and function with regard to Architectural practice) – Functions, constitutions, rules and regulations ,guidelines prescribed for professional code of conduct; Registration of Architects - Importance of Ethics - punitive action for professional misconduct, social responsibility and publications; Ways of getting works: types of works; works partly executed by other architects; precautions before taking up the works; conditions of engagement between architect & client.

UNIT 3 ARCHITECTURAL PROVISIONS**8 Hrs.**

Important Acts and Regulations governing the design of buildings - (Town & Country Planning Act, Copy Right Act, Persons with Disabilities Act, Coastal Regulation Zone Act, Heritage Act, Land Acquisition Act, Factories Act, Cinema Act-Master Plan Provisions and Development regulations with reference to CMDA / DTCP/NBC - Planning norms and Building Rules- Role of Planning Authority and local body - Building Approval process.

UNIT 4 EMERGING TRENDS**4 Hrs.**

Meaning of GATS - Globalisation and its impact on architectural profession - Entry of Foreign Architects and their impact in Indian Architectural practice - Information Technology and its impact -specialisation in the field of architecture -Green Buildings and the governing laws.

UNIT 5 CONSTRUCTIVE ASSIGNMENTS**4 Hrs.**

Exercise to identify the planning parameter for different type of buildings; compare the parameters with NBC / DTCP / CMDA regulations. Prepare architectural proposal for small / medium / big scale project.

Max. 30 Hours**COURSE OUTCOME:****On completion of the course the student will be able to**

- CO1** Understand the role of architects in society.
- CO2** Holistic understanding of legal requirements for managing an office and type of practices.
- CO3** Acquire knowledge on various acts, development regulations, planning norms and building rules.
- CO4** Comprehend the building approval process.
- CO5** Figure out the role of foreign architects working in collaboration with local architects.
- CO6** Enable the young minds to adopt green building strategies in design.

TEXT / REFERENCE BOOKS

1. Handbook of Professional Practice, IIA Publications, India
2. Namavati, R. (1984). Professional practice, Lakhani Book Depot, Mumbai.
3. Apte V.S. (2008). Architectural Practice and Procedure, Mrs. PadmajaBhide
4. CMDA, Second Master Plan, 2026, CMDA Publications, 2008
5. Architects Act 1972, Council of Architecture, 2011
6. Krishnamurthy K.G. & Ravindra S.V. (2014). Professional Practice, PHI Learning Pvt Ltd, Delhi,
7. Handbook of professional Documents, Council of Architecture, 2011

END SEMESTER EXAM QUESTION PAPER PATTERN**Max. Marks : 100****Exam Duration: 3 Hrs.****PART A : 2 questions each from unit 1 to unit 4, each carrying 5 marks****: 08 x 05 = 40 Marks****PART B : 1 question each from unit 1 to unit 4 with an internal choice, each carrying 15 marks****: 04 x 15 = 60 Marks**

SARA1704	URBAN DESIGN	L	T	P	Credits	Total Marks
		2	1	0	3	100

COURSE OBJECTIVES:

- To introduce the determinants of urban form and study how the urban form of cities have changed over the years.
- To familiarize the students about the various urban design theories and their significance in present day context.
- To expose the students to the application of various urban design principles and contemporary initiatives through case studies.
- To expose the students to various tools and techniques, methods and surveys used in urban design for analysis of urban form.

UNIT 1 URBAN DESIGN THEORY**8 Hrs.**

Study of Urban design theories in the past through books of Gordon Cullen and Kevin Lynch, Genius Loci and Schulz, the works of Jane Jacobs, Historic City and Rossi, William Whyte and Jan Gehl, Collage City and Colin Rowe. Current theories in Urban design

UNIT 2 INTRODUCTION AND HISTORY OF URBAN SPACES**12 Hrs.**

Relationship between Architecture, Urban Design and City planning, Elements of urban design. Definition of Urban Form, Urban Fabric, Mass and Scale. Understanding of Urban form and spaces at various spatial scales through examples in river valley civilizations, pre-industrial European cities- Greek and Roman cities, medieval European towns and Renaissance history

UNIT 3 CONTEMPORARY TRENDS AND STRATEGIES IN URBAN DEVELOPMENT**12 Hrs.**

Urban Design as public policy, Factors for Identifying Area of Intervention – Strategies – Urban Renewal and Urban Sprawl, Urban redevelopment and Urban Conservation. Approaches to Urban Development – Concepts of Transit Oriented Development, Water Front Development, Heritage city development, New Urbanism, Landscape Urbanism, Sustainable Urban Form, Ecologically Sustainable Communities and Smart City concepts. Role of Public Participation in Urban Design.

UNIT 4 TOOLS & TECHNIQUES IN URBAN DESIGN**8 Hrs.**

Extensive Study of existing or published reports of Urban Design studies in Indian Cities with special focus on components/aspects and tools /methods. Various methods of conducting a visual survey. Types of surveys, data and map analytical techniques. Tools and methods to include different types of maps/mapping, drawings, sketches, photo documentations, reading, data collection, analysis. Special focus on streets-Expressive quality of built forms, spaces in public domain.

UNIT 5 COMPREHENSIVE LEARNING**5 Hrs.**

Case studies of contemporary cities - Morphology of Indian modernist cities of Chandigarh, Bhubaneswar and Gandhi nagar. Temple Towns of Tamil Nadu. Case studies of heritage city/ towns. Sabarmati Waterfront development, Amaravathi etc. Incorporating the various concepts and theories in current semester urban design studio. Students are expected to implement various tools & methods of mapping and surveys in the analysis of urban form in their design studio.

Max. 45 Hours**COURSE OUTCOME:****On completion of the course the student will be able to**

- CO1** Understanding the evolution of urban form over the years with relevant theories and case studies
- CO2** Understanding the relationship between various aspects of Architecture, Urban Design, Town Planning and the Environment
- CO3** Resolving and understanding complex urban issues and map the dimensions of urban space
- CO4** Compare and contrast different urban design theories and concepts and understand its application in real world scenarios in development of urban spaces
- CO5** Develop an understanding of factors effecting built and open spaces at urban scale and methods to perceive, record and analyze them
- CO6** Apprehend the various concept of urban form, community spaces and development, the role of public participation in building the urban environment.

TEXT / REFERENCE BOOKS

1. Morris A. E. J. (1984). History of Urban form: Before the Industrial revolutions, Routledge.
2. Spreiregen, P. D. (1965). Urban design, The architecture of towns and cities. Krieger Publishing Company.
3. Cullen, G. (1961). The Concise Townscape, Van Nostrand Reinhold, New York,
4. Gehl, J. (2011). Life between buildings: Using Public space, Island Press,
5. Bernick, M., & Cervero, R. (1997). Transit villages in the 21st century. McGraw Hill Companies
6. Edmund, N. (1967). Bacon, Design of Cities. London: Tames and Hudson, 15.
7. Barnett, J. (1982). An Introduction to Urban design, Harper and Row, New York,
8. Gosling, G. (1994). Concepts of Urban Design, Academy Editions, St. Martin's Press, New York
9. Alexander R.C. (2003). Designing Cities - Critical readings in Urban design, Blackwell Publishers Ltd

END SEMESTER EXAM QUESTION PAPER PATTERN**Max. Marks : 100****Exam Duration: 3 Hrs.****PART A : 2 questions each from unit 1 to unit 4, each carrying 5 marks****: 08 x 05 = 40 Marks****PART B : 1 question each from unit 1 to unit 4 with an internal choice, each carrying 15 marks****: 04 x 15 = 60 Marks**

SARA2701	ADVANCED CONSTRUCTION STUDIO	L	T	P	Credits	Total Marks
		1	1	3	3	200
Continuous Assessment	End Semester Examination	Min Pass Marks				
		Continuous Assessment		End Semester Examination		
150	50	75		25		

COURSE OBJECTIVES:

- To synthesize the knowledge gained in all the materials and construction studios to develop drawings for an architectural design suitable for construction purpose.
- To detail the architectural elements and components to suitable scales.

Content	Plates	No	Remarks
Preparation of working drawings (plans, elevations, sections and other detailed drawings) to suitable scales.	Site marking and foundation layout	1	Bearing on Architectural design V
	Column layout plan	1	
	Floor plans with internal finishes (ground floor, first floor, typical floor)	3	
	Terrace and roof plan	1	
	Two elevations	1	
	Three sections (one through staircase and toilet, one showing the skin one in 1:50)	2	
	Basic electrical and plumbing drawing	2	
	Toilet detail (1:20)	1	

Max. 75 Hours**COURSE OUTCOME:****On completion of the course the student will be able to**

- CO1** Generate drawings like foundation layout, floor plans with internal finishes incorporating basic electrical and plumbing details, terrace and roof plan suitable for construction purpose.
- CO2** Develop elevations and sections evolved during the ideation phase to suitable scale so as to be used in the construction phase.
- CO3** Construct the details of the architectural elements and components.

SARA9701	DESIGN STUDIO VII	L	T	P	Credits	Total Marks
		0	0	14	7	400
Continuous Assessment	End Semester Examination	Min Pass Marks				
		Continuous Assessment		End Semester Examination		
250	150	125		75		

COURSE OBJECTIVES

- To understand and evaluate the dynamics of the urban settlements and the parameters which constitute the built environment in the urban areas.
- To identify the issues and challenges related to the urban areas and their relationship with the built environment.
- To explore urban design and architectural design solutions in context to the urban environment.

METHODOLOGY PROPOSED**STAGE I****Perlustration and Social Audit (Phase I)**

The exploration of the character of an identified urban settlement through observation, documentation and graphical presentation of the same to understand the context in a holistic manner. Evaluate urban design through primary/ secondary research, theoretical pursuits and delineate a study area.

Inquisition and Mapping (Phase II)

Mapping of the delineated area and analyze the available data to understand the physical, social, visual and Architectonic pattern.

STAGE II

Urban Design Proposal: To propose logical solutions for the perceived issues in the urban settlement and built environment. with high degree of sensitivity to the documented information as a strategic plan. **Individual/ small group projects:** To propose an architectural proposal of a built form as part of the strategic plan for the identified urban space supporting socio, economic and environmental factors.

Max. 210 Hours**DESIGN INTEGRATION**

All Urban planning principles shall be integrated with any selected urban context for renewal. All services for architectural built form along with the structure shall be integrated with the design.

SUGGESTED TYPOLOGIES

Urban/Sub Urban demarcated area which has scope for understanding present or futuristic urban intervention for a strategic plan supported by detailed design of architectural projects. **Note:** May conduct a joint studio with institutions willing to partner/ Special lectures from Urban Designers/ Planners, Practitioners / Construction Technology Experts to enhance the outcome.

COURSE OUTCOMES.

On completion of the course the student will be able to

- CO1** Comprehend the evolution and morphological development of urban settlements
- CO2** Understand and apply the concepts of urban design and methodological approaches
- CO3** Integrate multiple computation techniques and applications for analysis, conceptualization, representation and communication of Urban Design schemes.
- CO4** Assess the complexity of urban phenomena & decode, analyze and interpret the related issues and challenges
- CO5** Develop and formulate strategies for desirable development plan of an urban area.
- CO6** Identify and propose architectural design solutions addressing the requirements and needs of an urban area.

TEXT / REFERENCE BOOKS

1. Watson, D., Plattus, A. J., Shibley, R. G., & Watson, D. (2003). Time-saver standards for urban design. New York: McGraw-Hill.
2. Morris, E. S. (1997). British town planning and urban design. Harlow, UK: Longman.
3. Friedmann, J. (2012). Varieties of Planning Experience: Toward a Globalized Planning Culture? In the Oxford Handbook of Urban Planning.
4. De Chiara, J., & Hancock, J. (1980). Time Saver Standard for Building Types, McGraw Hill, 2nd Edition.
5. Watson, D. (2004). Time-saver standards for architectural design.
6. De Chiara, J. (2009). Time-saver Standards for Housing and Residential Development: Time Saver Standards.
7. Gehl, J. (2013). Cities for people. Island press.
8. Gehl, J. (2011). Life between buildings: using public space. Island press.
9. American Planning Association. (2006). Planning and urban design standards. John Wiley & Sons.

SEMESTER 8

SARA2801	EDUCATIONAL TOUR		L	T	P	Credits	Total Marks
			0	0	0	2	100
Continuous Assessment	End Semester Examination	Min Pass Marks					
		Continuous Assessment	End Semester Examination				
50	50	25	25				

COURSE OBJECTIVES

- To enable experiential learning through live case study of contemporary and historical buildings in order to comprehend the Architectural manifestation by documenting the inter relationship between the historical, social, cultural and economic aspects and its influence on selected works of master architects and visionaries

METHODOLOGY PROPOSED

An educational tour to the places of architectural interest / building appraisal shall be organized as per the itinerary approved by the department. The documentation shall be done in the form of photographs / slides and sketches, presented in the form of a seminar and written report immediately after the tour / building appraisal. The students will be instructed to submit a Pre-Tour and Post Tour report of the selected zone. The tour will be either choice based or anyone state for a group of forty. There will be a minimum of two assessments (pre tour and post tour) for the educational tour which carries a total of 50 marks. Refer clause 12c (v) in the regulations for assessment procedure.

COURSE OUTCOMES

On completion of the course the student will be able to

- CO1** Ability to understand and analyze the influence of historical, social, cultural and economic aspects on Architectural manifestations.
- CO2** Research and understand the role of scale and proportion in defining the character of a built form
- CO3** Critique and decode the fineness in construction techniques and judicious use of materials.
- CO4** Assess the architectural character and detailing in both historical and contemporary buildings

S21APT	PROFESSIONAL TRAINING		L	T	P	Credits	Total Marks
			0	0	0	10	600
Continuous Assessment	End Semester Examination	Min Pass Marks					
		Continuous Assessment	End Semester Examination				
200	400	100	200				

COURSE OBJECTIVES

- To apply the knowledge gained in the classroom learning in the creation of real time Architectural projects and thematically understand the various stages involved in the successful execution.
- To master the craft of handling Architectural projects and learn the office work flow structure and develop the qualities of an entrepreneur.

METHODOLOGY PROPOSED

Analyze and **document** the strength and the area of specialization while selecting an office for doing an internship. Training shall be taken in the office of an Architect registered with CoA with minimum five years' experience after CoA registration, and working in the field of Architecture. In case the student chooses to work in a firm where the principal is not an architect, he/she must be mentored by an employee of the firm registered with CoA and with the necessary experience. The evaluation of the performance of the students in Professional Training shall be as per the assessment procedure laid out in clause 12c (iv) in the regulations.

COURSE OUTCOMES

On completion of the course the student will be able to

- CO1** Application and importance of drawings in the process of building construction and execution.
- CO2** Comprehend the inter relationship between Architectural theory and professional practice.
- CO3** Apply the professional aspects of an architecture office/company and address multiple issues in conception, preparation and execution of a project on a site.
- CO4** Enabling the student to interact and deal appropriate with clients, contractors, vendors, workers on site etc.
- CO5** Understand and mitigate the challenges to be faced in professional life.
- CO6** Develop leadership skills, team work, co-ordination abilities.

SEMESTER 8

SARA2801	EDUCATIONAL TOUR		L	T	P	Credits	Total Marks
			0	0	0	2	100
Continuous Assessment	End Semester Examination	Min Pass Marks					
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50	50	25	25				

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