01 Semester 11

01.01 TAE111-E01 (General M.Arch course)

01.01.01 Basic Information

Code	Course Name	Prog	Sem	CP	CST	SST	Marks	Type	Cat
TAE111- E01	Contemporary Architecture Trends & Theories	AP	11	4	40 hrs.	120 hrs.	100	TH	

01.01.02 Prerequisites and Objectives

Course Prerequisites: • None	Course Objectives: After successful completion of this course, the student should be able to
	Develop an awareness of contemporary architecture. Update their comprehensive knowledge of architecture.

Studio: Students are expected to complete sufficient number of projects related to this course, with regular critical remarks and assessment from the counselor and peer students, during the semester.

01.01.03 Units

UN	Name of Unit	CP	CST	Evaluation Pattern
1 2	Influencing factors. Culture and expression.	1	10	1 SAQ & 1 LAQ (in End Exam) and 5 MCQs (in Self-Test) will be asked on these units.
3 4	Architectural theories. Design methods.	2	10	1 SAQ & 1 LAQ (in End Exam) and 5 MCQs (in Self-Test) will be asked on these units.
5 6	Architectural technologies. Building material and construction techniques.	3	10	1 SAQ & 1 LAQ (in End Exam) and 5 MCQs (in Self-Test) will be asked on these units.
7	Modernistic architecture.	4	10	1 SAQ & 1 LAQ (in End Exam) and 5 MCQs (in Self-Test) will be asked on these units.

01.01.04 Syllabus

UN	Detail Syllabus of the Unit
1	Brief review of state of art of designing (20th century up to present). Influencing factors in the shaping of contemporary architecture.
2	Study of contemporary culture and expression.
3	Study and understanding of contemporary architectural theories.
4	Understanding contemporary design thinking and methods.
5	Comprehensive study of contemporary architectural technologies.
6	Study of contemporary trends in building material and construction techniques.
7	Assessment of contemporary modernistic architecture.

01.01.05 Learning Material

Book Code	Title, Author, ISBN of Original Edition	Details of Chapters and Sections Included in Syllabus	Edition Year	Publisher, Price, Order It Here						
Text Boo	Text Books									
TAE111-	TAE111-E01-T1									

Reference Book	īs .			
Book Code	Title, Author, ISBN of Original Edition	Details of Chapters and Sections Included in Syllabus	Edition Year	Publisher, Price, Order It Here
TAE111-E01-R1	The language of post modern architecture by Charles Jencks			
TAE111-E01-R2	Modern Architecture since 1900 by William J. Curtis			
TAE111-E01-R3	Intentions in Architecture by Norberg Sclulz C			
TAE111-E01-R4	Design and Technology in Architecture by Guise D			
TAE111-E01-R5	Contemporary Indian Architecture: After the Masters by Bhatt V and Scriver P.			

01.04 TAE112-E01 (General M.Arch course)

01.04.01 Basic Information

Code Course Name			Prog	Sem	CP	CST	SST	Marks	Type	Cat			
TAE112-	Low	Cost	Building	Design	&	AP	11	4	40	120	100	TH	
E01	Techn	niques							Hrs.	Hrs.			

01.04.02 Prerequisites and Objectives

Course Prerequisites:	Course Objectives: After successful completion of this
• None	course, student will be able to:
	 comprehend the elements of buildings and their cost reduction, through various methods employed in the initial stages of designing, planning and construction of building,
	 methodology deployed by various research organizations in private and public sectors

01.04.03 Units

UN	Name of Unit	CP Block	CST in Hrs.	Evaluation Pattern
1 2	Elements and Components of Buildings CPM, PERT Line Balance	$1^{ m st}$	10	1 SAQ & 1 LAQ (in End Exam) and 5 MCQs (in Self-Test) will be asked on these units.
3 4	System Prefabrication	$2^{ m nd}$	10	1 SAQ & 1 LAQ (in End Exam) and 5 MCQs (in Self-Test) will be asked on these units.
5 6	Cost Usability	3 rd	10	1 SAQ & 1 LAQ (in End Exam) and 5 MCQs (in Self-Test) will be asked on these units.
7	Low-Cost Designing	$4^{ m th}$	10	1 SAQ & 1 LAQ (in End Exam) and 5 MCQs (in Self-Test) will be asked on these units.

01.04.04 Syllabus

UN	Detail Syllabus of the Unit
1	Elements and Components of Buildings : Cost of elements and components. Its influence on overall cost. Research and Development by various organizations in the country and foreign countries to reduce the cost and weight age factor.
2	CPM, PERT Line Balance : Reference and use of cost effective techniques in construction of building with advantages and disadvantages. Performance criteria and maintenance cost and their effect on employment.
3	System: Traditional, rationalized traditional and system of construction with cost. Building techniques and their importance at national / regional / individual level.
4	Prefabrication : Total and partial prefabrication, its objectives and prospects. Industrialized building. Employment potential & generation through buildings industry. Impact of prefabrication on employment.
5	Cost : Reduction of cost through utilization of wastes. Efficiency in architectural planning and layout. Surveys and system of planning.
6	Usability : Study of the methodology adopted and research conducted by various organizations and government departments in reducing the cost of building through various factors like elements, prefabrication, use of different kinds of material for building industry.
7	Low-Cost Designing : Study of low cost building materials, and (old and new) design and construction techniques. Methods of low-cost designing.

01.04.05 Learning Material

Book Code	Title, Author, ISBN of Original Edition	Details of Chapters and Sections Included in Syllabus	Edition Year	Publisher, Price, Order It Here
Text Book	s			
TAE112-E0)1-T1			
Reference	Books			
TAE112- E01-R1	Laurie Baker by Gautam Bhatia			
TAE112- E01-R2	An approach to low cost housing requirement by Gelik A. P. (Conference paper)			
TAE112- E01-R3	Affordable quality in low cost housing by Morris J. Schlotfeldt C. J. (XI CIB Congress 89)			
TAE112- E01-R4	CBRI Research publication on low cost building.			

01.07 TAE113-E01 (General M.Arch course)

01.07.01 Basic Information

Co	de	Course Name	Prog	Sem	CP	CST	SST	Marks	Type	Cat
TAE	113-	Ecology for Architecture & Planning	AP	11	4	40	120	100	TH	
EC)1					Hrs.	Hrs.			

01.07.02 Prerequisites and Objectives

Course Prerequisites:	Course Objectives: After successful completion of this
• None.	course, student should be able to
	 Reflect a general awareness for the preservation and protection of the environment, in the planning and construction of their building / development projects.

Studio: Students are expected to complete sufficient number of projects related to this course, with regular critical remarks and assessment from the counselor and peer students, during the semester. At the End Examination, due credit will be given to interaction on the on-line Discussion Forum between the student and the Counselor.

01.07.03 Units

UN	Name of Unit	CP	CST	Evaluation Pattern
		Block	in	
			Hrs.	
1	Introduction, Structure and Function.	1^{st}	10	1 SAQ & 1 LAQ (in End Exam) and 5 MCQs
				(in Self-Test) will be asked on these units.
2	Relationship with Nature.	$2^{\rm nd}$	10	1 SAQ & 1 LAQ (in End Exam) and 5 MCQs
				(in Self-Test) will be asked on these units.
3	Importance of Ecology.	$3^{\rm rd}$	10	1 SAQ & 1 LAQ (in End Exam) and 5 MCQs
				(in Self-Test) will be asked on these units.
4	Ecological applications to Architecture and	4^{th}	10	1 SAQ & 1 LAQ (in End Exam) and 5 MCQs
	Planning.			(in Self-Test) will be asked on these units.

01.07.04 Syllabus

UN	Detail Syllabus of the Unit
1	Introduction, Structure and Function: Introduction to ecology, its meaning and growing
	importance in daily life. Basic terms used in ecology and their meanings. Fundamental concepts of
	ecology. Ecology – Environment relationship. Concept of spaceship earth. Structure and function of eco-
	system. Major biomes of the world. Bio-geo-chemical cycles: Energy flows in eco-system. Species
	diversity, dominance, natural selection, habitat, niche, evolution etc. Eco-system equilibrium.
	Importance of micro organisms. Succession and community development limiting factors and other
	concepts. Ecological cybernetics.
2	Relationship with Nature: Man's relationship with nature in the past: Food-collecting, hunting,
	fishing, farming and other developmental stages in human civilization. Man's relationship with nature
	in the present: Industrial activities, urbanization, de-forestation, mining and similar incursions on
	nature for technological progress. Environmental impacts of these activities. The ecological crisis.
	Relevant case studies from abroad and India.
3	Importance of Ecology: Relevance and growing importance of ecology in a highly urbanized and
	technological world with reference to dwindling resources, increasing demands and advancing
	technology. Adaptation of life-styles, and adoption of alternate technologies to harmonize with the
	natural environment. Discussion on alternatives available. Guiding environmental principles.
4	Ecological applications to Architecture and Planning: Ecological applications to Architecture and
	Planning. Preserving and improving the human settlement in harmony with nature. Conservation of
	natural resource for improving the quality of life on earth and attempting to ensure its continuity for
	the future of humanity. Eco cities, eco-communities and eco buildings: Archeology. Designing
	settlements and other man-made eco-systems. Ecological and environmental cities for sustainable
	future.

01.07.05 Learning Material

Book Code	Title,	Details	of]	Edition	Publisher,			
	Author,	Chapters and	Sections	Year	Price,			
	ISBN of Original Edition	Included in Syllabus			Order It Here			
Text Books								

Book Code	Title,	Details	of	Edition	Publisher,
	Author,	Chapters and	Sections	Year	Price,
	ISBN of Original Edition	Included in Syllabus			Order It Here
TAE113-					
E01-T1					
Referen	ice Books				
TAE113-	Fundamentals of Ecology by				
E01-R1	E. P. Odum				
TAE113-	The Ecology of Man: An Eco				
E01-R2	- system Approach by Robert				
	Leo Smith				
TAE113-	Introduction to Ecology by				
E01-R3	Kurmundi				
TAE113-	Review Our Dying Planet by				
E01-R4	Sarala Devi				
TAE113-	Ecological Crisis: Reading for				
E01-R5	Survival by G. A. Love & R.				
	M. Love				
TAE113-	Environmental Science: The				
E01-R6	Way the World Works by B. J.				
	Mebol				
TAE113-	Modern Concepts of Ecology				
E01-R7	by H. D. Kumar				

01.10 TAE114-E01 Elective I (General M.Arch. course)

01.10.01 Basic Information

	Course Name	Prog	Sem	CP	CST	SST	Marks	Type	Cat
TAE114	Elective in Major Area of Specialization-I	AP	11	4	80	120	100	TH	
-E01	Elective 1: Vernacular Architecture				Hrs.	Hrs.			í

01.10.02 Prerequisites and Objectives

Course Prerequisites: None	Course Objectives: After successful completion of this course, student should be able to:
	 Identify and conserve the untapped values and principles in the evolution of new theories for architectural creations
	Highlights needs and various ways of vernacular building research, analysis, presentation of finding and its application to contemporary buildings

Studio: Students are expected to complete sufficient number of projects related to this course, with regular critical remarks and assessment from the counselor and peer students, during the semester. At the End Examination, due credit will be given to interaction on the on-line Discussion Forum between the student and the Counselor.

01.10.03 Units

UN	Name of Unit	CP	CST	Evaluation Pattern
		Block	in	
			Hrs.	
1	Introduction.	1^{st}	20	1 SAQ & 1 LAQ (in End Exam) and 5 MCQs
				(in Self-Test) will be asked on these units.
2	Vernacular examples from the Western	$2^{\rm nd}$	20	1 SAQ & 1 LAQ (in End Exam) and 5 MCQs
	Architecture			(in Self-Test) will be asked on these units.
3	Vernacular examples from the Indian	$3^{\rm rd}$	20	1 SAQ & 1 LAQ (in End Exam) and 5 MCQs
	Architecture			(in Self-Test) will be asked on these units.
4	Research and its Utilization	4^{th}	20	1 SAQ & 1 LAQ (in End Exam) and 5 MCQs
				(in Self-Test) will be asked on these units.

01.10.04 Syllabus

UN	Detail Syllabus of the Unit
1	Introduction: Vernacular architecture it's nature, purpose and scope. Analytical review classification,
	salient features and important contributions in evolving workable solutions.
2	Vernacular examples from the Western Architecture: Study of selected Vernacular examples from
	the Western architecture; evolution of building forms based on functions, building materials and
	construction techniques; art and crafts etc.
3	Vernacular examples from the Indian Architecture: Study of selected Vernacular examples from
	Indian architecture evolution of building forms based on functions building materials and construction
	techniques art and crafts etc.
4	Research and its Utilization: Methods of conducting research based on form, function and design and
	regional varieties. Research in passive planning and design principles and elements employed in
	vernacular buildings. Critical evaluation of information obtained and its analysis. Methods of utilizing
	this research. Presentation of results obtained from above analysis Evaluation of findings. Conclusions
	and recommendations. Suggested topics of Research Study. Evolution of structures. Construction
	peculiarities. Planning for comforts. Interior space designs. Impact of any influence in particular.
	Application of any techniques / trend to modern architecture.

01.10.05 Learning Material

Book Code	Title,	Details		of	Edition	Publisher,			
	Author,	Chapters	and	Sections	Year	Price,			
	ISBN of Original Edition	Included in Sy	llabus			Order It Here			
Text Bo	Text Books								
TAE114-E-									
01-T1									
Referen	ce Books								
TAE114-	Passive Solar Design by Prof.								
E01-R1	Naik, IIT Mumbai								

Book Code	Title,	Details	of	Edition	Publisher,
	Author,	Chapters and	Sections	Year	Price,
	ISBN of Original Edition	Included in Syllabus	\$		Order It Here
TAE113-	The Ecology of Architecture: a				
E11-R2	complete guide to creating a				
	environmental conscious				
	building by Laura Zeiher				
TAE114-	Ecologic Architecture,				
E01- R3	Butterworth Heinmen, 1992				
TAE114-	Climate Responsive				
E01-R4	Architecture: A design				
	handbook for energy efficient				
	buildings, ed. Arvind Krishan,				
	Simos Yanas, Nick Baker, S.				
	V. Szokolay, Tata McGraw				
	Hill, 2001				
TAE114-	Givoni B Man : Climate and				
E01-R5	Architecture				
TAE114-	Olgyay Victor: Design with				
E01-R6	clmate, Bio-climatic approach				
	to architectural regionalism				
TAE114-	Olgyay A & Olgyay V : Solar				
E01-R7	Control and Shading Devices				
TAE114-	Watson D.: Climatic Design				
E01-R8	(Energy - efficient Building				
	Principles & Practices)				

01.11 TAE114-E02 Elective 2 (General M.Arch. course)

01.11.01 Basic Information

Code	Course Name		Prog	Sem	CP	CST	SST	Marks	Type	Cat
	•	of Specialization-I	111	11	4	80	120	100	ST	
-1502	Elective 2: Energy Architecture	y Conserving				Hrs.	Hrs.			

01.11.02 Prerequisites and Objectives

Course Prerequisites: None	Course Objectives : After successful completion of th course, student should be able to:						
	Equipped with the theoretical and practical knowledge of all aspects of energy conserving architecture such as climatic studies, solar architecture, energy conservation in building with passive design principles etc.						

Studio: Students are expected to complete sufficient number of projects related to this course, with regular critical remarks and assessment from the counselor and peer students, during the semester. At the End Examination, due credit will be given to interaction on the on-line Discussion Forum between the student and the Counselor.

01.11.03 Units

UN	Name of Unit	\mathbf{CP}	CST	Evaluation Pattern
		Block	in	
			Hrs.	
1	Energy Consumption	1^{st}	20	Students are expected to complete sufficient
2	Energy Trends	$2^{\rm nd}$	20	number of projects related to this course, with
3	Solar Architecture			regular critical remarks and assessment from
4	Factors Affecting Energy Budget	$3^{\rm rd}$	20	the counselor and peer students, during the
5	Retrofitting			semester. External and internal experts will
6	Low Energy Materials	4^{th}	20	jointly evaluate these projects for 100 marks
				with viva after presentation by the student for
				about 5-7 minutes. At the End Examination,
				due credit will be given to interaction on the
				on-line Discussion Forum between the student
				and the Counselor.

01.11.04 Syllabus

	v
UN	Detail Syllabus of the Unit
1	Energy Consumption: Energy consumption in building and settlements, a review of global situation,
	energy distribution and utilization.
2	Energy Trends: Renewable and non-renewable sources research reviews.
3	Solar Architecture: Solar architecture and planning for solar energy.
4	Factors Affecting Energy Budget: Building designing and energy factors affecting energy budget in
	buildings and settlements, study of each of the factors.
5	Retrofitting: Retrofitting of buildings for energy conservation.
6	Low Energy Materials: Low energy materials, construction techniques and environmental control.

01.11.05 Learning Material

Book Code	Title,	Details	of	Edition	Publisher,
	Author,	Chapters and	Sections	Year	Price,
	ISBN of Original Edition	Included in Syllabus			Order It Here
Text Bo	oks				
TAE114-					
E02-T1					
Referen	ice Books				
TAE114-	The architects guide to energy				
E02-R1	conservation by Seymour				
	Jarmal				

Book Code	Title,	Details		of	Edition	Publisher,
	Author,	Chapters	and	Sections	Year	Price,
	ISBN of Original Edition	Included in Sy	llabus			Order It Here
TAE114-	Architecture and Energy by					
E02-R2	Stein R. G.					
TAE114-	Handbook of Sustainable					
E02-R3	Building by David Anink,					
	Chiel Boonstra, John Mak.					
TAE114-	Eco- refurbishment by Peter					
E02-R4	F. Smith					

01.12 TAE114-E03 Elective 3 (General M.Arch. course)

01.12.01 Basic Information

Code	Course	e Na	ame				Prog	Sem	CP	CST	SST	Marks	Type	Cat
TAE114	Elective	in	Major	Area	of	Specialization-I	AP	11	4	80	120	100	ST	
-E03	Electiv	7e 3	: Land	scap	e De	esign				Hrs.	Hrs.			

01.12.02 Prerequisites and Objectives

Course Prerequisites:	Course Objectives: After successful completion of this
	course, student should be able to: • Comprehend the relationship of man's living with nature and aim at enhancing the quality of living environment

Studio: Students are expected to complete 1 project related to this course, with regular critical remarks and assessment from the counselor and peer students, during the semester. At the End Examination, due credit will be given to interaction on the on-line Discussion Forum between the student and the Counselor.

01.12.03 Units

UN	Name of Unit	CP	CST	Evaluation Pattern
		Block	in	
			Hrs.	
1	Characteristics	1^{st}	20	Students are expected to complete sufficient
2	Elements and Materials Landscape			number of projects related to this course, with
3	Landscape and Conservation	$2^{\rm nd}$	20	regular critical remarks and assessment from
4	Urban Landscape			the counselor and peer students, during the
5	Regional Landscape	$3^{\rm rd}$	20	semester. External and internal experts will
6	Profession and Practice			jointly evaluate these projects for 100 marks
7	Landscape Design Schemes	$4^{ m th}$	20	with viva after presentation by the student for
				about 5-7 minutes. At the End Examination,
				due credit will be given to interaction on the
				on-line Discussion Forum between the student
				and the Counselor.

01.12.04 Syllabus

UN	Detail Syllabus of the Unit
1	Characteristics: Kinds of landscape and their relation to climate, topography, drainage subsoil,
	vegetation and their co-relation.
2	Elements and Materials Landscape: Various elements and materials of landscape design and their
	effect on visual and spatial organization in terms of environmental quality for human living.
3	Landscape and Conservation: Policies and issues of environmental design. Ecological approach to
	the comprehensive design for diagnostic and prescriptive requirements, landscape design for resource
	conservation.
4	Urban Landscape: Principles and design of space to humanize the urban environment. Hard
	landscape, structure, street furniture urban form etc. Landscaping of Urban streets, parks and other
	public places.
5	Regional Landscape: Forces of urbanization on landscape in regional context. Theories like
	Environmental Corridor, Transportation routes and conservation of historical and scenic sports.
	Regional land use planning with in landscape parameters.
6	Profession and Practice: Importance of the profession of landscape Architecture, Institute, Code of
	conduct, scale of fees, ethics etc.
7	Landscape Design Schemes: Preparation of landscape schemes in the form of drawings models of
	projects like parks, campus, urban spaces and regional design through studios classes.

01.12.05 Learning Material

Book Code	Title,	Details		of l	Edition	Publisher,
	Author,	Chapters	and	Sections	Year	Price,
	ISBN of Original Edition	Included in Syllabus				Order It Here

Book Code	Title,	Details	of E	Edition	Publisher,
	Author,	Chapters and	Sections Y	Tear	Price,
	ISBN of Original Edition	Included in Syllabus			Order It Here
Text Bo	ooks				
TAE114-					
E03-T1					
Referer	ice Books				
TAE114-	Landscape Architecture by				
E03-R1	Simonds J. O				
TAE114-	Out Door Design – At				
E03-R2	Handbook for the Architects				
	& Planners by Marlowe O. C.				
TAE114-	Landscape Architecture				
E03-R3	Construction by Landphair H.				
	C. & Klat F. Jr.				
TAE114-	The Indoor Garden – Design				
E03-R4	Construction and Furnishing				
	by Hunter M K & Hunter E.				
	H.				
TAE114-	Trees in Urban Design by				
E03-R5	Arnold H. F.				
TAE114-	Home Landscape by Garret				
E03-R6	Ekbo 1978				
TAE114-	Time Saver Standards for				
E03-R7	landscape Architecture by				
	Charles W. Harris et al 1986				

01.17 TAE115-E01 (General M.Arch. course)

01.17.01 Basic Information

Code	Course Name	Prog	Sem	CP	CST	SST	Marks	Type	Cat
TAE115	Architectural Design Studio – I	AP	11	4	80	120	100	ST	
-E01					Hrs.	Hrs.			

01.17.02 Prerequisites and Objectives

Course Prerequisites: • Nil.	Course Objectives: After successful completion of this course, student should be able to
Nii.	 Acquire a comprehensive base of knowledge required for the practice of architecture.
	 Develop awareness in physical context about implications of limited sources in design decision making.

Studio: Students are expected to complete sufficient number of projects related to this course, with regular critical remarks and assessment from the counselor and peer students, during the semester. At the End Examination, due credit will be given to interaction on the on-line Discussion Forum between the student and the Counselor.

01.17.03 Units

UN	Name of Unit: Following topics are	CP	CST	Evaluation Pattern
	suggested for carrying out design studio			
1	Problems related to design minimum /	1		Students are expected to complete number of
	optimum space for any given activity	1	10	projects, with critical remarks and assessment
2	Problems related to any particular aspects	2	1 171	from the counselor. External and internal
	of design such as site planning, etc	2	10	experts will jointly assess these projects for
3	Problems related to any particular aspects			100 marks with viva after presentation by the
	of design such as structural innovation or	3	10	student for about 5-7 minutes. In case of
	building services. etc			disagreement among the experts, decision of
4	Problems related to any particular aspects			external expert shall be final. At the End
	of design such as passive designing, etc	4	10	Examination, due credit will be given to
		4 10		interaction on the on-line Discussion Forum
			ĺ	between the student and the Counselor.

01.17.04 Syllabus

UN	Detail Syllabus of the Unit
1	Case studies and design development, in relation to function, efficiency, space, form and aesthetics,
2	environmental contacts both exterior and interior with physical and economical constraints. Special
3	emphasis should be given on aspects like, Building services, structural systems, architectural detailing
4	and building byelaws etc.

01.17.05 Learning Material

Book Code	Title,	Details	of Edition	Publisher,			
	Author,	Chapters and	Sections Year	Price,			
	ISBN of Original Edition	Included in Syllabus		Order It Here			
Text Books							
TAE115-							
E01-T1							
Reference Books							
TAE115-	Planning and Architecture						
E01-R1	edited Dennis Sharp Editor						
TAE115-	Planning feasible learning						
E01-R2	places by Leggett S Bru						
	Baker C. W. & Cohodes A.						
TAE115-	Methods in Architecture by.						
E01-R3	Town Health						

Book Code	Title,	Details	of Edition	Publisher,
	Author,	Chapters and Se	ections Year	Price,
	ISBN of Original Edition	Included in Syllabus		Order It Here
TAE115-	Climate Sensitive			
E11-R4	Architecture by Arvind			
	Krishen and others			