

GANPAT UNIVERSITY									
FACULTY OF ARCHITECTURE DEISGN & PLANNING									
Programme		Bachelor of Architecture			Branch/Spec.		INSTITUTE OF ARCHITECTURE		
Semester		III			Version		1.0.0.0		
Effective from Academic Year			2015-16		Effective for the batch Admitted in			June 2015	
Subject code		IIIA01ADS		Subject Name		Architecture design Studio- III			
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total	CE	SEE	Total	
	L	TU	P	TW					
Credit	-	-	6	-	6	Theory	-	-	-
Hours	-	-	6	-	6	Practical	360	240	600
Pre-requisites:									
Built environment & architectural form as resultant of material and structure.The course will introduce students to basic properties and application of building material and its ability to create an architectural space and form of certain ambiance and scale.									
Learning Outcome:									
Theory syllabus									
Unit	Content								Hrs
1	Understanding the various criteria of case study.i.e. Things to notice while doing the case studies. User-activities in activity hour w.r.t. spaces. Feasibility of scale of space w.r.t. nos. of users. Climatic criteria taken care of w.r.t. kind & nos. of users.								
2	Finding out programmatic add-ons that can enhance the architectural quality of spaces or functioning of space. Patterns of social interactions – one-to-one, small group formations, community gatherings etc w.r.t. activity and scale of space. Understanding the clientele – users properly w.r.t. their anthropometry, psychology and behavior pattern for this specific function.								
Practical content									
Bubble diagrams, using grid or standardized unit as design tools. Creating typical “interior layouts” for specific activity-spaces w.r.t. anthropometry & building materials (wall openings, thicknesses etc). Basic site development criteria. Margins, landscape, approaches, entry & any specific site features,very basic vehicular and pedestrian movement within the site. Usage of building material as generation of building language. Usage of building material w.r.t. climate, construction & technology available.									
Text Books									
1									
Reference Books									
1	Residential Buildings by Master designers & Vernacular master pieces.								
2	25 Tropical Houses in Singapore and Malaysia - Mcgillick Paul.								
3	50 Beautiful house in india, vol-2 - Sei.								
4	House Form and Culture - Rapoport, Amos.								
5	Pattern language - Christopher Alexander.								
6	Design in Architecture - Geoffrey Broadbent.								
7	Architecture as space - Bruno Zevi.								
8	Architectural Interaction- David Canter & Peter Stringer.								

<b>GANPAT UNIVERSITY</b>									
<b>FACULTY OF ARCHITECTURE DEISGN &amp; PLANNING</b>									
Programme		Bachelor of Architecture			Branch/Spec.		INSTITUTE OF ARCHITECTURE		
Semester		III			Version		1.0.0.0		
Effective from Academic Year			2015-16		Effective for the batch Admitted in			June 2015	
Subject code		IIIA02BOD		Subject Name		Basics of Design- III			
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	-	-	4	-	4	Theory	-	-	-
Hours	-	-	6	-	6	Practical	240	160	400
Pre-requisites:									
Diagrammatic understanding of Nature their Uses, Evolution, structure/ systems.									
Learning Outcome:									
Theory syllabus									
Unit	Content								Hrs
1	Study of Nature and Manmade elements, Analysis in terms of geometry, structure, material, color, evolution and abstraction in Architecture, Products, Graphics etc...								
2	Understanding of different architectural element from their concept to evolution.								
Practical content									
Sketching, Drafting, Model making									
Text Books									
1	NA								
Reference Books									
1	Architecture Scale & Proportion- Eugene Ruskin								
2	What is Design - Paul Grille								
3	The Nature of order - Christopher Alexander								
4	Design by Nature - Maggie Macnab								
5	Decoding Design - Maggie Macnab								
6	Geometry in Nature - John Blackwood								
7	Architecture without Architects - Rudofsky, Bernard								

GANPAT UNIVERSITY									
FACULTY OF ARCHITECTURE DEISGN & PLANNING									
Programme		Bachelor of Architecture			Branch/Spec.		INSTITUTE OF ARCHITECTURE		
Semester		III			Version		1.0.0.0		
Effective from Academic Year			2015-16		Effective for the batch Admitted in			June 2015	
Subject code		IIIA03TRD		Subject Name		Technical Representative Drawings- III			
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total	CE	SEE	Total	
	L	TU	P	TW					
Credit	-	-	3	-	3	Theory	-	-	-
Hours	-	-	6	-	6	Practical	180	120	300
Pre-requisites:									
3 dimensional visualization and drawing in manual and computer media.									
Learning Outcome:									
Theory syllabus									
Unit	Content								Hrs
1	Interpenetration of complex solids in 2D/3D through the concepts of isometric, perspective, axonometric projections. Use of development of surface technique to create models in complex object.								
2	Through understanding of Sketch up as an Architectural Software. Sciography and rendering techniques in plan, elevation and section.								
Practical content									
Representations of 3 Dimensional drawings. 3 D model making in virtual media, real model and paper.									
Text Books									
1	NA								
Reference Books									
1	Graphic Thinking for Architects and Designers - Leaseua, Paul.								
2	Ching, Francis D. K. – Graphics in Architecture.								
3	Bhatt, N. D. – Engineering Drawing.								
4	Architectural Drafting & Design-Alan Jefferis & David A. Madsen.								
5	Perspective for the architecture - Georg Schaarwachter.								
6	Architectural Drawing - Rendow Yee.								
7	Software User's Guide								

GANPAT UNIVERSITY									
FACULTY OF ARCHITECTURE DEISGN & PLANNING									
Programme		Bachelor of Architecture			Branch/Spec.		INSTITUTE OF ARCHITECTURE		
Semester		III			Version		1.0.0.0		
Effective from Academic Year			2015-16		Effective for the batch Admitted in			June 2015	
Subject code		IIIA04BCD		Subject Name		Building Construction & Details- III			
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total	CE	SEE	Total	
	L	TU	P	TW					
Credit	-	-	3	-	3	Theory	-	-	-
Hours	-	-	4	-	4	Practical	180	120	300
Pre-requisites:									
Understanding different system and components. Foundation System, Roofing System , Floor System etc.									
Learning Outcome:									
Theory syllabus									
Unit	Content								Hrs
1	Foundation System: Types of foundation, shallow foundations, deep foundation, underpinning, excavation support systems, spread footing, foundation walls, column footing, pole foundation, pile foundation, caissons foundation.								
2	Roofing System: Terminology of roofs, steel roofing system, precast concrete roof system, large span roofing system, and light weight roofing system.								
3	Floor System: Concrete floor system, Metal floor system, Precast floor system, Composite floor system. Different floor finishes and their application. Study of various construction equipment and formwork relevant to the material and techniques.								
Practical content									
Lectures on basic construction of systems. Studio exercises and case studies. Study of various contents of existing building through sketches & models. Site visit.									
Text Books									
1	NA								
Reference Books									
1	Building Construction - B.C. Punmia								
2	The Construction of Building - R. Barry,								
3	Building Construction Vol –I,II,III - Mackey W.B								
4	Handbook of Architectural Technology - Cowan Henry J								
5	Building Construction Illustrated - Fransis D.K.Ching.								

GANPAT UNIVERSITY									
FACULTY OF ARCHITECTURE DEISGN & PLANNING									
Programme	Bachelor of Architecture				Branch/Spec.	INSTITUTE OF ARCHITECTURE			
Semester	III				Version	1.0.0.0			
Effective from Academic Year	2015-16				Effective for the batch Admitted in	June 2015			
Subject code	IIIA05BM		Subject Name		Building Material- III				
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total	CE	SEE	Total	
	L	TU	P	TW					
Credit	2	-	-	-	2	Theory	120	80	200
Hours	2	-	-	-	2	Practical	-	-	-
Pre-requisites:									
Introduction of Advance Building Material									
Learning Outcome:									
Theory syllabus									
Unit	Content								Hrs
1	Fabric used as tensile structure. Earthquake resistance building material. PVC, Recycled material, Paints, Aluminum control panel.								
2									
Practical content									
Theory in the class with given assignments and practice questions, sketching And drawing, in class - interactions, case studies & final exam and final submission of class works. Site Visits: Advance building material.									
Text Books									
1									
Reference Books									
1	Engineering Materials – S.C. Rangwala (course book)								
2	Building Materials – B.C. Punamia (Additional Reference)								
3	Time Savers Standards – Building Materials and Systems – Donald Watson (Advanced Reference)								

<b>GANPAT UNIVERSITY</b>									
<b>FACULTY OF ARCHITECTURE DESIGN &amp; PLANNING</b>									
Programme		Bachelor of Architecture			Branch/Spec.		INSTITUTE OF ARCHITECTURE		
Semester		III			Version		1.0.0.0		
Effective from Academic Year			2015-16		Effective for the batch Admitted in			June 2015	
Subject code		IIIA06 HOA	Subject Name		History of Architecture - III				
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total	CE	SEE	Total	
	L	TU	P	TW					
Credit	2	-	-	-	2	Theory	120	80	200
Hours	2	-	-	-	2	Practical	-	-	-
Pre-requisites:									
Evolution of the built environment or human habitat as a complex and multilayered synthesis of culture, climate and construction.									
Learning Outcome:									
Theory syllabus									
Unit	Content								Hrs
1	Introduction of Egyptian Architecture (3000 – 400 AD). Basic introduction of Christianity. Basic introduction of Chinese Architecture.								
2	Introduction of Greek Architecture (500 To 200 BC). Introduction of Roman Architecture (100 To 300 BC).								
Practical content									
Drawings, Lectures, Presentations, Movies, Discussions and Debates based upon the above syllabus.									
Text Books									
1									
Reference Books									
1	A History of Architecture – Sir Banister Fletcher								
2	Genius Loci: Towards a Phenomenology of Architecture, Christian Noberg Schultz								
3	Towards a new architecture -Le Corbusier								
4	Complexity and Contradiction in Architecture -Robert Venturi								
5	Modern Architecture and Design: An alternative history – Bill Risebero								
6	Architecture: 19th and 20th Centuries -William J.R. Curti								
7	Architecture after Modernism -Thames and Hudson								

GANPAT UNIVERSITY									
FACULTY OF ARCHITECTURE DEISGN & PLANNING									
Programme		Bachelor of Architecture			Branch/Spec.		INSTITUTE OF ARCHITECTURE		
Semester		III			Version		1.0.0.0		
Effective from Academic Year			2015-16		Effective for the batch Admitted in			June 2015	
Subject code		IIIA07STR		Subject Name		Structure - III			
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total	CE	SEE	Total	
	L	TU	P	TW					
Credit	2	-	-	-	2	Theory	120	80	200
Hours	2	-	-	-	2	Practical	-	-	-
Pre-requisites:									
Analysis of Structures by model making and calculative structural systems.									
Learning Outcome:									
Theory syllabus									
Unit	Content								Hrs
1	Bending stress: Theory of simple bending, Assumptions, calculation of bending stresses for simply supported beams & cantilever beam of various cross sections, beams of uniform strength.								
2	Shear stress: Calculation of shear stress for simply supported & cantilever beams of various cross sections like T, L, I, O, Rectangle, Hollow sections etc. Direct & Bending stress: Combined direct & bending stresses, eccentric loading, middle third rule, Core & kernel, application.								
3	Shear force & Bending moment diagram for Indeterminate Beams: Calculation of Shear force & bending moment for Fixed & Continuous beams using Moment distribution method. Drawing Shear force & bending moment diagrams, Interpretation of diagram & application.								
4	Deflection of Beams: Introduction to deflection, boundary condition, Deflection of beams for simple cases like simply supported & cantilevers with full uniformly distributed load & central point load.								
5	Shear force & Bending moment diagram for Determinate & indeterminate Plane Frame & Arches: Behavior of Statically determinate & Indeterminate plane frames subjected to gravity & lateral load. Basic understanding of shear force & bending moment diagram for the same. Behavior of three hinges & two hinge Arch under point								
Practical content									
Tutorial based on course contents									
Text Books									
1	NA								
Reference Books									
1	Engineering Mechanics, Statics and Dynamics, Desai & Mistry								
2	Mechanics of structures , vol – I & II, Junarkar & H.J. Shah								
3	Strength of materials, R.S. Khurmi								
4	Analysis of structure, B.C.Punamia								

<b>GANPAT UNIVERSITY</b>									
<b>FACULTY OF ARCHITECTURE DEISGN &amp; PLANNING</b>									
Programme		Bachelor of Architecture			Branch/Spec.		INSTITUTE OF ARCHITECTURE		
Semester		III			Version		1.0.0.0		
Effective from Academic Year			2015-16		Effective for the batch Admitted in			June 2015	
Subject code		IIIA08ESS		Subject Name		Environmental Science & Services -I			
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total	CE	SEE	Total	
	L	TU	P	TW					
Credit	2	-	-	-	2	Theory	120	80	200
Hours	2	-	-	-	2	Practical	-	-	-
Pre-requisites:									
Built Environment and Climate.									
Learning Outcome:									
Theory syllabus									
Unit	Content								Hrs
1	Climate, constituent's elements, classification of tropical climate zone. Thermal comfort and principal of thermal design. Ventilation, air movement and fenestration, solar orientation, sun path pattern & shading devices.								
2	Traditional house form & settlement patterns in various tropical climates. Design Tool, Mahony table, sun path diagram etc.								
Practical content									
Exercises to enhance understanding of above concepts. Application of concepts in design work. Time problem to address design issues from climatology point of view.									
Text Books									
1	NA								
Reference Books									
1	Manual of Tropical Housing - Otto.Koenigsberger.								
2	Design Primer for Hot Climate - Allan Konya.								
3	Design with Climate - Victor Olgyay.								
4	Man, Climate and Architecture - B.Givoni.								
5	Climate Building Design - Donald Watson.								
6	Building in Hot climates - Building research establishment.								



GANPAT UNIVERSITY									
FACULTY OF ARCHITECTURE DEISGN & PLANNING									
Programme	Bachelor of Architecture				Branch/Spec.	INSTITUTE OF ARCHITECTURE			
Semester	I				Version	1.0.0.0			
Effective from Academic Year		2015-16			Effective for the batch Admitted in			June 2015	
Subject code	IIIB09 WS/ELE		Subject Name		Workshop/Elective-III				
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	-	-	2	-	2	Theory	-	-	-
Hours	-	-	2	-	2	Practical	120	80	200
Pre-requisites:									
Art based workshop									
Learning Outcome:									
Theory syllabus									
Unit	Content								Hrs
1	Photography, Music, Doodling, Theatrical Arts, Graphics								
Practical content									
Exercises based upon above topics. Models, installations and artworks									
Text Books									
1	NA								
Reference Books									
1	NA								

<b>GANPAT UNIVERSITY</b>								
<b>FACULTY OF ARCHITECTURE DEISGN &amp; PLANNING</b>								
Programme	Bachelor of Architecture			Branch/Spec.	INSTITUTE OF ARCHITECTURE			
Semester	III			Version	1.0.0.0			
Effective from Academic Year	2015-16			Effective for the batch Admitted in	June 2015			
Subject code	IIIB10RSP	Subject Name		Related Study Programme				
Teaching scheme				Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total	CE	SEE	Total
	L	TU	P	TW				
Credit	NA				Theory	NA		
Hours	1 Week Case Study				Practical	ATTENDANT/ NOT ATTENDANT		
Pre-requisites:								
Observation of house form.								
Learning Outcome:								
Theory syllabus								
Unit	Content						Hrs	
1	To understand the spatial relationship between spaces. To understand built form and open spaces in present scenario. To understand how one community live in a same place and working together.							
Practical content								
This RSP aims at creating understanding of inherent form and order in the built environment by observing it and analyzing by sketching and measure drawing. Hand sketch also gives an opportunity to students for examining the systems, scale and architectural language of the built.								
Text Books								
1	NA							
Reference Books								
1	NA							
2	NA							

