AR-105

CODE	SUBJECT	CREDITS
AR-105	STRUCTUTRE-I	02
FOCUS		
	Behavior of materials and basic structural systems.	
CONTENT		
	1. Glossary of technical words, natural structures and intuitive understanding of their	behavior, their
	relationship with man made structures.	
	2. Functions of structures. Primary and secondary forces acting on structures – gravitational force, live load,	
	wind, temperature variation. Types of supports & their characteristics.	
	3. Analysis & design – Design criteria.	
	4. Primary elements of structure and their behavior.	
	5. Factor of safety & factors affecting it. Characteristics of Structural design – strength, stiffness and	
	stability. Discussion on factors affecting them and ways of satisfying these requirements.	
6. Study of behavior of structures through models and testing them for given load.		
METHODOLOGY		
	Through class lectures, Presentations, site visits, case studies and making models & testing	g them.
REFERENCES:		
	1.Structure in Architecture - Mario Salvadori	
	2.Building Structure Primer - James E Ambrose	
	3.Structures - Schodeck	
	4. Structural Concepts and Systems for Architecture & Engineers - T.Y.Lin.	
	5.Elements of Structure - Morgan	