

Galgotias University
School of Architecture

Vision	To be known globally as a premier School of Architecture for design, innovation, creativity,	
Mission	M1:	Develop competencies in field of Architecture through Project Based Learning teaching process
	M2:	Establish state-of-the-art facilities for design and simulation
	M3:	Prepares architectural graduates to actively participate in the contemporary milieu, encourage and anticipate paradigm shifts, and respond to change
	M4:	Employ an aesthetic approach to develop sustainable ethical solutions for societal concerns
Program Educational Objectives	PEO 1:	Engage themselves in resilient professional entrepreneurs activities
	PEO 2:	Work in acknowledged industry/ organizations in context of global built environment
	PEO3:	Pursue higher education and research in the field of architecture and related specializations
Program Outcome	Pos. NO.	Program Outcome
	PO 1	Architectural knowledge: Interpreted the knowledge of Design parameters, mathematical analysis, construction technology, architectural fundamentals and latest development in various field for the solution of complex architectural design problems.
	PO 2	PROBLEM ANALYSIS: Identify, formulate, review research literature and analysis of complex architectural problems
	PO 3	DESIGN/DEVELOPMENT OF SOLUTIONS: Design solutions for complex architectural problems and design system components or processes that meet the specified user and environmental
	PO 4	CONDUCT INVESTIGATIONS OF COMPLEX PROBLEMS: Integrate research-based knowledge and research methods including experiments, analysis and interpretation of data, and
	PO 5	Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern analytical tools and simulation of complex architectural activities with an understanding of the
	PO 6	THE ARCHITECT AND SOCIETY: Evaluate contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the
	PO 7	Environment and sustainability: Elaborate the impact of the professional architectural solutions in societal and environmental contexts, demonstrate the knowledge and need for
	PO 8	Ethics: Integrate ethical principles and commitment to professional ethics, responsibilities and norms of the architectural practice.
	PO 9	INDIVIDUAL AND TEAM WORK: Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary settings.
	PO 10	COMMUNICATION: Communicate effectively on complex architectural activities with the architectural and allied community and with society at large, such as, being a member and leader in a team, to manage projects and in multidisciplinary environments
	PO 11	PROJECT MANAGEMENT AND FINANCE: Synthesize knowledge and understanding of the 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
	PO 12	Life-long learning: Relate to the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of environmental, social,



Program Specific Outcomes	PSO1	Human psychology and Philosophy & architecture: Interpret human behavior and mental processes, including perception, cognition and emotion. by understanding real time architecture project
	PSO2	Indian Traditions and Culture: Amalgamate basic concepts of Indian values and ethics with contemporary techniques to form modern social fabric

Semester	Sampls Cos
2nd	Analyze human activities on the basis of space requirement
4th	Display professional commitment to ethical practice on every day basis
5th	Appraise renowned national architects work to understand their design philosophies
7th	Protect the environment, improve public health and safety, and increase the wealth of any location.
8th	Design intervention in transit oriented development



SOA/ARCHITECTURE / B.Arch / 1.1.1 / 2/11

Module 6 ARMO 1006		M6: Universal Design				
Contacts Hours		50 (2 Weeks)				
Assigned Credits		2				
Subject Code	Subject Name	Max Marks	Subject Credit	Sub Credit component in Module	Contact Hours	Contact Hours Justified
BARC1009	Architectural Design-II	20	6	1.200	30	30
BARC1012	History of Architecture-II	40	1	0.400	10	10
BARC1017	Building Services-I	10	1	0.100	2.5	3
BARC1015	Surveying and Levelling	30	1	0.300	7.5	7

COURSE OUTCOMES

Architectural Graduate will be able to:		Knowledge domain and level	Evaluation Method
1	Analyze architecture of early river civilizations	K4 in Cognitive domain	Rubric/Viva
2	Organize furniture layout for mono-cellular units such as kitchen, toilet, bedroom, living room	K6 in Cognitive domain	Rubric/Viva
3	Analyze human activities on the basis of space requirement	K6 in Cognitive domain	Rubric/Viva
4	Apply basic concepts of water supply for mono-cellular unit	K4 in Cognitive domain	MCQ's
5	Apply basic concepts of surveying and levelling in design of mono cellular units	K4 in Cognitive domain	MCQ's

COURSE OBJECTIVES

1. Early river civilization
2. Brick
3. Anthropometry-mono cellular- kitchen, living room, bathroom
4. Services- water supply

Project: Analysis of human activities on the basis of space requirement on 1:1 scale

COURSE CONTENT

BARC1009 Architectural Design-II

Unit-I: Architectural Design Aspects

Basic anthropometrics, human functions and their implications for space requirements. Minimum and optimum areas for mono functions. User's data, Movement and circulation diagrams. Spatial interpretations – various activities and their relationship with spaces.

Unit-II: Floor Space Layout

Functional furniture layout, circulation, lighting and ventilation for spaces such as living/dining, kitchen, bedrooms, Architect's office, Doctor's clinic, Food parlor etc. Analysis of human activities on the basis of space requirement on 1:1 scale, chalk, new

Unit-III: Preliminary Architectural Design

Design of mono-cellular-unit/structure on a level plane, designing of simple activity spaces, design of multiple but simple activity spaces involving primarily horizontal circulation
Note: The requirements pertaining to the handicapped and elderly people are to be addressed in design and detailing.

BARC1012 History of Architecture-II



Module 16 ARMO 2006		M16: Vernacular				
Contacts Hours		72 (2 Weeks)				
Assigned Credits		2				
Subject Code	Subject Name	Max Marks	Subject Credit	Sub Credit component in Module	Contact Hours	Contact Hours Justified
BARC2009	Architectural Design-IV	15	7	1.050	26.25	26
BARC2012	History of Architecture-IV	10	2	0.200	5	5
BARC2015	Building Services-III	30	2	0.600	15	15
BARC 2020	Environmental Studies	15	1	0.150	3.75	4

COURSE OUTCOMES

Architectural Graduate will be able to:		Knowledge domain and level	Evaluation Method
1	Analyze concepts of vernacular architecture in different regions of India	K4 in Cognitive domain	Rubric/Viva
2	Apply basic principles of acoustics in built environment	K3 in Cognitive domain	Rubric/Viva
3	Display professional commitment to ethical practice on every day basis	A5 in Affective domain	Rubric/Viva
4	Make scale models of various styles of vernacular architecture in groups	P5 in psychomotor domain	Rubric/Viva
5	Illustrate basic application of vernacular architecture in contemporary scenario	K3 in Cognitive domain	Rubric/Viva

COURSE OBJECTIVES

1. Building services/acoustics as prerequisite
2. Human Values and professional ethics
3. Vernacular architecture in India-Sheets models and analysis

Project: Analysis of Vernacular Architecture of a Unique Climatic Zone in India

BARC2009 Architectural Design-IV

Elements of Vernacular Architecture- locality, context, water, light ventilation, wind, temperature, availability of material, skills and construction techniques. Study and analysis of vernacular architecture of various regions and climatic zones in India on the basis of given parameters.

Study of vernacular architecture, emerging out of the traditional way of life of the people in a given climatic context and region . Understanding how the social and physical environment, climate of the place, materials and methods of construction impact vernacular architecture. Works of Laurie Baker etc.

BARC2012 History of Architecture-IV

History of Indian Vernacular Architecture – Documentaries etc.

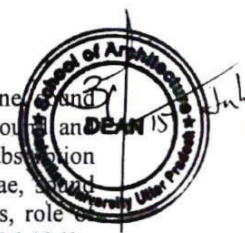
Contribution of society, social structure and culture on the development of Vernacular architecture; High rise and low-rise structure – design approach with social perspective.

BARC2015 Building Services III

Architectural Acoustic

Introduction to the study of acoustics – nature of sound, basic terminology – frequency, pitch, tone, sound pressure, sound intensity, decibel scale, loudness, threshold of audibility and pain, masking, sound distance – inverse square law. Behavior of sound in enclosed spaces. Absorption of sound, sound absorption coefficient, reverberation, reverberation time calculation, use of Sabine’s and Eyring’s formulae, sound absorbers, porous materials, panel or membrane absorbers and cavity or Holmboltz resonators, role of functional absorbers. Absorption coefficients of indigenous acoustical materials, use of IS code 2526-1963. Material- Internal finishing and details.

BARC 2020- Environmental Studies



Module 21 ARMO 3001		M21: Congent 1				
Contacts Hours		60 (2 Weeks)				
Assigned Credits		2				
Subject Code	Subject Name	Max Marks	Subject Credit	Sub Credit component in Module	Contact Hours	Contact Hours Justified
BARC3001	Architectural Design-V	15	9	1.350	33.75	34
BARC3004	Theory of Design	50	1	0.500	12.5	12
BARC3003	Building Structures-V	15	1	0.150	3.75	4

COURSE OUTCOMES

Architectural Graduate will be able to:		Knowledge domain and level	Evaluation Method
1	Design an art gallery	K6 in Cognitive domain	Rubric/Viva
2	Appraise renowned architects work to understand their design philosophies	K6 in Cognitive domain	Rubric/Viva
3	Appreciate various design styles and movements	A3 in Affective domain	Rubric/Viva
4	Make a scale model of art gallery	P5 in psychomotor domain	Rubric/Viva
5	Develop his own Philosophy/Rational thought process	A5 in Affective domain	Rubric/Viva

COURSE OBJECTIVES

1. To study various philosophies in and philosophers in popular literature
2. Congent – Clear, logical and convincing

Project: Art Gallery

BARC3001 Architectural Design-V

Philosophy and Philosophers

Idea of challenging the norm, questioning and analysing the philosophies, manipulation and debate.
Learning through Videos on sociology

Following philosophers shall be studied individually and discussed – Plato, Aristotle, Immanuel Kant, Karl Marx, Michel Foucault, Jacques Derrida, Friedrich Nietzsche, Rene' Descartes, David Hume, Jean Paul Sartre, Martin Heidegger, Socrates, Confucius

Popular philosophers in Architecture – Patric Schumaker, Christopher Alexander, Charles Jenx, Kevin Lynch, Jane Jacobs

Design Evaluation and Criticism: Value judgments in design, Appreciation of designer's skills, theories of perception and variability of perception. Theoretical issues in contemporary architectural thought, Seminars on the works of selected Indian and International architects and related topics.



Module 31 ARMO 4001		M31: Resurgence				
Contacts Hours		60 (2 Weeks)				
Assigned Credits		2				
Subject Code	Subject Name	Max Marks	Subject Credit	Sub Credit component in Module	Contact Hours	Contact Hours Justified
BARC4002	Building Construction-VII	50	1	0.500	12.5	13
BARC4013	Town Planning	100	1	1.000	25	25
BARC9998	Research/Dissertation	50	1	0.500	12.5	12

COURSE OUTCOMES

Architectural Graduate will be able to:		Knowledge domain and level	Evaluation Method
1	Apply basic concepts of town planning.	K3 in Cognitive domain	Rubric/Viva
2	Evaluate the level of planning of a town plan.	K5 in Cognitive domain	Rubric/Viva
3	Protect the environment, improve public health and safety, and increase the wealth of any location.	K3 in Cognitive domain	Rubric/Viva
4	Value the role of sustainability in built environment	K6 in Cognitive domain	Rubric/Viva
5	To write a dissertation on current scenario of any particular area.	A3 in Affective domain	Rubric/Viva

COURSE OBJECTIVES:

1. To study the various defects and remedies in a building.
2. To learn philosophies and basic components of town planning.
3. To appreciate the process of research and make the students aware of its potential in the field of architecture.

Project: Project assessment

BARC4002	Building Construction-VII
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The study of various defects in buildings and their remedies, Defects caused by dampness, applied forces and changes in size.

BARC4013	Town Planning
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Introduction to Town Planning:

Definitions of town planning, form of planning, Elements and planning principal of city plan, Success of plan in accordance to road networks, Town planning in ancient India.

Roads and traffic studies:



Module 40 ARMO 5004		M40: Mixed Use Development				
Contacts Hours		150 (6 Weeks)				
Assigned Credits		6				
Subject Code	Subject Name	Max Marks	Subject Credit	Sub Credit component in Module	Contact Hours	Contact Hours Justified
BARC5001	Architectural Design IX	45	12	5.400	135	135
BARC5008	Transport Planning*4	30	2	0.600	15	15
BARC5009	Urban & Regional Planning*4					-

COURSE OUTCOMES

Architectural Graduate will be able to:		Knowledge domain and level	Evaluation Method
1	Illustrate concepts of various Land Uses and land planning	K3 in Cognitive domain	Rubric/Viva
2	Apply basic concepts of town planning	K3 in Cognitive domain	Rubric/Viva
3	Design intervention in transit oriented development	K6 in Cognitive domain	Rubric/Viva
4	Develop a vision document for mixed land use	K6 in Cognitive domain	Rubric/Viva
5	Integrate social, ecological and economic concerns	A4 in Affective domain	Rubric/Viva

COURSE OBJECTIVES

Project:

COURSE CONTENT

BARC5001 Architectural Design IX

Project: Urban Design Intervention

- Design intervention into an existing urban precinct.
- Creating proposal document, drawings, maps and 3D physical model for proposed project.
- Urban outdoor lighting, urban green infrastructure, acoustic consideration for urban fabric, air quality at street level.
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BARC5008 Transport Planning (Elective IV-A)

Unit I Introduction:

Transport and Socioeconomic Activities, Historical Development of Transport, Transportation in the Cities, Freight Transportation, Future Developments.

BARC5009 Urban & Regional Planning (Elective IV-A)

Origin, evolution and history of human settlements- planned cities in India and the world, definitions and classifications, terminologies, Urban design concept and theories, Physical, Environmental, infrastructure, housing aspects of Urban Planning, planning theories

