

TEACHING SCHEME & EXAMINATION 4th year B. Arch

REVISED SYLLABUS 2011

FOURTH YEAR SEVENTH SEMESTER

B. ARCH

Code	Subject	HOURS / WEEKS					Exam	T.W	Total Marks
		L	S	WS LAB	Viva	Total			
AR-701	Design Studio – V (Urban Design)	-	14	-		14	-	600	600
AR-702	Advanced Building Construction	2	-	-		2	50	50	100
AR-703	Design Seminar – I	4	-	-		4	-	200	200
AR-704	Project Management	2	2	-		4	50	50	100
AR-705	Special Subjects – I	-	-	3	-	3	-	100	100 *
AR-706	Special Subjects -II	-	-	3	-	3	-	100	100 *
	TOTAL					30			1200

AR – 701

DESIGN STUDIO – V (URBAN DESIGN)

CONTENTS:

- City and its parts, city development, urban renewal/growth, nodes and transportation, etc.
- The student has to become familiarized with city/urban problems and changes. Design of areas/buildings to effect urban change.

AR – 702

Advanced Building Construction

CONTENTS:

- Advanced method of multistory building construction.
- Liftslab construction, slip form construction and its procedure for erection and detailing.
- Passive solar building details and materials.
- Industrial construction and prefabricated construction types and its details.
- Building retrofitting techniques.
- Importance of quality control in the building.
- Construction waste management.

AR – 703

Design Seminar – I

CONTENTS: The student is supposed to explore the significance of urban design approaches and related issues such as

- Architecture for Urban Infrastructure
- Globalisation and its significance for urban living
- Digital techniques for developing forms
- Integrating Services with the design of a building and a campus

FOCUS: Design Theory II will further explore significant design and theoretical issues in the design discipline and practice. The course will consist of lectures and investigations by the students of existing literature and case studies.

AR – 704

PROJECT MANAGEMENT

- CONTENTS:**
- Basic requirement of building as a whole, site selection, different zones, statutory documents required in connection with the plots, survey, surveyors job, contour plan, exploration of strata, method of improving bearing capacity of soil.
 - Definition of PM, Nature of construction projects, Understanding of various terms Rent, lease, Hire purchase, Cash flow, Expenditures etc.
 - Various objectives for PM, Various activities i.e. administrative, Technical, Financial, Legal with main titles for PM. Role of PM in the construction industries.
 - Knowledge area of project management like scope management, time management, cost management, quality management, human resource management, communication management and risk management
 - Project phases and life cycle: stake holder leadership skill, general management skills, communication skills
 - Techniques for scheduling: Bar chart, Net working diagram, and project evaluation and review techniques, critical path method.
 - CPM in determining extension of time
 - Reasons for cost over run in project
 - Practical implementation and application of CPM to typical construction project and Understanding of PERT method.
 - Different types of Records, Maintenance and Reporting methods and formats.
 - Orginogram for various types of offices for large project Management Company. (Site office, Branch office, Head office)
 - Construction safety and various injuries on site.

FOCUS: Techniques for planning and implementation of construction projects, Field visits for the actual methods of planning and record on site.

AR-705

SPECIAL SUBJECTS – I

CONTENTS: To help student to explore their aptitude and develop skill in any related field no. of subjects shall be offered depending on faculties interest and availability.

Students shall choose any subject from list A or B

AR-706

SPECIAL SUBJECTS – II

CONTENTS: To help student to explore their aptitude and develop skill in any related field no. of subjects shall be offered depending on faculties interest and availability.

Students shall choose any subject from list C

**FOURTH YEAR
EIGHT SEMESTER**

B. ARCH

Code	Subject	HOURS / WEEKS					Exam	T.W	Total Marks
		L	S	WS LAB	Viva	Total			
AR-801	Design Studio – VI (Green)	-	14	-	-	14	-	500	500
AR-802	Arch. Prog. & Research Method (Thesis)	4	-	-	-	4	-	200	200
AR-803	Professional Practice	2	-	-	-	2	50	50	100
AR-804	Design Seminar –II	4	-	-	-	4	-	100	100
AR-805	Adv. Services	2	-	-	-	2	50	50	100
AR-806	Special Subjects – I	-	-	2	-	2	-	100	100 *
AR-807	Special Subjects -II	-	-	2	-	2	-	100	100 *
	TOTAL					30			1200

AR – 801

DESIGN STUDIO – VI (GREEN)

CONTENTS:

- Design of a building or buildings with the emphasis on sustainability, energy efficiency, green building
- Energy efficient design with adoption of new materials and technologies
- Role of vernacular design ideas and traditional materials and techniques
- Use of recycled materials and services

AR – 802

Arch. Prog. & Research Method (Thesis)

CONTENTS:

- Quantifying and qualifying aspects of the programme and methods to determine and represent them. Preparing of area requirements and understanding the urban, historical, ecological and regional contexts.
- Preparation of site layouts for large campus keeping in mind infrastructure, road layouts, analysis of contours.
- Critical analysis of data collected.
- Presentation of the analysis.
- Refining of the report based on the feedback from the guide.

FOCUS:

- To understand physical, psychological, cultural dimensions of an architectural project and how to interpret them in an architectural design.
- Research method is intended to enhance the student's capacity to understand, analyse and resolve complex issues related to Architecture and environment. The student is supposed to learn how to express verbally and visually, analysis and synthesis of the data.

Note: students may choose a subject on which they will do the thesis in sem IX, so they can do the programming and research on the same subject.

AR-803

PROFESSIONAL PRACTICE

CONTENTS:

- Principles of contracts and Agreements.
- Types of contracts with brief theory.
- Tendering procedure up to publication in newspaper.
- Brief theory on writing various specifications, condition of contract for **civil construction and interior design of various buildings.**
- Role of an architect, responsibilities and liabilities with respect to client and society. Duties, powers and functions.
- Architects Act 1972-aims, objectives, and provision for registration.
- Profession: work and scale of professional charges, Mode of working and payments, phasing of the projects etc. (Examples of **civil work and interior work** for considerations of professional fees.)
- Understanding of arbitration, easement, valuation of land and building.

FOCUS:

Provision of ready references and Performa, preparation of dummy documents for small-scale design exercises.

AR – 804

Design Seminar –II

CONTENTS: The student is supposed to explore the significance of contemporary design approaches and related issues such as

- Urban issues
- Psychological and symbolic dimensions of built spaces
- Responsive Design-- Nature, Man and Technology

Design values for heritage, ecology and culture

FOCUS: Design Seminar will explore significant design and theoretical issues in the design discipline and practice. The course will consist of lectures and investigations by the students of existing literature and case studies.

AR-805

ADVANCED SERVICES

CONTENTS:

- Heat Transfer, heat gain and loss from buildings, thermal aspect of building and building materials, and economics of insulation. Cooling devices.
- Installation of Escalators and lifts for high-rise buildings.
- Automated systems in the buildings, fire alarm systems, security systems, fire safety systems, smoke detectors etc.
- Services of man made water bodies, garden pools, fountains etc.
- Advancement in HVAC systems
- Lighting systems for energy saving factors.
- Solar energy saving and its various applications in public and domestic buildings, solar water heating systems.
- Automated systems in various buildings for water supply.
- Introduction of various advance fixture of water supply and drainage systems for small and large scale projects.

AR-806

SPECIAL SUBJECTS – I

CONTENTS: To help student to explore their aptitude and develop skill in any related field no. of subjects shall be offered depending on faculties interest and availability.

Students shall choose any subject from list A or B

AR-807

SPECIAL SUBJECTS – II

CONTENTS: To help student to explore their aptitude and develop skill in any related field no. of subjects shall be offered depending on faculties interest and availability.

Students shall choose any subject from list C

**TEACHING SCHEME & EXAMINATION COMMON SYLLABUS FOR 5TH
YEAR B-ARCH, B-ARCH (ID), B-ARCH (BCT)**

REVISED SYLLABUS 2011

**FIFTH YEAR
NINETH SEMESTER**

B. ARCH, B. ARCH (ID), B. ARCH (BCT)

Code	Subject	HOURS / WEEKS					Exam	T.W	Total Marks
		L	S	WS LAB	Viva	Total			
AR-901	Design Thesis	-	30	-	-	30	-	1200	1200
	TOTAL					30			1200

AR- 901

DESIGN THESIS

CONTENTS: The student is supposed to work under the guidance of internal / external Guide in the areas of public concern & related issues such as Ordering themes / Ideas / Concepts.
Movement network & circulation.
Landscaping.
Perception of spaces
Psychology & Human behavior.
ID: Emphasis shall be placed on Interior aspect of building design (part/whole) with appropriate details/drawings explaining the interior spaces/design.
BCT: Emphasis shall be placed on Technical aspects of building design with accompany data/details and drawings.

FOCUS: The undergraduate design thesis is intended to evaluate the student's capacity to understand, analyze and resolve complex issues related to architecture as well as interior environment.

EVALUATION: Presentation of final design with drawings, models and case studies with a report (both in printed and in digital format) to the external Jury and Guide

Note: The Student may be allowed to do the Thesis by way of a Research if recommended By internal/external Guide.

**FIFTH YEAR
TENTH SEMESTER**

B. ARCH, B. ARCH (ID), B. ARCH (BCT)

Code	Subject	HOURS / WEEKS					Exam	T.W	Total Marks
		L	S	WS LAB	Viva	Total			
AR-1001	Office Training Report	-	-	-	-	100 Days	-	600	600
	TOTAL					100 Days			600

AR-1001

OFFICE TRAINING REPORT

CONTENTS: Min 16 weeks of training with a registered Architectural firm.
Understating of Professional Practice methods in Architectural firm.
Develop Client contacts to production of documents, tendering drawing, site supervision, coordinating various agencies.

FOCUS: Expose the students to Architectural profession to understand the process including conception to execution of project.