

**Solapur University, Solapur**  
**Revised Syllabus for Semester VIII, IX & X**  
(W.E.F. 2014-15)

## SOLAPUR UNIVERSITY, SOLAPUR

( W.E.F. 2014-15)

**Scheme of Teaching and Examinations of Fourth Year – VIII th Semester B.Arch.**

Subject Code	Title of Subject	Teaching Scheme period per week  (each period 50 minutes)			Examination Scheme							
		Lecture	Studio	Total	Duration In Hrs.	Theory Marks		Sessional Work				Total
								Internal		External		
						Max	Min	Max	Min	Max	Min	
AR8-01	Project II	10	-	10	-	-	-	100	50	100	45	200
AR8-02	Prof. Practice II	3	-	3	3	80	36	20	10	50	23	150
AR8-03	Project Management	4	-	4	-	-	-	50	25	50	23	100
AR8-04	Elective	4	-	4	-	-	-	50	25	-	-	50
AR8 -05	Seminar	4	-	4	-	-	-	50	25	-	-	50
	Total	-	-	25	-	80	-	270	-	200	-	550

## VIIIth SEM

**AR8 -01: Project II****Independent Project (Design Thesis)**

Lectures – 10	Paper	Internal - 100
Studio -	Duration	External- 100
Total - 10	Theory	
		Total - 200

**Objective :-**

To demonstrate an ability to comprehend the nature of architectural problem & create a brief which sets the frame work for design.

To demonstrate an advanced level design ability.

**Outline :**

Independent conceptual solution to the programme finalized by the student in semester vii.

Dissertation Process :-

1. Research & Statistics.
2. Programme Finalization & Requirement
3. Programme Analysis.
4. Site Selection.
5. Site Analysis :- Set of Constant, variable & constraint
6. Design Methodology
7. Conceptual level plans, sections, elevations, block models, views etc.

**Submission Format :****1. Spiral bound book**

A) A typewritten book must be presented in neatly spiral bound 2 copies out of which one copy will be retained by college & one will be returned back to student. The size of the book should be A4 size on sunlit bond or equivalent paper. The printed blank page of the certificate which will be supplied by the college will be bound along with other typewritten pages in the beginning of the book. This will be certified and signed by the college authorities as authentication of the work by the guide who has guided the work.

The index page must contain the following sequence & paging the volume must follow this sequence. Attach either reduced size Xerox or photocopies of drawing (if legible) and prints neatly folded to suit the size of the volume.

- 1) Introduction (the why & what of the project)
- 2) Synopsis
- 3) Research
- 4) Case Studies (3 total, 2 live & 1 book)
- 5) Site selection
- 6) Design Programme (Requirement listing)
- 7) Programme analysis
- 8) Site analysis
- 9) Data collection
- 10) Design methodology
- 11) Photocopies of conceptual drawings

## **2. Drawing requirements**

The final submission for the semester shall be in 4'x8' panel format or a neat portfolio, sheet size Mini A1 and Max A0, . all plans should be to the scale ( readable scale), site plan scale can be decided by the students with the help of guide .

- 1) About the the topic & research
- 2) Two Live & one Book Case Study presentation & comparative.
- 3) Data Collection
  - i) Climate data
  - ii) Technical Data – relevant to your topic.
- 4) Programme Analysis
- 5) Site selection and Analysis
- 6) Design Concept
- 7) Conceptual Drawings.
- 8) Block / Concept model.

**VIII<sup>th</sup> SEM**  
**AR8 – 02 : Professional Practice II**

Lectures – 3	Paper	Internal - 20
Studio	Duration 3 hrs	External- 50
Total - 3	Theory 80 marks	
		Total - 150

**Objective :** To understand Architecture as a profession, its duties, responsibilities and liabilities.

**Outline :**

1) Arbitration :

Arbitration, mediation, conciliation, advantage and disadvantage of each, arbitrator, arbitral tribunal, arbitration agreement, arbitral award.

2) Land acquisition:

Principles of land acquisition, procedure and remedies for the acquisition.

3) Easements:

Easements and its characteristics, its types and modes of acquiring, easement rights, and architects role.

4) Architectural Competitions :

Competitions, guidelines of COA, types, procedure for conduct of competitions

5) Building Byelaws :

Byelaws, national building code, floor area ratio, floor space index, zoning regulations, laws relating to repairs, dilapidations, wastes and fixtures, fire fighting, Tenements act, local bodies byelaws, MIDC byelaws, factory Act, labour act.

**References:**

- 1) "Professional Practice for Architects & Engineers" by Roshan Namavathi
- 2) "Legal and Contractual Procedures for Architects" by Bob Greenstreet
- 3) AJ Legal Handbook
- 4) "Professional Practice" by KG Krishnamurthy and SV Ravindra.

## VIII SEM

### AR 8 – 03: PROJECT MANAGEMENT

Lectures – 4	Paper	Internal - 50
Studio	Duration	External- 50
Total - 4	Theory	
		Total - 100

#### **Objectives :**

To help the students in understanding programming and management of a project, labour , tools and equipments.

#### **Outline :**

Introduction to project Management concepts, background of management, purpose, goal and objectives. Characteristics of projects and different aspects of management.

Traditional Management system Gantt's approach, load-charts, progress-chart, bar-chart, merits and limitations.

Concept of project programming, stages of programming, work-break down schedule, time estimates, units, introduction to work study, time study, and motion study.

Project programming, resources balancing phasing of activities, programme schedule, project control, reviewing, up-dating and monitoring.

Introduction to modern management concepts unidimensional managements techniques, introduction to net-work.

Crash programme, network compression, least cost solution, least time solution, optimum time solution, decision making.

Construction tools and equipment.

Labour management and control, labour laws, labour records,(Introductory only)

Local materials and non local materials, investigation and exploration, quality, lead, procurement, local stage and central government taxes and their effect on costs.

Site layout for construction work, site office, its management, duties and responsibilities.

Insurance, fire, Accident, Theft;

Quality control, Testing Facilities on site.

Use of computer in project management (Introductory)

#### **References:**

- 1) PERT AND CPM - Dr. B. C. Punmia
- 2) Construction Management and Planning - B. Sengupta, H. Gutia

## VIII SEM

### AR8- 04: ELECTIVE

Lectures -4	Paper	Internal -50
Studio	Duration	External
Total - 4	Theory	
		Total - 50

#### **Objective :**

To open the kaleidoscope of specialized areas in architecture.

#### **Outline :** The electives offered are

- 1) Valuation of immovable properties
- 2) Contemporary architecture
- 3) Design with climate
- 4) Architectural conservation

The detail syllabus for the above subjects are given hereby

## VIII SEM

### AR 8 – 04 A : VALUATION OF IMMOVABLE PROPERTIES

Lectures – 4	Paper	Internal - 50
Studio	Duration	External- -
Total - 4	Theory	
		Total - 50

#### **Objective :**

To help the students in the valuation of properties, land, their acts, and the role of architect.

#### **Outline :**

**1)Principals of Valuation:** Nature of value, fair market value and open market price, supply and Demand, property as an Investment, percentage Yield of Investments, Interest Rates on Investments in Land and Buildings, valuation of like interests, property as an investment, Development of properties. Comparison with other types of Investment.

**2) Rental value and Net Income:** Economics and Legal factors affecting Rent, Methods of Determination of Rental value, Effect of Capital Improvements on Rental Value.

Outgoings : Municipal and other Taxes, Repairs, Sinking Funds, Insurances Management.

Nature and use of Valuation Tables :

**3) Valuation properties :** Methods of valuation, Analysis of Rental and sales, Direct comparisons of Capital value, valuation by reference to cost valuation by reference to profits. The residual or development method, Rental method of Valuations Land and Building method, Modern Developments, Methods of costs of Building works, valuation of fully developed, Fully Tenanted, partly & fully Occupied properties, valuation of under-developed properties, Properties Rental out or given on Leave and License basis.

**4) Valuation of Land :** Situation, size, shape, Reversion to land value, Technical & physical conditions of lands, Methods, of Valuation of land, problem of Continuance of Income Reversion to land value, Encumbrance on land.

**5) Depreciation :** Depreciation, Method of computing depreciation, Classification and life of buildings.

**6)Valuation for mortgage and probate :** Valuation for mortgage, probate, advancing finance, bank loans, compulsory acquisition, standard rent court orders, suction reserve acquisition.

**7) Valuation of Non-Residential Properties:** Industrial properties, Commercial properties like theatres, hotels, offices etc.

**8) Valuation of Acts :** State and Central Government acts. Affecting valuation, Income tax Act regarding Land Ceiling Act, Compensation Act, Town Planning Act, Valuation for acquisition and compensation.

#### **References:**

- 1) Theory of Valuation – Roshan H. Namavati
- 2) Valuation of IMMOVABLE PROPERTIES – M.H. Dchange



## VIII SEM

### AR8- 04 B: Contemporary Architecture

Lectures – 4	Paper	Internal - 50
Studio -	Duration	External-
Total - 4	Theory	
		Total - 50

#### **Objective :**

To study the architectural changes after independence.

#### **Outline:**

Post 1950's architecture: the emergence if a diversity of approaches.

Indian Architecture in the post-independence era: assimilation of modernism. The search for appropriateness –integrating new technology with local responses.

Internationally the search for a sense of place –regionalism.

Various approaches emerging all over the world.

#### **Theory :**

Critical thinking and architectural practice.

Post independence Architecture.

The questioning of the premises of modernism- Universality standardization.

Impart of critical thinking from other fields – literature, philosophy, sociology and anthropology.

Structuralist and post structuralist approaches.

Phenomenology, linguistics, and post modern thinking.

#### **References :**

- 1) "Design in Architecture" by Broadbent, Geoffrey
- 2) "Creating Architectural Theory" by Lang, Jon

## VIII SEM

### AR 8 – 04 C: DESIGN WITH CLIMATE

Lectures – 4	Paper	Internal - 50
Studio	Duration	External- -
Total - 4	Theory	
		Total - 50

#### **Objective :**

Climate and its problems confronting architectural design considering the different aspects of climate various methods & techniques for controlling solar radiation.

#### **Outline:**

Residential units

- Analysis of any exerting situation/ problem
- Design proposal for one of the climate types and details of important elements.
- Study and Analysis of one climate types with design principles, material used and construction techniques
- Details of this programme will be discussed with the concerned staff.

#### **References :**

- 1) Climate Responsive Architecture – Arvind Krishnan
- 2) Climate Design By – S. V. Szokolay

## VIII SEM

### AR 8 – 04 D: ARCHITECTURAL CONSERVATION

Lectures – 4	Paper	Internal - 50
Studio	Duration	External- -
Total - 4	Theory	
		Total - 50

#### **Objective :**

Student should be able to acquire comprehensive understanding about architectural conservation. The role of conservation architects, types and methodology of architectural conservation.

#### **Scope :**

Introduction to architectural conservation, preparatory procedure for conservation like 1)Prevention2)Preservation3)Consolidation4)Restoration5)Rehabilitation6)Reproduction7) Reconstruction etc.

Structural aspects of the building, as to study their actions. Causes of decay in buildings- man made or natural.

Considering all above aspects of conservation procedure like inspection, documentation, reports and research, analysis and recordings only.

The students have to identify a building for conservation with the help of faculty and the area shall not be less than 150 sqm. They have to prepare analytical report of conservation for that building.

## VIII<sup>th</sup> SEM

### AR8 – 05 : Seminar

Lectures – 4	Paper	Internal - 50
Studio	Duration	External-
Total - 4	Theory	
		Total - 50

#### **Objective :**

In this subject, the student learns to study in depth any architectural topic and its underlying principles. He offers his own views of solutions and presents them before an audience and holds discussions.

#### **Outline :**

The Institution should select and declare subjects for seminar (minimum three to be held in a term) The subjects shall cover any topic within the scope of syllabus, works and philosophy of eminent architects, review of any book, appreciation of an existing building in the area, etc.

A selected number of students study on topic in detail and each of them prepares a paper on the subject with sketches, photographs etc.

The student presents and reads the paper before fellow students, staff and invites. He invites and discusses queries and comments from the audience.

It should be seen that every student presents at least one paper in the academic year.

# SOLAPUR UNIVERSITY, SOLAPUR

( w.e.f. 2014-15)

## Scheme of teaching and examinations of Final Year - IXth Semester B.Arch.

Subject Code	Title of Subject	No. of Weeks			Examination Scheme						
		Lecture	Studio	Total	Duration In Hrs.	Theory Marks	Sessional Work				Total
							Internal		External		
AR9-01	Professional Training I	-	-	16		-	Max	Min	Max	Min	
							150	75	150	68	300
	Total			16			150		150		300

## IX SEM

### AR9- 01 : PROFESSIONAL TRAINING – I

Lectures –	Paper	Internal - 150
Studio -	Duration	External- 150
Total - 16 weeks	Theory	
		Total - 300

#### Objective\_:

The purpose of this study is to expose students to the practices carried out in an Architect's office.

Starting from the conceptual drawings and to end up with the all working details on the same which could be carried out for execution.

Here student shall learn practical application of knowledge acquired by him through the process of curriculum.

#### Scope :

The purpose of training is to learn.

1. Day to day working of an Architects office
2. Conceptual drawings and presentation techniques.
3. Correspondence
4. Working drawings
5. Municipal approvals

#### Instructions:

**1.** The students are required to gain practical experience for 16 weeks. He/she should try to get his/her training in a registered (COA) Architects office. He/she should get bio-data of the firm, where he proposes to work, approved by the Principal.

**2.** The Log book and work done (in the form of Sheets A3 min.) by the students in the architects office should be submitted in two copies to the College for their external exams.

**3.** The student should attend the office regularly and work full-time and should follow the discipline and duty hours of the organization. He/she is also expected to keep his/her eyes open and observe general working of the office as a whole. His/her minimum attendance in the office should be 80% of the full working days which should work out 96 days minimum.

**4.** During this period, the student will maintain a log-book as prescribed and it shall be countersigned by the principal of that office alongwith the professor-in-charge. The candidate is

expected to work in an office or on work site during this period, in accordance with the discipline of the organization where he/she is working.

The candidate will enroll himself at the college by paying his/her full fees and the successful completion of his/her period will be certified by the principal of the College based on his/her progress recorded in his/her log-book.

**5.** If a student feels that he/she is not getting proper training in an office, then with the permission of the Principal, he/she may go for training in some other office without break and give due intimation of at least a fortnight to the original office.

**6.** It is suggested that period for the student's training should be so arranged that the student returns to the Institution, discusses his/her problems and difficulties encountered with the staff members and resumes his/her education with the background of the practical training.

**7.** On successful completion of the practical training viva-voce will be conducted jointly by one internal and two external examiner on the training he/she has undergone and the report submitted by the student.

**8. Proforma of Report:**

Name of the Student:

Academic year:

Name of Office/Organisation:

Date of Joining :

Date of Leaving :

Employer's Report:

Employer's opinion about student's training:

Any suggestions by the Employer:

Signature of the Employer

Signature of the Student

Sessional work based on above topics.

**9.** One copy of syllabus for this subject should be made available to the employer.

**10.** students should submit joining letter and completion letter within 15 days of the respective academic schedule.

## SOLAPUR UNIVERSITY, SOLAPUR

( w.e.f. 2014-15)

**Scheme of teaching and examinations of Final Year - Xth Semester B.Arch.**

Subject Code	Title of Subject	No. of Weeks			Examination Scheme						
		Lecture	Studio	Total	Duration In Hrs.	Theory Marks	Sessional Work				Total
							Internal		External		
							Max Min		Max Min		
AR10-01	Professional Training II	-	-	16			150	75	150	68	300
AR10-02	Project -III	-	-	-	-	-	150	75	150	68	300
	<b>Total</b>			<b>16</b>			<b>300</b>		<b>300</b>		<b>600</b>



**X SEM**  
**AR10- 01 : PROFESSIONAL TRAINING – II**

Lectures –	Paper	Internal - 150
Studio -	Duration	External- 150
Total - 16 weeks	Theory	
		Total - 300

**Objective :**

The purpose of this study is to expose students to the actual execution of projects carried out in an architect's office.

Starting from the estimates, tenders and ending up into site execution till completion of building. The stages involved in practical execution are to be thoroughly learnt by the student.

**Scope :**

The purpose of training to learn.

1. Preparing estimates
2. Competition Drawings
3. Tender Documents
4. Item rates, labour rates, checking of contractors bills.
5. Site supervision
6. Knowledge of new as well traditional building materials and construction techniques in market.

**Instructions:**

**1.** The students are required to gain practical experience for 16 weeks. He/she should try to get his training in a registered(COA) Architects office. He/she should get bio-data of the firm, where he/she proposes to work, approved by the Principal.

**2.** The Log book and work done (in the form of Sheets A3 min.) by the students in the architects office should be submitted in two copies to the College for their external exams.

**3.** The student should attend the office regularly and work full-time and should follow the discipline and duty hours of the organization. He/she is also expected to keep his/her eyes open and observe general working of the office as a whole. His/her minimum attendance in the office should be 80% of the full working days which should work out 96 days minimum.

**4.** During this period, the student will maintain a log-book as prescribed and it shall be countersigned by the principal of that office alongwith the professor-in-charge. The candidate is

expected to work in an office or on work site during this period, in accordance with the discipline of the organization where he/she is working.

The candidate will enroll himself at the college by paying his/her full fees and the successful completion of his/her period will be certified by the principal of the College based on his/her progress recorded in his/her log-book.

**5.** If a student feels that he/she is not getting proper training in an office, then with the permission of the Principal, he/she may go for training in some other office without break and give due intimation of at least a fortnight to the original office:-

**6.** It is suggested that period for the student's training should be so arranged that the student returns to the Institution, discusses his/her problems and difficulties encountered with the staff members and resumes his/her education with the background of the practical training.

**7.** On successful completion of the practical training viva-voce will be conducted jointly by one internal and two external examiner on the training he/she has undergone and the report submitted by the Employer and the student.

**8. Proforma of Report:**

Name of the Student:

Academic year:

Name of Office/Organisation:

Date of Joining :

Date of Leaving :

Employer's Report:

Employer's opinion about student's training:

Any suggestions by the Employer:

Signature of the Employer

Signature of the Student

Sessional work based on above topics.

**9.** One copy of syllabus for this subject should be made available to the employer.

**10.** students should submit joining letter and completion letter within 15 days of the respective academic schedule.

## AR10- 02 : PROJECT – III

Lectures –	Paper	Internal - 150
Studio -	Duration	External- 150
Total -	Theory	
		Total - 300

### Objective :-

To demonstrate an ability to comprehend the nature of architectural problem & create a brief which sets the frame work for design.

To demonstrate an advanced level design ability.

### Outline :

Students are expected to develop their conceptual designs & research into technical plans, elevations, sections, 3-D, view etc. for the project finalized in semester vii and viii.

Developing the concepts into full fledged technical design plans and revising it at every stage with the help of respective guides.

### SUBMISSION REQUIREMENTS :-

#### A - DISSERTATION (BOOK)

The typewritten dissertation must be presented in neatly bound 3 copies, two copies of which will be retained by the college and one returned to the candidate. The size of the dissertation volume must be A4 size on sunlit bound or equivalent paper with standard binding in black or brown cloth and embossed title on top and preferably on the spine.

The printed blank page of the certificate which will be supplied by the College will be bound along with other typewritten pages in the beginning of the dissertation. This will be certified and signed by the College authorities as authentication of the work and by the guide who has guided the work.

The index page must contain the following sequence and paging the volume must follow this sequence.

1. Introduction (the why & what of the project)
2. Synopsis
3. Research
4. Case Studies (3 total, 2 live & 1 book)

5. Site selection
6. Design Programme (Requirement listing)
7. Programme analysis
8. Site analysis
9. Data collection
10. Photocopies of conceptual drawings & block/concept model
11. reduced size Xerox or photocopies of drawing (if legible) or prints neatly folded
12. photographs of model of the project

## **B. DRAWING REQUIREMENT**

- a) Sheetwork from viith and viiith sem. With remarks and assesement from the guides concerned
- b) Site plan.
- c) All Floor plans & detailed plans .
- d) sections : min.4
- e) elevations : min.4
- f) Details – as per discussion with guide.
- g) 3d Views - Walk through
- h) Models along with site development .

Note –Minimum two reviews have to be conducted. Appropriate scale ( Readable scale) for the drawings has to be incorporated.