

B.E.Semester : III

Civil Engineering

Subject Name: Building and Town Planning (CV302)

A.Course Objective

The main objectives of the course are

- To get maximum benefit from building and its services in terms of quality, timely completion and cost-effectiveness.
- To compile different aspects of Building Construction, Planning and Drawing of residential buildings & Public Building

B. Teaching & Evaluation Scheme

Teaching scheme				Total Credit	Evaluation Scheme					
L	T	P	Total		Theory		Mid Sem Exam	CIA	Pract.	Total
Hrs	Hrs	Hrs	Hrs		Hrs	Marks	Marks	Marks	Marks	Marks
03	00	02	05	04	03	70	30	20	30	150

C. Detailed Syllabus

BUILDING PLANNING

- 1 Study of general principles of Planning. Typical Building Byelaws as per National Building Code and General Development Control Regulation.
- 2 Planning of residential buildings, Public buildings and Multistoried structure.
3. Planning of Industrial Building.
- 4 Preparing Working Drawings of Residential Buildings. Various types, Scale selection, Material description

5 Elements of Perspective Drawing-basic terms, Different types of perspective drawing.

TOWN PLANNING

6 History, Ancient Planning in India, Origin and Growth of towns,Satellite Town, Ribbon development

7 Planning of Earthquake resistant buildings considering symmetry.simplicity, continuity, staircase, water tank etc

8 Civic surveys: Purpose, Types, Data required, Presentation

9 Elements of City Planning, Zoning and land use, Housing,Introduction to landscape architectural planning, Master plan,Town Center, Civic, centers, Shopping Center, Town Planning Schemes, CBD.

10 Elements of Neighbourhood.

11 Slum: definition, Slum improvements.

D. Lesson Planning

Sr.No.	Title of the Unit	Hours	Weight age
1	Building Planning		
	Study of general principles of Planning. Typical Building Byelaws as per National Building Code and General Development Control Regulation.	2	8
	Planning of residential buildings, Public buildings,Industrial building and Multistoried structure.	7	15
	Preparing Working Drawings of Residential Buildings. Various types, Scale selection, Material description	3	9
	Elements of Perspective Drawing-basic terms, Different types of prespective drawing	3	8
2.	Town planning		
	History, Ancient Planning in India, Origin and Growth of towns,Satellite Town, Ribbon development	4	8

Planning of Earthquake resistant buildings considering symmetry, simplicity, continuity, staircase, water tank etc	4	8
Civic surveys: Purpose, Types, Data required, Presentation	5	10
Elements of City Planning, Zoning and land use, Housing, Introduction to landscape architectural planning Master plan, Town Center, Civic centers, Shopping Center, Town Planning Schemes, CBD	10	20
Elements of Neighborhood.	4	7
Slum: definition, Slum improvements	3	7

A1 Size Sheet

- (1) Residential Planning: Single and Multi storied Building: Plans, elevation, section, lay-out plan, key plan, site plan, area table, schedule of opening. Scale-1:100.
- (2) Public Building: Ground Floor plan, typical floor plan, elevation, section, lay-out plan, key plan, site plan, area table, schedule of opening.
- (3) Working Drawing: sheet should accommodate min. five types with sectional details.
(Plan, Elevation, Section including Foundation Plan, Furniture plan, Drainage lay out, Toilet Detail, Woodwork detail, Kitchen detail, Electrical plan etc)
- (4) Perspective Drawing: One Point as well as Two point perspective of sheet -1 planning.

(A) Assignments:

- (1) Assignment -1: Principles of Planning & Architecture
- (2) Assignment -2: Building Bye laws
- (3) Assignment -3: Town Planning

E. Instructional Method and Pedagogy:

- At the start of course, the course delivery pattern, prerequisite of the subject will be discussed.
- Lectures will be conducted with the aid of multi-media projector, black board, OHP etc.
- Attendance is compulsory in lectures and laboratory which carries 5 Marks weightage.
- One internal exams will be conducted of 30 Marks as a part of internal theory evaluation.

- Assignments based on course content will be given to the students at the end of each unit/topic and will be evaluated at regular interval. It carries a weightage of 5 Marks as a part of internal theory evaluation.
- Surprise tests/Quizzes/Seminar will be conducted which carries 5 Marks as a part of internal theory evaluation.
- The course includes a laboratory, where students have an opportunity to build an appreciation for the concepts being taught in lectures.
- Experiments/Tutorials related to course content will be carried out in the laboratory.
- Minimum 4 numbers of A-1 size drawing sheets will prepared based on above course content.
- Working drawing sheet should accommodate Minimum 5 types with sectional details.

F. Students Learning Outcomes

Adopting scientific principles of construction management, quality management, cost and time control student employed in practice.

- Skill, specialization, experience, resourcefulness increases for engagement of execution & supervision of project work
- Ensuring inter-disciplinary co-ordination during construction.

G. Recommended Study Material:

A. Text Books & Reference Books:

1. Gurcharan Singh, Building Planning, Designing and Scheduling.
2. Rangwala, S.C., Town Planning, Charotar Publishing House, Anand. 58
3. Hiraskar, G.K., Town Planning, Dhanpatrai & Sons, New Delhi.
4. Sikka, V.B., Civil Engineering Drawing, S.K. Kataria & Sons.
5. Shah, M.G., Kale, C.M. and Patki, S.Y., Building Drawing, Tata Mcgraw Hill, New Delhi.
6. Sane, Y.S., Planning and Designing Building.
7. General Development Control Regulations published by AUDA and GICEA.
8. National Building Code of India, Indian Standard Institution (ISI), 2005, New Delhi.
9. BIS and IS Code.

B. Web Materials:

1. <http://edudel.nic.in>

2. <http://bis.org.in/other/quake.htm>
3. http://www.vastu-design.com/india_homes.htm
4. <http://www.thepeninsulaneighborhood.com/ThePlan.html>
5. http://www.historytution.com/indus_valley_civilization/town_planning.html