



**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**Syllabus for Diploma of Vocation (D.Voc.), 6<sup>th</sup> Semester**  
**Branch: Architectural Assistantship**  
**Subject Name: Application of Building By laws**  
**On Job Training (Elective)**  
**Subject Code: 1260608**

**Type of course:** On Job Training (Elective)

**Prerequisite:** Understanding of building planning in a systematic manner to meet its functional and legal purposes to maintain the growth or orderly development of a building / place.

**Rationale:** Knowledge of preparation of municipal drawings and building bylaws is a must for the students. All the buildings which are to be erected must be approved or sanctioned by the local Municipal Authority, Development Authority, or any Regulatory Authority before the execution.

The students should be well acquainted with bylaws and shall be able to prepare the Municipal drawings and implement it in practice.

**Teaching and Examination Scheme:**

Teaching Scheme				Credits	Examination Marks				Total Marks
L	T	P	C		Theory Marks		Practical		
					ESE (E)	PA(M)	ESE (V)	PA (I)	
0	0	15	15		0	0	100	100	200

L- Lectures; T- Tutorial/Teacher Guided Student Activity; P- Practical; C- Credit; ESE- End Semester Examination; PA- Progressive Assessment

**Content:**

Sr. No.	Content	Total Hrs.
1	<p><b>Need and objects of building bylaws.</b></p> <ul style="list-style-type: none"> <li>• Basic information of building bylaws and responsibility of Government and other public bodies.</li> <li>• Modern concept of building bylaws with reference to National Building Code.</li> <li>• Introduction to building codes and norms, Need and nature of building codes, standards and regulations, overview of basic terms in practice, application of nature of building codes in special regions like heritage zones, coastal zones, hilly areas.</li> <li>• Study of building regulations – overview of administrative processes for obtaining building permits at various stages by visiting VMC (or equivalent office).</li> <li>• Developing the understanding of general land use, building classifications and permissible uses, norms for exterior and interior open spaces, setbacks and margins, norms for building projections in open spaces, consideration in FAR, guidelines for open green areas.</li> </ul>	30
2	<p><b>Norms for Vehicular Areas</b></p> <ul style="list-style-type: none"> <li>• Information to be understood to apply in designing of medium to large scale project. Means of access, norms for access widths for various types of buildings, requirement of parking spaces, standards for turning radius, access to service area.</li> </ul> <p><b>Norms for fire protection</b></p> <ul style="list-style-type: none"> <li>• Overview of fire protection norms for various building classifications,</li> </ul>	30



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	norms for fire exit ways and building materials, concept of fire zoning, doorways, stairways, passages and corridors, fire escapes to be applied in practice at office.	
3	<p><b>Norms for building services</b></p> <ul style="list-style-type: none"> <li>• Norms for lighting and ventilation, introduction to terms to apply them practically, components of daylight factor, general principles of opening for good lighting, considerations in artificial lighting, general principles for natural and mechanical ventilation.</li> <li>• Requirements for parts of buildings</li> <li>• Plinth, Habitable rooms, kitchen, wet areas, mezzanine. Storerooms, parapets.</li> </ul>	20
4	<p><b>Procedure and documents required for securing development permission.</b></p> <ul style="list-style-type: none"> <li>• Understanding the process involved in taking development permission of any building or land, within the limits of Development Plan proposals.</li> <li>• In the office develop the understanding if making a proposal to take permission along with the receipt of the payment as per sanctioned final T.P. Scheme.</li> <li>• Documents required to take permission – evidence of right to develop or to build on the land, city survey land, records of Rights for Revenue lands, copy of Index.</li> <li>• Other documents required are – certified copy of approved subdivisions/layout of final plot form the concerned authority, NOC from the competent authority (in case of urban land), report of structural designer, a site plan of the area proposed to be developed in prescribed scale showing the boundaries of the plot, name of the streets and its details, site development and other conditions, other manmade and natural features of site.</li> <li>• A detailed plan (small scale project) to be prepared showing the plans, sections and elevations of the proposed development work in the prescribed scale showing details like floor plans having all elements, sizes, uses, materials of all parts, building elevations, level of the site.</li> <li>• Certificate of undertaking to be procured from Engineer / Surveyor / Structural Designer</li> <li>• Notations used in plans to be learned and practiced in office.</li> </ul>	70
5	<p><b>Introduction to zoning</b></p> <p>Understanding the different zones before designing buildings– Residential, Existing Nucleus, Local Commercial, General Commercial, Educational, Non obnoxious and non-hazardous industrial, Obnoxious and hazardous, Agricultural.</p> <p>Understanding the relation of zone and type of development shall be permitted in the given condition.</p>	20
6	<p><b>Bylaws in Gamtal</b></p> <p>To design or redevelop in Gamtal area following norms to be considered – follow the Minimum area of a building unit specified in CGDCR, setback criteria</p>	30



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	with respect to street width, building height with respect to plot area, road width and location, permissible ground coverage as per plot area, consideration of chowk for light and ventilation. Revenue survey areas (from GDCR) Purpose, documents requirement, land revenue and its objectives, components of land revenue, benefits.	
	<b>Total</b>	200

**Course Outcomes:**

Sr. No.	CO Statement	Marks % Weightage
CO-1	To understand the importance of building bylaws in construction industry while preparing drawings.	10
CO-2	To understand the provisions of building bylaws in different zones and different plot sizes.	40
CO-3	To understand the implementation of the master plan by implementing building bylaws.	20
CO-4	To understand the rules and regulations to be followed in planning a scheme	10
CO-5	To understand the different certification and provisions required for the building design as per GDCR.	20

**Reference Books:**

1. CGDCR
2. Guidelines for conservation – A technical manual, INTACH, Feilden, Bernard.
3. National Building Code
4. Planning the Indian City, Buch N Mahesh
5. Town planning 18<sup>th</sup> edition, Rangwala SC, Charotar publication, house Anand, 2003