



Vision Buldhana Educational & Welfare Society's

**PANKAJ LADDHAD INSTITUTE OF TECHNOLOGY &  
MANAGEMENT STUDIES, YELGAON,  
BULDHANA**

(Recognized by AICTE, New Delhi & affiliated to Sant Gadge Baba Amravati University)

Accredited by NAAC

**Department of Civil Engineering**

**Teaching Scheme as per Syllabus**

Four Year Degree Course in Bachelor of Engineering Branch: CIVIL ENGINEERING  
Semester Pattern (Choice Based Credit Grade System)

SEMESTER : THIRD																
Sr. No.	Subject Code	Subject	TEACHING SCHEME					EXAMINATION SCHEME								
			HOURS / WEEK			Total HOURS/WEEK	CREDITS	THEORY					PRACTICAL			
			Lecture	Tutorial	P/D			Duration Of Paper (Hr.)	Max. Marks Theory Paper	Internal Marks	Total	Min. Passing Marks	Max. Marks		Total	Min. Passing Marks
												Int.	Ext.			
<b>THEORY</b>																
01	3CE01	Engineering Mathematics-III	3	1	--	4	4	3	80	20	100	40	--	--	--	--
02	3CE02	Strength of Materials	3	--	--	3	3	3	80	20	100	40	--	--	--	--
03	3CE03	Building Construction & Engineering. Geology	3	--	--	3	3	3	80	20	100	40	--	--	--	--
04	3CE04	Transportation Engineering	3	--	--	3	3	3	80	20	100	40	--	--	--	--
05	3CE05	Concrete Technology & RCC	3	--	--	3	3	3	80	20	100	40	--	--	--	--
06	4ES06	**Environmental Science	2	--	--	2	--	--	--	--	--	--	-	-	-	-
<b>PRACTICALS / DRAWING / DESIGN</b>																
07	3CE07	Strength of Materials- lab	--	--	2	2	1	--	--	--	--	--	25	25	50	25
08	3CE08	Building Construction & Engineering. Geology-lab	--	--	2	2	1	--	--	--	--	--	25	25	50	25
09	3CE09	Transportation Engineering-lab	--	--	2	2	1	--	--	--	--	--	25	25	50	25
10	3CE10	Concrete Technology & RCC-lab	--	--	2	2	1	--	--	--	--	--	25	25	50	25
<b>Total</b>			<b>17</b>	<b>1</b>	<b>8</b>	<b>26</b>	<b>20</b>	--	--	--	<b>500</b>	--	--	--	<b>200</b>	--
<b>Grand Total</b>															<b>700</b>	

Note: \*\*The Examination of Mandatory Subject Environmental Science shall be conducted in IV Semester.

SEMESTER : FOURTH																
Sr. No.	Subject Code	Subject	TEACHING SCHEME					EXAMINATION SCHEME								
			HOURS / WEEK			CREDITS	THEORY					PRACTICAL				
			Lecture	Tutorial	P/D		Total HOURS/WEEK	Duration Of Paper (Hr.)	Max. Marks Theory Paper	Internal Marks	Total	Min. Passing Marks	Max. Marks		Min. Passing Marks	
										Int.	Ext.	Total				
<b>THEORY</b>																
01	4CE01	Building Planning Designing & CAD	3	--	--	3	3	4	80	20	100	40	--	--	--	--
02	4CE02	Hydrology & Water Resource Engg.	3	--	--	3	3	3	80	20	100	40	--	--	--	--
03	4CE03	Surveying	3	--	--	3	3	3	80	20	100	40	--	--	--	--
04	4CE04	Geotechnical Engineering- I	3	--	--	3	3	3	80	20	100	40	--	--	--	--
05	4CE05	Structural Analysis - I	3	1	--	4	4	3	80	20	100	40	--	--	--	--
06	4ES06	**Environmental Science	2	--	--	2	2	3	80	20	100	40	-	-	-	-
<b>PRACTICALS / DRAWING / DESIGN</b>																
07	4CE07	Building Planning Designing & CAD -lab	--	--	2	2	1	--	--	--	--	--	25	25	50	25
08	4CE08	Hydrology & Water Resource Engg. -- lab.	--	--	2	2	1	--	--	--	--	--	25	25	50	25
09	4CE09	Surveying -- lab.	--	--	2	2	1	--	--	--	--	--	25	25	50	25
10	4CE10	Geotechnical Engineering- I- lab.	--	--	2	2	1	--	--	--	--	--	25	25	50	25
<b>Total</b>			<b>17</b>	<b>1</b>	<b>8</b>	<b>26</b>	<b>22</b>	--	--	--	<b>500</b>	--	--	--	<b>200</b>	--
													<b>Grand Total</b>		<b>700</b>	

Note: \*\*The Examination of Subject Environmental Science shall be conducted in IV Semester.

SEMESTER : FIFTH																
Sr. No.	Subject Code	Subject	TEACHING SCHEME					EXAMINATION SCHEME								
			HOURS / WEEK			CREDITS	THEORY					PRACTICAL				
			Lecture	Tutorial	P/D		Total HOURS/WEEK	Duration Of Paper (Hr.)	Max. Marks Theory Paper	Internal Marks	Total	Min. Passing Marks	Max. Marks		Min. Passing Marks	
												Int.	Ext.	Total		
<b>THEORY</b>																
01	5CE01	Design of Reinforced & Prestressed Concrete Structures	3	1	--	4	4	3	80	20	100	40	--	--	--	--
02	5CE02	Surveying & Geomatics	3	--	--	3	3	3	80	20	100	40	--	--	--	--
03	5CE03	Numerical Methods & Computer Programming	3	--	--	3	3	3	80	20	100	40	--	--	--	--
04	5CE04	Professional Elective -I	3	--	--	3	3	3	80	20	100	40	--	--	--	--
05	5CE05	Open Elective - I	3	--	--	3	3	3	80	20	100	40	--	--	--	--
<b>PRACTICALS / DRAWING / DESIGN</b>																
06	5CE06	Design of Reinforced & Prestressed Concrete Structures- lab	--	--	2	2	1	--	--	--	--	--	25	25	50	25
07	5CE07	Surveying & Geomatics -lab	--	--	2	2	1	--	--	--	--	--	25	25	50	25
08	5CE08	Numerical Methods & Computer Programming -lab	--	--	2	2	1	--	--	--	--	--	25	25	50	25
09	5CE09	Professional Elective -I -lab	--	--	2	2	1	--	--	--	--	--	25	25	50	25
<b>Total</b>			<b>15</b>	<b>1</b>	<b>8</b>	<b>24</b>	<b>20</b>	--	--	--	<b>500</b>	--	--	--	<b>200</b>	--
													<b>Grand Total</b>		<b>700</b>	
<p>Note : Open Elective - I to be opted from the Courses offered by the other Engineering &amp; Technology courses from the College / Depts. of the University.</p> <p><b>5CE04 &amp; 5CE09 Prof. Elective I :</b> (i) Highway Construction &amp; Management (ii) Repairs &amp; Rehabilitation of Structures (iii) Sustainable Construction Methods iv) Watershed Engg. &amp; Management</p> <p><b>5CE05: Open Elective I :</b> (i) Basic to Building Construction (ii) Disaster Management (iii) Soft Skills and Interpersonal Communication</p>																

SEMESTER : SIXTH															
			TEACHING SCHEME					EXAMINATION SCHEME							

Sr. No.	Subject Code	Subject	HOURS / WEEK			THEORY							PRACTICAL			
			Lecture	Tutorial	P/D	Duration Of Paper (Hr.)	Max. Marks Theory Paper	Internal Marks	Total	Min. Passing Marks	Max. Marks		Total	Min. Passing Marks		
											Int.	Ext.				
<b>THEORY</b>																
01	6CE01	Design of Steel Structures	3	1	--	4	4	3	80	20	100	40	--	--	--	--
02	6CE02	Environmental Engineering - I	3	--	--	3	3	3	80	20	100	40	--	--	--	--
03	6CE03	Fluid Mechanics	3	--	--	3	3	3	80	20	100	40	--	--	--	--
04	6CE04	Prof. Elective - II	3	--	--	3	3	3	80	20	100	40	--	--	--	--
05	6CE05	Open Elective - II	3	--	--	3	3	3	80	20	100	40	--	--	--	--
<b>PRACTICALS / DRAWING / DESIGN</b>																
06	6CE06	Design of Steel Structures-lab.	--	--	2	2	1	--	--	--	--	--	25	25	50	25
07	6CE07	Environmental Engineering – I-lab	--	--	2	2	1	--	--	--	--	--	25	25	50	25
08	6CE08	Fluid Mechanics-lab.	--	--	2	2	1	--	--	--	--	--	25	25	50	25
09	6CE09	Mini Project	--	--	2	2	1	--	--	--	--	--	25	25	50	25
<b>Total</b>			<b>15</b>	<b>1</b>	<b>8</b>	<b>24</b>	<b>20</b>	--	--	--	<b>500</b>	--	--	--	<b>200</b>	--
<b>Grand Total</b>															<b>700</b>	
<b>Note :</b> i) <b>Open Elective – II</b> to be opted from the Courses offered by the other Engineering & Technology courses from the College / Depths. of the University. ii) Students need to do compulsory Two (2) weeks Internship after 6 <sup>th</sup> Semester and that shall be monitored by allotted Final year Project Guides.																
<b>6CE04 : PE (II) :</b> (i) Advanced Construction Materials (ii) Geographic Information Systems & Science (iii) Masonry Structures (iv) Solid & Hazardous Waste Management (v) Traffic Engineering & Management																
<b>6CE05 : OE (II) :</b> (i) Environmental Management (ii) Human Resource Development & Organizational Behavior (iii) Introduction to Earthquake Engineering																

SEMESTER : SEVENTH																
Sr. No.	Subject Code	Subject	TEACHING SCHEME					EXAMINATION SCHEME								
			HOURS / WEEK			Total HOURS/WEEK	CREDITS	THEORY					PRACTICAL			
			Lecture	Tutorial	P/D			Duration Of Paper (Hr.)	Max. Marks Theory Paper	Internal Marks	Total	Min. Passing Marks	Max. Marks		Total	Min. Passing Marks
<b>THEORY</b>																
01	7CE01	Structural Analysis - II	3	--	--	3	3	3	80	20	100	40	--	--	--	--
02	7CE02	Geotechnical Engineering - II	3	--	--	3	3	3	80	20	100	40	--	--	--	--
03	7CE03	Hydraulic Engineering	3	--	--	3	3	3	80	20	100	40	--	--	--	--
04	7CE04	Environmental Engineering -II	3	--	--	3	3	3	80	20	100	40	--	--	--	--
05	7CE05	Professional Elective- III	3	--	--	3	3	3	80	20	100	40	--	--	--	--
<b>PRACTICALS / DRAWING / DESIGN</b>																
06	7CE06	Computational Structure Analysis --lab.	--	--	2	2	1	--	--	--	--	--	25	25	50	25
07	7CE07	Geotechnical Engineering – II- lab.	--	--	2	2	1	--	--	--	--	--	25	25	50	25
08	7CE08	Environmental Engineering –II- lab.	--	--	2	2	1	--	--	--	--	--	25	25	50	25
09	7CE09	Project & Seminar	--	--	8	8	4	--	--	--	--	--	50	--	50	25
<b>Total</b>			<b>15</b>	<b>0</b>	<b>14</b>	<b>29</b>	<b>22</b>	--	--	--	<b>500</b>	--	--	--	<b>200</b>	--
<b>Grand Total</b>															<b>700</b>	

7CE05 Prof Elect. III : (i) Analysis & Design of Structures for Earthquake & Wind (ii) Environmental Impact Assessment & Life Cycle (iii) Pavement Design (iv) Water Power Engineering

SEMESTER : EIGHT																
Sr. No.	Subject Code	Subject	TEACHING SCHEME					EXAMINATION SCHEME								
			HOURS / WEEK			CREDITS	THEORY					PRACTICAL				
			Lecture	Tutorial	P/D		Duration Of Paper (Hr.)	Max. Marks Theory Paper	Internal Marks	Total	Min. Passing Marks	Max. Marks		Total	Min. Passing Marks	
			Total HOURS/WEEK						Int.	Ext.						
<b>THEORY</b>																
01	8CE01	Construction Project Management	3	--		3	3	3	80	20	100	40	--	--	--	--
02	8CE02	Construction Economics & Estimating - Costing	3	--		3	3	3	80	20	100	40	--	--	--	--
03	8CE03	Professional Elective-IV	3	--		3	3	3	80	20	100	40	--	--	--	--
04	8CE04	Professional Elective-V	3	--		3	3	3	80	20	100	40	--	--	--	--
<b>PRACTICALS / DRAWING / DESIGN</b>																
05	8CE05	Construction Economics & Estimating – Costing – lab.	--	--	2	2	1	--	--	--	--	--	25	25	50	25
06	8CE06	Professional Elective-IV – lab.	--	--	2	2	1	--	--	--	--	--	25	25	50	25
07	8CE07	Project & Seminar	--	--	12	12	6	--	--	--	--	--	75	75	150	75
<b>Total</b>			<b>12</b>	<b>0</b>	<b>16</b>	<b>28</b>	<b>20</b>	--	--	--	<b>400</b>	--	--	--	<b>250</b>	--
														<b>Grand Total</b>	<b>650</b>	
<b>8CE03 : Prof. Elect IV:</b> (i) Advanced Design of Steel Structures (ii) Advanced Pre-stressed Concrete Structures (iii) Advanced Water Treatment (iv) Industrial Waste Water Treatment (v) Structural Analysis by Matrix Methods																
<b>8CE04 : Prof Elect V :</b> (i) Advanced Geotechnical Engineering (ii) Advanced Structural Analysis (iii) Advanced Design of RCC Structures (iv)Advanced Waste Water Engineering (v) Construction Equipment & Machinery (vi) Finite Element Methods																