SYLLABUS STRUCTURE

B. Tech. (Civil Engineering)

INDEX

Sr. No.	Particulars/Subject	Page No.
1	Distribution of subject groups	1
2	Distribution of courses in subject groups	2-7
3	Summary of distribution of courses in all semester	8
4	Semester wise scheme of teaching and examination	9-10
5	Semester wise credit and marks	11
6	Evaluation of Industrial Training	12-23

SYLLABUS STRUCTURE

B. Tech. (Civil Engineering)

DISTRIBUTION OF SUBJECT GROUPS

- 1 Basic Science Courses (BSC)
- 2 Engineering Science Courses (ESC)
- 3 Humanities & Social Science Including Management Courses (HSSMC)
- 4 Professional Core Courses (PCC)
- 5 Professional Elective Courses (PEC)
- 6 Open Elective Courses
- 7 Seminar/Project/Internship/Industrial Training
- 8 Mandatory Courses

SYLLABUS STRUCTURE

B. Tech. (Civil Engineering)

DISTRIBUTION OF COURSES IN SUBJECT GROUPS

1) HUMANITIES & SOCIAL SCIENCE INCLUDING MANAGEMENT COURSE(HSSMC)

Sr. No.	Course Code	Course Type	Name Of Course	Teaching Scheme per week				
				L	T	P	Credits	
1		HSSMC1	Professional	2	-	2	3	
			Communication					
2		HSSMC2	Elective foundation	3	-	-	3	
			course in humanities					
3		HSSMC3	Presentation and report	1	-	-	1	
			Writing					
4		HSSMC4	Social Innovation	-	1	2	2	
5		HSSMC5	Foreign language (1	-	-	-	
			German / Japanese/					
			Russian) (Non credit)					
6		HSSMC6	Engineering Exploration	-	•	4	2	
			TOTAL				11	

2) BASIC SCIENCE COURSES (BSC)

Sr. No.	Course Code	Course Type	Name Of Course	Teac	Teaching Scheme per week				
				L	T	P	Credits		
1		BSC1	Applied Mathematics-I	3	1	-	4		
2		BSC2	Applied Physics	3	-	2	4		
3		BSC3	Applied Chemistry	3	-	2	4		
4		BSC4	Applied Mathematics -II	3	1	-	4		
5		BSC5	Probability and statistics	2	2	-	4		
			TOTAL				20		

3) ENGINEERING SCIENCE COURSES (ESC)

Sr.	Course	Course	Name Of Course	Teaching Scheme per week				
No.	Code	Type		L	T	P	Credits	
1		ESC1	Computer Programming in C	3	-	2	4	
		ESC2	Engineering Drawing	2	-	4	4	

2	ESC3	Object Oriented	3	-	2	4
		Programming				
	ESC4	Engineeing Mechanics	3	-	2	4
3	ESC5	Applied mechanics	3	-	2	4
4	ESC6	Fundamentals of	3	-	2	4
		Electronics and				
		Electrical				
	ESC7	Workshop Practice Lab-	-	-	2	1
		I				
5	ESC8	Workshop Practice Lab-	-	-	2	1
		II				
		TOTAL				26

4) PROFESSIONAL CORE COURSES (PCC)

Sr. No.	Course Code	Course Type	Name Of Course	Te	•	g Sch week	eme per
110.	Coue	Туре		L	T	P	Credits
1		PCC1	Fluid mechanics	2	-	2	3
2		PCC2	Engineering geology	2	-	2	3
3		PCC3	Engineering surveying	3	-	2	4
4		PCC4	Solid mechanics	2	1		3
5		PCC5	Hydraulics and hydraulic Machinery	3	-	2	4
6		PCC6	Building planning and design	2	-	2	3
7		PCC7	Water resource engineering	2	1	-	3
8		PCC8	Concrete Technology	2	-	2	3
9		PCC9	Advanced surveying	2	-	2	3
10		PCC10	Soil Mechanics	2	1	2	4
11		PCC11	Design of Steel Structures	2	1	-	3
12		PCC12	Estimating and contracts	3	-	-	3
13		PCC14	Waste management and pollution control	2	1	-	3
14		PCC15	Design of concrete structures	2	1	-	3
15		PCC16	Engineering economics and valuation	3	1	-	4
16		PCC17	Construction Project management	3	1	-	4
17		PCC18	Earthquake engineering	3	-	-	3
18		PCC19	Design of concrete structures II	3	-	-	3
			TOTAL				59

5) PROFESSIONAL ELECTIVE COURSES (PEC)

Sr. No.	Course Code	Course Type	Name Of Course		ching		me per
				L	T	P	Credits
1		PEC 1	Building Materials & Construction	2	-	2	3
			Advanced Building				
			materials				
2		PEC 2	Structural Analysis	2	-	 -	2
			Structural Design &				
			Drawing				
3		PEC 3	Water Supply and Treatment Technology	3	-	2	4
			Industrial Wastewater				
			Treatment				
4		PEC 4	Professional Electives 4	2	1	-	3
		1	Construction Equipment and Techniques				
		2	Structural Geology				
		3	Computational Methods				
			and Optimization				
			Techniques				
		4	Structural Mechanics				
5		PEC5	Professional Elective 5	2	1	-	3
		1	Design of Hydraulic Structure				
		2	Advanced Surveying				
		3	Concrete Engineering				
6		PEC 6	Professional Elective 6	3	-	-	3
		1	Advanced Structural				
			Analysis				
		2	Computer Applications				
			in structural Engineering				
		3	Maintenance and				
			rehabilitation of				
		4	structures				
		4	Advanced Water and Waste Water Treatment				
		5	Bridge and Airport			1	
			Engineering				
7		PEC 7	Field Studies	-	1	-	1
8		PEC8	Professional Elective 8	3	-	-	3
		1	Design of Concrete			1	
			Bridges				
		2	Advanced Structural				

		TOTAL		22
		Management		
	7	Municipal Solid Waste		
	6	Remote Sensing and GIS		
		Planning		
	5	Town and Country		
		Masonry Structures		
	4	Design of Unreinforced		
	3	Construction Practices		
		Design		

6) OPEN ELECTIVE COURSES (OEC)

Sr. No.	Course Code	Course Type	Name Of Course	_ `	ching	Sche eek	me per
				L	T	P	Credits
1		OEC1	Elective –I	3	-	-	3
		1	Energy Engineering				
		2	Electrical Machine Technology				
		3	Electronic System				
		4	Software Engineering and Database Essentials				
		5	The Joy of Computing using Python				
2		OEC2	Elective –II	3	-	-	3
		1	Theory of structures				
		2	Joining Technology				
		3	Mechanical Power Transmission				
		4	Biomedical Instrumentation				
		5	Artificial Intelligence and Machine learning				
		6	Modern Application Development				
3		OEC3	Elective –III	3	-	-	3
		1	Finite Element Method				
		2	Concrete Engineering &Technology				
		3	Computational Methods				

	and Optimization		
	Techniques		
4	Automobile Engineering		
5	Industrial Automation		
6	Cyber Physical System		
7	Business Intelligence		
8	Data Visualization and		
	Interpretation		
	TOTAL		9

7) SEMINAR/ MINI PROJECT/ PROJECT/ INTERNSHIP/ INDUSTRIAL TRAINING

Sr. No.	Course Code	Course Type	Name Of Course	Teaching Scheme per week				
				L	T	P	Credits	
1		MP	Building Planning & Design	-	-	2	1	
2		MP	Mini Project –Estimating and Costing	-	-	2	1	
3		MP	Mini Project – Structural Steel Design and Drawing	-	-	2	1	
4		MP	Mini Project- Construction Project Management	-	-	2	1	
5		MP	Mini Project- Concrete Structure Design and Drawings	-	ı	4	2	
6		MP	Project –I	-	-	8	4	
7		MP	Project –II	-	-	16	8	
			TOTAL				18	

8) MANDATORY COURSES (MC)

Sr. No.	Course Code	Course Type	Name Of Course	Teaching Scheme per week				
				L	T	P	Credits	
1		MC1	Democracy, elections and good Governance	2	-	-	NC	
2		MC2	Environmental Studies	2	-	_	NC	

SYLLABUS STRUCTURE

B. Tech. (Civil Engineering)

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SUMMARY OF DISTRIBUTION OF COURSES IN ALL SEMESTER

Sr.N o.	Category	No. of Subject in each category	Suggested Breakup of credit of AICTE	Total
1	Humanities & Social Science Including Management Courses (HSSMC)	6	12	11
2	Basic Science Courses (BSC)	6	26	20
3	Engineering Science Courses (ESC)	5	29	26
4	Professional core courses (PCC)	18	47	59
5	Professional Elective Courses (PEC)	8	23	22
6	Open Elective Courses (OEC)	3	11	9
7	Seminar/ Mini Project/ Project/ Internship/ Industrial training	7	12	18
8	Mandatory Courses	2	NC	NC
	Total	53	160	165

SYLLABUS STRUCTURE

B. Tech. (Civil Engineering)

Semester wise Distribution of Courses

No of				Semes	ter			
Courses	I	II	III	IV	V	VI	VII	VIII
1	Applied Mathematics – I	Applied Mathematics – II	Probability and Statistics	Applied Mathematics	Soil Mechanics	Estimating and Contracts	Engineering Economics and Valuation	Project -II
2	Applied Chemistry	Applied Physics	Fluid Mechanics	Hydraulics and Hydraulics Machinery	Water Supply and Treatment Technology	Foundation Engineering	Construction Project Management	Field Studies
3	Computer Programming in C	Object Oriented Programming	Building Materials and Construction	Building Planning and Design	Design of Steel Structures	Waste Management and Pollution Control	Earthquake Engineering	Professional Elective 2
4	Engineeing Mechanics	Engineering Drawing	Engineering Geology	Water Resources Engineering	Environmental Engineering Laboratory	Design of Concrete Structures	Design of Concrete Structures II	Value Added Professional Courses
5	Fundamental s of Electronics and Electrical	Engineering Exploration	Engineering Surveying	Structural Analysis	Soil Mechanics Laboratory	Mini Project 2 Estimating and Costing	Mini Project Construction Project Management	Value Added Life-Skill Courses

6	Social Innovation	Professional Communication	Solid Mechanics	Concrete Technology	Elective Foundation Course in Humanities	Mini Project 3 Structural Steel Design and Drawing	Mini Project Concrete Structure Design and Drawing	
7	Applied Mathematics – I	Applied Mathematics – II	Fluid Mechanics Lab	Hydraulics Lab	Professional Elective 1	Professional Elective 2	Project – I	
8	Applied Chemistry Lab.	Applied Physics Lab.	Building Materials and Construction Lab	Mini Project 1- Building Planning and Design	Open Elective 1	Open Elective 2	Professional Elective 1	
9	Computer Programming in C lab	Object Oriented Programming Lab.	Engineering Geology Lab	Advanced Surveying Lab	Value Added Professional Courses	Value Added Professional Courses	Open Elective 3	
10	Engineeing Mechanics Lab.	Engineering Drawing Lab	Surveying Lab	Material Testing Lab	Value Added Life-Skill Courses	Value Added Life-Skill Courses	Value Added Professional Courses	
11	Fundamenta ls of Electronics and Electrical lab	Professional Communication Lab	Environmental Sciences	Presentation and Report Writing			Value Added Life-Skill Courses	
12	Workshop Practice I	Workshop Practice II	Value Added Professional Courses	Value Added Professional Courses				
13	Foreign language (German / Japanese/ Russian) (Non credit)		Value Added Life-Skill Courses	Value Added Life-Skill Courses				
Total	23	22	20	21	20	20	27	12
. 5 (4)	20		20		1 20	_	TAL	165

SYLLABUS STRUCTURE

B. Tech. (Civil Engineering)

SEMESTERWISE CREDITS & MARKS

SEM	CREDITS	NO. OF SUBJECT	TOTAL MARKS
I	23	13	825
II	22	12	775
III	20	13	1150
IV	21	13	1200
V	20	10	800
VI	20	10	800
VII	27	11	900
VIII	12	05	300
TOTAL	165	87	6750

D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR

SCHOOL OF ENGINEERING AND TECHNOLOGY SCHEME OF TEACHING AND EXAMINATION

FIRST YEAR B. TECH. (CIVIL ENGINEERING)

SEMESTER- I (Chemistry Group)

C	C	C]		ing Seer wee	cheme ek	T-4-1		F	Evaluation S	cheme (Ma	ırks)	
Sr. No.	Course	Corse	Name of Course					Total Marks		Theory			Practica	1
No.	Code	Туре		L	Т	P	Credits	Marks	Scheme	Max marks	Min. Passing	Scheme	Max marks	Min. Passing
1			Applied Mathematics-I	3	-	-	03	100						
2			Applied Chemistry	3	-	-	03	100						
3			Computer Programming in C	3	-	-	03	100						
4			Engineering Mechanics	3	-	-	03	100						
5			Fundamental of electronics and Electrical	3	-	-	03	100						
6			Social Innovation	-	1	2	02	50						
7			Applied Mathematics-I	-	1	-	01	25						
8			Applied Chemistry Lab	-	-	2	01	25						
9			Computer Programming in C Lab	-	-	2	01	25						
10			Engineering Mechanics Lab	ı	-	2	01	25						
11			Fundamental of electronics and Electrical Lab	ı	-	2	01	25						
12			Workshop Practice Lab-I	-	-	2	01	50						
13			Foreign language (German/Japanese/ Russian) (Non Credit)	1	-	-	-	100						
14		<u> </u>	Democracy, Election & Good Governar	nce (l	Non C	Credit 1	Mandatory	Course)*						
			Total	16	2	12	23	825						

Note: 1) Tutorials & practical shall be conducted in batches with batch strength not exceeding 20 students.

2) SEE will be conducted for 100 marks and converted to 50 marks.

CSE: Continuous Semester Evaluation SI

SEE: Semester End Evaluation

IPE: Internal Practical Evaluation

D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR

SCHOOL OF ENGINEERING AND TECHNOLOGY SCHEME OF TEACHING AND EXAMINATION FIRST YEAR B. TECH. (CIVIL ENGINEERING) SEMESTER- II

C	C	C		Т		ing S	cheme ek	Total	Evaluation Scheme (Marks)					
Sr.	Course	Corse	Name of Course							Theory			Practical	
No.	Code	Туре		L	Т	P	Credits	Marks	Scheme	Max marks	Min. Passing	Scheme	Max marks	Min. Passing
1			Applied Mathematics-II	3	-	-	03	100						
2			Applied Physics	3	-	-	03	100						
3			Object oriented Programming	3	-	-	03	100						
4			Engineering Drawing	2	-	-	02	100						
5			Engineering Exploration	-	-	4	02	100						
6			Professional Communication	2	-	-	02	100						
7			Applied Mathematics-II	-	1	-	01	25						
8			Applied Physics Lab	-	-	2	01	25						
9	_		Object oriented Programming Lab	-	-	2	01	25						
10			Engineering Drawing Lab	-	-	4	02	25						
11			Professional; Communications Lab	-	-	2	01	25					-	
12			Workshop Practice Lab-II	-	-	2	01	50						
			Total	13	1	16	22	775						

Note: 1) Tutorials & practical shall be conducted in batches with batch strength not exceeding 20 students.

2) SEE will be conducted for 100 marks and converted to 50 marks.

CSE: Continuous Semester Evaluation SEE: Semester End Evaluation

IPE: Internal Practical Evaluation

D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR SCHOOL OF ENGINEERING AND TECHNOLOGY SCHEME OF TEACHING AND EXAMINATION SECOND YEAR B. TECH. (CIVIL ENGINEERING) SEMESTER-III

6	C	C		Teaching Scheme per week		T. ()		Evaluation Scheme (Marks)						
Sr.	Course	Corse	Name of Course					Total		Theory			Practical	
No.	Code	Туре		L	T	P	Credits	Marks	Scheme	Max marks	Min. Passing	Scheme	Max marks	Min. Passing
1			Probability and Statistics	2	2	0	4	100						
2			Fluid Mechanics	2	0	0	2	100						
3			Professional Elective-1	2	0	0	2	100						
4			Engineering Geology	2	0	0	2	100						
5			Engineering Surveying	3	0	0	3	100						
6			Solid Mechanics	2	1	0	3	100						
7			Fluid Mechanics Lab	0	0	2	1	100						
8			Building Materials and Construction Lab	0	0	2	1	100]			
9			Engineering Geology Lab	0	0	2	1	100						
10			Surveying Lab	0	0	2	1	100						
11			Environmental Sciences	2	0	0	-	50						
12			Value Added Professional Courses #											
13			Value Added Life-Skill Courses #											
			Total	15	3	8	20	1150						
				26 Hrs/Week						•				

Sr.No.	Sr.No. Course Code Course Name								
	Professional Elective 1								
1	1 Building Materials & Construction								
2	2 Advanced Building Materials								

Note: 1) Tutorials & practical shall be conducted in batches with batch strength not exceeding 20 students.

2) SEE will be conducted for 100 marks and converted to 50 marks.

3) *Environmental Studies project evaluation and theory examination will be conducted at the end of the year (along with Sem IV end examination)

CSE: Continuous Semester Evaluation EPE: External Practical Examination

SEE: Semester End Evaluation IOE: Internal Oral Evaluation

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IPE: Internal Practical Evaluation

EOE: External Oral Examination

D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR

SCHOOL OF ENGINEERING AND TECHNOLOGY

SCHEME OF TEACHING AND EXAMINATION

SECOND YEAR B. TECH. (CIVIL ENGINEERING) SEMESTER- IV

6				7		ing S er we	cheme ek	Total		Ev	aluation Sc	heme (Mar	·ks)	
Sr.	Course	Corse	Name of Course							Theory			Practical	
No.	Code	Type		L	T	P	Credits	Marks	Scheme	Max marks	Min. Passing	Scheme	Max marks	Min. Passing
1			Applied Mathematics	2	2	0	4	100						
2			Hydraulics and Hydraulics Machinery	3	0	0	3	100						
3			Building Planning and Design	2	0	0	2	100						
4			Advanced Surveying	2	0	0	2	100						
5			Professional Elective-2	2	0	0	2	100						
6			Concrete Technology	2	0	0	2	100						
7			Hydraulics Lab	0	0	2		100						
8			Mini Project 1- Building Planning and Design	0	0	2	1	100						
9			Advanced Surveying Lab	0	0	2	1	100						
10			Material Testing Lab	0	0	2	1	100						
11			Presentation and Report Writing	1	0	0	1	100						
12			Building Planning and Design Lab	0	0	2	1	100						
13			Value Added Professional Courses #											
14			Value Added Life-Skill Courses #											
			Total	14	2	10	20							
				26 I	Irs/V	Veek		1200						

Sr.No.	Course Code	Course Name						
	Professional Elective 2							
1	1 Structural Analysis							
2	CC	Structural Design & Drawing						

Note: 1) Tutorials & practical shall be conducted in batches with batch strength not exceeding 20 students.

2) SEE will be conducted for 100 marks and converted to 50 marks.

3) * Environmental Studies project evaluation & theory examination will be conducted at the end of the year (along with Sem IV end examination)

CSE: Continuous Semester Evaluation EPE: External Practical Examination

SEE: Semester End Evaluation IOE: Internal Oral Evaluation

IPE: Internal Practical Evaluation EOE: External Oral Examination

D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR

SCHOOL OF ENGINEERING AND TECHNOLOGY

SCHEME OF TEACHING AND EXAMINATION

THIRD YEAR B. TECH. (CIVIL ENGINEERING) SEMESTER- V

6	C	C	Corse			ning S er we	cheme ek	Total	Evaluation Scheme (Marks)					
Sr.	Course		Name of Course							Theory			Practical	
No.	Code	Туре		L	T	P	Credits	Marks	Scheme	Max marks	Min. Passing	Scheme	Max marks	Min. Passing
1			Soil Mechanics	2	1	0	3	100						
2			Professional Elective-3	3	0	0	3	100						
3			Design of Steel Structures	2	1	0	3	100						
4			Professional Elective-3 Lab	0	0	2	1	100						
5			Soil Mechanics Laboratory	0	0	2	1	100						
6			Elective Foundation Course in Humanities	3	0	0	3	100						
7			Professional Elective 4	2	1	0	3	100						
8			Open Elective 1	3	0	0	3	100						
9			Value Added Professional Courses #											
10			Value Added Life-Skill Courses #											
			Total	15	3	4	20	800						
				22 Hrs/Week										

Course List for T.Y. B.Tech. (Civil Engineering)

Sr.No.	No. Course Code Course Name								
Elective Foundation Course in Humanities									
1	Law and Engineering								
2	CC	Foreign Language-German							
3	Human Relations at Work								

	Professional Elective 4							
1		Construction Equipment and Techniques						
2		Structural Geology						
3	CC	Computational Methods and Optimization Techniques						
4		Structural Mechanics						

	Open Elective 1							
1		Energy Engineering						
2	CC	Electrical Machine Technology						
3		Electronic Systems						
4		Software Engineering and Database Essentials						
5		The Joy of Computing using Python						
		Professional Elective 3						
1		Water Supply & Treatment Technology						
2	CC	Industrial Waste water Treatment						

Note: 1) Tutorials & practical shall be conducted in batches with batch strength not exceeding 20 students.

2) SEE will be conducted for 100 marks and converted to 50 marks.

CSE: Continuous Semester Evaluation
EPE: External Practical Examination
SEE: Semester End Evaluation
IOE: Internal Oral Evaluation
EOE: External Oral Examination

D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR

SCHOOL OF ENGINEERING AND TECHNOLOGY

SCHEME OF TEACHING AND EXAMINATION

THIRD YEAR B. TECH. (CIVIL ENGINEERING) SEMESTER- VI

Course List for T.Y. B.Tech. (Civil Engineering)

	Sr. Course Con			Teaching Scheme per week					Evaluation Scheme (Marks)					
		Corse	Name of Course					Total	Theory				Practical	
No.	Code	Туре		L	T	P	Credits	Marks	Scheme	Max marks	Min. Passing	Scheme	Max marks	Min. Passing
1			Estimating and Contracts	3	0	0	3	100						
2			Water Resource Engineering	2	1	0	3	100						
3			Waste Management and Pollution Control	2 1 0 3 100										
4			Design of Concrete Structures	2 1 0		3	100							
5			Mini Project 2 Estimating and Costing	0	0	2	1	100						
6			Mini Project 3 Structural Steel Design and Drawing	0	0	2	1	1 100						
7			Professional Elective 5	2	1	0	3	100						
8			Open Elective 2	3	0	0	3	100						
9			Value Added Professional Courses #											
10			Value Added Life-Skill Courses #											
			Total	14	4	4	20	800						
				22 Hrs/Week										

Sr.No.	Course Code	Course Name
		Professional Elective 2
1		Design of Hydraulic Structure
2	CC	Advanced Surveying
3		Concrete Engineering

	Open Elective 5							
1		Theory of Structures						
2		Joining Technology						
3		Mechanical Power Transmission						
4	CC	Renewable Energy						
5		Biomedical Instrumentation						
6		Artificial Intelligence and Machine Learning						
7		Modern Application Development						

Note: 1) Tutorials & practical shall be conducted in batches with batch strength not exceeding 20 students.

2) SEE will be conducted for 100 marks and converted to 50 marks.

CSE: Continuous Semester Evaluation
EPE: External Practical Examination

SEE: Semester End Evaluation
IOE: Internal Oral Evaluation

IPE: Internal Practical Evaluation

EOE: External Oral Examination

D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR SCHOOL OF ENGINEERING AND TECHNOLOGY SCHEME OF TEACHING AND EXAMINATION FINAL YEAR B. TECH. (CIVIL ENGINEERING) SEMESTER-VII

Course List for Final Year B.Tech. (Civil Engineering)

					Teaching Scheme per week					Evaluation Scheme (Marks)					
	Sr. Course No. Code	Corse	Name of Course					Total	Theory			Practical			
No.	Code	' ¹ Credits	Scheme	Max marks	Min. Passing	Scheme	Max marks	Min. Passing							
1			Engineering Economics and Valuation	3	1	0	4	100							
2			Construction Project Management	3	1	0	4	100							
3			Earthquake Engineering	3	0	0	3	100							
4			Design of Concrete Structures II	3	0	0	3	100							
5			Mini Project 4- Construction Project Management	0	0	2	1	100							
6			Mini Project5- Concrete Structure Design and Drawing	0	0	4	2	100							
7			Project – I	0	0	8	4	100							
8		Mini Project 4- Construction Project 0 Management		0	0	2	3	100							
9			Open Elective 3	3	0	0	3	100							
10			Value Added Professional Courses #												
11			Value Added Life-Skill Courses #												
			Total	18	2	14	27	900							
				34 I	Hrs/V	Veek				1					

Sr.No.	Course Code	Course Name								
	Professional Elective 6									
1		Advanced Structural Analysis								
2		Computer Applications in Structural Engineering								
3	CC	Maintenance and Rehabilitation of Structures								
4		Advanced Water and Wastewater Treatment								
5		Bridge and Airport Engineering								

	Open Elective 3							
1		Finite Element Method						
2		Concrete Engineering and Technology						
3		Computational Methods and Optimization Techniques						
4	CC	Automobile Engineering						
5		Industrial Automation						
6		Cyber Physical Systems						
7		Business Intelligence						
8		Data Visualization and Interpretation						

Note: 1) Tutorials & practical shall be conducted in batches with batch strength not exceeding 20 students.

2) SEE will be conducted for 100 marks and converted to 50 marks.

CSE: Continuous Semester Evaluation
EPE: External Practical Examination

SEE: Semester End Evaluation
IOE: Internal Oral Evaluation

EOE: External Oral Examination

IPE: Internal Practical Evaluation

D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR SCHOOL OF ENGINEERING AND TECHNOLOGY SCHEME OF TEACHING AND EXAMINATION FINALYEAR B. TECH. (CIVIL ENGINEERING) SEMESTER-VIII

Course List for Final Year B.Tech. (Civil Engineering)

C	C				Teaching Scheme per week				Evaluation Scheme (Marks)					
Sr. No.	Course Code	Corse	Name of Course					Total Marks	Theory			Practical		
110.	Code	Type		L	T	P		Marks	Scheme	Max	Min.	Scheme	Max	Min.
									Scheme	marks	Passing	Scheme	marks	Passing
1			Project -II		0	16	8	100						
2			Field Studies		1	0	1	100						
3			Professional Elective 7	3	0	0	3	100						
4			Value Added Professional Courses #											
5			Value Added Life-Skill Courses #											
			Total	3	1	16	12	300						
				20 Hrs/Week										

Sr.No.	Course Code	Course Name								
	Professional Elective 7									
1		Design of Concrete Bridges								
2		Advanced Structural Design								
3		Construction Practices								
4	CC	Design of Unreinforced Masonry Structures								
5		Town and Country Planning								
6]	Remote Sensing and GIS								
7]	Municipal Solid Waste Management								

CSE: Continuous Semester Evaluation
EPE: External Practical Examination

SEE: Semester End Evaluation
IOE: Internal Oral Evaluation
EOE: External Oral Examination

Field Studies: In different govt./private/semi govt./NGO's industries.

Faculties do keep close watch with industry officials regarding performance of students during training.

Industries select students through campus interviews.

In-plant Training for a short period of time in relevant industry helps gain the knowledge and experience of the work culture. In-plant Training by reputed organizations either MNCs or organized sectors provide an industrial exposure to the students as well as helps develop their career in high tech industrial requirements.