Walchand College of Engineering

(Government Aided Autonomous Institute)

Curriculum Structure and Credit System

M. Tech. (Civil - Structural Engineering)

Applicable from A.Y. 2026-27 and Onwards

Credit System for F. Y. M. Tech (Civil -Structural Engineering) Sem-I AY 2026-27

Sr. No.	Category	Course Code	Course Name	L	T	P	I	Hrs	Cr	MSE/LA1	ISE/LA2	ESE	Remark
			Professional Core (Theory)										
1	PC	7IC501	Research Methodology and IPR	3	0	0	0	3	3	30	20	50	--
2	PC	7ST501	Mechanics of Structures	3	0	0	0	3	3	30	20	50	--
3	PC	7ST502	Theory of Elasticity and Plasticity	3	0	0	0	3	3	30	20	50	--
4	PC	7ST503	Structural Dynamics and Earthquake Engineering	3	0	0	0	3	3	30	20	50	--
			Professional Core (Lab)										
5	PR	7ST551	Modern Materials Laboratory	0	0	2	0	2	1	30	30	40	--
6	PR	7ST552	Dynamics of Structures Laboratory	0	0	2	0	2	1	30	30	40	--
7	PR	7ST553	Computer Aided Design Laboratory	0	0	2	0	2	1	30	30	40	--
			Professional Elective (Theory)										
7	PE	Refer List	Professional Elective 1	3	0	0	0	3	3	30	20	50	--
8	PE	Refer List	Professional Elective 2	3	0	0	0	3	3	30	20	50	--
			Totals	**18**	**0**	**6**	**0**	**24**	**21**				

Professional Elective Course List for F. Y. M. Tech (Civil -Structural Engineering) Sem-I AY 2026-27

Sr. No.	Track	Course Code	Course Name
	Professional Elective 1		
1	Advanced Design of Structures	7ST511	Advanced Design of Reinforced Concrete Structures
2	Advanced Structural Analysis and Computational Methods	7ST515	Advanced Design of Steel Structures
	Professional Elective 2		
1	Advanced Design of Structures	7ST513	Computer Aided Design
2	Advanced Structural Analysis and Computational Methods	7ST516	Design of RCC Bridges

Prepared by

DAC/Secretary, BoS

Head, Dept./ Chairman, BoS

Dean Academics

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M. Tech. (Civil - Structural Engineering)

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Credit System for F. Y. M. Tech (Civil - Structural Engineering) Sem-II AY 2026-27

Sr. No.	Category	Course Code	Course Name	L	T	P	I	Hrs	Cr	MSE/LA1	ISE/LA2	ESE	Remark
			Professional Core (Theory)										
1	PC	7ST524	Structural Health Monitoring and Smart Materials	3	0	0	0	3	3	30	20	50	--
2	PC	7ST522	Finite Element Method	3	0	0	0	3	3	30	20	50	--
3	PC	7ST523	Advanced Earthquake Engineering	3	0	0	0	3	3	30	20	50	--
			Professional Core (Lab)										
4	PR	7ST571	Structural Health Monitoring Laboratory	0	0	2	0	2	1	30	30	40	--
5	PR	7ST572	Finite Element Laboratory	0	0	2	0	2	1	30	30	40	--
6	PR	7ST545	Seminar	0	0	2	0	2	1	30	30	40	--
			Professional Elective (Theory)										
7	PE	Refer List	Professional Elective 3	3	0	0	0	3	3	30	20	50	--
8	PE	Refer List	Professional Elective 4	3	0	0	0	3	3	30	20	50	--
			Open Elective										
9	OE	Refer List	Open Elective	3	0	0	0	3	3	30	20	50	--
			Totals	**18**	**0**	**6**	**0**	**24**	**21**				

Professional Elective Course List for F. Y. M. Tech (Civil - Structural Engineering) Sem-II AY 2026-27

Sr. No.	Track	Course Code	Course Name
	Professional Elective 3		
1	Advanced Design of Structures	7ST531	Advanced Prestressed Concrete
2	Advanced Structural Analysis and Computational Methods	7ST536	Repair and Rehabilitation of Structures
3	Advanced Structural Analysis and Computational Methods	7ST537	Theory of Plates and Shells
	Professional Elective 4		
1	Advanced Design of Structures	7ST538	Design of Tall Structures
2	Advanced Structural Analysis and Computational Methods	7ST535	Design Optimization

Prepared by

DAC Secretary, BoS

Head, Dept./ Chairman, BoS

Dean Academics