# Walchand College of Engineering

(Government Aided Autonomous Institute)

Vishrambag, Sangli-416415



Credit System for
F. Y. M. Tech. (Thermal Engineering)
Semester-I and II

Effective from AY 2024-25



## Walchand College of Engineering, Langli

(Government Aided Autonomous Institute)

#### Credit System for F. Y. M. Tech. (Thermal Engineering) Sem-I Effective from AY 2024-25

Sr. No.	Category	Course Code	Course Name		L	T	P	Hrs.	Cr	MSE/LA1	ISE/LA2	ESE	Remark
			Professiona	Core (Theory)								I	
1	PC	7IC501	Research Methodology and IPR		3.	0	0	3	3	30	20	50	
2	PC	1TH501	Thermodynamics and Combustion		3	0	0	3	3	30	20	50	
3	PC	1TH502	Advanced Fluid Dynamics			0	0	3	3	30	20	50	
4	PC	1TH503	Advanced Heat Transfer		3	0	0	3	3	30	20	50	
-			Profession	al Core (Lab)									1
5	PC	1TH551	Thermodynamics and Combustion Lab		0	0	2	2	1	30	30	40	
6	PC	1TH552	Advanced Fluid Dynamics Lab		0	0	2	2	1	30	30	40	
7	PC	1TH553	Advanced Heat Transfer Lab		0	0	2	2	1	30	30	40	
			Professional 1	Elective (Theory)	)		4 11 -	-					13
8	PE	Refer List	Professional Elective 1		3	0	0	3	3	30	20	50	
9	PE	Refer List	Professional Elective 2		3	0	0	3	3	30	20	50	
5-40				Total	18	0	6	24	21				

#### Professional Elective Course List for F. Y. M. Tech. (Thermal Engineering) Sem-I

Track	Course Code	Course Name
	Professional E	Clective 1
Study and Design of Thermal Systems	1TH511	Nuclear Engineering
2 Pumps and Turbines		Design of Thermo Turbo Systems
Pumps and Turbines	1TH513	Gas Turbines
	Professional E	elective 2
Study and Design of Thermal Systems	1TH514	Design of Hydro Turbo Systems
Heating Ventilation and Air Conditioning	1TH515	Air Conditioning System Design
Energy Engineering	1TH516	Design of Solar and Wind System
	Study and Design of Thermal Systems Pumps and Turbines Pumps and Turbines Study and Design of Thermal Systems Heating Ventilation and Air Conditioning	Study and Design of Thermal Systems 1TH511 Pumps and Turbines 1TH512 Pumps and Turbines 1TH513 Professional E Study and Design of Thermal Systems 1TH514 Heating Ventilation and Air Conditioning 1TH515

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## Walchand College of Engineering, Cangli

(Government Aided Autonomous Institute)

### Credit System for F. Y. M. Tech. (Thermal Engineering) Sem-II Effective from AY 2024-25

Sr. No.	Category	Course Code	Course Name		L	T	P	Hrs.	Cr	MSE/LA1	ISE/LA2	ESE	Remark
		,	Professiona	l Core (Theory)									
1	PC	1TH521	Steam Engineering		3	0	0	3	3	30	20	50	
2	PC.	1TH522	Computational Techniques in Fluid Flow and Heat Transfer		3	0	0	3	3	30	20	50	
3	PC	1TH523	Internal Combustion Engine Design			0	0	3	3	30	20	50	
		1	Profession	al Core (Lab)									
3	PC	1TH571	Steam Engineering Lab		0	0	2	2	1	30	30	40	
4	PC	1TH572	CFD Lab		0	0	2	2	1	30	30	40	
5	PC	1TH545	Seminar		0	0	2	2	1	30	30	40	
		7 P P P P P P P P P P P P P P P P P P P	Professional I	Elective (Theory)		4		. Also		1			
6	PE	Refer List	Professional Elective 3		3	0	0	3	3	30	20	50	
7	PE	Refer List	Professional Elective 4		3	0	0	3	3	30	20	50	
		- 12	Oper	Elective		- 1							
8	OE	Refer List	Open Elective		3	0	0	3	3	30	20	50	
				Total	18	0	6	24	21				

## Professional Elective Course List for F. Y. M. Tech. (Thermal Engineering) Sem-II AY 2024-25

Sr.No.	Track	Course Code	Course Name				
		Professional E	Elective 3				
1	Study and Design of Thermal Systems	1TH531	Design of Heat Exchanger				
2 Refrigeration		1TH532	Industrial Refrigeration				
3	Food Preservation	1TH533	Food preservation and cold chain management				
		Professional E					
1	Refrigeration	1TH534	Cryogenics				
2	Heating Ventilation and Air Conditioning	1TH535	Industrial Air Conditioning				
3	Energy Engineering	1TH536	Energy Conservation and Management				

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