

Walchand College of Engineering

(Government Aided Autonomous Institute)

Vishrambag, Sangli-416415



1947

Credit System for F. Y. M. Tech. (Control and Instrumentation) Semester-I and II

Effective from AY 2024-25



Walchand College of Engineering
(Government Aided Autonomous Institute)

Credit System for F. Y. M. Tech. (Control and Instrumentation) 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
Professional Core (Theory)												
1	PC	IC501	Research Methodology and IPR	3	0	0	3	3	30	20	50	
2	PC	CI501	Linear Control Systems	3	0	0	3	3	30	20	50	
3	PC	CI502	PLC and Embedded Control	3	0	0	3	3	30	20	50	
4	PC	CI503	Process Instrumentation	3	0	0	3	3	30	20	50	
Professional Core (Lab)												
5	PR	CI551	Linear Control Systems Lab	0	0	2	2	1	30	30	40	
6	PR	CI552	PLC and Embedded Control Lab	0	0	2	2	1	30	30	40	
7	PR	CI553	Process Instrumentation Lab	0	0	2	2	1	30	30	40	
Professional Elective (Theory)												
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	
				Total	18	0	6	24	21			

Professional Elective Course List for F. Y. M. Tech. (Control and Instrumentation) Sem- I AY 2024-25

Sr. No.	Track	Course Code	Course Name
Professional Elective 1			
1	Control Systems	CI511	Advanced Digital Signal Processing
		CI512	Optimization Techniques
		CI513	Modern Control Systems
Professional Elective 2			
2	Instrumentation	CI514	Advanced Transducers and Measurement Technique
		CI515	Smart Sensors and Actuators
		CI516	Biomedical Instrumentation

HoD

I/C Dean Academics



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Credit System for F. Y. M. Tech. (Control and Instrumentation) 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
Professional Core (Theory)												
1	PC	CI521	Instrumentation System Design	3	0	0	3	3	30	20	50	
2	PC	CI522	Non-Linear System Analysis	3	0	0	3	3	30	20	50	
3	PC	CI523	Adaptive Control	3	0	0	3	3	30	20	50	
Professional Core (Lab)												
3	PR	CI571	Non-Linear System Analysis Lab	0	0	2	2	1	30	30	40	
4	PR	CI572	Adaptive Control Lab	0	0	2	2	1	30	30	40	
5	PR	CI545	Seminar	0	0	2	2	1	30	30	40	
Professional Elective (Theory)												
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	
Open Elective												
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. (Control and Instrumentation) Sem- II AY 2023-24

Sr.No.	Track	Course Code	Course Name
Professional Elective 3			
1	Control Systems	CI531	Modern Power Electronics
		CI532	Electric Vehicle Technology
		CI533	Optimal Control
Professional Elective 4			
1	Instrumentation	CI534	Power Plant Instrumentation
		CI535	Artificial Intelligence and Machine Learning
		CI536	Measurement Data Analytics


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