

Walchand College of Engineering

(Government Aided Autonomous Institute)

Vishrambag, Sangli-416415



Credit System for F. Y. M. Tech. (Computer Science and Information Technology) Semester-I and II

2023-24



Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Credit System for F. Y. M. Tech. (Computer Science and Information Technology) Sem-I AY 2023-24

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	7IT501	Advanced Algorithms	3	0	0	0	3	3	30	20	50	
3	PC	7IT502	Unix Internal	3	0	0	0	3	3	30	20	50	
4	PC	7IT503	Database Design and Performance Tuning	3	0	0	0	3	3	30	20	50	
Professional Core (Lab)													
5	PC	7IT551	Advanced Algorithms Lab	0	0	2	0	2	1	30	30	40	
6	PC	7IT552	Unix Internal Lab	0	0	2	0	2	1	30	30	40	
7	PC	7IT553	Database Design and Performance Tuning Lab	0	0	2	0	2	1	30	30	40	
Professional Elective (Theory)													
8	PE	Refer List	Professional Elective 1	3	0	0	0	3	3	30	20	50	
9	PE	Refer List	Professional Elective 2	3	0	0	0	3	3	30	20	50	
Total				18	0	6	0	24	21				

Notes:

For Theory courses: There shall be MSE, ISE and ESE. The ESE is a separate head of passing.

For Lab courses: There shall be continuous assessment (LA1, LA2, ESE). The ESE is a separate head of passing.

For further details, refer to Academic and Examination rules and regulations.

HoD

Dean Academics
 Walchand Academics
 Vishrambag, Sangli - 416 415



Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Professional Elective Course List for F. Y. M. Tech. (Computer Science and Information Technology) Sem-I AY 2023-24

Sr.No.	Track	Course Code	Course Name
Professional Elective 1			
1	CS and IT	7IT511	Cloud and Virtualization Techniques
2	CS and IT	7IT512	Ruby & Go Programming Language
3	CS and IT	7IT513	Advanced Distributed Computing
4	Interdisciplinary	7IT514	Artificial Intelligence
Professional Elective 2			
1	CS and IT	7IT515	Parallel Algorithms
2	CS and IT	7IT516	Software Reliability and Testing
3	CS and IT	7IT517	IoT systems and Applications
4	Interdisciplinary	7IT518	Image Processing and Pattern Recognition

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Credit System for F. Y. M. Tech. (Computer Science and Information Technology) Sem-II AY 2023-24

Sr.No.	Category	Course Code	Course Name	L	T	P	I	Hrs	Cr	MSE/LA1	ISE/LA2	ESE	Remark
Professional Core (Theory)													
1	PC	7IT521	Data Mining Methods and Application	3	0	0	0	3	3	30	20	50	
2	PC	7IT522	Scientific Computing	3	0	0	0	3	3	30	20	50	
3	PC	7IT523	Agile Development	3	0	0	0	3	3	30	20	50	
Professional Core (Lab)													
3	PC	7IT571	Data Mining Methods and Applications Lab	0	0	2	0	2	1	30	30	40	
4	PC	7IT572	Scientific Computing Lab	0	0	2	0	2	1	30	30	40	
5	PR	7IT545	Seminar	0	0	2	0	2	1	30	30	40	
Professional Elective (Theory)													
6	PE	Refer List	Professional Elective 3	3	0	0	0	3	3	30	20	50	
7	PE	Refer List	Professional Elective 4	3	0	0	0	3	3	30	20	50	
Open Elective													
8	OE	Refer list	Open Elective	3	0	0	0	3	3	30	20	50	
Total				18	0	6	0	24	21				

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Date: 18-8-2023



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Professional Elective Course List for F. Y. M. Tech. (Computer Science and Information Technology) Sem-II AY 2023-24

Sr.No.	Track	Course Code	Course Name
Professional Elective 3			
1	CS and IT	7IT531	Distributed Operating Systems
2	CS and IT	7IT532	System Programming
3	CS and IT	7IT533	Mathematic for Machine Learning
4	Interdisciplinary	7IT534	Soft Computing and Applications
Professional Elective 4			
1	CS and IT	7IT535	Big Data Computing
2	CS and IT	7IT536	High Performance Computing
3	CS and IT	7IT537	Deep Learning
4	Interdisciplinary	7IT538	Geographical Information System & Remote Sensing

Open Elective Course List for F. Y. M. Tech. (Computer Science and Information Technology) Sem-II AY 2023-24

Sr.No.	Offering Programme	Course Code	Course Name
1	Environmental Engg.	7OE501	Solid Waste Management
2	Structural Engg.	7OE502	Structural Health Monitoring
3	Design Engg.	7OE503	Industrial Product Design
4	Heat Power Engg.	7OE504	Waste to Energy
5	Production Engg.	7OE505	Advanced Production systems
6	Power System Engg.	7OE506	Control Techniques for Electrical Drives
7	Control System Engg.	7OE506	Control Techniques for Electrical Drives
8	Electronics Engg.	7OE508	Introduction to Embedded Systems
9	Computer Science & Engg.	7OE509	Machine Learning in Practice
10	Computer Science and Information Technology*	7OE510	Machine Learning & Applications

Notes:

*Open Elective offered by (Computer Science and Information Technology Engineering) Programme is allowed for students of all other Programmes (Except Computer Science & Engg, Computer Science and Information Technology Programme)

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