Walchand College of Engineering

(Government Aided Autonomous Institute)

Vishrambag, Sangli-416415

Credit System for

F. Y. M. Tech. (Computer Science & Engineering)

Semester-I and II

2024-25 Onwards

Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Credit System for F. Y. M. Tech. (Computer Science & Engineering) Sem-I 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	7IC501	Research Methodology and IPR	3	0	0	3	3	30	20	50	
2	PC	7CO501	Advanced Data Structures	3	0	0	3	3	30	20	50	
3	PC	7CO504	Data Science	3	0	0	3	3	30	20	50	
4	PC	7CO503	Mathematical Foundation of Computer Science	3	0	0	3	3	30	20	50	
			Professional Core (Lab)									
5	PR	7CO551	Advanced Data Structures Lab	0	0	2	2	1	30	30	40	
6	PR	7CO554	Data Science Lab	0	0	2	2	1	30	30	40	
7	PR	7CO553	Presentation and Technical Report Writing	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	REFERLIST	Professional Elective 2	3	0	0	3	3	30	20	50	
			Total	18	0	6	24	21				

PG Coordinator   HoD   Dean Academics   Date:

Walchand College of Engineering, Sangli
(Government Aided Autonomous Institute)

Professional Elective Course List for F. Y. M. Tech. (Computer Science & Engineering) Sem-I AY 2024-25

Sr. No.	Track	Course Code	Course Name
		Professional Elective 1	
1	IP & CV	7CO511	Image Processing/NPTEL Course
2	Computing	7CO516	Computational Complexity /NPTEL Course
3	Multidisciplinary	7CO513	Human Computer Interaction/NPTEL Course
		Professional Elective 2	
1	Artificial Intelligence	7CO517	Artificial Intelligence/NPTEL Course
2	Network Security	7CO515	Advanced Network Technologies/NPTEL Course
3	Computing	7CO518	Cloud Computing/NPTEL Course
4	Multidisciplinary	7CO519	Internet of Things/NPTEL Course

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. The Y in the PoE indicates external component for ESE. Minimum two AICTE mandatory courses need to be completed for award of degree.

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

PG Coordinator   HoD   I/C Dean Academics   Page 3/6   Date:

Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Credit System for F. Y. M. Tech. (Computer Science & Engineering) Sem-II 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	7CO521	Advanced Computer Algorithms	3	0	0	3	3	30	20	50	
2	PC	7CO524	High Performance Computing	3	0	0	3	3	30	20	50	
3	PC	7CO523	Information Security	3	0	0	3	3	30	20	50	
			Professional Core (Lab)									
4	PR	7CO571	Advanced Computer Algorithms Lab	0	0	2	2	1	30	30	40	
5	PR	7CO574	High Performance Computing Lab	0	0	2	2	1	30	30	40	
6	PR	7CO545	Pre-Dissertation Work and Seminar	0	0	2	2	1	30	30	40	
			Professional Elective (Theory)									
7	PE	REFER LIST	Professional Elective 3	3	0	0	3	3	30	20	50	
8	PE	REFER LIST	Professional Elective 4	3	0	0	3	3	30	20	50	
			Open Elective									
9	OE	REFER LIST	Open Elective	3	0	0	3	3	30	20	50	
			Total	18	0	6	24	21				

PG Coordinator   HoD   I/C Dean Academics   Page 4/6   Date:

Professional Elective Course List for F. Y. M. Tech. (Computer Science & Engineering) Sem-II AY 2024-25

Sr.No.	Track	Course Code	Course Name
		Professional Elective 3	
1	Artificial Intelligence	7CO538	Natural Language Processing/ NPTEL Course
2	Network Security	7CO533	Blockchain Technology/ NPTEL Course
3	Multidisciplinary	7CO534	Theory and Applications of Remote Sensing & GIS/ NPTEL Course
		Professional Elective 4	
1	Artificial Intelligence	7CO535	Deep Learning/ NPTEL Course
2	Network Security	7CO536	Cyber Security/ NPTEL Course
3	Database	7CO537	Advanced Database Management System/ NPTEL Course

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