Walchand College of Engineering

(Government Aided Autonomous Institute)

Vishrambag, Sangli. 416415

*** Platinum Jubilee Year ***

Credit System for

F.Y. M.Tech. (Computer Science and Information Technology)

Sem-I and II

2021-22

Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Credit System for F.Y. M.Tech. (CS and IT) Sem-I AY 2021-22

Sr.No.	Category	Course Code	Course Name	L	T	P	I	Hrs	Cr	T1/LA1	T2/LA2	ESE
Professional Core (Theory)												
1	PC		Advanced Algorithms	2	0	0	0	2	2	20	20	60
2	PC		Database Design and Performance Tuning	2	0	0	0	2	2	20	20	60
Professional Core (Lab)												
3	PC		Research Methodology	0	0	0	2	2	2	30	30	40
4	PR		Activity Based Lab for Advanced Algorithms	0	0	2	0	2	1	30	30	40
5	PR		Activity Based Lab for Database Design and Performance Tuning	0	0	2	0	2	1	30	30	40
6	HS		Presentation and Technical Report Writing	0	0	0	1	1	1	30	30	40
7	PC		Professional Skills 1	0	0	0	1	1	1	30	30	40
8	PC		Unix Internal	0	0	2	1	3	2	30	30	40
Professional Elective (Theory)												
9	PE	Refer list	Elective 1	3	0	0	0	3	3	20	20	60
10	PE	Refer list	Elective 2	3	0	0	0	3	3	20	20	60
AICTE Mandatory Courses @												
11	MC		Constitution of India	2	0	0	0	2	0	20	20	60
Value Added Professional Courses #												
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Value Added Life-Skill Courses #												
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			Total	12	0	6	5	23	18			

Walchand College of Engineering, Sangli
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Elective Course List for F.Y. M.Tech. (CS and IT) Sem-I AY 2021-22

Sr.No.	Track	Course Code	Course Name
Elective 1			
1	Distributed Systems		Cloud and Virtualization Techniques
2	Programming and Internet Technology		Ruby & Go Programming Langauge
3	Data Science		Artificial Intelligence
Elective 2			
1	Distributed Systems		Advanced Distributed Computing
2	Programming and Internet Technology		Modern Application Development
3	Data Science		Image Processing and Pattern Recognition

Notes:

For Lab courses: There shall be only internal continuous assessment (LA1, LA2, ESE). LA1 and LA2 together shall be Lab ISE. The ESE is a separate head of passing.
For Theory courses: There shall be two tests (T1 and T2) and one ESE. The ESE is a separate head of passing.

\# The Value Added Courses are Optional Courses. The mode of teaching (LTPI) is decided by the resource person.
   The credits earned from these courses will be shown on grade card. For SGPA and CGPA calculation, these courses will be excluded.
   The list of Value added courses will be updated from time to time. The courses may be on paid basis. These courses will be offered as per availability of faculty.

@ Minimum two AICTE mandatory courses need to be completed for award of degree.

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

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Credit System for F.Y. M.Tech. (CS and IT) Sem-II AY 2021-22

Sr.No.	Category	Course Code	Course Name	L	T	P	I	Hrs	Cr	T1/LA1	T2/LA2	ESE
Professional Core (Theory)												
1	PC		Data Mining Methods and Applications	2	0	0	0	2	2	20	20	60
2	PC		Agile Development	2	0	0	0	2	2	20	20	60
Professional Core (Lab)												
3	PR		Activity Based Lab for Data Mining Methods and Applications	0	0	2	0	2	1	30	30	40
4	PR		Activity Based Lab for Agile Development	0	0	2	0	2	1	30	30	40
5	PR		Industrial Project	0	0	0	2	2	2	30	30	40
6	PC		Professional Skills 2	0	0	0	1	1	1	30	30	40
7	PC		Scientific Computing	0	0	2	1	3	2	30	30	40
Professional Elective (Theory)												
8	PE	Refer list	Elective 3	2	0	0	0	2	2	20	20	60
9	PE	Refer list	Elective 4	2	0	0	0	2	2	20	20	60
Professional Elective (Lab)												
10	PR	Refer list	Activity Based Lab for Elective 4	0	0	2	0	2	1	30	30	40
Open Elective												
11	OE	Refer list	Open Elective	2	0	0	0	2	2	20	20	60
AICTE Mandatory Courses @												
12	MC		Value Education	2	0	0	0	2	0	20	20	60
Value Added Professional Courses #												
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Value Added Life-Skill Courses #												
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			Total	12	0	8	4	24	18			

Elective Course List for F.Y. M.Tech. (CS and IT) Sem-II AY 2021-22

Sr.No.	Track	Course Code	Course Name
Activity Based Lab for Elective 4			
1	Distributed Systems		Big Data Computing
2	Programming and Internet Technology		High Performance Computing
3	Data Science		Deep Learning
Elective 3			
1	Distributed Systems		Distributed Operating Systems
2	Programming and Internet Technology		System Programming
3	Data Science		Mathematic for Machine Learning
Elective 4			
1	Distributed Systems		Big Data Computing
2	Programming and Internet Technology		High Performance Computing
3	Data Science		Deep Learning

Notes:

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   The credits earned from these courses will be shown on grade card. For SGPA and CGPA calculation, these courses will be excluded.

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