

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

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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	5IT501	Advanced Algorithms	3	0	0	0	3	3	20	20	60
2	PC	5IT502	Unix Internal	3	0	0	0	3	3	20	20	60
Professional Core (Lab)												
3	PC	5IT560	Research Methodology	0	0	0	2	2	2	30	30	40
4	PR	5IT551	Activity Based Lab for Advanced Algorithms	0	0	2	0	2	1	30	30	40
5	PR	5IT552	Activity Based Lab for Unix Internal	0	0	2	0	2	1	30	30	40
6	HS	5IT553	Presentation and Technical Report Writing	0	0	0	1	1	1	30	30	40
7	PC	5IT554	Professional Skills 1	0	0	0	1	1	1	30	30	40
Professional Elective (Theory)												
8	PE	Refer list	Elective 1	3	0	0	0	3	3	20	20	60
9	PE	Refer list	Elective 2	3	0	0	0	3	3	20	20	60
AICTE Mandatory Courses @												
10	MC	5IC502	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				14	0	4	4	22	18			



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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	5IT511	Cloud and Virtualization Techniques
2	Programming and Internet Technology	5IT512	Ruby & Go Programming Language
3	Data Science	5IT513	Artificial Intelligence
Elective 2			
1	Distributed Systems	5IT514	Advanced Distributed Computing
2	Programming and Internet Technology	5IT515	Modern Application Development
3	Data Science	5IT516	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	5IT521	Data Mining Methods and Applications	3	0	0	0	3	3	20	20	60
2	PC	5IT522	Scientific Computing	3	0	0	0	3	3	20	20	60
Professional Core (Lab)												
3	PR	5IT571	Activity Based Lab for Data Mining Methods and Applications	0	0	2	0	2	1	30	30	40
4	PR	5IT572	Activity Based Lab for Scientific Computing	0	0	2	0	2	1	30	30	40
5	PR	5IT573	Industrial Project	0	0	0	2	2	2	30	30	40
6	PC	5IT574	Professional Skills 2	0	0	0	1	1	1	30	30	40
Professional Elective (Theory)												
7	PE	Refer list	Elective 3	2	0	0	0	2	2	20	20	60
8	PE	Refer list	Elective 4	2	0	0	0	2	2	20	20	60
Professional Elective (Lab)												
9	PR	Refer list	Activity Based Lab for Elective 4	0	0	2	0	2	1	30	30	40
Open Elective												
10	OE	Refer list	Open Elective	2	0	0	0	2	2	20	20	60
AICTE Mandatory Courses @												
11	MC	5IC501	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				14	0	6	3	23	18			



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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	5IT575	Big Data Computing Lab
2	Programming and Internet Technology	5IT576	High Performance Computing Lab
3	Data Science	5IT577	Deep Learning Lab
Elective 3			
1	Distributed Systems	5IT523	Distributed Operating Systems
2	Programming and Internet Technology	5IT524	System Programming
3	Data Science	5IT525	Mathematic for Machine Learning
Elective 4			
1	Distributed Systems	5IT526	Big Data Computing
2	Programming and Internet Technology	5IT527	High Performance Computing
3	Data Science	5IT528	Deep Learning



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

Sr.No.	Offering Dept	Sem	Course Code	Course Name
Open Elective 1				
1	Civil_Env	2	5OE101	Solid Waste Management
2	Civil_Struct	2	5OE102	Structural Health Monitoring
3	Mech_Prod	2	5OE103	Advanced Production systems
4	Mech_Heat	2	5OE104	Waste to Energy
5	Mech_Design	2	5OE105	Industrial Product Design
6	Elect_Power	2	5OE106	Control Techniques for Electrical Drives
7	Elect_Control	2	5OE106	Control Techniques for Electrical Drives
8	Eln	2	5OE108	Introduction to Embedded Systems

Notes:

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