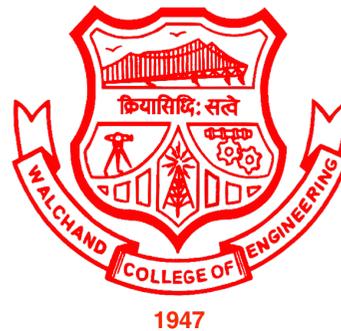


Walchand College of Engineering

(Government Aided Autonomous Institute)

Vishrambag, Sangli. 416415



***** Platinum Jubilee Year *****

**Credit System for
F.Y. M.Tech. (Computer Science and Engineering)
Sem-I and II**

2021-22



Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Credit System for F.Y. M.Tech. (Computer Science and Engineering) 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	5CO501	Mathematical Foundations of Computer Science	3	0	0	0	3	3	20	20	60
2	PC	5CO502	Advanced Data Structures	3	0	0	0	3	3	20	20	60
Professional Core (Lab)												
3	PC	5CO560	Research Methodology	0	0	0	2	2	2	30	30	40
4	PR	5CO551	Mathematical Foundations of Computer Science Lab	0	0	2	0	2	1	30	30	40
5	PR	5CO552	Advanced Data Structures Lab	0	0	2	0	2	1	30	30	40
6	HS	5CO553	Presentation and Technical Report Writing	0	0	0	1	1	1	30	30	40
7	PC	5CO554	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 #												
--												
Value Added Life-Skill Courses #												
--												
Total				14	0	4	4	22	18			



Walchand College of Engineering, Sangli

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Elective Course List for F.Y. M.Tech. (Computer Science and Engineering) Sem-I AY 2021-22

Sr.No.	Track	Course Code	Course Name
Elective 1			
1	AI and ML	5CO511	Introduction to Artificial Intelligence
2	IP and CV	5CO512	Image Processing
3	Miscellaneous	5CO513	Internet of Things
Elective 2			
1	AI and ML	5CO514	Data Science
2	Cyber Security	5CO515	Advanced Network Technologies
3	Miscellaneous	5CO516	Modern Operating System

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.



Walchand College of Engineering, Sangli

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Credit System for F.Y. M.Tech. (Computer Science and Engineering) 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	5CO521	Computer Algorithms	3	0	0	0	3	3	20	20	60
2	PC	5CO522	Soft Computing	3	0	0	0	3	3	20	20	60
Professional Core (Lab)												
3	PR	5CO571	Computer Algorithms Lab	0	0	2	0	2	1	30	30	40
4	PR	5CO572	Soft Computing Lab	0	0	2	0	2	1	30	30	40
5	PR	5CO573	Industrial Project	0	0	0	2	2	2	30	30	40
6	PC	5CO574	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 Elective Lab 1	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 #												
--												
Value Added Life-Skill Courses #												
--												
Total				14	0	6	3	23	18			



Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Elective Course List for F.Y. M.Tech. (Computer Science and Engineering) Sem-II AY 2021-22

Sr.No.	Track	Course Code	Course Name
Activity Based Elective Lab 1			
1	AI and ML	5CO575	Natural Language Processing Lab
2	Cyber Security	5CO576	Data Encryption & Compression Lab
3	IP and CV	5CO577	Theory and Applications of Remote Sensing & GIS Lab
4	AI and ML	5CO578	Machine Learning Lab
5	Cyber Security	5CO579	Network Security Lab
6	Miscellaneous	5CO580	Advanced Database Systems Lab
Elective 3			
1	AI and ML	5CO523	Natural Language Processing
2	Cyber Security	5CO524	Data Encryption & Compression
3	IP and CV	5CO525	Theory and Applications of Remote Sensing & GIS
Elective 4			
1	AI and ML	5CO526	Machine Learning
2	Cyber Security	5CO527	Network Security
3	Miscellaneous	5CO528	Advanced Database Systems



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Open Elective Course List for F.Y. M.Tech. (Computer Science and Engineering) 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:

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.

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