

# **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**

**2023-24**



# Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

## Credit System for F. Y. M. Tech. (Computer Science & Engineering) Sem-I AY 2023-24

Sr.No.	Category	Course Code	Course Name	L	T	P	I	Hrs	Cr	MSE/LA1	ISE/LA2	ESE	Remark
<b>Professional Core (Theory)</b>													
1	PC	7IC501	Research Methodology and IPR	3	0	0	0	3	3	30	20	50	
2	PC	7CO501	Advanced Data Structures	3	0	0	0	3	3	30	20	50	
3	PC	7CO502	Artificial Intelligence & Machine Learning	3	0	0	0	3	3	30	20	50	
4	PC	7CO503	Mathematical Foundations of Computer Science	3	0	0	0	3	3	30	20	50	
<b>Professional Core (Lab)</b>													
5	PC	7CO551	Advanced Data Structures Lab	0	0	2	0	2	1	30	30	40	
6	PC	7CO552	Artificial Intelligence & Machine Learning Lab	0	0	2	0	2	1	30	30	40	
7	PC	7CO553	Presentation and Technical Report Writing	0	0	2	0	2	1	30	30	40	
<b>Professional Elective (Theory)</b>													
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	
<b>Total</b>				<b>18</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>24</b>	<b>21</b>				

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(Ms. S. S. Rokade)

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21/08/23  
HoD

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21/8/2023  
Dean Academics  
Walchand College of Engg.  
Vishran, Sangli - 419 415



# Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

## Professional Elective Course List for F. Y. M. Tech. (Computer Science & Engineering) Sem-I AY 2023-24

Sr.No.	Track	Course Code	Course Name
<b>Professional Elective 1</b>			
1	IP &CV	7CO511	Image Processing
2	Advanced Computing	7CO512	Internet of Things
3	IP &CV	7CO513	Human Computer Interaction
<b>Professional Elective 2</b>			
1	Artificial Intelligence	7CO514	Natural Language Processing
2	Network Security	7CO515	Advanced Network Technologies
3	Advanced Computing	7CO516	Modern Operating System

### 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.**

  
(Ms. S. S. Rokade)

  
HoD  
21/08/23

  
Dean Academics  
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Sangli - 415 415



# Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

## Credit System for F. Y. M. Tech. (Computer Science & Engineering) Sem-II AY 2023-24

Sr.No.	Category	Course Code	Course Name	L	T	P	I	Hrs	Cr	MSE/LA1	ISE/LA2	ESE	Remark	
<b>Professional Core (Theory)</b>														
1	PC	7CO521	Advanced Computer Algorithms	3	0	0	0	3	3	30	20	50		
2	PC	7CO522	Soft Computing	3	0	0	0	3	3	30	20	50		
3	PC	7CO523	Information Security	3	0	0	0	3	3	30	20	50		
<b>Professional Core (Lab)</b>														
3	PC	7CO571	Advanced Computer Algorithms Lab	0	0	2	0	2	1	30	30	40		
4	PC	7CO572	Soft Computing Lab	0	0	2	0	2	1	30	30	40		
5	PR	7CO545	Pre-dissertation Work and Seminar	0	0	2	0	2	1	30	30	40		
<b>Professional Elective (Theory)</b>														
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		
<b>Open Elective</b>														
8	OE	Refer list	Open Elective	3	0	0	0	3	3	30	20	50		
<b>Total</b>				<b>18</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>24</b>	<b>21</b>					

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# Walchand College of Engineering, Sangli

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## Professional Elective Course List for F. Y. M. Tech. (Computer Science & Engineering) Sem-II AY 2023-24

Sr.No.	Track	Course Code	Course Name
<b>Professional Elective 3</b>			
1	Artificial Intelligence	7CO531	Data Science
2	Network Security	7CO532	Data Encryption & Compression
3	Network Security	7CO533	Blockchain Technology
4	IP & CV	7CO534	Theory and Applications of Remote Sensing & GIS
<b>Professional Elective 4</b>			
1	Artificial Intelligence	7CO535	Deep Learning
2	Network Security	7CO536	Cyber Security
3	Advanced Computing	7CO537	Advanced Database Management Systems

## Open Elective Course List for F. Y. M. Tech. (Computer Science & Engineering) 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	Information Technology	7OE510	Machine Learning & Applications

### Notes:

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

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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.**

*S.S. Rohade*  
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HoD  
21/05/23

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