

# **Walchand College of Engineering**

(Government Aided Autonomous Institute)

**Vishrambag, Sangli. 416 415**



**Credit System for**

**T.Y. B.Tech. (Information Technology)**

**Sem-V and VI**

**AY 2023-24**

# Walchand College of Engineering

(Government Aided Autonomous Institute)

## Credit System for T.Y. B.Tech. (Information Technology) Sem-V AY 2023-24


Sr.No.	Category	Course Code	Course Name	L	T	P	I	Hrs	Cr	MSE/LA1	ISE/LA2	ESE	Ext
<b>Professional Core (Theory)</b>													
01	PC	6IT301	Database Engineering	3	0	0	0	3	3	30	20	50	
02	PC	6IT302	Operating System	3	0	0	0	3	3	30	20	50	
03	PC	6IT303	Computer Algorithm	3	0	0	0	3	3	30	20	50	
<b>Professional Core (Lab)</b>													
05	PR	6IT341	Mini-Project-2	0	0	2	0	2	1	30	30	40	POE
06	PC	6IT351	Database Engineering Lab	0	0	2	0	2	1	30	30	40	POE
07	PC	6IT352	Web Technology Lab	0	0	2	1	3	2	30	30	40	POE
08	PC	6IT353	Computer Algorithm Lab	0	0	2	0	2	1	30	30	40	
<b>Professional Elective (Theory)</b>													
09	PE	Refer List	Professional Elective-1	3	0	0	0	3	3	30	20	50	
<b>Open Elective</b>													
10	OE	Refer List	Open Elective-1	3	0	0	0	3	3	30	20	50	
<b>Humanities</b>													
11	HS	6IT354	IT Project Management	0	0	0	2	2	2	30	30	40	
12	HS	6HS301	Integrated/ Employability Skills-1	0	0	0	2	2	2	30	30	40	
Total				15	0	8	5	28	24				


### 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 POE/OE indicates external component for ESE.

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

  
28/7/23  
Prof. B. S. Shetty  
DAC/Secretary, BoS

  
28.7.23  
Dr. R. R. Rathod  
Head, Information Technology Dept./  
Chairman, BoS

  
28/7/2023  
Dr. Mrs. S. P. Sonavane  
Dean Academics

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Date: 28/07/2023

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## Elective Course List for T.Y. B.Tech. (Information Technology) Sem-V AY 2023-24


Sr.No.	Track	Course Code	Course Name
<b>Professional Elective-1</b>			
01	Data Science	6IT311	Graph Theory
		6IT312	Blockchain Technology and Applications
02	Network Technology	6IT313	Wireless Networks
03	Interdisciplinary	6IT314	Natural Language Processing
		6IT315	Geographical Information System

Sr.No.	Offering Dept.	Course Code	Course Name
<b>Open Elective-1</b>			
01	Civil Engg.	6OE301	Building Planning and Design
02	Civil Engg.	6OE302	Disaster Management
03	Applied Mechanics Dept	6OE315	Theory of structures
04	Mechanical Engg.	6OE329	Non-Conventional Machining Processes
05	Electrical Engg.	6OE343	Electrical Machine Technology
06	Electronics Engg.	6OE357	Introduction to Electronic Systems
07	Electronics Engg.	6OE358	Signals and Systems
08	Computer Science and Engg.	6OE371	Data Science
09	Information Technology*	6OE385	Cloud Computing System
10	Information Technology*	6OE386	Joy of Python Programming
11	Information Technology*	6OE387	Data Science for Engineers

\* Open Elective-1 offered by Information Technology Dept. is allowed for students of all other departments (Except Information Technology & Computer Science & Engineering Dept.

  
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## Credit System for T.Y. B.Tech. (Information Technology) Sem-VI AY 2023-24

Sr.No.	Category	Course Code	Course Name	L	T	P	I	Hrs	Cr	MSE/LA1	ISE/LA2	ESE	Ext
<b>Professional Core (Theory)</b>													
01	PC	6IT321	Unix Operating System	3	0	0	0	3	3	30	20	50	
02	PC	6IT322	Image Processing and Pattern Recognition	3	0	0	0	3	3	30	20	50	
03	PC	6IT323	Artificial Intelligence	3	0	0	0	3	3	30	20	50	
<b>Professional Core (Lab)</b>													
04	PC	6IT342	Project-1	0	0	4	0	4	2	30	30	40	POE
05	PC	6IT371	Unix Operating System Lab	0	0	2	0	2	1	30	30	40	POE
06	PC	6IT373	IT Practices Lab-1	0	0	2	0	2	1	30	30	40	POE
07	PC	6IT372	Parallel Computing Lab	0	0	2	1	3	2	30	30	40	
<b>Professional Elective (Theory)</b>													
08	PE	Refer List	Professional Elective-2	3	0	0	0	3	3	30	20	50	
<b>Open Elective</b>													
09	OE	Refer List	Open Elective-2	3	0	0	0	3	3	30	20	50	
<b>Humanities</b>													
10	HS	Refer List	Humanities-II	0	0	0	2	2	2	30	30	40	
11	HS	6HS302	Integrated/ Employability Skills-2	0	0	0	2	2	2	30	30	40	
<b>Total</b>				<b>15</b>	<b>0</b>	<b>10</b>	<b>5</b>	<b>30</b>	<b>25</b>				

**Notes:**

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

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28/7/23  
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DAC/Secretary, BoS

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28.7.23  
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Chairman, BoS

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## Elective Course List for T.Y. B.Tech. (Information Technology) Sem-VI AY 2023-24

Sr.No.	Track	Course Code	Course Name
<b>Professional Elective-2</b>			
01	Data Science	6IT331	Soft Computing
		6IT332	Machine Learning
		6IT333	Artificial Neural Network
02	Network Technology	6IT334	Cloud Computing
03	Database Technology	6IT335	Advance Database Engineering
04	Interdisciplinary	6IT336	Spatial Data analysis

Sr.No.	Offering Dept.	Course Code	Course Name
<b>Open Elective-2</b>			
01	Civil Engg.	6OE308	Ecology
02	Civil Engg.	6OE309	Solid Waste Management
03	Applied Mechanics Dept	6OE322	Maintenance and Rehabilitation of Structures
04	Mechanical Engg.*	6OE336	Basics of Automobile Engineering
05	Electrical Engg.	6OE350	Industrial Automation
06	Electronics Engg.	6OE364	Cyber Physical Systems
07	Electronics Engg.	6OE365	Biomedical Engineering
08	Computer Science and Engg.	6OE378	Soft Computing
09	Information Technology*	6OE392	Web Development and Applications
10	Information Technology*	6OE393	Fundamentals of Machine Learning
11	Information Technology*	6OE394	Remote Sensing and Geographical Information Systems

Sr.No.	Course Code	Course Name
<b>Humanities-II</b>		
01	6HS303	German Language
02	6HS304	French Language
03	6HS305	Japanese Language
04	6HS306	Introduction to Entrepreneurship

\* Open Elective-2 offered by Information Technology Dept. is allowed for students of all other departments (Except Information Technology & Computer Science & Engineering Dept.)

  
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