Walchand College of Engineering

(Government Aided Autonomous Institute)

Vishrambag, Sangli. 416415

1947

Credit System for

T.Y. B.Tech. (Electronics Engineering)

Sem-V and VI

2023-24

Walchand College of Engineering
(Government Aided Autonomous Institute)

Credit System for T.Y. B.Tech. (Electronics Engineering) Sem-V AY 2023-24

Sr.No.	Category	Course Code	Course Name	L	T	P	I	Hrs	Cr	MSE/LA1	ISE/LA2	ESE	Ext
			Professional Core (Theory)										
1	PC	6EN301	Digital Signal Processing	3	0	0	0	3	3	30	20	50	
2	PC	6EN302	Embedded System Design	3	0	0	0	3	3	30	20	50	
3	PC	6EN303	Digital Communication Engineering	3	0	0	0	3	3	30	20	50	
			Professional Core (Lab)										
4	PC	6EN351	Digital Signal Processing Lab	0	0	2	0	2	1	30	30	40	POE
5	PC	6EN352	Embedded System Design Lab	0	0	2	0	2	1	30	30	40	POE
6	PC	6EN353	Digital Communication Engineering Lab	0	0	2	0	2	1	30	30	40	
7	PR	6EN341	Mini Project-1	0	0	2	0	2	1	30	30	40	OE
			Professional Elective (Theory)										
8	PE	Refer list	Elective-1	3	0	0	0	3	3	30	20	50	
9	PE	Refer list	Elective-2	2	1	0	0	3	3	30	20	50	
			Open Elective										
10	PE	Refer list	Open Elective-1	3	0	0	0	3	3	30	20	50	
			Humanities										
11	HS	6EN354	Humanities I: Project Management	0	0	0	2	2	2	30	30	40	
12	HS	6HS301	Integrated/ Employability Skills Development-1	0	0	0	2	2	2	30	30	40	
			Total	17	1	8	4	30	26				

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 Y in the PoE indicates external component for ESE.

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

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Elective Course List for T.Y. B.Tech. (Electronics Engineering) Sem-V AY 2023-24

Sr.No.	Track	Course Code	Course Name
Professional Elective-1		
1	Communication & Signal Processing	6EN311	Biomedical Instrumentation
2	Embedded System & VLSI	6EN312	Microelectronics
3	Communication & Signal Processing	6EN313	Linear Algebra
4	Embedded System & VLSI	6EN314	Automotive Electronics
	Professional Elective 2		
1	Embedded System & VLSI	6EN315	Object Oriented Programming
2	Embedded IoT and Networking	6EN316	Data Analytics
3	Communication & Signal Processing	6EN317	Optical Communication

Open Elective Course List for T.Y. B.Tech. (Electronics Engineering) Sem-V AY 2023-24

Sr.No.	Offering Dept	Sem	Course Code	Course Name
	Open Elective-1			
1	Civil	5	6OE301	Building Planning and Design
2	Civil	5	6OE302	Diaster Management
3	App. Mechanics	5	6OE315	Theory of structures
4	Mechanical	5	6OE329	Non-Conventional Machining Processes
5	Electrical	5	6OE343	Electrical Machine Technology
6	Electronics*	5	6OE357	Introduction to Electronic Systems
7	Electronics*	5	6OE358	Signals and Systems
8	CSE	5	6OE371	Data Science
9	IT	5	6OE385	Cloud Computing System
10	IT	5	6OE386	Joy of Python Programming
11	IT	5	6OE387	Data Science for Engineers

* Open Elective-1 offered by Electronics Dept. is allowed for students of all other departments (Except Electrical & Electronics Dept.)

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Credit System for T.Y. B.Tech. (Electronics Engineering) Sem-VI AY 2023-24

Sr.No.	Category	Course Code	Course Name	L	T	P	I	Hrs	Cr	MSE/LA1	ISE/LA2	ESE	Ext
Professional Core (Theory)												
1	PC	6EN321	Electromagnetic Engineering	3	1	0	0	4	4	30	20	50	
2	PC	6EN322	Digital System Architecture	3	0	0	0	3	3	30	20	50	
3	PC	6EN323	Power Electronics	3	0	0	0	3	3	30	20	50	
Professional Core (Lab)												
4	PC	6EN371	Digital System Architecture Lab	0	0	2	0	2	1	30	30	40	POE
5	PC	6EN372	Power Electronics Lab	0	0	2	0	2	1	30	30	40	POE
6	PR	6EN342	Mini Project-2	0	0	2	0	2	1	30	30	40	OE
Professional Elective (Theory)												
7	PE	Refer list	Elective-3	3	0	0	0	3	3	30	20	50	
8	PE	Refer list	Elective-4	2	1	0	0	3	3	30	20	50	
Open Elective												
9	OE	Refer list	Open Elective-2	3	0	0	0	3	3	30	20	50	
Humanities												
10	HS	Refer list	Humanities-2	0	0	0	2	2	2	30	30	40	
11	HS	6HS302	Integrated/ Employability Skills Development-2	0	0	0	2	2	2	30	30	40	
			Total	17	2	6	4	29	26				

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 Y in the PoE indicates external component for ESE.

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

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Date: 25/07/2023

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Elective Course List for T.Y. B.Tech. (Electronics Engineering) Sem-VI AY 2023-24

Sr.No.	Track	Course Code	Course Name
Professional Elective-3			
1	Communication & Signal Processing	6EN331	Mobile Communication Engineering
2	Embedded System & VLSI	6EN332	Digital System Engineering
3	Embedded IoT and Networking	6EN333	Design and Analysis of Algorithm
Professional Elective-4			
1	Communication & Signal Processing	6EN334	Communication Network Protocols
2	Embedded System & VLSI	6EN335	CMOS Digital VLSI Design
3	Communication & Signal Processing	6EN336	Digital Image Processing

Open Elective Course List for T.Y. B.Tech. (Electronics Engineering) Sem-VI AY 2023-24

Sr.No.	Offering Dept	Sem	Course Code	Course Name
Open Elective-2				
1	Civil	6	6OE308	Ecology
2	Civil	6	6OE309	Solid Waste Management
3	App. Mechanics	6	6OE322	Maintenance and Rehabilitation of Structures
4	Mechanical	6	6OE336	Basics of Automobile Engineering
5	Electrical	6	6OE350	Industrial Automation
6	Electronics*	6	6OE364	Cyber Physical Systems
7	Electronics*	6	6OE365	Biomedical Engineering
8	CSE	6	6OE378	Soft Computing
9	IT	6	6OE392	Web Development and Applications
10	IT	6	6OE393	Fundamentals of Machine Learning
11	IT	6	6OE394	Remote Sensing and Geographical Information Systems
Humanities-2				
1	HS	6	6HS303	German Language
2	HS	6	6HS304	French Language
3	HS	6	6HS305	Japanese Language
4	HS	6	6HS306	Entrepreneurship-1: Introduction to Entrepreneurship

* Open Elective-2 offered by Electronics Dept. is allowed for students of all other departments (Except Electronics Dept.)

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