

Walchand College of Engineering

(Government Aided Autonomous Institute)

Vishrambag, Sangli. 416415



Credit System for Final Year B.Tech. (Electronics Engineering) Sem-VII and VIII

2023-24



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(Government Aided Autonomous Institute)

Credit System for Final Year B.Tech. (Electronics Engineering) Sem-VII 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	5EN401	Power Electronics and Drives	3	0	0	0	3	3	30	20	50	
2	PC	5EN404	Real Time Operating Systems	3	0	0	0	3	3	30	20	50	
3	HS	5EN403	Humanities-4 Legal, IPR, Safety	1	0	0	0	1	1	15	10	25	
Professional Core (Lab)													
4	PC	5EN451	Power Electronics and Drives Lab	0	0	2	0	2	1	30	30	40	POE
5	PC	5EN452	Real Time Operating Systems Lab	0	0	2	0	2	1	30	30	40	POE
6	PR	5EN446	Project-I	0	0	6	0	6	3	30	30	40	OE
7	HS	5EN455	Humanities-3 Project Management	0	0	0	1	1	1	15	15	20	
Professional Elective (Theory)													
8	PE	Refer list	Elective-5	3	0	0	0	3	3	30	20	50	
Professional Elective (Lab)													
9	PE	Refer list	Elective-5 Lab	0	0	2	0	2	1	30	30	40	
Open Elective													
10	OE	Refer list	Open Elective-5	3	0	0	0	3	3	30	20	50	
Total				13	0	12	1	26	20				

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.


Minimum two AICTE mandatory courses need to be completed for award of degree.

The contact hours of guide for Final Year B.Tech. project are 4 hrs for Sem.- VII and 8 hours/week for Sem.- VIII, for 9 students.

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


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Walchand College of Engg.
Vishrambag, Sangli - 416 415



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Elective Course List for Final Year B.Tech. (Electronics Engineering) Sem-VII AY 2023-24

Sr.No.	Track	Course Code	Course Name
Professional Elective-5			
1	Communication & Signal Processing	5EN414	Microwave Engineering
2	Embedded System & VLSI	5EN415	TCP/IP and Advanced Protocol
3	Embedded System & VLSI	5EN416	Analog CMOS IC Design
Professional Elective-5 Lab			
1	Communication & Signal Processing	5EN454	Microwave Engineering Lab
2	Embedded System & VLSI	5EN458	TCP/IP and Advanced Protocol Lab
3	Embedded System & VLSI	5EN457	Analog CMOS IC Design Lab

Open Elective Course List for Final Year B.Tech. (Electronics Engineering) Sem-VII AY 2023-24

Sr.No.	Offering Dept	Sem	Course Code	Course Name
Open Elective-5				
1	Civil	7	5OE415	Management for Engineers
2	App. Mech	7	5OE485	Structural Health Monitoring
3	Mechanical	7	5OE429	Industrial Automation
4	Electrical	7	5OE443	Industrial Automation NPTEL
5	Electronics*	7	5OE457	Medical Image Processing
6	CSE	7	5OE471	Cyber Security
7	IT	7	5OE485	Data Visualization & Interpretation

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


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Credit System for Final Year B.Tech. (Electronics Engineering) Sem-VIII 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	5EN422	Internet of Things	3	0	0	0	3	3	30	20	50	
Professional Core (Lab)													
2	PR	5EN492	Project-II	0	0	12	0	12	6	30	30	40	POE
Professional Elective (Theory)													
3	PE	Refer list	Elective-6	3	0	0	0	3	3	30	20	50	
4	PE	Refer list	Elective-7	3	0	0	0	3	3	30	20	50	
5	PE	Refer list	Elective-8	3	0	0	0	3	3	30	20	50	
AICTE Mandatory Courses													
6	MC	5IC401	Constitution of India	2	0	0	0	2	0	30	20	50	
Total				14	0	12	0	26	18				

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.

Minimum two AICTE mandatory courses need to be completed for award of degree.

The contact hours of guide for Final Year BTech project are 4 hrs for Sem VII and 8 hours/week for Sem VIII, for 9 students.

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


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Elective Course List for Final Year B.Tech. (Electronics Engineering) Sem-VIII AY 2023-24

Sr.No.	Track	Course Code	Course Name
Elective-6			
1	Embedded System & VLSI	5EN431	System on Chip
2	Embedded System & VLSI	5EN437	Advanced Embedded Programming
Elective-7			
1	Communication & Signal Processing	5EN433	Radar and Navigation
2	Embedded IoT and Networking	5EN434	Data Analytics
Elective-8			
1	Embedded System & VLSI	5EN432	Digital System Engineering
2	Communication & Signal Processing	5EN435	Satellite Communication


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