

Walchand College of Engineering

(Government Aided Autonomous Institute)

Vishrambag, Sangli. 416415



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

**Credit System for
T.Y. B.Tech. (Electrical Engineering)
Sem-V and VI**

2021-22



Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Credit System for T.Y. B.Tech. (Electrical Engineering) Sem-V 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		Power System Analysis and Stability	3	0	0	0	3	3	20	20	60
2	PC		Control System Engineering	2	0	0	0	2	2	20	20	60
Professional Core (Lab)												
3	PC		Power System Analysis and Stability Lab	0	0	2	0	2	1	30	30	40
4	PC		Control System Engineering Lab	0	0	2	0	2	1	30	30	40
5	PR		Mini-Project 1	0	0	2	0	2	1	30	30	40
6	PR		Mini-Project 2	0	0	2	0	2	1	30	30	40
7	HS		Humanities 1: German Language	0	0	0	3	3	3	30	30	40
Professional Elective (Theory)												
8	PE	Refer list	Elective 1	2	0	0	0	2	2	20	20	60
9	PE	Refer list	Elective 2	2	0	0	0	2	2	20	20	60
Professional Elective (Lab)												
10	PE	Refer list	Elective 2 Lab	0	0	2	0	2	1	30	30	40
Open Elective												
11	OE	Refer list	Open Elective 1	2	0	0	0	2	2	20	20	60
12	OE	Refer list	Open Elective 2	3	0	0	0	3	3	20	20	60
Value Added Professional Courses #												
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Value Added Life-Skill Courses #												
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Total				14	0	10	3	27	22			



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Elective Course List for T.Y. B.Tech. (Electrical Engineering) Sem-V AY 2021-22

Sr.No.	Track	Course Code	Course Name
Elective 1			
1	Power System		Illumination Engineering
2	Control System		Digital Signal Processing
3	Power Electronics and Drives		Electromagnetic Field
Elective 2			
1	Power System		Electrical Machine Design
2	Control System		Linear Algebra
3	Power Electronics and Drives		Energy Storage Systems for EV
Elective 2 Lab			
1	Power System		Electrical Machine Design Lab
2	Control System		Linear Algebra Lab
3	Power Electronics and Drives		Energy Storage Systems for EV Lab



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Open Elective Course List for T.Y. B.Tech. (Electrical Engineering) Sem-V AY 2021-22

Sr.No.	Offering Dept	Sem	Course Code	Course Name
Open Elective 1				
1	Civil	5		Basic Civil Engineering
2	Mech	5		Energy Engineering
3	CSE	5		Data Science using Python
4	IT	5		Joy of Python Programming
Open Elective 2				
1	Civil	5		Application of Remote Sensing
2	Mech	5		Non-conventional Machining Processes
3	CSE	5		Software Engineering and Database Essentials
4	IT	5		Cloud Computing 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.

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



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Credit System for T.Y. B.Tech. (Electrical Engineering) Sem-VI 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		Power System Protection	3	0	0	0	3	3	20	20	60
2	PC		Industrial Drives and Control	2	0	0	0	2	2	20	20	60
3	PC		Microcontroller and Applications	2	0	0	0	2	2	20	20	60
Professional Core (Lab)												
4	PC		Power System Protection Lab	0	0	2	0	2	1	30	30	40
5	PR		Mini-Project 3	0	0	2	0	2	1	30	30	40
6	PR		Mini-Project 4: Industrial Drives and Control Lab	0	0	2	0	2	1	30	30	40
7	PC		Microcontroller and Applications Lab	0	0	2	0	2	1	30	30	40
8	HS		Humanities 2: Human Relations at Work	0	0	0	3	3	3	30	30	40
Professional Elective (Theory)												
9	PE	Refer list	Elective 3	2	0	0	0	2	2	20	20	60
Open Elective												
10	OE	Refer list	Open Elective 3	2	0	0	0	2	2	20	20	60
11	OE	Refer list	Open Elective 4	3	0	0	0	3	3	20	20	60
Value Added Professional Courses #												
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Value Added Life-Skill Courses #												
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Total				14	0	8	3	25	21			



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Elective Course List for T.Y. B.Tech. (Electrical Engineering) Sem-VI AY 2021-22

Sr.No.	Track	Course Code	Course Name
Elective 3			
1	Power System		Artificial Neural Network
2	Control System		Non Linear and Digital Control System
3	Power Electronics and Drives		Introduction to Electric Vehicle



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Open Elective Course List for T.Y. B.Tech. (Electrical Engineering) Sem-VI AY 2021-22

Sr.No.	Offering Dept	Sem	Course Code	Course Name
Open Elective 3				
1	Mech	6		3D Printing
2	Eln	6		Cyber Physical System
3	CSE	6		Fundamentals of Internet of Things
4	IT	6		Web Development & Applications
Open Elective 4				
1	Mech	6		Basics of Automobile Engineering
2	Eln	6		Biomedical Engineering
3	CSE	6		Artificial Intelligence and Machine Learning
4	IT	6		Fundamentals Of Machine Learning

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