

Walchand College of Engineering

(Government Aided Autonomous Institute)

Vishrambag, Sangli. 416415



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

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

2021-22



Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Credit System for T.Y. B.Tech. (Electronics 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		Digital Signal Processing	2	0	0	0	2	2	20	20	60
2	PC		Embedded System Design	2	0	0	0	2	2	20	20	60
Professional Core (Lab)												
3	PC		Digital Signal Processing Lab	0	0	2	0	2	1	30	30	40
4	PC		Embedded System Design 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: Human Relations at work	0	0	0	3	3	3	30	30	40
Professional Elective (Theory)												
8	PE	Refer list	Elective 1	2	1	0	0	3	3	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				13	1	10	3	27	22			



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

Sr.No.	Track	Course Code	Course Name
Elective 1			
1	Communication & Signal Processing		Biomedical Instrumentation
2	Embedded System & VLSI		Microelectronics
3	Power Eln & Control		Linear Algebra
Elective 2			
1	Communication & Signal Processing		Information Theory and coding
2	Embedded IoT and Networking		Object Oriented Programming
3	Embedded IoT and Networking		Computer Organization and Architecture
Elective 2 Lab			
1	Communication & Signal Processing		Information Theory and Coding Lab
2	Embedded IoT and Networking		Object Oriented Programming Lab
3	Embedded IoT and Networking		Computer Organization and Architecture Lab



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

Sr.No.	Offering Dept	Sem	Course Code	Course Name
Open Elective 1				
1	Mech	5		Energy Engineering
2	Elect	5		Electrical Machine Technology
3	CSE	5		Data Science using Python
4	IT	5		Joy of Python Programming
Open Elective 2				
1	Mech	5		Non-conventional Machining Processes
2	Elect	5		Industrial Instrumentation
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. (Electronics 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		Electromagnetic Engineering	2	1	0	0	3	3	20	20	60
2	PC		FPGA based System Design	2	0	0	0	2	2	20	20	60
Professional Core (Lab)												
3	PC		FPGA based System Design Lab	0	0	2	0	2	1	30	30	40
4	PR		Mini-Project 3	0	0	2	0	2	1	30	30	40
5	PR		Mini-Project 4	0	0	2	0	2	1	30	30	40
6	HS		Humanities 2: German Language	0	0	0	3	3	3	30	30	40
Professional Elective (Theory)												
7	PE	Refer list	Elective 3	2	0	0	0	2	2	20	20	60
8	PE	Refer list	Elective 4	2	0	0	0	2	2	20	20	60
Professional Elective (Lab)												
9	PE	Refer list	Elective 4 Lab	0	0	2	0	2	1	30	30	40
Open Elective												
10	OE	Refer list	Open Electiv 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				13	1	8	3	25	21			



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

Sr.No.	Track	Course Code	Course Name
Elective 3			
1	Embedded IoT and Networking		Introduction to Machine Learning
2	Communication & Signal Processing		Optical Communication
3	Embedded IoT and Networking		Design and Analysis of Algorithm
Elective 4			
1	Communication & Signal Processing		Mobile Communication Engineering
2	Embedded System & VLSI		CMOS Digital VLSI Design
3	Communication & Signal Processing		Digital Image Processing
Elective 4 Lab			
1	Communication & Signal Processing		Mobile Communication Engineering Lab
2	Embedded System & VLSI		CMOS Digital VLSI Design Lab
3	Communication & Signal Processing		Digital Image Processing Lab



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

Sr.No.	Offering Dept	Sem	Course Code	Course Name
Open Elective 3				
1	Mech	6		3D Printing
2	Elect	6		Renewable Energy
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	Elect	6		Energy Management
3	CSE	6		Artificial Intelligence and Machine Learning
4	IT	6		Fundamentals Of Machine Learning

Notes:

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