

Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)



Credit System for

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

Sem-V and VI

AY 2020-21



Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Credit System for T.Y. B.Tech. (Electronics Engineering) Sem-V AY 2020-21

Sr.No.	Category	Course Code	Course Name	L	T	P	Hrs	Credits	ISE-1	MSE*	ISE-2	ESE	
Professional Core (Theory)													
1	PC	4EN301	Digital Signal Processing	3	0	0	3	3	10	30	10	50	
2	PC	4EN302	Embedded System Design	3	0	0	3	3	10	30	10	50	
3	HS	4HS307	Fundamentals of Management and Economics for Engineers	4	0	0	4	4	10	30	10	50	
Professional Core (Lab)													
4	PC	4EN351	Digital Signal Processing Lab	0	0	2	2	1	25	25	25	25	
5	PC	4EN352	Embedded Systems Design Lab	0	0	2	2	1	25	25	25	25	
6	PC	4EN353	Mini-project	0	0	2	2	1	25	25	25	25	
Professional Elective (Theory)													
7	PE	Refer list	Professional Elective 1	2	1	0	3	3	10	30	10	50	
8	PE	Refer list	Professional Elective 2	2	0	0	2	2	10	30	10	50	
Professional Elective (Lab)													
9	PE	Refer list	Professional Elective 2 Lab	0	0	2	2	1	25	25	25	25	
Open Elective													
10	OE	Refer list	Open Elective 1	3	0	0	3	3	10	30	10	50	
Value Added Professional Courses #													
--													
Value Added Life-Skill Courses #													
--													
Total				17	1	8	26	22					



Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Course List for T.Y. B.Tech. (Electronics Engineering) Sem-V AY 2020-21

Sr.No.	Course Code	Course Name
Professional Elective 1		
1	4EN311	Biomedical Engineering
2	4EN312	Microelectronics
3	4EN313	Linear Algebra and Statistics
4	4EN314	Automotive Electronics

Professional Elective 2		
1	4EN315	Digital Communication Engineering
2	4EN316	Object Oriented Programming
3	4EN317	Data Communication and Networking

Professional Elective 2 Lab		
1	4EN365	Digital Communication Engineering Lab
2	4EN366	Object Oriented Programming Lab
3	4EN367	Data Communication and Networking Lab

Open Elective 1		
1	4OE315	Remote Sensing and GIP, GPS
2	4OE330	Energy Engineering
3	4OE343	Electrical Machine Technology
4	4OE371	Software Engineering and Database Essentials
5	4OE385	The Joy of Computing using Python



Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Notes:

* For Lab courses, there will be only internal continuous assessment. ESE is a separate head of passing for both theory and lab courses.

The Value Added Courses are Optional Courses. The mode of teaching (LTPI) is decided by the resource person.

The list of Value added courses will be updated from time to time. The courses may be on paid basis.

The credits earned from these courses will be shown on grade card. For SPI and CPI calculation, these courses will be excluded.

These courses will be offered as per availability of faculty

@ Minimum 2 mandatory life skill courses are to be completed for award of degree.

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



Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Credit System for T.Y. B.Tech. (Electronics Engineering) Sem-VI AY 2020-21

Sr.No.	Category	Course Code	Course Name	L	T	P	Hrs	Credits	ISE-1	MSE*	ISE-2	ESE	
Professional Core (Theory)													
1	PC	4EN321	Electromagnetic Engineering	3	1	0	4	4	10	30	10	50	
2	PC	4EN322	FPGA Based System Design	3	0	0	3	3	10	30	10	50	
Professional Core (Lab)													
3	PC	4EN371	Mini Project	0	0	2	2	1	25	25	25	25	
4	PC	4EN372	FPGA Based System Design Lab	0	0	2	2	1	25	25	25	25	
Professional Elective (Theory)													
5	HS	Refer list	Elective Foundation Course in Humanities	3	0	0	3	3	10	30	10	50	
6	PE	Refer list	Professional Elective 3	2	1	0	3	3	10	30	10	50	
7	PE	Refer list	Professional Elective 4	3	0	0	3	3	10	30	10	50	
Professional Elective (Lab)													
8	PE	Refer list	Professional Elective 4 Lab	0	0	2	2	1	25	25	25	25	
Open Elective													
9	OE	Refer list	Open Elective 2	3	0	0	3	3	10	30	10	50	
Value Added Professional Courses #													
--													
Value Added Life-Skill Courses #													
--													
Total				17	2	6	25	22					



Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Course List for T.Y. B.Tech. (Electronics Engineering) Sem-VI AY 2020-21

Sr.No.	Course Code	Course Name
Elective Foundation Course in Humanities		
1	4HS301	Law and Engineering
2	4HS305	Foreign Language-German
3	4HS306	Human Relations at Work

Professional Elective 3		
1	4EN331	Introduction to Machine Learning
2	4EN332	Optical Communication
3	4EN333	Design and Analysis of Algorithm

Professional Elective 4		
1	4EN334	Mobile Communication Engineering
2	4EN335	CMOS VLSI Design
3	4EN336	Digital Image Processing

Professional Elective 4 Lab		
1	4EN384	Mobile Communication Engineering Lab
2	4EN385	CMOS VLSI Design Lab
3	4EN386	Digital Image Processing Lab

Open Elective 2		
1	4OE309	Theory of Structures
2	4OE337	Joining Technology
3	4OE338	Mechanical Power Transmission
4	4OE350	Renewable Energy
5	4OE378	Artificial Intelligence and Machine Learning
6	4OE395	Modern Application Development



Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Notes:

* For Lab courses, there will be only internal continuous assessment. ESE is a separate head of passing for both theory and lab courses.

The Value Added Courses are Optional Courses. The mode of teaching (LTPI) is decided by the resource person.

The list of Value added courses will be updated from time to time. The courses may be on paid basis.

The credits earned from these courses will be shown on grade card. For SPI and CPI calculation, these courses will be excluded.

These courses will be offered as per availability of faculty

@ Minimum 2 mandatory life skill courses are to be completed for award of degree.

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