

Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)



Credit System for

**Final Year B.Tech. (Electrical Engineering)
Sem-VII and VIII**

AY 2020-21



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Credit System for Final Year B.Tech. (Electrical Engineering) Sem-VII 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	3EL401	Power System Harmonics and FACTS	3	0	0	3	3	10	30	10	50	
2	PC	3EL402	HVDC Transmission	3	0	0	3	3	10	30	10	50	
3	PC	3EL403	Solar and Wind Power Generation	3	0	0	3	3	10	30	10	50	
Professional Core (Lab)													
4	PC	3EL451	Power System Harmonics and FACTS Lab	0	0	2	2	1	25	25	25	25	
5	PC	3EL491	Project 1	0	0	8	8	4	25	25	25	25	
Professional Elective (Theory)													
6	PE	Refer list	Professional Elective 1	3	0	0	3	3	10	30	10	50	
7	PE	Refer list	Professional Elective 2	3	0	0	3	3	10	30	10	50	
Professional Elective (Lab)													
8	PE	Refer list	Professional Elective 1 Lab	0	0	2	2	1	25	25	25	25	
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 3	3	0	0	3	3	10	30	10	50	
Value Added Professional Courses #													
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Value Added Life-Skill Courses #													
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Total				18	0	14	32	25					



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Sr.No.	Course Code	Course Name
Professional Elective 1		
1	3EL411	Advanced Power Electronics
2	3EL412	Process Control
3	3EL413	Power System Operation and Control
Professional Elective 2		
1	3EL414	Microcontroller Application in Electrical Engineering
2	3EL415	Neural Network and Fuzzy Control
3	3EL416	PLC and SCADA
Professional Elective 1 Lab		
1	3EL452	Advanced Power Electronics Lab
2	3EL453	Process Control Lab
3	3EL454	Power System Operation and Control Lab
Professional Elective 2 Lab		
1	3EL455	Microcontroller Application in Electrical Engineering Lab
2	3EL456	Neural Network and Fuzzy Control Lab
3	3EL457	PLC and SCADA Lab
Open Elective 3		
1	1OE402	Finite Element Method
2	1OE416	Concrete Engineering and Technology
3	1OE417	Computational Methods and Optimization Techniques
4	1OE429	Automobile Engineering
5	1OE443	Industrial Automation
6	1OE457	Cyber Physical Systems
7	1OE471	Business Intelligence
8	1OE485	Data Visualization & Interpretation



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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.

\$ Contact hours of each Final Year BTech project batch (of min 5 students) with the guide shall be 1 hour/week.

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



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Credit System for Final Year B.Tech. (Electrical Engineering) Sem-VIII 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	HS	3IC401	Engineering Management and Ethics	4	0	0	4	4	10	30	10	50	
Professional Core (Lab)													
2	PC	3EL492	Project 2	0	0	16	16	8	25	25	25	25	
Value Added Professional Courses #													
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Value Added Life-Skill Courses #													
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Total				4	0	16	20	12					

Notes:

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