

Walchand College of Engineering

(Government Aided Autonomous Institute)

Vishrambag, Sangli. 416415



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

**Credit System for
F.Y. M.Tech. (Power System Engineering)
Sem-I and II**

2021-22



Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Credit System for F.Y. M.Tech. (Power System Engineering) Sem-I 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	5PS501	Digital Protection of Power System	3	0	0	0	3	3	20	20	60
2	PC	5PS502	Application of Power Electronics to Power Systems	3	0	0	0	3	3	20	20	60
Professional Core (Lab)												
3	PC	5PS560	Research Methodology	0	0	0	2	2	2	30	30	40
4	PR	5PS551	Digital Protection of Power System Lab	0	0	2	0	2	1	30	30	40
5	PR	5PS552	Application of Power Electronics to Power Systems Lab	0	0	2	0	2	1	30	30	40
6	HS	5PS553	Presentation and Technical Report Writing	0	0	0	1	1	1	30	30	40
7	PC	5PS554	Professional Skills 1	0	0	0	1	1	1	30	30	40
Professional Elective (Theory)												
8	PE	Refer list	Elective 1	3	0	0	0	3	3	20	20	60
9	PE	Refer list	Elective 2	3	0	0	0	3	3	20	20	60
AICTE Mandatory Courses @												
10	MC	5IC502	Constitution of India	2	0	0	0	2	0	20	20	60
Value Added Professional Courses #												
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Value Added Life-Skill Courses #												
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Total				14	0	4	4	22	18			



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Elective Course List for F.Y. M.Tech. (Power System Engineering) Sem-I AY 2021-22

Sr.No.	Track	Course Code	Course Name
Elective 1			
1	Elect. Transmission and Distribution	5PS511	Power Apparatus Modeling
2	Elect. Power Control and Analysis	5PS512	DSP Application to Power System
Elective 2			
1	Elect. Transmission and Distribution	5PS513	Grid Integration of Renewable Energy
2	Elect. Power Control and Analysis	5PS514	Neural Network and Fuzzy Application to Power 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.

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

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



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Credit System for F.Y. M.Tech. (Power System Engineering) Sem-II 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	5PS521	Power Quality in Distribution Systems	3	0	0	0	3	3	20	20	60
2	PC	5PS522	PLC and Embedded Systems	3	0	0	0	3	3	20	20	60
Professional Core (Lab)												
3	PR	5PS571	Power Quality in Distribution Systems Lab	0	0	2	0	2	1	30	30	40
4	PR	5PS572	PLC and Embedded Systems Lab	0	0	2	0	2	1	30	30	40
5	PR	5PS573	Industrial Project	0	0	0	2	2	2	30	30	40
6	PC	5PS574	Professional Skills 2	0	0	0	1	1	1	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	PR	Refer list	Activity Based Elective Lab 1	0	0	2	0	2	1	30	30	40
Open Elective												
10	OE	Refer list	Open Elective	2	0	0	0	2	2	20	20	60
AICTE Mandatory Courses @												
11	MC	5IC501	Value Education	2	0	0	0	2	0	20	20	60
Value Added Professional Courses #												
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Value Added Life-Skill Courses #												
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Total				14	0	6	3	23	18			



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Elective Course List for F.Y. M.Tech. (Power System Engineering) Sem-II AY 2021-22

Sr.No.	Track	Course Code	Course Name
Activity Based Elective Lab 1			
1	Elect. Power Control and Analysis	5PS575	Computer Aided Power System Analysis Lab
2	Elect. Transmission and Distribution	5PS576	HV Engineering Lab
Elective 3			
1	Elect. Power Control and Analysis	5PS523	Power System Dynamics
2	Elect. Transmission and Distribution	5PS524	EHVAC
Elective 4			
1	Elect. Power Control and Analysis	5PS525	Computer Aided Power System Analysis
2	Elect. Transmission and Distribution	5PS526	HV Engineering



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Open Elective Course List for F.Y. M.Tech. (Power System Engineering) Sem-II AY 2021-22

Sr.No.	Offering Dept	Sem	Course Code	Course Name
Open Elective 1				
1	Civil_Env	2	5OE101	Solid Waste Management
2	Civil_Struct	2	5OE102	Structural Health Monitoring
3	Mech_Prod	2	5OE103	Advanced Production systems
4	Mech_Heat	2	5OE104	Waste to Energy
5	Mech_Design	2	5OE105	Industrial Product Design
6	Elect_Power	2	5OE106	Control Techniques for Electrical Drives
7	Eln	2	5OE108	Introduction to Embedded Systems
8	CSE	2	5OE109	Machine Learning in Practice
9	IT	2	5OE110	Machine Learning & Applications

Notes:

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