

VIGNANA BHARATHI INSTITUTE OF TECHNOLOGY
(AUTONOMOUS) HYDERABAD
M. TECH in ELECTRICAL POWER SYSTEMS
COURSE STRUCTURE & SYLLABUS (R19)

I YEAR I – SEMESTER

S.No.	Category	Course Code	Course Title	Int. Marks	Ext. Marks	L	T	P	Credits
1	PC	19PS6111	Advanced Computer Aided Power System Analysis	30	70	3	0	0	3
2	PC	19PS6112	Power System Protection and Relaying	30	70	3	0	0	3
3	PE-I	19EE6172 19EE6173 19EE6174	Smart Grid Technologies Advanced Digital Signal Processing EHVAC Transmission	30	70	3	0	0	3
4	PE-II	19EE6182 19EE6183 19EE6184	FACTS and Custom Power Devices Modern Control Theory Electrical Power Distribution and Automation	30	70	3	0	0	3
5	Lab I	19PS6151	Power System Computation Lab I	30	70	0	0	4	2
6	Lab II	19PS6152	Power Systems Lab I	30	70	0	0	4	2
7	MLC		Research Methodology & IPR	30	70	2	0	0	2
8	AD-1	19AD6MC1	Stress Management by Yoga	30	70	2	0	0	0
			Total Credits						18

I YEAR II – SEMESTER

S.No.	Category	Course Code	Course Title	Int. Marks	Ext. Marks	L	T	P	Credits
1	PC	19PS6211	Power System Dynamics and Control	30	70	3	0	0	3
2	PC	19PS6212	Power System Operation and Deregulation	30	70	3	0	0	3
3	PE-III	19EE6271 19EE6272 19EE6273	Reactive Power Compensation and Management Renewable Energy Systems Restructured Power Systems	30	70	3	0	0	3
4	PE-IV	19EE6281 19EE6282 19EE6283	Energy Auditing Conservation and Management Power System Reliability AI Techniques in Electrical Engineering	30	70	3	0	0	3
5	LAB-III	19PS6251	Power System Computation Lab II	30	70	0	0	4	2
6	LAB-IV	19PS6252	Power Systems Lab II	30	70	0	0	4	2
7	TS	19EE62TS	Mini Project with Seminar			0	0	4	2
8	AD-2	19AD6MC2	English for Research Paper Writing	30	70	2	0	0	0
			Total Credits						18

II YEAR I – SEMESTER

S.No.	Category	Course Code	Course Title	Int. Marks	Ext. Marks	L	T	P/D	Credits
1	PE-V	19EE6371 19EE6372 19EE6373	Power Quality Power System Stability Electric and Hybrid Vehicles	30	70	3	0	0	3
2	OE		1. Business Analytics 2. Industrial Safety 3. Operations Research 4. Cost Management of Engineering Projects 5. Composite Materials 6. Energy from Waste	30	70	3	0	0	3
3	TS	19EE63TS	Technical Seminar	100	0	0	2	0	1
4	CV	19EE63CV	Comprehensive Viva-Voce	100	0	0	2	0	1
5	DS	19EE63DS	Dissertation Phase -I			0	0	16	8
			Total Credits						16

II YEAR II – SEMESTER

S.No.	Category	Course Code	Course Title	Int. Marks	Ext. Marks	L	T	P	Credits
1	DS	19EE64DS	Dissertation Phase-II			0	0	32	16
			Total Credits						16