

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR**

**Course Structure and Detailed Syllabi for**

**M.Tech., Power Electronics and Electrical Drives (PE&ED)  
Power Electronics (PE) & Power Electronics & Drives (PED),  
Power & Industrial Drives (PID)  
Offered by Department of EEE  
for affiliated Engineering Colleges 2012-13**

**I YEAR            I SEMESTER**

S. No	Course code	Subject	Theory	Lab.	Credits
1.	9D49101	Modern Control Theory	4		4
2.	9D49102	Microprocessor and Microcontrollers	4		4
3.	9D54103	Principles of Machine modeling Analysis	4		4
4.	9D54104	Analysis of Power Electronic Converters	4		4
5.	9D54105	Power Electronic Control of DC Drives	4		4
6.		<b>Elective-I</b>	4		4
	9D49106a	a. Advanced Digital Signal Processing			
	9D49106b	b. Neural Networks and Fuzzy Systems			
7.	9D54107	Power Converters Lab		3	2
		contact periods/week	24	3	
			Total 27		26

**I YEAR          II SEMESTER**

S. No	Course Code	Subject	Theory	Lab.	Credits
1.	9D49201	Flexible AC Transmission Systems	4		4
2.	9D49202	HVDC Transmission	4		4
3.	9D54203	Power Electronic Control of AC Drives	4		4
4.	9D54204	Advanced Power Semiconductor Devices & Protection	4		4
5.	9D54205	Modern Power Electronics	4		4
6.	9D49206a 9D49206b	<b>Elective-II</b> a. Programmable Logic Controllers b. Energy Auditing, Conservation And Management	4		4
7.	9D54207	Electrical Systems Simulation Lab		3	2
		contact periods/week	24	3	
			Total 27		26

**II YEAR          (III & IV Semesters)**

S. No	Course code	Subject		credits
1	9D54401	Seminar		2
2	9D54202	Project work		16