

## Approved Course Structure

**Program: M.Tech.- Power Electronics and Drives**

**Regulations: SVEC-19**

### I-Semester

S. No.	Course Code	Course Title	Contact Hours per Week				Credits	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1	19MT18301	Dynamics of Electrical Machines	3	-	-	3	3	40	60	100
2	19MT18302	Power Electronic Converters	3	-	-	3	3	40	60	100
3	19MT18303	Power Semiconductor Devices and Modeling	3	-	-	3	3	40	60	100
4	<b>Program Elective - 1</b>									
	19MT10704	High Voltage DC Transmission								
	19MT18304	Control System Design	3	-	-	3	3	40	60	100
	19MT18305	Intelligent Controllers								
	19MT18306	Microcontroller and Applications								
5	<b>Program Elective - 2</b>									
	19MT10705	Digital Signal Processing								
	19MT10706	Power Quality	3	-	-	3	3	40	60	100
	19MT10707	Smart Grids								
	19MT18307	Electromagnetic Field Computation and Modeling								
6	19MT10708	Research Methodology and IPR	2	-	-	2	2	40	60	100
7	19MT18331	Power Electronics Design Lab	-	-	4	4	2	50	50	100
8	19MT18332	Power Electronics Simulation Lab	-	-	4	4	2	50	50	100
		<b>Total</b>	<b>17</b>	<b>-</b>	<b>8</b>	<b>25</b>	<b>21</b>	<b>340</b>	<b>460</b>	<b>800</b>
8	19MT1AC01	Technical Report Writing	2	-	-	2	-	-	-	-



## II-Semester


S. No.	Course Code	Course Title	Contact Hours per Week				Credits	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1	19MT28301	Digital Control of Power Electronics and Drive Systems	3	-	-	3	3	40	60	100
2	19MT28302	Electrical Drives	3	-	-	3	3	40	60	100
3	<b>Program Elective - 3</b>									
	19MT28303	Advanced Power Electronic Circuits	3	-	-	3	3	40	60	100
	19MT28304	Multilevel Inverters								
	19MT28305	Solar Energy Conversion Systems								
	19MT28306	Special Electrical Machines								
4	<b>Program Elective - 4</b>									
	19MT20706	Flexible AC Transmission System	3	-	-	3	3	40	60	100
	19MT28307	Hybrid Electric Vehicles								
	19MT28308	Switched Mode Power Supplies and UPS								
	19MT28309	Wind Energy Conversion Systems								
5	19MT2MOOC	<b>Open Elective (MOOC)</b>	-	-	-	-	3	-	100	100
6	19MT28331	Electrical Drives Lab	-	-	4	4	2	50	50	100
7	19MT28332	Electrical Drives Simulation Lab	-	-	4	4	2	50	50	100
		<b>Total</b>	<b>12</b>	<b>-</b>	<b>8</b>	<b>20</b>	<b>19</b>	<b>260</b>	<b>440</b>	<b>700</b>
8	19MT2AC01	Statistics with R	2	-	-	2	-	-	-	-

## III-Semester

S. No.	Course Code	Course Title	Contact Hours per Week				Credits	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1	19MT38331	Internship	-	-	-	-	2	-	100	100
2	19MT38332	Project Work Phase-I	-	-	-	-	10	50	50	100
		<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>12</b>	<b>50</b>	<b>150</b>	<b>200</b>

## IV-Semester

S. No.	Course Code	Course Title	Contact Hours per Week				Credits	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1	19MT48331	Project Work Phase-II	-	-	-	-	16	150	150	300
		<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>16</b>	<b>150</b>	<b>150</b>	<b>300</b>
<b>Total Credits:</b>						<b>68</b>	<b>Total Marks:</b>		<b>2000</b>	

  
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