



**SAMRAT ASHOK TECHNOLOGICAL INSTITUTE VIDISHA (M.P.)**  
(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV Bhopal)

**Scheme of Examination (Semester-V)**

**for Batch Admitted in session - 2022-23**

**Bachelor of Technology (B. Tech.) – Electrical Engineering**

Subject Code	Subject Category	Subject Name	Maximum Marks Allotted								Contact Hrs.			Total Credits
			Theory				Practical			Total Marks	L	T	P	
			ES	MS	Assignment	Quiz	ES	LW	Quiz					
EE- 501	DC	Control System	60	20	10	10	30	10	10	150	3	-	2	4
EE-502	DC	Power Electronics	60	20	10	10	30	10	10	150	3	-	2	4
EE-503	DC	Microprocessor & Micro Controller	60	20	10	10	30	10	10	150	3	-	2	4
EE-504	DC	Power System - II	60	20	10	10	-	-	-	100	3	-	-	3
OE-505	OE	OE-III	60	20	10	10	-	-	-	100	3	-	-	3
EE-506	DL	Lab- Machine Design	-	-	-	-	30	10	10	50	-	-	4	2
EE-507	ILC	Internship-II (90 Hrs) Institute level (evaluation )	-	-	-	-	-	50	-	50	-	-	4	2
<b>Total</b>			<b>300</b>	<b>100</b>	<b>50</b>	<b>50</b>	<b>120</b>	<b>90</b>	<b>40</b>	<b>750</b>	<b>15</b>	<b>0</b>	<b>14</b>	<b>22</b>

ILC	Extracurricular Activities	It is a one credit per year activity to be endorsed in eight semester marksheet
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**Abbreviations:** ES -End Semester, MS- Mid Semester, LW- Laboratory Work/Assignment. (L: Lecture, T: Tutorial, P: Practical)  
 BSC- Basic Science Course, ESC- Engineering Science Course, HSMC- Humanities Science and Management Course, MAC- Mandatory, Audit Course, AC- Audit Course, HEC- Holistic Education Courses: NSS/NCC/NSO, ITC- Information Technology Course, ILC-Institute Level Course, DC- Department Course, DE-Department Elective, OC- Open Course, DLC- Department Laboratory, PROJ- Project Work, VA-Value Added Course

<b>List of Courses for Honors Degree (MOOCs)</b>													<b>Credits</b>
<b>*NPTEL Session July-Aug, Minimum 5 Credits to be earn (Except the subjects which are in the scheme)</b>													
													<b>*5</b>
<b>List of Courses for Minor Degree (MOOCs)</b>													<b>Credits</b>
<b>**NPTEL Session July-Aug, Minimum 5 Credits to be earn from Electrical Domain</b>													
													<b>**5</b>

**Total 20 credits required for Honors / Minor degree**

OE-505	OE-III	1. Control System												
		2. Power Generation Technologies	60	20	10	10	-	-	-	100	3	-	-	<b>3</b>

S.no.	Honor's Degree (For Electrical Students)
1	Design of Photovoltaic Systems
2	Enclosure Design of Electronics Equipment
3	Phase-Locked Loops
4	Machine Learning and Deep Learning - Fundamentals and Applications
5	Smart Grid: Basics to Advanced Technologies
6	Advances in UHV Transmission and Distribution
7	Dc Microgrid and Control System
8	Advance Power Electronics and Control
9	Electrical Distribution System Analysis
10	Electrical Equipment and Machines: Finite Element Analysis
11	Modeling, Analysis and Estimation of Three Phase Unbalanced Power Network
12	Optimization Theory and Algorithms
13	Power Electronics with Wide Band Gap Devices
14	Electronic Systems Design: Hands-on Circuits and PCB Design with CAD Software
15	Power Electronics Applications in Power Systems

S.no.	Minor Degree (For other Dept. Students)
1	Basic Electrical Circuits
2	Power System Protection
3	Electrical Measurement and Electronic Instruments
4	Electrical Machines - I
5	Electrical Distribution System Analysis
6	Analog Electronic Circuits
7	Optimization Theory and Algorithms
8	A Basic Course on Electric and Magnetic Circuits
9	Power Electronics with Wide Band Gap Devices
10	Power Electronics Applications in Power Systems
11	Electronic Systems Design: Hands-on Circuits and PCB Design with CAD Software
12	