



**INDUS INSTITUTE OF TECHNOLOGY  
AND ENGINEERING**

**DEPARTMENT OF ELECTRICAL ENGINEERING**

**B.TECH ELECTRICAL ENGINEERING**

**B.Tech Electrical Engineering Teaching Scheme (Bos 2021)**

**B. Tech Electrical Engineering : Semester 1**

Sr. No	Code	Subject Name	Teaching Scheme				
			L*	T*	P*	Cr	Hrs
1	MA0111	Calculus	3	1	0	4	4
2	CH0011	Engineering Chemistry	3	0	2	4	5
3	EN0111	Technical Communication	1	1	0	2	2
4		Open Elective 1#	2	0	2	3	4
5	ME0219	Engineering Graphics	1	0	4	3	5
6	CV0004	Environmental Science	2	0	0	2	2
7		Open Elective 2#	3	0	0	3	3
		Indian Knowledge System				3	
Total			15	2	8	24	15

**B. Tech Electrical Engineering : Semester 2**

Sr. No	Code	Subject Name	Teaching Scheme				
			L*	T*	P*	Cr	Hrs
1	MA0211	Differential Equations and Linear Algebra	3	1	0	4	4
2	PH0011	Engineering Physics	3	0	2	4	5
3	EN0211	Business Communication and Presentation skills	1	1	0	2	2
4		Open Elective 3#	3	0	0	3	3
5	EL0117	Workshop Practice (EL/EC/CE/CSE/IT)	0	0	4	2	4
6	EL0220	Elements of Electrical Engineering	3	0	2	4	5
		Indian Science and Technology				1	
Total			13	2	8	20	23

**B.Tech Electrical Engineering Teaching Scheme 2019-2022 Batch (Sem III)**

**SEMESTER - III (w.e.f. Year 2019-22)**

Sr. No.	CODE	Name of the subject	CR EDI T	Teaching Scheme
				(per week)

				Th.	Tut.	Pr.	Total (hr.)
1	MA0313	Integral Transform & Numerical Analysis	4	3	0	2	5
2	EL0322	Signals & Systems	4	3	1	0	4
3	EL0317	Network Analysis	4	3	1	0	4
4	EL0321	Electrical Machines-I	4	3	0	2	5
5	EL0319	Analog & Digital Logic	4	3	0	2	5
6	SS0301	Human values and Professional Ethics	2	2	0	0	2
9	EL0320	Internship	2				
		TOTAL	24	17	2	6	25

B.Tech Electrical Engineering Teaching Scheme 2019-2022 Batch (Sem IV)							
SEMESTER - IV (w.e.f. Year 2019-22)							
Sr. No.	CODE	Name of the subject	CR EDI T	Teaching Scheme			
				(per week)			
				Th.	Tut.	Pr.	Total (hr.)
1	EL0416	Electromagnetics	4	3	1	0	4
2	EL0417	Power System I	4	3	0	2	5
3	EL0426	Electrical Machine II	4	3	0	2	5
4	EL0419	Control Theory	4	3	0	2	5
5	EN0411	Soft skill and Interpersonal communication	2	1	0	2	3
	EL0425	Electrical Measurement	4	3	0	2	5
		TOTAL	22	16	1	10	27

**In Sem-IV, OE-IV and OE V is optional, student can opt for the subject to earn extra credit**

B.Tech Electrical Engineering Teaching Scheme 2019-2022 Batch (Sem V)							
SEMESTER - V (w.e.f. Year 2019-22)							

Sr. No.	Category	Name of the subject	CR EDI T	Teaching Scheme			
				(per week)			
				Th.	Tut.	Pr.	Total (hr.)
1	EL0516	Power System II	4	3	0	2	5
2	EL0517	Microprocessor & Microcontroller Interfacing	4	3	0	2	5
3	EL0526	Power Electronics	4	3	0	2	5
4	EL0519	Elements of Electrical Design (Elective-I)	4	3	1	0	4
	EL0520	Renewable Energy Sources(Elective-I)					
	EL0525	Optimization Technique (Elective-I)					
		MOOC					
	CE0525	Prog for Scientific Computing	4	3	0	2	5
5	EL0523	( OE-VI)	3	3	0	0	3
6	BB0504	Enterpreneurship Development	2	2	0	0	2
7	EL0524	Internship	2				
		TOTAL	27	20	1	8	29

B.Tech Electrical Engineering Teaching Scheme 2019-2022 Batch (Sem VI)							
SEMESTER - VI (w.e.f. Year 2019-22)							
Sr. No.	Category	Name of the subject	CR EDI T	Teaching Scheme			
				(per week)			
				Th.	Tut.	Pr.	Total (hr.)
1	EL0616	Power System Operation & Control	4	3	0	2	5
2	EL0617	Electrical Drives and control (Elective-II)	4	3	0	2	5
	EL0622	Digital Signal Processing(Elective-II)					
	EL0623	Advance Control Theory(Elective-II)					

3*	EL0618	Electrical Power Utilization and Control(Elective-III)	3	3	0	0	3
	EL0624	Testing & Commissioning of Electrical Equipment(Elective-III)					
	EL0620	Energy Management (Elective-III)					
4*	CE0630	Data Science (Elective-IV)	4	3	0	2	5
	CE0622	Internet of Things (Elective-IV)					
	CS0602	Data Preparation & Analysis (Elective-IV)					
5*	EL0630	Electrical Energy Storage System (Elective-V)	3	3	0	0	3
	EL0625	Electric & Hybrid Vehicle (Elective-V)					
	EL0631	Energy Audit (Elective-V)					
6		(OE-VII)	3	3	0	0	3
7		Organizational Behaviour	2	2	0	0	2
		TOTAL	20	20	0	6	23

To select two electives from any two basket

B.Tech Electrical Engineering Teaching Scheme 2019-2022 Batch (Sem VII)							
SEMESTER - VII (w.e.f. Year 2019-22)							
Sr. No.	Category	Name of the subject	CR EDI T	Teaching Scheme			
				(per week)			
				Th.	Tut.	Pr.	Total (hr.)
1	EL0716	Switchgear & Protection	4	3	0	2	5
2	EL0717	Electrical Machine Design	4	3	0	2	5
3*	EL0730	Smart Grid (Elective-VI)	3	3	0	0	3
	EL0719	Power System Design(Elective-VI)					
	EL0720	Power System Planning (Elective-VI)					
4*	IT0701	Artificial Intelligence (Elective-VII)	4	3	0	2	5
	EL0722	Industrial Automation (Elective-VII)					
	EL0723	Soft computing Technique (Elective-VII)					

5*	EL0731	Bio Medical Instrumentation (Elective-VIII)	3	3	0	0	3
	EL0718	Advance Power Electronics (Elective-VIII)					
	EL0721	Advanced Micro Controller (Elective-VIII)					
5	EL0727	(OE-VIII)	3	3	0	0	3
6	EL0728	(OE-IX)	3	3	0	0	3
	EL0732	Project Stage-I	5			20	20
8	EL0733	Internship	2				
		TOTAL	23	21	0	26	41

To select two electives from any two basket

B.Tech Electrical Engineering Teaching Scheme 2019-2022 Batch (Sem VIII)							
SEMESTER - VIII(w.e.f. Year 2019-22)							
Sr. No.	Category	Name of the subject	CR EDI T	Teaching Scheme			
				(per week)			
				Th.	Tut.	Pr.	Total (hr.)
				1	EL0817	Project	12