GH raisoni COLLEGE
Engineering and Management
Nagpur

UG Scheme-2026 (NEP-2020)
B. Tech. (Electrical Engineering)

Course Code	Name of Course	Course Category	Classroom Instruction (CI) (in hours per semester)		Lab Instruction (LI) (in hours per semester)	Term Work (TW) and Self Learning (SL) (TW+ SL)(in hours per semester)	Total no.of hours per semester	Credits	Evaluation Scheme					Total Marks
									Theory			Practical		
			L	T	P				TAE	CAE	ESE	INT	EXT	
SEMESTER-I (NCrf Level 4.5)														
BSBTSH2TT101EL	Engineering Physics	BSC2	15	15	--	30	60	2	10	15	50	--	--	75
BSBTSH1PI101EL	Engineering Physics	BSC2	--	--	30	--	30	1	--	--	--	25	--	25
BSBTSH3TT103EL	Matrices and Differential Calculus	BSC1	30	15	--	45	60	3	10	15	50	-	-	75
CCBTSH2PT10XEL (0X=26,69, 70)	Liberal Learning Courses-I	CC1	--	--	60	--	60	2	--	--	--	25	25	50
BSBTSH2TT115EL	Biomedical Engineering	BSC5	30	--	--	30	60	2	10	15	50	--	-	75
BSBTSH1PI115EL	Biomedical Engineering	BSC5	--	--	30	--	30	1	--	--	--	25	-	25
ESBTET3TT109EL	Basic Electronics	ESC2	45			45	90	3	10	15	50		-	75
ESBTET1PI109EL	Basic Electronics	ESC2	--	--	30	--	30	1	--	--	--	25	-	25
ESBTEL3TT101	Basic Electrical Engineering	ESC1	45	-	--	45	90	3	10	15	50	--	--	75
ESBTEL1PI101	Basic Electrical Engineering	ESC1	--	-	30	--	30	1	--	--	--	25	-	25
VSBTEL1TI10X	Elective -I : Vocational and Skill Enhancement	VSEC1	15	--	--	15	30	1	10	15	--	--	--	25
VSBTEL1PI10X (0X=02,03,04)	Elective -I : Vocational and Skill Enhancement	VSEC1	--	--	30	--	30	1	--	--	--	25	--	25
TOTAL			180	30	210	210	600	21	60	90	250	150	25	575

GHraisoni COLLEGE Engineering and Management Nagpur

UG Scheme-2026 (NEP-2020)
B. Tech. (Electrical Engineering)

Course Code	Name of Course	Course Category	Classroom Instruction (CI) (in hours per semester)		Lab Instruction (LI) (in hours per semester)	Term Work (TW) and Self Learning (SL) (TW+ SL)(in hours per semester)	Total No.of hours per semester	Credits	Evaluation Scheme					
									Theory			Practical		Total Marks
			L	T	P				TAE	CAE	ESE	INT	EXT	
SEMESTER-II (NCrf Level 4.5)														
BSBTSH1TT202EL	Environmental Chemistry	BSC4	15	---	--	15	30	1	10	15	50	--	-	75
BSBTSH1PI202EL	Environmental Chemistry	BSC4	--	--	30	--	30	1				25	-	25
BSBTSH3TT204EL	Integral Calculus and Differential Equations	BSC3	30	15	-	45	90	3	10	15	50	-	--	75
AEBTSH1TI208EL	Communication Skills	AEC1	15	--	--	15	30	1	10	15	--	--	--	25
AEBTSH1PI208EL	Communication Skills	AEC1	--	--	30	--	30	1	--	--	--	25	--	25
IKBTSH2TT20XEL (0X=09,10,11,17, 18,19,20)	Elective : Indian Knowledge System	IKS	30	--	--	30	60	2	10	15	50	--	--	75
CCBTSH2PT20XEL (0X=71,72, 73)	Liberal Learning Courses-II	CC2	--	--	60	--	60	2	–	–	–	25	25	50
ESBTIT3TT202EL	Programming for Problem Solving	ESC3	45	--	--	45	90	3	10	15	50	--	-	75
ESBTIT1PI202EL	Programming for Problem Solving	ESC3	--		30	--	30	1	–	–	–	25	-	25
BTEL2TT205	Advanced Electrical Technology	PCC1	30	--	--	30	60	2	10	15	50	--	--	75
VSBTEL1TI20X	Elective –II: Vocational and Skill Enhancement	VSEC2	15	--	--	15	30	1	10	15	---	---	--	25
VSBTEL1PI20X (0X=06,07,08)	Elective –II: Vocational and Skill Enhancement	VSEC2	--	---	30	--	30	1	–	–	–	25	--	25
TOTAL			180	15	180	195	570	19	70	105	250	125	25	575

ELECTIVES

Applied Science and Humanities Board

23BTSHL10XAI -Elective : Indian Knowledge System -

Course	Course Code (L)	Course Code(P)
Elective: IKS- Concepts and Applications inEngineering	**IKBTSH2TT109AI/CY/IT/CV/ET** **IKBTSH2TT209CE/DS/ME/EL**	Not Applicable
Elective: IKS- Social History of Medicine In Colonial India	**IKBTSH2TT110AI/CY/IT/CV/ET** **IKBTSH2TT210 CE/DS/ME/EL**	Not Applicable
Elective: IKS- Modern IndianArchitecture	**IKBTSH2TT111AI/CY/IT/CV/ET** **IKBTSH2TT211 CE/DS/ME/EL**	Not Applicable
Elective: IKS- Introduction to Ancient Indian Technology	**IKBTSH2TT117AI/CY/IT/CV/ET** **IKBTSH2TT217 CE/DS/ME/EL**	Not Applicable
Elective: IKS- Introduction To Modern Indian Drama	**IKBTSH2TT118AI/CY/IT/CV/ET** **IKBTSH2TT218 CE/DS/ME/EL**	Not Applicable
Elective: IKS- Introduction To Indian Art - An Appreciation	**IKBTSH2TT119AI/CY/IT/CV/ET** **IKBTSH2TT219 CE/DS/ME/EL**	Not Applicable
Elective: IKS- Folk And Minor Art In India	**IKBTSH2TT120 AI/CY/IT/CV/ET** **IKBTSH2TT220 CE/DS/ME/EL**	Not Applicable

Liberal learning courses BTSH2PE10X or BTSH2PE20X

Course	Course Code (L)	Course Code(P)
Liberal learning course-1 Integrated Personality Development Course 1	Not Applicable	**CCBTSH2PT112** **AI/CE/DS/CY/IT/CV/ME/EL/ET**
Liberal learning course-1 Government Missions (Study of any 2)	Not Applicable	**CCBTSH2PT126** **AI/CE/DS/CY/IT/CV/ME/EL/ET**
Liberal learning course-1 Study of India's Top 2 Problems	Not Applicable	**CCBTSH2PT169** **AI/CE/DS/CY/IT/CV/ME/EL/ET**
Liberal learning course-1 Study of one of the identified books	Not Applicable	**CCBTSH2PT170** **AI/CE/DS/CY/IT/CV/ME/EL/ET**
Liberal learning course-2 Integrated Personality Development Course 2	Not Applicable	**CCBTSH2PT213** **AI/CE/DS/CY/IT/CV/ME/EL/ET**
Liberal learning course-2 Innovation and Creativity	Not Applicable	**CCBTSH2PT271** **AI/CE/DS/CY/IT/CV/ME/EL/ET**
Liberal learning course-2 Sports-Representation of Institute at University level/Inter College Level and above in any sport	Not Applicable	**CCBTSH2PT272** **AI/CE/DS/CY/IT/CV/ME/EL/ET**
Liberal learning course-2 Making short film/Photography	Not Applicable	**CCBTSH2PT273** **AI/CE/DS/CY/IT/CV/ME/EL/ET**
Liberal learning course-2 Foreign Language (German)	Not Applicable	**CCBTSH2PT276** **AI/CE/DS/CY/IT/CV/ME/EL/ET**
Liberal learning course-2 Foreign Language (Japanese)	Not Applicable	**CCBTSH2PT277** **AI/CE/DS/CY/IT/CV/ME/EL/ET**

Electrical Board

Course	Course Code (L)	Course Code(P)
Elective -I : Vocational and Skill Enhancement I-Solar Photovoltaic and Its Applications	VSBTEL1TI102	VSBTEL1PI102
Elective -I : Vocational and Skill Enhancement-I-Energy Conservation and Audit	VSBTEL1TI103	VSBTEL1PI103
Elective -I : Vocational and Skill Enhancement- I-	VSBTEL1TI104	VSBTEL1PI104
Elective -II : Vocational and Skill Enhancement-Foundation of Electric Vehicle and Renewable Energy	VSBTEL1TI206	VSBTEL1PI206
Elective -II : Vocational and Skill Enhancement-Simulation of Electric Circuit	VSBTEL1TI207	VSBTEL1PI207
Elective -II : Vocational and Skill Enhancement-	VSBTEL1TI208	VSBTEL1PI208