



AUTONOMOUS SCHEME (Tentative) UG - BE 2nd Year EEE

SCHEME: 2023

Aca. Year.: 2024-25

Date: 10/11/2023

SEM: III

SL No	Course Type	Course type series	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				Examinations				
								L	T	P	S	CIE Marks	SEE			Tot. Marks
								Lecture	Tutorial	Practical	PBL/ABL/SL/others.		Dur.	Th. Mrks	Lab. Mrks.	
1	IBSC	3	23MAI301	Mathematics-III	Maths	Maths	4	2	2	2		50	03	50	-	100
2	PCC	1	23EET302	Transformers and AC Machines	EE	EE	3	2	2	0		50	03	50	-	100
3	IPCC	1	23EEI303	Electric Circuit Analysis	EE	EE	4	3	0	2		50	03	50	-	100
4	IPCC	2	23EEI304	Analog & Digital Circuits	EE	EE	4	2	2	2		50	03	50	-	100
5	PCCL	1	23EEL305	Machines lab 1	EE	EE	1	0	0	2		50	03	-	50	100
6	ETC	1	23EEE31y	Emerging Technology Course - 1	EE	EE	3	3	0	0		50	03	50	-	100
7	AEC	3	23EEAE31	Skill development Course - 3	I.E.	I.E.	1	1	0	0	3	50	02	50	-	100
8	NCMC	3	23PDSN03	Personality Development-3 (HRD Training)	I.E.	I.E.	PP/NP	0	0	0	2	50	-	-	-	50
Total							20	13	6	8	5	400	0	300	50	750

BSC: Basic Science Course; PCC: Professional Course; IPCC: Integrated Professional Core Course; PCCL: Professional Core Course Laboratory; ETC: Emerging Technology Course; AEC: Ability Enhancement Course; NCMC: Non Credit Mandatory Course {I.E.-Industry Experts}

Note: For the fulfillment of successful completion of degree, lateral entry students, shall study & complete additional courses of Additional mathematics, Language Courses, Environmental studies, Constitution of India & professional Ethics as per the guidelines released time to time.

Emerging Technology Course - 1	
Course Code	Course Title
23EEE311	Electrical Measurements and Instrumentation
23EEE312	Engineering Electromagnetics
23EEE313	Sensors and Transducers
23EEE314	Object Oriented Programming

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AUTONOMOUS SCHEME (Tentative) UG - BE 2nd Year EEE

SCHEME: 2023

Aca. Year.: 2024-25

Date: 10/11/2023

SEM: IV

SL No	Course Type	Course type series	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				Examinations				
								L	T	P	S	CIE Marks	SEE			Tot. Marks
								Lecture	Tutorial	Practical	PBL/ABL/SL/others.		Dur.	Th. Mrks	Lab. Mrks	
1	IBSC	4	23MAI401	Mathematics-IV	Maths	Maths	3	2	0	2		50	03	50	-	100
2	PCC	2	23EET402	Electric Motors	EE	EE	3	3	0	0		50	03	50	-	100
3	IPCC	3	23EEI403	Microcontrollers	EE	EE	4	3	0	2		50	03	50	-	100
4	IPCC	4	23EEI404	Transmission & Distribution	EE	EE	4	3	0	2		50	03	50	-	100
5	PCCL	2	23EEL405	Machines lab 2	EE	EE	1	0	0	2		50	03	-	50	100
6	ETC	2	23EEE42y	Emerging Technology Course - 2	EE	EE	3	3	0	0		50	03	50	-	100
7	HSMC	5	23SFHH06/ 23UHVH07	SFH or UHV	any dept	any dept	1	0	2	0	@	50	02	50	-	100
8	AEC	4	23EEAE41	Skill Development Course - 4	I.E.	I.E.	1	1	0	0	3	50	02	50	-	100
9	NCMC	4	23PASN01	Phy. Education (Sports & Phy. Activities)	PED	PED	PP/NP	-	-	-	2	50	-	-	-	50
			23YOGN02	Yoga	PED	PED										
			23NSSN03	NSS	NSS	NSS										
			23NCCN04	NCC	NCC	NCC										
10	NCMC	5	23PDSN04	Personality Development-4 (HRD Training)	I.E.	I.E.	PP/NP	0	0	0	2	50	-	-	-	50
Total							20	15	2	8	7	500		350	50	900

BSC: Basic Science Course; PCC: Professional Course; IPCC: Integrated Professional Core Course; PCCL: Professional Core Course Laboratory; ETC: Engineering Technology Course; AEC: Ability Enhancement Course; HSMC: Humanities, Social Sciences & Management Course; NCMC: Non Credit Mandatory Course; {@ - Compulsory one activity during the semester} {\$ - Activity based (2 Hrs/week)} {I.E.-Industry Experts}

Emerging Technology Course - 2	
Course Code	Course Title
23EEE421	Power Generation and Economics
23EEE422	Op-Amp and LIC
23EEE423	PLC and Automation
23EEE424	Introduction to core JAVA Programming

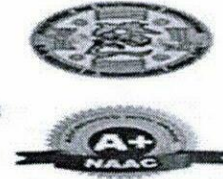
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AUTONOMOUS SCHEME (Tentative) UG - BE 3rd Year EEE

SCHEME: 2023
SEM: V

Aca. Year.: 2025-26

Date: 10/11/2023

SL No	Course Type	Course type series	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				Examinations				
								L	T	P	S	CIE Marks	SEE			Tot. Marks
								Lecture	Tutorial	Practical	PBL/ABL/SL/others.		Dur.	Th. Mrks	Lab. Mrks	
1	PCC	3	23EET501	Power System Analysis-1	EE	EE	3	3	0	0		50	03	50	-	100
2	IPCC	5	23EEI502	Signal and Systems	EE	EE	4	3	0	2		50	03	50	-	100
3	IPCC	6	23EEI503	Power Electronics	EE	EE	4	3	0	2		50	03	50	-	100
4	PCCL	3	23EEL504	Electrical CAED	EE	EE	1	0	0	2		50	03	-	50	100
5	PEC	1	23EEP51y	Professional Elective Course - 1	EE	EE	3	3	0	0		50	03	50	-	100
6	ETC	3	23EEE53y	Emerging Technology Course - 3	EE	EE	3	3	0	0		50	03	50	-	100
7	HSMC	6	23SFHH06/ 23UHVH07	SFH or UHV	any dept	any dept	1	0	2	0	@	50	02	50	-	100
8	AEC	5	23EEAE51	Skill Development Course - 5	I.E.	I.E.	1	1	0	0	3	50	02	50	-	100
9	NCMC	4	23PASN01	Phy. Education (Sports & Phy. Activities)	PED	PED	NP/PP	-	-	-	2	50	-	-	-	50
			23YOGN02	Yoga	PED	PED										
			23NSSN03	NSS	NSS	NSS										
			23NCCN04	NCC	NCC	NCC										
10	NCMC	6	23IKSN05	Inidan Knowledge System	HSS	HSS	PP/NP	0	0	0	2	50	-	-	-	-
			23PDSN04	Personality Development-5 (HRD Training)	I.E.	I.E.										
Total							20	16	2	6	7	500		350	50	900

BSC: Basic Science Course; PCC: Professional Course; IPCC: Integrated Professional Core Course; PCCL: Professional Core Course Laboratory; ETC: Engineering Technology Course; AEC: Ability Enhancement Course; HSMC: Humanities, Social Sciences & Management Course; NCMC: Non Credit Mandatory Course; {@ - Compulsory one activity during the semester} {\$ - Activity based (2 Hrs/week)} {I.E.-Industry Experts}

Professional Elective Course - 1		Emerging Technology Course - 3	
Course Code	Course Title	Course Code	Course Title
23EEP511	Electrical Machine Design	23EEE531	Electric Vehicles
23EEP512	Electrical Estimation and Costing	23EEE532	Introduction to Solar PV systems
23EEP513	Renewable Energy Sources	23EEE533	Internet of Things for Electrical Engineering
23EEP514	Energy Conservation & Audit	23EEE534	Python Programming

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AUTONOMOUS SCHEME (Tentative) UG - BE 3rd Year EEE

SCHEME: 2023

Aca. Year.: 2025-26

Date: 10/11/2023

SEM: VI

SL No	Course Type	Course type series	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				Examinations				
								L	T	P	S	CIE Marks	SEE			Tot. Marks
								Lecture	Tutorial	Practical	PBL/ABL/SL/others.		Dur.	Th. Mrks	Lab. Mrks	
1	PCC	4	23EET601	Power System Analysis-2	EE	EE	3	3	0	0		50	03	50	-	100
2	IPCC	7	23EEI602	Control Systems	EE	EE	4	3	0	2		50	03	50	-	100
3	PCCL	4	23EEL603	Power System Simulation lab	EE	EE	1	0	0	2		50	03	-	50	100
4	PEC	2	23EEP62y	Professional Elective Course - 2	EE	EE	3	3	0	0		50	03	50	-	100
5	OEC	1	23EEO61y	Open Elective Course - 1	EE	EE	3	3	0	0		50	03	50	-	100
6	ETC	4	23EEE64y	Emerging Technology Course - 4	EE	EE	3	2	0	2		50	03	50	-	100
7	AEC	6	23EEAE61	Innovation & Design Thinking	EE	EE	1	0	2	0	@	50	02	50	-	100
8	PRJ	1	23EEP62y	Mini Project	EE	EE	2	0	0	4	@	50	03	-	50	100
9	AEC	7	23EEAE62	Skill Development Course - 6	I.E.	I.E.	1	1	0	0	3	50	02	50	-	100
10	NCMC	7	23PDSN04	Personality Development-5 (HRD Training)	I.E.	I.E.	PP/NP	0	0	0	2	50	-	-	-	50
Total							21	15	2	10	5	500		350	100	950

PCC: Professional Course; IPCC: Integrated Professional Core Course; PCCL: Professional Core Course Laboratory; PEC: Professional Elective Course; OEC: Open Elective Course; ETC: Engineering Technology Course; HSMC: Humanities, Social Sciences & Management Course; AEC: Ability Enhancement Course; {@ - Compulsory one activity during the semester} {I.E.- Industry Experts} {Open Electives listed here are for other department students, stdnts shall select from separate list published}

Professional Elective Course - 2		Open Elective Course - 1		Emerging Technology Course - 4	
Course Code	Course Title	Course Code	Course Title	Course Code	Course Title
23EEP621	Drives & Traction	23EEO611	Alternate Energy Sources	23xxE641	Artificial Neural Networks
23EEP622	Energy Storage System	23EEO612	Fundamentals of Electric Vehicles	23xxE642	Operational Research
23EEP623	Embedded Systems	23EEO613	Micro and Nano electronics	23xxE643	Artificial Intelligence
23EEP624	Smart Grid	23EEO614	Energy Conservation and Audit	23xxE644	Computer Networks

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AUTONOMOUS SCHEME (Tentative) UG - BE 4th Year EEE

SCHEME: 2023

Aca. Year.: 2026-27

Date: 10/11/2023

SEM: VII

SL No	Course Type	Course type series	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				Examinations				
								L	T	P	S	CIE Marks	SEE			Tot. Marks
								Lecture	Tutorial	Practical	PBL/ABL/SL/others.		Dur.	Th. Mrks	Lab. Mrks	
1	PCC	5	23EET701	Power System Operation and Control	EE	EE	3	3	0	0		50	03	50	-	100
2	IPCC	8	23EEI702	High voltage and Power System Protection	EE	EE	4	3	0	2		50	03	50	-	100
3	IPCC	9	23EEI703	Digital signal Processing	EE	EE	4	3	0	2		50	03	50	-	100
4	PEC	3	23EEP73y	Professional Elective Course - 3	EE	EE	3	3	0	0		50	03	50	-	100
5	OEC	2	23EEO72y	Open Elective Course - 2	any dept.	any dept.	3	3	0	0		50	03	50	-	100
6	HSMC	7	23EET704	Management & Entrepreneurship	EE	EE	2	2	0	0		50	03	50	-	100
7	PRJ	2	23EPRJ2	Major Project - Phase I	EE	EE	2	0	0	0	@	50	03	-	50	100
Total							21	17	0	6		350		300	50	700

PCC: Professional Core Course; IPCC: Integrated Professional Core Course; PEC: Professional Elective Course; OEC: Open Elective Course; PRJ-P1W: Major Project Phase Wise. {Open Electives listed here are for other department students, stdnts shall select from separate list published}

Professional Elective Course - 3		Open Elective Course - 2	
Course Code	Course Title	Course Code	Course Title
23EEP731	Integration of Distributed generation	23EEO721	Testing and Commissioning
23EEP732	HVDC & FACTS	23EEO722	Smart Materials
23EEP733	VLSI Design	23EEO723	Industrial safety and Environment
23EEP734	Advanced control systems	23EEO724	Domestic and Industrial Electrical Installation

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AUTONOMOUS SCHEME (Tentative) UG - BE 4th Year EEE

SCHEME: 2023
SEM: VIII

Aca. Year.: 2026-27

Date: 10/11/2023

SL No	Course Type	Course type series	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				Examinations				
								L	T	P	S	CIE Marks	SEE			Tot. Marks
								Lecture	Tutorial	Practical	PBL/ABL/SL/others.		Dur.	Th. Mrks	Lab. Mrks	
1	SLC	1	23EESL1y	Self-Learning course - 1 (NPTEL)			3	0	0	0	@	50	-	50	-	100
2	SLC	2	23EESL2y	Self-Learning course - 2 (NPTEL)			3	0	0	0	@	50	-	50	-	100
3	PRJ	3	23EEPRJ3	Major Project - Phase II			8				@	100	-	-	100	200
3	INT	1	23EEINT1	Industrial Internship			4				@	50	-	-	50	100
Total							18	0	0	0	0	250		100	150	500

SLC: Self Learning Course; Prj-PW: Project Phase Wise; INT: Internship; After 7th SEM exams, full time for Internship & Project equally divided; SLC courses to be started from 3rd SEM and to be completed by 7th SEM and evaluated and credited in 8th SEM.

Self-Learning course - 1 (NPTEL)				Self-Learning course - 2 (NPTEL)			
Sl. No	Course code	Course title	NPTEL course code	Sl. No	Course code	Course title	NPTEL course code
1	22EESL11	An Introduction To Coding Theory	noc23-ee101	1	22EESL21	Understanding Incubation And Entrepreneurship	noc23-de16
2	22EESL12	Machine Learning And Deep Learning - Fundamentals And Applications	noc23-ee87	2	22EESL22	Learning Analytics Tools	noc23-ge42
3	22EESL13	Electrical Equipment And Machines: Finite Element Analysis	noc23-ee104	3	22EESL23	Economics of IPR	Economics of IPR
4	22EESL14	Design Of Photovoltaic Systems	noc23-ee107	4	22EESL24	Deep Learning - IIT Ropar	noc23-cs110
5	22EESL15	Electronic Systems For Cancer Diagnosis	noc23-ee110	5	22EESL25	Big Data Computing	noc23-cs112
6	22EESL16	Pattern Recognition And Application	noc23-ee119	6	22EESL26	Privacy And Security In Online Social Media	noc23-cs69
7	22EESL17	Dc Microgrid And Control Systems	noc23-ee123	7	22EESL27	Artificial Intelligence : Search Methods For Problem Solving	noc23-cs92
8	22EESL18	Applied Optimization For Wireless, Machine Learning, Big Data	noc23-ee99	8	22EESL28	Cyber Security and Privacy	noc23-cs127
9	22EESL19	Mathematical Aspects Of Biomedical Electronic System Design	noc23-ee90	9	22EESL29	Entrepreneurship And IP Strategy	noc23-hs144
10	22EESL110	Introductory Neuroscience & Neuro-Instrumentation	noc23-ee89	10	22EESL210	Patent Law For Engineers And Scientists	noc23-hs97

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