



SCHEME 2024



Raja Rajeshwari Nagar, Bengaluru

I to VIII Semester 2024 Scheme

Electrical & Electronics Engineering

GLOBAL ACADEMY OF TECHNOLOGY

(Autonomous institution affiliated to
VTU, Belagavi.
Accredited by NAAC with 'A' grade,

Department of Electrical and Electronics
Engineering



Global Academy of Technology

Ideal Homes Township, RR Nagar, Bengaluru - 98



VISION OF THE INSTITUTE

Become a premier institution imparting quality education in engineering and management to meet the changing needs of society.

MISSION OF THE INSTITUTE

- **M1:** Create environment conducive for continuous learning through quality teaching and learning processes supported by modern infrastructure
- **M2:** Promote Research and Innovation through collaboration with industries.
- **M3:** Inculcate ethical values and environmental consciousness through holistic education programs.

Abhisand





Global Academy of Technology

Ideal Homes Township, RR Nagar, Bengaluru - 98

Department of Electrical & Electronics Engineering



VISION OF THE DEPARTMENT

To be a foremost education program in the field of Electrical & Electronics Engineering to train the students to face global challenges and succeed in their careers.

MISSION OF THE DEPARTMENT

- Strengthen learning environment that facilitates quality education in the field of Electrical & Electronics Engineering.
- Enhance the Industry Institute interaction continuously to enable students to work on real-time engineering problems.
- Improve the quality of value-added programs to enhance the technical and intellectual capabilities of students ensuring their success in competitive examinations for higher studies, employment, and research.

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Ideal Homes Township, RR Nagar, Bengaluru - 98

Department of Electrical & Electronics Engineering



Program Educational Objectives

After successful completion of Electrical & Electronics Engineering program, the graduates will be able to:

1. **PEO1:** Engage in the design of systems and applications in the field of Electrical and Electronics Engineering and allied Engineering Industries.
2. **PEO2:** Apply the knowledge of Electrical and Electronics Engineering to solve problems of societal relevance.
3. **PEO3:** Engage in life-long learning through continued education, professional practices and technical training and/or higher education and research.
4. **PEO4:** Exhibit increasing levels of leadership and commitment to professional ethics and social awareness in their professional careers.

Program Specific Outcomes

Graduates in Electrical & Electronics Engineering will be able to:

PSO1: Design DC machines, transformers, and dynamic AC machines for given specifications.

PSO2: Understand generation, transmission, distribution, and utilization of electric power.

PSO3: Design analog and digital electronic circuits and controller for operation and maintenance of electrical systems.

Alexander



Global Academy of Technology, Bengaluru
Scheme of Teaching and Examinations (Effective from the academic year 2024-25)

I Semester (Electrical & Electronics Engineering Stream) (For Physics Group)													
Sl. No	Course and Course Code		Course Title	TD/PSB	Teaching Hours/Week				Examination				Credits
					Theory	Tutorial	Practical/ Drawing	SDA	Duration in	CIE Marks	SEE Marks	Total Marks	
1	*ASC(IC)	BMATE24101	Mathematics-I for EEE Stream (Integrated)	Maths	2	2	2	0	03	50	50	100	04
2	#ASC(IC)	BPHYE24102	Applied Physics for EEE Stream (Integrated)	PHY	2	2	2	0	03	50	50	100	04
3	ESC	BEEE24103	# Elements of Electrical Engineering	EEE/ECE/TCE	2	2	0	0	03	50	50	100	03
		OR			OR								
		BBEE24103	## Basic Electronics		3	0	0	0					
4	ESC-I	BESCK24104x	Engineering Science Course-I	Respective Engg Dept	3	0	0	0	03	50	50	100	03
5	ETC-I	BETCK24105x	Emerging Technology Course-I	Any Dept	3	0	0	0	03	50	50	100	03
	OR												
	PLC-I	BPLCK24105x	Programing Language Course-I		2	0	2	0					
6	AEC	BENGK24106	Communicative English	Humanities	1	0	0	0	01	50	50	100	01
		OR											
		BPWSK24106	Professional Writing Skills in English										
7	HSMC	BKSKK24107/ BKBBK24107	Sanskritika Kannada/ Balake Kannada	Humanities	1	0	0	0	01	50	50	100	01
		OR											
		BICOK24107	Indian Constitution										
8	AEC/SDC	BIDTK24108	Innovation and Design Thinking	Any Dept	1	0	0	0	01	50	50	100	01
		OR											
		BSFHK24108	Scientific Foundations of Health										
TOTAL										400	400	800	20

R. Lakshmi
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Global Academy of Technology, Bengaluru
Scheme of Teaching and Examinations (Effective from the academic year 2024- 25)

II Semester (Electrical & Electronics Engineering Stream)

(For the students who attended 1st semester under Physics Group)

Sl. No	Course and Course Code		Course Title	TD/PSB	Teaching Hours/Week				Examination				Credits
					Theory	Tutorial	Practical/ Drawing	SDA	Duration in	CIE Marks	SEE Marks	Total Mark	
1	*ASC(IC)	BMATE24201	Mathematics-II for EEE Stream (Integrated)	Maths	2	2	2	0	03	50	50	100	04
2	#ASC(IC)	BCHEE24202	Applied Chemistry for EEE Stream (Integrated)	Chemistry	2	2	2	0	03	50	50	100	04
3	ESC	BCEDK24203	Computer Aided Engineering Drawing	Civil/Mech Engg dept	2	0	2	0	03	50	50	100	03
4	ESC-II	BESCK24204x	Engineering Science Course-II	Respective Engg Dept	3	0	0	0	03	50	50	100	03
5	PLC-II	BPLCK24205x	Programming Language Course-II	Any Dept	2	0	2	0	03	50	50	100	03
	OR												
	ETC-II	BETCK24205x	Emerging Technology Course-II		03	0	0	0	03				
6	AEC	BPWKS24206	Professional Writing Skills in English	Humanities	1	0	0	0	01	50	50	100	01
		OR											
		BENGK24206	Communicative English										
7	HSMS	BICOK24207	Indian Constitution	Humanities	1	0	0	0	01	50	50	100	01
		OR											
		BKSKK24207/ BKBKK24207	Sanskritika Kannada/ Balake Kannada										
8	HSMS	BSFHK24208	Scientific Foundations of Health	Any Dept.	1	0	0	0	01	50	50	100	01
		OR											
		BIDTK24208	Innovation and Design Thinking										
TOTAL										400	400	800	20

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Global Academy of Technology, Bengaluru
Scheme of Teaching and Examinations (Effective from the academic year 2024- 25)

I Semester (Electrical & Electronics Engineering Stream)													(For Chemistry Group)			
Sl. No	Course and Course Code		Course Title	TD/PSB	TeachingHours/Week				Examination				Credits			
					Theory	Tutorial	Practical/ Drawing	SDA	Duration in	CIE Marks	SEE Marks	Total Mark				
														L	T	P
1	*ASC(IC)	BMATE24101	Mathematics-I for EEE Stream (Integrated)	Maths	2	2	2	0	03	50	50	100	04			
2	#ASC(IC)	BCHEE24102	Applied Chemistry for EEE Stream (Integrated)	Chemistry	2	2	2	0	03	50	50	100	04			
3	ESC	BCEDK24103	Computer-Aided Engineering Drawing	Mechanical	2	0	2	0	03	50	50	100	03			
4	ESC-I	BESCK24104x	Engineering Science Course-I	Respective Engg Dept	3	0	0	0	03	50	50	100	03			
5	ETC-I	BETCK24105x	Emerging Technology Course-I	Any Dept	3	0	0	0	03	50	50	100	03			
	OR															
	PLC-I	BPLCK24105x	Programing Language Course-I		2	0	2	0	03							
6	AEC	BPWSK24106	Professional Writing Skills in English	Humanities	1	0	0	0	01	50	50	100	01			
		OR														
		BENGK24106	Communicative English													
7	HSMS	BICOK24107	Indian Constitution	Humanities	1	0	0	0	01	50	50	100	01			
		OR														
		BKSKK24107/ BKBKK24107	Sanskrutika Kannada/ Balake Kannada													
8	HSMS	BSFHK24108	Scientific Foundations of Health	Any Dept.	1	0	0	0	01	50	50	100	01			
		OR														
		BIDTK24108	Innovation and Design Thinking													
				TOTAL						400	400	800	20			

R. Jayaram
Principal
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Global Academy of Technology, Bengaluru
Scheme of Teaching and Examinations (Effective from the academic year 2024- 25)

II Semester (Electrical & Electronics Engineering Stream)

(For students who attended 1st semester under Chemistry Group)

Sl. No	Course and Course Code		Course Title	TD/PSB	Teaching Hours/Week				Examination			Credits	
					Theory	Tutorial	Practical/Drawing	SDA	Duration in	CIE Marks	SEE Marks		Total Mark
1	*ASC(IC)	BMATE24201	Mathematics-II for EEE Stream (Integrated)	Maths	2	2	2	0	03	50	50	100	04
2	#ASC(IC)	BPHYE24202	Applied Physics for EEE Stream (Integrated)	PHY	2	2	2	0	03	50	50	100	04
3	ESC	BEEE24203	# Elements of Electrical Engineering	EEE/ECE/TCE	2	2	0	0	03	50	50	100	03
		OR											
		BBEE24203	## Basic Electronics		3	0	0	0					
4	ESC-II	BESCK24204x	Engineering Science Course-II	Respective Engg Dept.	3	0	0	0	03	50	50	100	03
5	PLC-II	BPLCK24205x	Programming language Course-II	Any Dept	2	0	2	0	03	50	50	100	03
		OR											
		ETC-II	BETCK24205x		Emerging Technology Course-II	3	0	0					
6	AEC	BENGK24206	Communicative English	Humanities	1	0	0	0	01	50	50	100	01
		OR											
		BPWSK24206	Professional Writing Skills in English		1	0	0	0					
7	HSMC	BKSKK24207/ BKBKK24207	Sanskritika Kannada/ Balake Kannada	Humanities	1	0	0	0	01	50	50	100	01
		OR											
		BICOK24207	Indian Constitution		1	0	0	0					
8	AEC/SDC	BIDTK24208	Innovation and Design Thinking	Any Dept	1	0	0	0	01	50	50	100	01
		OR											
		BSFHK24208	Scientific Foundations of Health		1	0	0	0					
TOTAL										400	400	800	20

R. Laxmi
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(ESC-I/II) Engineering Science Courses-I/II					(ETC-I/II) Emerging Technology Courses-I/II				
Code	Title	L	T	P	Code	Title	L	T	P
BESCK24104/204A	INTRODUCTION TO CIVIL ENGINEERING	3	0	0	BETCK24105/205A	INTRODUCTION TO ARTIFICIAL INTELLIGENCE	3	0	0
BESCK24104/204B	INTRODUCTION TO ELECTRONICS AND COMMUNICATION	3	0	0	BETCK24105/205B	INTRODUCTION TO EMBEDDED SYSTEM	3	0	0
BESCK24104/204C	INTRODUCTION TO ELECTRICAL ENGINEERING	3	0	0	BETCK24105/205C	SENSOR SYSTEMS	3	0	0
BESCK24104/204D	INTRODUCTION TO C PROGRAMMING (INTEGRATED)	2	0	2	BETCK24105/205D	ELECTROMECHANICAL SYSTEMS & MEASUREMENTS	3	0	0
BESCK24104/204E	INTRODUCTION TO ENGINEERING MECHANICS	3	0	0	BETCK24105/205E	WASTE MANAGEMENT	3	0	0
BESCK24104/204F	ENGINEERING GEOLOGY (INTEGRATED)	2	0	2	BETCK24105/205F	GREEN BUILDINGS	3	0	0
BESCK24104/204G	INTRODUCTION TO AERONAUTICAL ENGINEERING(Integrated)	2	0	2	BETCK24105/205G	SMART MATERIALS AND SYSTEMS	3	0	0
BESCK104H/204H	INTRODUCTION TO MECHANICAL ENGINEERING	2	0	2	BETCK24105/205H	INTRODUCTION TO NANO TECHNOLOGY	3	0	0
					BETCK24105/205I	INTRODUCTION TO SUSTAINABLE ENGINEERING	3	0	0
					BETCK24105/205J	RENEWABLE ENERGY SOURCES	3	0	0
					BETCK24105/205K	EMERGING APPLICATIONS OF BIOSENSORS	3	0	0
					BETCK24105/205L	INTRODUCTION TO INTERNET OF THINGS (IOT)	3	0	0
					BETCK24105/205M	INTRODUCTION TO CYBER SECURITY	3	0	0
					BETCK24105/205N	INTRODUCTION TO EMBEDDED SYSTEMS	3	0	0
(PLC-I/II) Programming Language Courses-I/II									
Code	Title	L	T	P					
BPLCK24105/205A	PROGRAMMING IN C (INTEGRATED)	2	0	2					
BPLCK24105/205B	INTRODUCTION TO PYTHON PROGRAMMING(INTEGRATED)	2	0	2					
BPLCK24105/205C	BASICS OF JAVA PROGRAMMING(INTEGRATED)	2	0	2					
BPLCK24105/205D	ADVANCED PROGRAMMING IN C(INTEGRATED)	2	0	2					
BPLCK24105/205E	INTRODUCTION TO WEB PROGRAMMING	2	0	2					
BPLCK24105/205F	INTRODUCTION TO C++ PROGRAMMING	2	0	2					

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B.E. in Electrical and Electronics Engineering

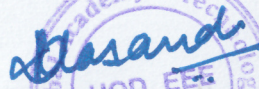
Scheme of Teaching and Examinations 2025

(with effect from AY 2024-25)



III SEMESTER

Sl. No	Course	Course Code	Course Title	Teaching Department (TD) and Question Paper Setting	Teaching Hours /Week				Examination				Credits
					Theory Lecture	Tutorial	Practica I/ Drawing	SDA	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P	S					
1	PCC/BS C	BMATE24301	Transform calculus and Special Functions	TD- HS PSB	3	0	0		03	50	50	100	3
2	IPCC	BEE24302	Electrical Machines-I	TD: EEE PSB	3	0	2		03	50	50	100	4
3	IPCC	BEE24303	Analog Electronics Circuits	TD: EEE PSB	3	0	2		03	50	50	100	4
4	PCC	BEE24304	Electric Circuits	TD: EEE PSB	2	2	0		03	50	50	100	3
5	PCCL	BEEL24305	MATLAB Programming	TD: EEE PSB	0	0	2		03	50	50	100	1
6	ETC/PL C	BEE24306x	ETC	TD: EEE PSB	3	0	0		03	50	50	100	3
7	UHV	BSCK24307	Social Connect and Responsibility	Any Department	0	0	2		01	100	---	100	1
8	AEC/ SEC	BEE24358x	Ability Enhancement Course/Skill Enhancement Course - III	TD: EEE PSB	If the course is a Theory				01	50	50	100	1
					1	0	0	0					
					If a course is a laboratory				02				
9	MC	BNSK24359	National Service Scheme (NSS)	NSS coordinator	0	0	2			100	---	100	0
		BPEK24359	Physical Education (PE) (Sports and Athletics)	Physical Education Director									
		BYOK24359	Yoga	Yoga Teacher									
		BLAK24359	Liberal Arts	Prominent NGO									
Total										550	350	900	20


 HOD, EEE
 Bangalore-08

PCC: Professional Core Course, **PCCL:** Professional Core Course laboratory, **UHV:** Universal Human Value Course, **MC:** Mandatory Course (Non-credit), **AEC:** Ability Enhancement Course, **SEC:** Skill Enhancement Course, **L:** Lecture, **T:** Tutorial, **P:** Practical **S= SDA:** Skill Development Activity, **CIE:** Continuous Internal Evaluation, **SEE:** Semester End Evaluation. **K :** This letter in the course code indicates common to all the stream of engineering. **ESC:** Engineering Science Course, **ETC:** Emerging Technology Course, **PLC:** Programming Language Course

Emerging Technology Course /Programming Language Course (ETC/PLC)

BEE24306A	Digital Logic Design	BEE24306C	Computer Organization & Architecture
BEE24306B	Measurements & Instrumentation	BEE24306D	Electro Magnetic Field Theory
Ability Enhancement Course – III			
BEE24358A	Electrical Hardware Lab	BEE24358C	Python Programming for Electrical Applications
BEE24358B	Circuits Lab Using LT SPICE	BEE24358D	Measurement Lab





GLOBAL ACADEMY OF TECHNOLOGY

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B.E. in Electrical and Electronics Engineering Scheme of Teaching and Examinations 2024



IV SEMESTER

Sl. No	Course	Course Code	Course Title	Teaching Department (TD) and Question Paper Setting Board (PSB)	Teaching Hours /Week				Examination				Credits
					Theory Lecture	Tutorial	Practical	SDA	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P	S					
1	PCC/BSC	BMATE24401	Probability and Complex Analysis	TD- HS PSB	3	0	0		03	50	50	100	3
2	IPCC	BEE24402	Electrical Machines-II	TD: EEE PSB: EEE	3	0	2		03	50	50	100	4
3	PCC	BEE24403	Power System-I	TD: EEE PSB: EEE	3	0	0		03	50	50	100	3
4	PCC	BEE24404	Control Systems	TD: EEE PSB: EEE	3	0	0		03	50	50	100	3
5	PCCL	BEEL24405	Control Systems Lab	TD: EEE PSB: EEE	0	0	2		03	50	50	100	1
6	ETC/PLC	BEE24406x	ETC		3	0	0		03	50	50	100	3
7	AEC/ SEC	BEE24457x	Ability Enhancement Course/Skill Enhancement Course- IV	TD: EEE PSB: EEE	If the course is Theory				01	50	50	100	1
					1	0	0						
					If the course is a lab				02	0	0	2	
0	0	2											
8	BSC	BBOK24407	Biology For Engineers	TD / PSB: BT, CHE,	1	0	0		01	50	50	100	1
9	UHV	BUHK24408	Universal human values course	Any Department	1	0	0		01	50	50	100	1
10	MC	BNSK24459	National Service Scheme (NSS)	NSS coordinator	0	0	2		100	---	100	0	
		BPEK24459	Physical Education (PE) (Sports and Athletics)	Physical Education Director									
		BYOK24459	Yoga	Yoga Teacher									
		BLAK24459	Liberal Arts	Prominent NGO									
Total									550	450	1000	20	

PCC: Professional Core Course, PCCL: Professional Core Course laboratory, UHV: Universal Human Value Course, MC: Mandatory Course (Non-credit), AEC: Ability Enhancement Course, SEC: Skill Enhancement Course, L: Lecture, T: Tutorial, P: Practical S= SDA: Skill Development Activity, CIE: Continuous Internal Evaluation, SEE: Semester End Evaluation. K :This letter in the course code indicates common to all the stream of engineering.



Ability Enhancement Course / Skill Enhancement Course – IV

BEE24457A	Digital Logic Design Lab	BEE24457C	Arduino Based Projects
BEE24457B	Data Handling With MS Excel	BEE24457D	Assembly Language Programming
Emerging Technology Course/Programming Language Course (ETC/PLC)			
BEE24406A	Data Structures Using C	BEE24406C	Digital Systems Design using Verilog HDL
BEE24406B	Engineering Materials	BEE24406D	Micro Electrical Mechanical Systems (MEMS)





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(with effect from AY 2024-25)



V SEMESTER

Sl. No	Course	Course Code	Course Title	Teaching Department (TD) and Question Paper Setting Board (PSB)	Teaching Hours /Week				Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	SDA	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P	S					
1	HSMC	BEE24501	Engineering Economics and Management (This course must be pertaining to economics and management of the concerned degree program. The course syllabus should have both economics and management topics and the course title should bear the word Management.)	TD: EEE PSB: EEE	3	0	0		03	50	50	100	3
2	IPCC	BEE24502	Power Electronics	TD: EEE PSB: EEE	3	0	2		03	50	50	100	4
3	PCC	BEE24503	Power Systems-II	TD: EEE PSB: EEE	3	0	0		03	50	50	100	3
4	PCCL	BEEL24504	AUTO CAED	TD: EEE PSB: EEE	0	0	2		03	50	50	100	1
5	PEC	BEE24505x	Professional Elective Course I	TD: EEE PSB: EEE	3	0	0		03	50	50	100	3
6	AEC/ SEC	BEE24556x	Ability Enhancement Course/Skill Enhancement Course- V	TD: EEE PSB: EEE	If the course is Theory				01	50	50	100	1
					1	0	0						
					If the course is Lab				02				
0	0	2											
7	PROJ	BEEP24507	Mini Project	TD: EEE PSB: EEE	0	0	4		03	100	-	100	2
8	AEC	BRMK24557	Research Methodology and IPR	Any Department	2	2	0		03	50	50	100	3
9	MC	BESK24508	Environmental Studies	Civil	1	0	0		01	100	--	100	0
10	MC	BNSK24559	National Service Scheme (NSS)	NSS coordinator	0	0	2			100	--	100	0
		BPEK24559	Physical Education (PE) (Sports and Athletics)	Physical Education Director									
		BYOK24559	Yoga	Yoga Teacher									
		BLAK24559	Liberal Arts	Prominent NGO									



				Total	650	350	1000	20
Professional Elective Course I								
BEE24505A	Embedded Systems	BEE24505C	Utilization of Electrical Power					
BEE24505B	OOPS Using C++	BEE24505D	Technologies of Renewable Energy Sources					
Ability Enhancement Course / Skill Enhancement Course – V								
BEE24556A	Embedded C Programming	BEE24556C	Project Management with GIT					
BEE24556B	Data Visualization using Power BI	BEE24556D	PCB Design					





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(with effect from AY 2024-25)



VI SEMESTER

Sl. No	Course	Course Code	Course Title	Teaching Department (TD) and Question Paper Setting Board (PSB)	Teaching Hours /Week				Examination			Credits	
					Theory Lecture	Tutorial	Practical/ Drawing	SDA	Duration in hours	CIE Marks	SEE Marks		Total Marks
					L	T	P	S					
1	IPCC	BEE24601	Signal Processing	TD: EEE PSB: EEE	3	0	2		03	50	50	100	4
2	PCC	BEE24602	Power System-III	TD: EEE PSB: EEE	3	0	0		03	50	50	100	3
3	PCC	BEE24603	Industrial Drives & Applications	TD: EEE PSB: EEE	3	0	0		03	50	50	100	3
4	PEC	BEE24604x	Professional Elective Course II	TD: EEE PSB: EEE	3	0	0		03	50	50	100	3
5	OEC	BEE24605x	Open Elective Course I	TD: EEE PSB: EEE	3	0	0		03	50	50	100	3
6	PROJ	BEEP24606	Project Phase I	TD: EEE PSB: EEE	0	0	4		03	100	--	100	2
7	PCCL	BEEL24607	Power System Simulation Lab	TD: EEE PSB: EEE	0	0	2		03	50	50	100	1
8	AEC/SDC	BEE24657x	Ability Enhancement Course/Skill Development Course VI	TD: EEE PSB: EEE	if the course is offered as a Theory				01	50	50	100	1
					1	0	0						
					if course is offered as a practical				02				
					0	0	2						
9	IKS	BIKS24608	Indian Knowledge System	Any Dept.	1	0	0		01	100	---	100	0
10	MC	BNSK24659	National Service Scheme (NSS)	NSS coordinator									
		BPEK659	Physical Education (PE) (Sports and Athletics)	Physical Education Director									
		BYOK24659	Yoga	Yoga Teacher	0	0	2		100	---	100	0	
		BLAK24659	Liberal Arts	Prominent NGO									
									Total	650	350	1000	20



Professional Elective Course II

BEE24604A	Introduction to AI&ML	BEE24604C	VLSI Design
BEE24604B	Micro Grid	BEE24604D	Internet of Things (IoT)

Open Elective Course I

BEE24605A	Electric Vehicles	BEE24605C	Technologies of Renewable Energy Sources
BEE24605B	Industrial Automation	BEE24605D	Utilization of Electrical Power

Ability Enhancement Course / Skill Enhancement Course-VI

BEE24657A	Internet of Things (IoT) Lab	BEE24657C	Energy Audit Projects
BEE24657B	Python Programming for ML Application	BEE24657D	Project on Renewable Energy Sources





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B.E. in Electrical and Electronics Engineering
Scheme of Teaching and Examinations 2025
(with effect from AY 2024-25)

VII SEMESTER (Swappable VII and VIII SEMESTER)

Sl. No	Course	Course Code	Course Title	Teaching Department (TD) and Question Paper Setting Board (PSB)	Teaching Hours /Week				Examination			Credits	
					Theory Lecture	Tutorial	Practical/ Drawing	SDA	Duration in hours	CIE Marks	SEE Marks		Total Marks
					L	T	P	S					
1	IPCC	BEE24701	Power System-IV	TD: EEE PSB: EEE	3	0	2		03	50	50	100	4
2	IPCC	BEE24702	Electric Vehicles	TD: EEE PSB: EEE	3	0	2		03	50	50	100	4
3	PCC	BEE24703	Smart Grid	TD: EEE PSB: EEE	3	0	0		03	50	50	100	3
4	PEC	BEE24704x	Professional Elective Course / (Online) III	TD: EEE PSB: EEE	3	0	0		03	50	50	100	3
5	OEC	BEE24705x	Open Elective Course /(online) II	TD: EEE PSB: EEE	3	0	0		03	50	50	100	3
6	PROJ	BEEP24706	Major Project Phase-II	TD: EEE PSB: EEE	0	0	14		03	100	100	200	7
									350	350	700	24	

Professional Elective Course III

BEE24704A	Switched Mode Power Converter	BEE24704C	Robotics & Automation
BEE24704B	FACTS & HVDC	BEE24704D	Big DATA Analytics in Power System

Open Elective Course II

BEE24705A	Smart IoT	BEE24705C	Energy Storage System
BEE24705B	Smart Grid Technology	BEE24705D	Energy Auditing

PCC: Professional Core Course, **PCCL:** Professional Core Course laboratory, **PEC:** Professional Elective Course, **OEC:** Open Elective Course **PR:** Project Work, **L:** Lecture, **T:** Tutorial, **P:** Practical **S= SDA:** Skill Development Activity, **CIE:** Continuous Internal Evaluation, **SEE:** Semester End Evaluation. **TD-** Teaching Department, **PSB:** Paper Setting department, **OEC:** Open Elective Course, **PEC:** Professional Elective Course. **PROJ:** Project work

Note: VII and VIII semesters of IV years of the program

- (1) Institutions can swap the VII and VIII Semester Schemes of Teaching and Examinations to accommodate research internships/ industry internships after the VI semester.
- (2) Credits earned for the courses of VII and VIII Semester Scheme of Teaching and Examinations shall be counted against the corresponding semesters whether the VII or VIII semesters is completed during the beginning of the IV year or the later part of IV years of the program.





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VIII SEMESTER (Swappable VII and VIII SEMESTER)

Sl. No	Course	Course Code	Course Title	Teaching Department (TD) and Question Paper Setting Board (PSB)	Teaching Hours /Week				Examination			Credits	
					Theory Lecture	Tutorial	Practical/ Drawing	SDA	Duration in hours	CIE Marks	SEE Marks		Total Marks
					L	T	P	S					
1	PEC	BEE24801x	Professional Elective (Online Courses) IV	TD: EEE PSB: EEE	3	0	0		03	50	50	100	3
2	PEC	BEE24802x	Professional Elective (Online Courses) V	TD: EEE PSB: EEE	3	0	0		03	50	50	100	3
3	INT	BEE24803	Internship (Industry/Research) (14 - 20 weeks)	TD: EEE PSB: EEE	0	0	12		03	100	100	200	10
									200	200	400	16	

Professional Elective Course (Online courses) IV

BEE24801A AI Techniques for Electric Vehicles

BEE24801C Electrical power Quality

BEE24801B Battery Management Systems

BEE24801D Soft Computing Techniques

Professional Elective Course (Online courses) V

BEE24802A Programmable Logic Controllers

BEE24802C Embedded Systems for EV Application

BEE24802B Advance Control Systems

BEE24802D Energy Conservation & Auditing

L: Lecture, **T:** Tutorial, **P:** Practical **S= SDA:** Skill Development Activity, **CIE:** Continuous Internal Evaluation, **SEE:** Semester End Evaluation. **TD-** Teaching Department, **PSB:** Paper Setting department, **OEC:** Open Elective Course, **PEC:** Professional Elective Course. **PROJ:** Project work, **INT:** Industry Internship / Research Internship / Rural Internship

Note: VII and VIII semesters of IV years of the program

Swapping Facility

- Institutions can swap VII and VIII Semester Scheme of Teaching and Examinations to accommodate **research internships/ industry internships/Rural Internship** after the VI semester.
- Credits earned for the courses of VII and VIII Semester Scheme of Teaching and Examinations shall be counted against the corresponding semesters whether VII or VIII semester is completed during the beginning of IV year or later part of IV year of the program.

Elucidation:

