



Autonomous Scheme of Teaching & Examinations (ST&E) (Tentative) UG - BE 3rd Year EEE

SCHEME: 2023

SEM: V

Revision date: 05-04-2025

S. #	Course Type	Course type Series	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				CIE Marks	Examinations			
								L	T	P	O		SEE (Dur. & Marks)			
								Lecture	Tutorial	Practical	PBL//ABL / SL/etc.		Dur.	Th.	Lab	Tot.
1	PCC	3	23EET501	Power System Analysis and Stability	EE	EE	3	3	0	0		50	03	50	-	100
2	IPCC	5	23EEI502	Signals and DSP	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	Industrial Automation Lab	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	Bioscience or UHV-Universal Human Values	any dept	any dept	1	0	2	0	@	50	02	50	-	100
8	AEC	5	23EEAE5y	Ability Enhancement Course - 5	EE	EE	1	1	0	0		50	02	50	-	100
								(or)								
								0	0	2		50	02	-	50	100
9	NCMC	4	23PASN01	Physical Education - Sports and Athletics	PED	PED	PP/NP				2	50	-	-	-	50
			23YOGN02	Yoga	PED	PED										
			23NSSN03	NSS - National Service Scheme	NSS	NSS										
			23NCCN04	NCC - National Cadet Corps	NCC	NCC										
			23IKSN05	Indian Knowledge System	HSS	HSS										
Total							20	16	2	8	2	450		350	100	850

PCC: Professional Course; IPCC: Integrated Professional Core Course; PCCL: Professional Core Course Laboratory; AEC: Ability Enhancement Course; HSMC: Humanities, Social Sciences & Management Course; NCMC: Non Credit Mandatory Course;

{@ - Compulsory one activity during the semester};

{I.E.-Industry Experts}.

PBL: project Based learning; ABL: Activity Based Learning; SL: Self-Learning

ETC (Emerging Technology Course):

For ETC (L:T:P:O) can be planned by the depts considering practicality & possibility of conduction, same shall be indicated along with course title in the list, if altered than above. If planned altering the prescription, the same shall be approved at the department BOS & authorities. Atleast one activity is mandatory during the delivery of the course. The guidelines is applicable to all the semesters III to VI semesters (ETC-1 to ETC-4).

Bioscience & UHV-Universal Human Values:

- 1) Any one of the course will be offered by the departments in each semester of IV & V based on the institutional planning.
- 2) Both the courses shall be studied and completed by the students registering each in the two semesters. For example, if Bioscience is offered in the IV semester, UHV-Universal Human Values is offered in the V semester.

Ability Enhancement Course-5: 23EEAE5y - 1 Credit course

- 1) The courses and the syllabus shall be defined by the respective dept. BOS.
- 2) SEE will be MCQ if offered as theory course. If offered as LAB course, SEE will be practical, with two internal examiners. Handled by Controller of Examinations.

NCMC (Non Credit Mandatory Course) for course type series-4: Refer to guidelines in III SEM.

Professional Elective Course - 1		Emerging Technology Course - 3			Ability Enhancement Course - 5	
Course Code	Course Title	Course Code	Course Title		Course Code	Course Title
23EEP511	Electrical Machine Design	23EEE531	Big Data for Power System engineering		23EEAE51	Computer Aided Electrical Drawing
23EEP512	Electrical Estimation and Costing	23EEE532	Battery Management System		23EEAE52	Energy Audit Project
23EEP513	Renewable Energy Sources	23EEE533	VLSI Circuits & Design		23EEAE53	Renewable Energy Project
23EEP514	Energy Conservation & Audit	23EEE534	Introduction to Core Java programming		23EEAE54	OOP with Java Lab

BOS Chairman/HOD

Academic Dean

Principal

Academic Director



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Autonomous Institution affiliated to Visvesvaraya Technological University, Belagavi

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Certified by ISO 9001 - 2015



Autonomous Scheme of Teaching & Examinations (ST&E) (Tentative) UG - BE 3rd Year EEE

SCHEME: 2023

SEM: VI

Revision date: 05-04-2025

S. #	Course Type	Course type Series	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				Examinations				
								L	T	P	O	CIE Marks	SEE (Dur. & Marks)			
								Lecture	Tutorial	Practical	PBL/ABL / SL/etc.		Dur.	Th.	Lab	Tot.
1	PCC	4	23EET601	Computer Techniques in Power Syatem Analysis	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	Any dept.	Any dept.	3	3	0	0		50	03	50	-	100
6	ETC	4	23EEE64y	Emerging Technology Course - 4	EE	EE	3	3	0	0	@	50	03	50	-	100
7	AEC	6	23RMAE61	Research Methodology & IPR	EE	EE	3	3	0	0	@	50	03	50	-	100
8	PRJ	1	23EEPRJ1	Major Project - Phase I	EE	EE	2	0	0	4	@	50	03	-	50	100
9	HSMC	7	23SCRH08	Social Connect & Responsibility	Any dept	Any dept	1	1	0	0	@	50	-	-	-	50
10	NCMC	4	23PASN01	Physical Education - Sports and Athletics	PED	PED	PP/NP				2	50				50
			23YOGN02	Yoga	PED	PED										
			23NSSN03	NSS - National Service Scheme	NSS	NSS										
			23NCCN04	NCC - National Cadet Corps	NCC	NCC										
			23IKSN05	Indian Knowledge System	HSS	HSS										
Total							23	19	0	8	2	500		300	100	900

PCC: Professional Course; IPCC: Integrated Professional Core Course; PCCL: Professional Core Course Laboratory; PEC: Professional Elective Course; OEC: Open Elective Course;

HSMC: Humanities, Social Sciences & Management Course; AEC: Ability Enhancement Course; NMC: Non Credit Mandatory Course; PRJ: Project work.

{@ - Compulsory one activity during the semester}; {I.E.-Industry Experts}; PBL: project Based learning; ABL: Activity Based Learning; SL: Self-Learning

NOTE: CIE & SEE guidelines for S. #7: AEC-23RMAE61-Reserach Methodology & IPR will be same as 3 credit courses BSC/ESC/PCC/ETC/PEC/OEC as mentioned in serial no. 1 of CIE & SEE guidelines.

Open Elective Courses (OEC):

1) Open Electives listed here are to offer for other department students.

2) Students shall select open elective courses offered from other departments, separate consolidated list of courses offered from various departments will be published time to time.

ETC (Emerging Technology Course):

For ETC (L:T:P:O) can be planned by the depts considering practicality & possibility of conduction, same shall be indicated along with course title in the list, if altered than above. If planned altering the prescription, the same shall be approved at the department BOS & authorities. Atleast one activity is mandatory during the delivery of the course. The guidelines is applicable to all the semesters III to VI semesters (ETC-1 to ETC-4).

NCMC (Non Credit Mandatory Course) for course type series-4: Refer to guidelines in III SEM.

Professional Elective Course - 2 (23EEP62y)		Open Elective Course - 1 (23EEO61y)		Emerging Technology Course - 4 (23EEE64y)	
Course Code	Course Title	Course Code	Course Title	Course Code	Course Title
23EEP621	Drives & Traction	23EEO611	Alternate Energy Sources	23EEE641	Artificial Intelligence in Power System
23EEP622	Energy Storage System	23EEO612	Fundamentals of Electric Vehicles	23EEE642	EV Battery Charging Methods & Topologies
23EEP623	Embedded Systems	23EEO613	Micro and Nano electronics	23EEE643	Electronic Circuit using Verilog
23EEP624	Smart Grid	23EEO614	Energy Conservation and Audit	23EEE644	IOT & its Applications

BOS Chairman/HOD

Academic Dean

Principal

Academic Director



Autonomous Scheme of Teaching & Examinations (ST&E) (Tentative) UG - BE 4th Year EEE

SCHEME: 2023

SEM: VII

Revision date: 05/04/2025

S. #	Course Type	Course Type Series	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				Examinations				
								L	T	P	O	CIE Marks	SEE (Dur. & Marks)			
								Lecture	Tutorial	Practical	PBL/ABL / SL/etc.		Dur.	Th.	Lab	Tot.
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
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	23EEPRJ2	Major Project - Phase II			6	0	0	12	@	100	03	-	100	200
Total							21	14	0	14		350		250	100	700

PCC: Professional Core Course; IPCC: Integrated Professional Core Course; PEC: Professional Elective Course; OEC: Open Elective Course; PRJ: Project Work.

PBL: project Based learning; ABL: Activity Based Learning; SL: Self-Learning

Open Elective Courses (OEC):

1) Open Electives listed here are to offer for other department students.

2) Students shall select open elective courses offered from other departments, separate consolidated list of courses offered from various departments will be published time to time.

Professional Elective Course - 3 (23EEP73y)		Open Elective Course - 2 (23EEO72y)	
Course Code	Course Title	Course Code	Course Title
23EEP731	Integration of Distributed generation	23EEO721	Testing and Commissioning
23EEP732	HVDC & FACTS	23EEO722	Smart Materials
23EEP733	Power Quality and Mitigation	23EEO723	Industrial safety and Environment
23EEP734	Advanced control systems	23EEO724	Domestic and Industrial Electrical Installation

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Autonomous Scheme of Teaching & Examinations (ST&E) (Tentative) UG - BE 4th Year EEE

SCHEME: 2023

SEM: VIII

Revision date: 05-04-2025

S. #	Course Type	Course Type Series	Course Code	Course Title	QP setting dept	Credits	Teaching Hrs/Week				CIE Marks	Examinations			
							L	T	P	O		SEE (Dur. & Marks)			
							Lecture	Tutorial	Practical	PBL/ABL / SL/etc.		Dur.	Th.	Lab	Tot.
1	SLC	1	23EES1yy	Self-Learning Course - 1 (NPTEL)		3	0	0	0	@	50	-	50	-	100
2	SLC	2	23EES2yy	Self-Learning Course - 2 (NPTEL)		3	0	0	0	@	50	-	50	-	100
4	INT	1	23EEINT1	Industrial Internship		10				@	100	03	-	100	200
Total						16	0	0	0	0	200		100	100	400

SLC: Self Learning Course; INT: Internship-After 7th SEM exams; SLC courses to be started from 3rd SEM and to be completed by 7th SEM and evaluated and credited in 8th SEM.
PBL: project Based learning; ABL: Activity Based Learning; SL: Self-Learning

Self-Learning Courses (SLC):

- 1) Offering and Registration of Self-learning Courses will commence from 3rd Semester itself and continues till the end of the duration of study.
- 2) Both regular & lateral entry students shall start registering for the self learning courses and complete as per the guidelines published separately. (Refer to the Self Learning Courses guidelines published).
- 3) Calculation of SGPA & CGPA is considered for VIII Semester, irrespective of period or time of completion of the course.

Self-Learning course - 1 (NPTEL) (23EES1yy)			Self-Learning course - 2 (NPTEL) (23EES2yy)		
Course Code	Course Title	NPTEL Code	Course Code	Course Title	NPTEL Code
NOTE:					
1) List shall be published separately starting from 3rd SEM itself. (Need not to mention the list here)					
2) The students shall register for NPTEL courses when the lists are announced by the departments & complete as per the guidelines.					

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