Basaveshwar Engineering College (Autonomous), Bagalkot DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Scheme of Teaching and Evaluation for B.E Electrical and Electronics Engineering

Academic Year 2021-22 (Students taking admission to B.E in E&EE in 2021-2022)

Total Credits for B.E., 160

Breakdown of Credits as per NEP 2020

SI.	Course Catagony	Pro	posed	by
31.	Course Category	AICTE	VTU	BEC(A)
1.	HSMC: HSS, Management courses	12	10	12
2.	BSC: Basic Science Courses (Physics, Chemistry and Mathematics)	25	2 3	23
3.	ESC: Engineering Science Courses (Basic elect/ electronics/ computer/ mechanics/ workshop/ drawing etc.)	24	20	20
4.	PCC: Professional Core Courses (Fundamental subjects of individual disciplines)	48	43	48
5.	PEC: Professional Elective Courses relevant to chosen branch/specialization	18	14	12
6.	OEC: Open Electives Courses/ Subjects from other technical/ arts/commerce/ NCC/ NSS & AEC: Ability Enhancement Courses	18	14	6+12 =18
7.	Mini and Major projects/ seminar/ summer internships and Research/ Industrial Internships	15	32	25
8.	Mandatory Non-credit Courses (EV, Kan, UHV, Constitution, induction)	No Credits	04	02
	Total	160	160	160

Sem	BSC	BEC	HSSM	AEC	PCC	PEC	OEC	Proj.	INT	Sem inar	UHV-2	Total
1	7	10	2	1								20
Ш	7	10	2	1								20
Ш	3		2	1 (ss-I)	12				2		2	22
IV	3		2	1 (ss-II)+1	15							22
V	3		1	1 (ss-III)	12		3		2			22
VI			3	2 (RM&IPR)	9	3	3	2				22
VII				1		9		8				18
VIII				3 (MOOCS)					10	01		14
Tot.	23	20	12	12	48	12	06	10	14	01	02	160*

	st Year B. mester-1	(Physics Grou	p) CAY 2021-22 (160 Credits 202	01-22 :	dmit	had	hatcl	۱)		
361	liester-1	(Filysics Grou	CAT 2021-22 (100 Cleuits 202	1-22		irs/W			ination	Marks
SI.	Cat.	Subject Code	Subject Title	Cr.	L	T	Р	CIE	SEE	Total
1	BSC	21UMA101C	Engineering Mathematics - I	3	3	0	0	50	50	100
2	BSC	21UPH102C	Engineering Physics	3	3	0	0	50	50	100
3	ESC	21UCS103C	Principles of Programming with C	3	3	0	0	50	50	100
4	ESC	21UEC104C	Basic Electronics Engineering	3	2	2	0	50	50	100
5	ESC	21UEE105C	Basic Electrical Engineering	3	3	0	0	50	50	100
6	HSSM	21UHS106C	Communicative English	2	2	0	0	50	50	100
7	AEC	21UNS107C	Scientific Foundation of Health	1	1	0	0	50	50	100
8	BSC	21UPH108L	Engineering Physics Laboratory	1	0	0	2	50	50	100
9	ESC	21UCS109L	Programming practice using C	1	0	0	2	50	50	100
			Total	20	17	2	4	450	450	900
Ser	mester-1	(Chemistry G					lmitt			
			6.14		Hou	ırs/W	/eek	Exam	ination	Marks
SI.	Cat.	Subject Code	Subject Title	Cr.	L	Т	Р	CIE	SEE	Total
1	BSC	21UMA101C	Engineering Mathematics – I	3	3	0	0	50	50	100
2	BSC	21UCH110C	Engineering Physics	3	3	0	0	50	50	100
3	ESC	21UCV111C	Principles of Programming with C	3	3	0	0	50	50	100
4	ESC	21UME112C	Basic Electronics Engineering	3	2	2	0	50	50	100
5	ESC	21UME113L	Basic Electrical Engineering	3	3	0	0	50	50	100
6	HSSM	21UHS106C	Communicative English	2	2	0	0	50	50	100
7	AEC	21UHS115C	Scientific Foundation of Health	1	1	0	0	50	50	100
8	BSC	21UCH114L	Engineering Physics Laboratory	1	0	0	2	50	50	100
									800	
Ser	mester-2	(Physics Grou					_		400	800
			p) CAY 2021-22 (160 Credits 202	21-22 a	dmit		batcl	1)		800 Marks
SI.	Cat.	Subject Code	p) CAY 2021-22 (160 Credits 202 Subject Title	21-22 a	Hou L	irs/W	batcl eek P	Exam	ination SEE	Marks Total
SI.	Cat.	Subject Code 21UMA201C	p) CAY 2021-22 (160 Credits 202 Subject Title Engineering Mathematics - I	Cr.	Hou L 3	tted irs/W T 0	batcl /eek P 0	Exam CIE 50	ination SEE 50	Marks Total 100
SI.	Cat.	Subject Code	Subject Title Engineering Mathematics - I Engineering Physics	21-22 a	Hou L 3	irs/W	batcl eek P	Exam	ination SEE	Marks Total
SI.	Cat.	Subject Code 21UMA201C	p) CAY 2021-22 (160 Credits 202 Subject Title Engineering Mathematics - I	Cr.	Hou L 3	tted irs/W T 0	batcl /eek P 0	Exam CIE 50	ination SEE 50	Marks Total 100
SI. 1 2	Cat. BSC BSC	Subject Code 21UMA201C 21UPH202C	Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C Basic Electronics Engineering	Cr. 3	Hou L 3 3 3	T 0	batcl reek P 0	Exam CIE 50 50	SEE 50 50	Marks Total 100 100
SI. 1 2 3	Cat. BSC BSC ESC	Subject Code 21UMA201C 21UPH202C 21UCS203C	Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C	Cr. 3 3 3	Hou L 3 3	T 0 0	batcl /eek P 0 0	Exam CIE 50 50	SEE 50 50 50	Marks Total 100 100
SI. 1 2 3 4	Cat. BSC BSC ESC ESC	Subject Code 21UMA201C 21UPH202C 21UCS203C 21UEC204C	Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C Basic Electronics Engineering	Cr. 3 3 3 3 3	Hou L 3 3 3	T 0 0 0 2	batcl /eek P 0 0	Exam CIE 50 50 50 50	50 50 50 50	Marks Total 100 100 100 100
SI. 1 2 3 4 5	Cat. BSC BSC ESC ESC ESC	Subject Code 21UMA201C 21UPH202C 21UCS203C 21UEC204C 21UEE205C	Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C Basic Electronics Engineering Basic Electrical Engineering	Cr. 3 3 3 3 3 3	Hou L 3 3 3 2	T 0 0 0 2 0	batcl reek P 0 0 0	Exam CIE 50 50 50 50 50	50 50 50 50 50	Marks Total 100 100 100 100 100
SI. 1 2 3 4 5	Cat. BSC BSC ESC ESC ESC HSSM	Subject Code 21UMA201C 21UPH202C 21UCS203C 21UEC204C 21UEE205C 21UHS206C	Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C Basic Electronics Engineering Basic Electrical Engineering Communicative English	Cr. 3 3 3 3 3 2	Hou L 3 3 3 2 3	T 0 0 0 2 0 0 0	batcl reek P O O O O	Exam CIE 50 50 50 50 50	50 50 50 50 50 50	Marks Total 100 100 100 100 100 100
SI. 1 2 3 4 5 6 7	Cat. BSC BSC ESC ESC ESC HSSM AEC	Subject Code 21UMA201C 21UPH202C 21UCS203C 21UEC204C 21UEE205C 21UHS206C 21UNS207C	Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C Basic Electronics Engineering Basic Electrical Engineering Communicative English Scientific Foundation of Health	Cr. 3 3 3 3 2 1	Hou L 3 3 2 3	T 0 0 0 2 0 0 0 0	batcl reek	Exam CIE 50 50 50 50 50 50	50 50 50 50 50 50 50	Marks Total 100 100 100 100 100 100 100 100
SI. 1 2 3 4 5 6 7 8 9	Cat. BSC BSC ESC ESC HSSM AEC BSC ESC	Subject Code 21UMA201C 21UPH202C 21UCS203C 21UEC204C 21UEE205C 21UHS206C 21UNS207C 21UPH208L 21UCS209L	Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C Basic Electronics Engineering Basic Electrical Engineering Communicative English Scientific Foundation of Health Engineering Physics Laboratory Programming practice using C Total	Cr. 3 3 3 3 1 1 1 20	Hou L 3 3 2 3 2 1 0 0	T 0 0 0 0 0 0 0 0 0 0 2	batcl/eek P 0 0 0 0 0 0 2 2	Exam CIE 50 50 50 50 50 50 50 50 50	50 50 50 50 50 50 50 50 50 50	Marks Total 100 100 100 100 100 100 100 100 100
SI. 1 2 3 4 5 6 7 8 9	Cat. BSC BSC ESC ESC ESC HSSM AEC BSC	Subject Code 21UMA201C 21UPH202C 21UCS203C 21UEC204C 21UEE205C 21UHS206C 21UNS207C 21UPH208L	Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C Basic Electronics Engineering Basic Electrical Engineering Communicative English Scientific Foundation of Health Engineering Physics Laboratory Programming practice using C Total	Cr. 3 3 3 3 1 1 1 20	Hou L 3 3 2 3 2 1 0 0 17	T 0 0 0 0 0 0 0 0 0 0 2 2 2 2 2 2 2 2 2	batcl /eek P 0 0 0 0 0 2 4	50 50 50 50 50 50 50 50 50 50 450 ed bat	50 50 50 50 50 50 50 50 50 50 50	Marks Total 100 100 100 100 100 100 100 100 100 10
SI. 1 2 3 4 5 6 7 8 9	Cat. BSC BSC ESC ESC HSSM AEC BSC ESC	Subject Code 21UMA201C 21UPH202C 21UCS203C 21UEC204C 21UEE205C 21UHS206C 21UNS207C 21UPH208L 21UCS209L	Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C Basic Electronics Engineering Basic Electrical Engineering Communicative English Scientific Foundation of Health Engineering Physics Laboratory Programming practice using C Total	Cr. 3 3 3 3 1 1 1 20	Hou Hou	T 0 0 0 2 0 0 0 0 2 222 addrs/W	batcl /eek P 0 0 0 0 0 0 2 4 Imitt	50 50 50 50 50 50 50 50 50 50 50 450 ed bat	50 50 50 50 50 50 50 50 50 50 450 50	Marks Total 100 100 100 100 100 100 100 100 100 10
SI. 1 2 3 4 5 6 7 8 9 Ser	Cat. BSC BSC ESC ESC ESC HSSM AEC BSC ESC Cat.	Subject Code 21UMA201C 21UPH202C 21UCS203C 21UEC204C 21UEE205C 21UHS206C 21UNS207C 21UPH208L 21UCS209L (Chemistry Gi	Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C Basic Electronics Engineering Basic Electrical Engineering Communicative English Scientific Foundation of Health Engineering Physics Laboratory Programming practice using C Total Total Total Toup) CAY 2021-22 (160 Creens)	Cr. 3 3 3 3 2 1 1 20 edits 2 Cr.	Hou L 3 3 3 2 3 2 1 0 0 17 021-2	T 0 0 0 0 0 0 0 0 0 2 22 addrs/W T	batcl /eek P 0 0 0 0 0 2 2 4 Imitt /eek P	50 50 50 50 50 50 50 50 50 450 ed bat Exam	50 50 50 50 50 50 50 50 50 450 cch)	Marks Total 100 100 100 100 100 100 100 100 100 10
SI. 1 2 3 4 5 6 7 8 9 Ser SI. 1	Cat. BSC BSC ESC ESC HSSM AEC BSC ESC Cat. BSC	Subject Code 21UMA201C 21UPH202C 21UCS203C 21UEC204C 21UEE205C 21UHS206C 21UNS207C 21UPH208L 21UCS209L (Chemistry Gi Subject Code 21UMA201C	Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C Basic Electronics Engineering Basic Electrical Engineering Communicative English Scientific Foundation of Health Engineering Physics Laboratory Programming practice using C Total Toup) CAY 2021-22 (160 Cre Subject Title Engineering Mathematics - I	Cr. 3 3 3 3 3 1 1 1 20 edits 2 Cr. 3	Hou L 3 3 2 3 2 1 0 0 17 021-2 Hou L	T 0 0 0 0 2 0 0 0 0 2 222 addrs/W T 0 0	batcl /eek P 0 0 0 0 0 0 2 4 Imitt /eek P	50 50 50 50 50 50 50 50 50 50 450 ed bat Exam CIE	50 50 50 50 50 50 50 50 50 450 cch)	Marks Total 100 100 100 100 100 100 100 100 100 10
SI. 1 2 3 4 5 6 7 8 9 Ser SI. 1 2	Cat. BSC BSC ESC ESC ESC HSSM AEC BSC ESC Cat. Mester-2 Cat. BSC BSC	Subject Code 21UMA201C 21UPH202C 21UCS203C 21UEC204C 21UEE205C 21UHS206C 21UNS207C 21UPH208L 21UCS209L (Chemistry Gi Subject Code 21UMA201C 21UCH210C	Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C Basic Electronics Engineering Basic Electrical Engineering Communicative English Scientific Foundation of Health Engineering Physics Laboratory Programming practice using C Total Total Total Total Toup) CAY 2021-22 (160 Cree Subject Title Engineering Mathematics - I Engineering Physics	Cr. 3 3 3 3 3 2 1 1 20 edits 2 Cr. 3 3	Hou L 3 3 2 3 2 1 0 0 17 021-2 L 3 3	tted	batcl /eek P 0 0 0 0 0 0 2 2 4 Imitt /eek P 0 0	50 50 50 50 50 50 50 50 50 50 50 50 50 5	50 50 50 50 50 50 50 50 50 450 cch) ination SEE 50	Marks Total 100 100 100 100 100 100 100 100 100 10
SI. 1 2 3 4 5 6 7 8 9 Ser SI. 1 2 3	Cat. BSC BSC ESC ESC HSSM AEC BSC ESC Cat. BSC BSC ESC	Subject Code 21UMA201C 21UPH202C 21UCS203C 21UEC204C 21UEE205C 21UHS206C 21UNS207C 21UPH208L 21UCS209L (Chemistry Gi Subject Code 21UMA201C 21UCV211C	Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C Basic Electronics Engineering Basic Electrical Engineering Communicative English Scientific Foundation of Health Engineering Physics Laboratory Programming practice using C Total COUP) CAY 2021-22 (160 Creen Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C	Cr. 3 3 3 3 3 2 1 1 20 edits 2 Cr. 3 3 3	Hou L 3 3 2 3 2 1 0 0 17 021-2 Hou L 3 3	tted	batcl /eek	50 50 50 50 450 ed bat Exam CIE 50 50 50	50 50 50 50 50 50 50 50 50 450 cch) ination SEE 50	Marks Total 100 100 100 100 100 100 100 100 100 10
SI. 1 2 3 4 5 6 7 8 9 Sei SI. 1 2 3 4	Cat. BSC BSC ESC ESC HSSM AEC BSC ESC Cat. BSC ESC ESC ESC	Subject Code 21UMA201C 21UPH202C 21UCS203C 21UEC204C 21UEE205C 21UHS206C 21UNS207C 21UPH208L 21UCS209L (Chemistry Gi Subject Code 21UMA201C 21UCH210C 21UCV211C 21UME212C	Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C Basic Electronics Engineering Basic Electrical Engineering Communicative English Scientific Foundation of Health Engineering Physics Laboratory Programming practice using C Total Total Total CAY 2021-22 (160 Cre Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C Basic Electronics Engineering	Cr. 3 3 3 3 3 2 1 1 20 cdits 2 Cr. 3 3 3	17 0 17 0 17 0 17 0 17 0 17 0 17 0 17 0	tted	batcl /eek P 0 0 0 0 0 0 2 2 4 Imitt /eek P 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Exam CIE 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	50 50 50 50 50 50 50 50 50 50 50 50 50 5	Marks Total 100 100 100 100 100 100 100 100 100 10
SI. 1 2 3 4 5 6 7 8 9 Ser SI. 1 2 3 4 5	Cat. BSC BSC ESC ESC HSSM AEC BSC ESC Cat. BSC ESC ESC ESC ESC	Subject Code 21UMA201C 21UPH202C 21UCS203C 21UEC204C 21UEE205C 21UHS206C 21UNS207C 21UPH208L 21UCS209L (Chemistry Gi Subject Code 21UMA201C 21UCY211C 21UME213L	Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C Basic Electronics Engineering Basic Electrical Engineering Communicative English Scientific Foundation of Health Engineering Physics Laboratory Programming practice using C Total COUP) CAY 2021-22 (160 Cre Subject Title Engineering Physics Principles of Programming with C Basic Electronics Engineering Basic Electrical Engineering	Cr. 3 3 3 3 3 2 1 1 20 cdits 2 Cr. 3 3 3 3 3	Hou L 3 3 2 3 2 1 0 0 17 021-2 Hou L 3 3 3	tted	batcl /eek	Exam CIE 50 50 50 50 50 50 50 50 50 50 50 50 50	50 50 50 50 50 50 50 50 50 50 450 50 50 50 50 50	Marks Total 100 100 100 100 100 100 100 100 100 10
SI. 1 2 3 4 5 6 7 8 9 Ser SI. 1 2 3 4 5 6	Cat. BSC BSC ESC ESC HSSM AEC BSC ESC Cat. BSC ESC ESC HSSM	Subject Code 21UMA201C 21UPH202C 21UCS203C 21UEC204C 21UEE205C 21UHS206C 21UNS207C 21UPH208L 21UCS209L (Chemistry Gi Subject Code 21UMA201C 21UCH210C 21UCV211C 21UME212C 21UME213L 21UHS206C	Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C Basic Electronics Engineering Basic Electrical Engineering Communicative English Scientific Foundation of Health Engineering Physics Laboratory Programming practice using C Total Total Total CAY 2021-22 (160 Cre Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C Basic Electronics Engineering Basic Electrical Engineering Communicative English	Cr. 3 3 3 3 3 2 1 1 20 edits 2 Cr. 3 3 3 2	Hou L 3 3 2 3 2 1 0 0 17 021-2 Hou L 3 3 2	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	batcl /eek P 0 0 0 0 0 0 2 2 4 Imitt /eek P 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Exam CIE 50 50 50 50 50 50 50 450 6d bat Exam CIE 50 50 50 50 50 50 50 50 50 50	50 50 50 50 50 50 50 50 50 50 50 50 50 5	Marks Total 100 100 100 100 100 100 100 100 100 10
SI. 1 2 3 4 5 6 7 8 9 Ser SI. 1 2 3 4 5 6 7	Cat. BSC BSC ESC ESC HSSM AEC BSC Cat. BSC ESC Cat. BSC BSC ESC HSSM AEC AEC AEC AEC AEC AEC AEC AE	Subject Code 21UMA201C 21UPH202C 21UCS203C 21UEC204C 21UEE205C 21UHS206C 21UNS207C 21UPH208L 21UCS209L (Chemistry Gi Subject Code 21UMA201C 21UCH210C 21UCY211C 21UME213L 21UHS206C 21UHS206C 21UHS215C	Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C Basic Electronics Engineering Communicative English Scientific Foundation of Health Engineering Physics Laboratory Programming practice using C Total Toup) CAY 2021-22 (160 Cre Subject Title Engineering Physics Principles of Programming with C Basic Electronics Engineering Basic Electronics Engineering Communicative English Scientific Foundation of Health	Cr. 3 3 3 3 3 2 1 1 20 cdits 2 Cr. 3 3 3 1 1 1 20 cdits 2 1 1 1 20 1 20 1 20 1 20 1 20 20 20 20 20 20 20 20 20 20 20 20 20	Hou L 3 3 2 3 2 1 0 0 17 021-2 Hou L 3 3 2 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	batcl reek	Exam CIE 50 50 50 50 50 50 50 50 50 50 50 50 50	50 50 50 50 50 50 50 50 50 50 50 50 50 5	Marks Total 100 100 100 100 100 100 100 100 100 10
SI. 1 2 3 4 5 6 7 8 9 Ser SI. 1 2 3 4 5 6	Cat. BSC BSC ESC ESC HSSM AEC BSC ESC Cat. BSC ESC ESC HSSM	Subject Code 21UMA201C 21UPH202C 21UCS203C 21UEC204C 21UEE205C 21UHS206C 21UNS207C 21UPH208L 21UCS209L (Chemistry Gi Subject Code 21UMA201C 21UCH210C 21UCV211C 21UME212C 21UME213L 21UHS206C	Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C Basic Electronics Engineering Basic Electrical Engineering Communicative English Scientific Foundation of Health Engineering Physics Laboratory Programming practice using C Total Total Total CAY 2021-22 (160 Cre Subject Title Engineering Mathematics - I Engineering Physics Principles of Programming with C Basic Electronics Engineering Basic Electrical Engineering Communicative English	Cr. 3 3 3 3 3 2 1 1 20 edits 2 Cr. 3 3 3 2	Hou L 3 3 2 3 2 1 0 0 17 021-2 Hou L 3 3 2	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	batcl /eek P 0 0 0 0 0 0 2 2 4 Imitt /eek P 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Exam CIE 50 50 50 50 50 50 50 450 6d bat Exam CIE 50 50 50 50 50 50 50 50 50 50	50 50 50 50 50 50 50 50 50 50 50 50 50 5	Marks Total 100 100 100 100 100 100 100 100 100 10

Second Year B.E in E&EE:

Semester-3

CAY 2022-23 (160 Credits 2021-22 admitted batch)

SI.	Category	Subject	Subject Code Subject Title C	Cr		ours Veel	-	Exam Marks			
		Code			L	Т	Р	CIE	SEE	Total	
1.	BSC		Mathematics –III*	3	2	2	0	50	50	100	
2.	PCC		Network Analysis	3	2	0	2	50	50	100	
3.	PCC		Electronic Circuits	3	3	0	0	50	50	100	
4.	PCC		Electrical Machines – I	3	3	0	0	50	50	100	
5.	PCC		Measurement Laboratory	1	0	0	2	50	50	100	
6.	PCC		Electronic Circuits Lab	1	0	0	2	50	50	100	
7.	PCC		Electrical Machines – I Lab	1	0	0	2	50	50	100	
8.	INT		Summer Internship – I	2				50	50	100	
9.	AEC		Soft Skill – I	1	1	0	0	50	50	100	
10.	UHV		UHV – 2	2	2	0	0	50	50	100	
11.	HSSM		SK/BK or CI	2	2	0	0	50	50	100	
Tota	al			22				550	550	1100	

Semester-3

CAY 2022-23 (160 Credits 2021-22 admitted batch)

Semester-5 CAT 2022-25 (100 Credits 2021-22 admitted batch											
SI.	Category	Subject Code	Subject Title	Cr.		lours Weel	-	Exam Marks			
		Code			L	Т	Р	CIE	SEE	Total	
1.	BSC		Mathematics – IV*	3	2	2	0	50	50	100	
2.	PCC		Power Systems – I [T D & SG]	3	3	0	0	50	50	100	
3.	PCC		Power Electronics	3	3	0	0	50	50	100	
4.	PCC		Electrical Machines – II	3	3	0	0	50	50	100	
5.	PCC		Control Systems	3	2	0	2	50	50	100	
6.	PCC		Power System – I Laboratory	1	0	0	2	50	50	100	
7.	PCC		Power Electronics Laboratory	1	0	0	2	50	50	100	
8.	PCC		Electrical Machines – II Lab	1	0	0	2	50	50	100	
9.	AEC		Agri-Tech	1	1	0	0	50	50	100	
10.	AEC		Soft Skill - II	1	1	0	0	50	50	100	
11.	HSSM		SK/BK or CI	2	2	0	0	50	50	100	
			Total	22				550	550	1100	

Third Year B.E in E&EE:

Semester-5

CAY 2023-24 (160 Credits 2021-22 admitted batch)

SI.	Category	Subject Code	Subject Title	Cr.		ours Neel	•	Ех	am Ma	Marks	
		Code			L	T	P	CIE	SEE	Total	
1.	BSC		Mathematics – V*	3	2	2	0	50	50	100	
2.	PCC		Power System - II	3	3	0	0	50	50	100	
3.	PCC		Logic Design	3	3	0	0	50	50	100	
4.	PCC		Digital Signal Processing	3	3	0	0	50	50	100	
5.	OEC		Open Elective Course – I	3	3	0	0	50	50	100	
6.	PCC		Logic Design Laboratory	1	0	0	2	50	50	100	
7.	PCC		Digital Signal Processing Lab	1	0	0	2	50	50	100	
8.	PCC		Auto CAD Electrical Laboratory	1	0	0	2	50	50	100	
9.	INT		Summer Internship - II	2				50	50	100	
10.	HSSM		Environmental Studies	1	1	0	0	50	50	100	
11.	AEC		Soft Skills - III	1	1	0	0	50	50	100	
			Total	22				550	550	1100	

	List of Open Elective Subjects - I									
SI.	SI. Subject Code Subject Title									
1.		MATLAB for Engineers								
2.		Renewable Energy Resources								
3.	3. Electric Vehicle									

Semester-5

CAY 2023-24 (160 Credits 2021-22 admitted batch)

SI.	Category	Subject Code	Subject Code Subject Title C	Cr.		lours/ Neek		Exam Marks			
		Code			L	Т	P	CIE	SEE	Total	
1.	HSSM		HRM	3	3	0	0	50	50	100	
2.	PCC		Power System – III	3	3	0	0	50	50	100	
3.	PCC		Embedded Systems	3	3	0	0	50	50	100	
4.	PEC		Professional Elective Course – I	3	3	0	0	50	50	100	
5.	OEC		Open Elective Course – II	3	3	0	0	50	50	100	
6.	PCC		Power System – II Lab	1	0	0	2	50	50	100	
7.	PCC		Embedded Systems Laboratory	1	0	0	2	50	50	100	
8.	PCC		Advanced Programming Lab	1	0	0	2	50	50	100	
9.	AEC		Research Methodology & IPR	2	2	0	0	50	50	100	
10	Proj		Mini Project	2	0	0	4	50	50	100	
			Total	22				500	500	1000	

L	ist of Profession	al Elective Subjects - I (Sem-VI)	List of Open Elective Subjects - II (Sem-VI)					
SI.	Subject Code	Subject Title	Subject Code	Subject Title				
1.		Electrical Machine Design		Energy Conservation in Industrial System				
2.		Electrical Engineering Materials		Electrical Safety for Engineers				
3.		Testing and Commissioning of Electrical Equipment		Energy Storage Systems				
4.		Micro Electro Mechanical Systems						
5.		Advanced Power Electronics						
6.		Reactive Power management						
7.		SPV based Irrigation Systems						

Fourth Year B.E in E&EE:

Semester-7

CAY 2024-25 (160 Credits 2021-22 admitted batch)

SI. Category		Subject	Subject Code Subject Title Cr	Cr.	Hours/ Week			Exam Marks			
					L	Т	Р	CIE	SEE	Total	
1.	PEC		Professional Elective Course-II	3	3	0	0	50	50	100	
2.	PEC		Professional Elective Course-III	3	3	0	0	50	50	100	
3.	OEC		Professional Elective Course-IV	3	3	0	0	50	50	100	
5.	Proj		Project Work	8	0	0	16	50	50	100	
6.	AEC		Professional Communication	1	1	0	0	50	50	100	
		_	Total	18				300	300	600	

Semester-8

CAY 2024-25 (160 Credits 2021-22 admitted batch)

SI.	Category	Subject Code	Subject Title	Cr.		lours Weel	-	Exam Marks		
		Code			L	Т	P	CIE	SEE	Total
1.	AEC		MOOCs*	3	3	0	0			
2.	Seminar		Technical Seminar	1	0	0	2	50	50	100
3.	INT		Research/Industrial Internship	10				100		100
			Total	14				150	50	200

OR

Semester-7

CAY 2024-25 (160 Credits 2021-22 admitted batch)

SI.	Category	Subject Subject Title		Cr.		lours Neel	-	E	xam Ma	rks
		Code			L	Т	P	CIE	SEE	Total
1.	AEC		MOOCs*	3	3	0	0			
2.	Seminar		Technical Seminar	1	0	0	2	50	50	100
3.	INT		Research/Industrial Internship	10				100		100
			Total	14				150	50	200

Semester-8

CAY 2024-25 (160 Credits 2021-22 admitted batch)

SI.	Category	Subject Code	Subject Title	Cr.	Hours/ Week			Exam Marks		
					L	T	P	CIE	SEE	Total
1.	PEC		Professional Elective Course-II		3	0	0	50	50	100
2.	PEC		Professional Elective Course-III	3	3	0	0	50	50	100
3.	OEC		Professional Elective Course-IV	3	3	0	0	50	50	100
5.	Proj	Project Work		8	0	0	16	50	50	100
6.	AEC		Professional Communication	1	1	0	0	50	50	100
	Total							300	300	600

	List of Professional Elective Subjects - II (Sem-VII)				
SI.	Subject Code	Subject Title			
1.		Standards and Indian Electricity Act			
2.		Automotive Electronics			
3.		Advances in Instrumentation			
4.		Power System Operation and Control			
5.		Energy Conservation, Audit and DSM			
6.		Flexible AC Transmission Systems			
7.		HVDC Transmission			

	List of Professional Elective Subjects - III (Sem-VII)				
SI.	Subject Code	Subject Title			
1.		Electrical Safety in Industrial Plants			
2.		Al Applications to Power Systems			
3.		Internet of Things			
4.		Electric Vehicles			
5.		Solar Photovoltaic System Design			
6.		Operation Research			
7.		Energy conservation in Industrial Systems			

	List of Professional Elective Subjects - IV (Sem-VII)				
SI.	Subject Code	Subject Title			
1.		Modern Control Theory			
2.		Battery Management Systems			
3.		Data Base management Systems			
4.		Energy Efficient Motors			
5.		Electrical Power Utilization and Drives			
6.		Fundamentals of Wind Energy Conversion Systems			
7.		Smartgrids and Microgrids			

Awards at the different levels of study

SI.	Minimum Credits to be earned	End of Year	Award
1	36	First	Certificate
2	78	Second	Diploma
3	120	Third	Bachelor of Science (Engineering)
4	160	Fourth	Bachelor of Engineering (B.E)
5	178 [160 + 18 (online)]	Fourth	Bachelor of Engineering (B.E honors)
6	178 [160 + 18* (blended)]	Fourth	Bachelor of Engineering (B.E) with major and minor streams

- A student has to earn a minimum of 36 credits for award of Certificate at the end of first year.
- A student has to earn a minimum of 78 credits for award of Diploma at the end of second year.
- A student has to earn a minimum of 120 credits for award of Bachelor of Science (Engineering) at the end of third year.
- A student has to earn a minimum of 160 credits for award of Bachelor of Engineering (B.E) at the end of fourth year.
- A student has to earn a minimum of 178 [160 + 18 (online)] credits for award of Bachelor of Engineering (B.E honors) at the end of fourth year.
- A student has to earn a minimum of 178 [160 + 18* (blended)] credits for award of Bachelor of Engineering (B.E) with major and minor streams at the end of fourth year.