Sharnbasva University, Kalaburagi

Scheme for B.Tech., First Year Program from the Academic Year: 2022-23

All the B.Tech., branches offered by the University are grouped in to Four Streams (CES, MES, EES and CSS)

B.Tech., I Semester, Chemistry Group - (for streams MES & EES including Mech., Energy, EEE & ECE branches)

	55			8						AEC-OE: Ability Enhancement Course - Open Elective	nhancement	E: Ability E	AEC-O
					Course	nd Management Course	ces and M	Social Scien	HSMC: Humanities, Social Sciences as	PLC-OE : Programming Language Course - Open Elective	nming Langua	E: Progran	PLC-O
						Open Elective	_	opment Cou	SDC-OE: Skill Development Course -	ETC-OE: Emerging Technology Course -Open Elective	ng Technology	E: Emergin	ETC-0
						n 	ering Design	ded Enginee	CAED: Computer Aided Engineering	ESC-OE : Engineering Science Course - Open Elective	ring Science (E : Enginee	ESC-O
						ring Stream (E)		ctronics Eng	EES: Electrical & Electronics Engineer	urse	ESC - Engineering Science Course	Engineerin _E	ESC - E
						7787	tream (M)	ngineering S	MES: Mechanical Engineering Stream	ASC (IC) - Applied Science Course - (IC - Integrated Course)	d Science Cou	C) - Applied	ASC (I
20	1000	500	500						Total				
						ties)	ctice/activ	or 2 hours of practice/activities	or 2				
Ь	100	50	50	1 or 2	/tutorial	t (1 hour of theory/tutorial	roject (1 h	tertake one p	with a guide, may udertake one project	Project - I	22PROJ10	SDC - OE	10
					anches)	different bro	e branch or	udents (samu	A batch of 4 to 5 students (same branch or different branches)				
1	100	50	50	2	0	2	0	0	ECE or EEE	Electronics and Electrical Lab	22EECL19	ESC-L	9
1	100	50	50	2	0	2	0	0	Chemistry	Chemistry Lab	22CHEL18	ASC-L	∞
1	100	50	50	1 or 2		ll of them.	binations of a	any other combinations of all of them	Respective Dept	Indian Constitution	22HSM17	HSMC	7
1	100	50	50	1 or 2	rctivities or	1 hour theory or 2 hours tutorial /practice/activities or	or 2 hours tute	1 hour theory (Any Dept.	Ability Enhancement Course-I	22AEC16X	AEC-OE	6
·	TOO	J	کر	21012	c	Jacay	-	7 0	Any Dept.	Programming Language Course - I	22PLC15X	PLC-OE	Ĺ
υ	3	7	л 5	כבב זה ב	>	ntegrated		3 or 2 (for	Any Engg. Dept./	Emerging Technology Course-I or		ETC-OE/	л
2	100	50	50	3 or 3+2	0	0		2	Respective Dept.	Engineering Science Course-I	22ESC14X	ESC-OE	4
3	100	50	50	3 or 3+2	0	2	,	2	Mech Engg	CAED	22CED13	ESC	З
3	100	50	50	3	0	0		3	Cicilistiy	Chemistry for EES	22CHEE12	730	١
3	100	50	50	3	0	0	1	3	Chamistry	Chemistry for MES	22CHEM12	۸۶۲	
4	100	50	50	3+2	0	2		3	Machellacics	Mathematics for EES - I	22MATE11	איזר (ור)	ŀ
4	100	50	50	3+2	0	2	}	3	Mathematics	22MATM11 Mathematics for MES - I	22MATM11	עכני נוני)	
	Marks	Marks	Marks	Daration	es ·	Drawing	iuconai	Lecture	0		COUR		i i
Credits	Total	SEE	CIE	7	Activiti	Practical/	T toulo	Theory/	Paner Setting Board	Course Title	asinon	Course	2
		ation	Examination			Teaching hours/week	eaching h	1	,		Cause		2

The following courses are elective under different categories, students can choose the courses based on their choice/interest.

EŞÇ-	OE : Engineer	ESC-OE : Engineering Science Course - Open Elective
1	22ESC141	22ESC141 Introduction to Civil Engineering
2	22ESC142	22ESC142 Introduction to Electrical Engineering
IJ	22ESC143	22ESC143 Introduction to Electronics Engineering
4	22ESC144 I	22ESC144 Introduction to Mechanical Engineering
Ç1	22ESC145 1	22ESC145 Introduction to Energy Engineering
6	22ESC146	22ESC146 Introduction to Computer Science & Engineering
7	22ESC147	22ESC147 Introduction to Al & ML
8	22ESC148 [22ESC148 Introduction to Al & DS

from ESC-OF Group mentioned above excluding the course of his/her branch.

For Example: Civl Engineering Students shall opt for any one of the courses from ESC-OE group except 22ESC141 - Introduction to Civil Engineer	The student has to select one course from ESC-OE Group International above exchange in Escaped and Select one course from the course of the co
eering.	

耳	ETC-OE: Emerging Technology Course -Open Elective	ctive	Teaching Faculty	Dept
7	1 22ETC151 Cyber Security		Dr. Syeda Asra	CSE
Т	2 22ETC152 Introduction to Block Chain & Digital Currency		Dr. Laxmi Math	CSE
	3 22ETC153 Waste Management			Civil
	4 22ETC154 Sustainable Technology		Prof. Sharnkumar Itagi	Civil
	5 22ETC155 Introduction to IOT		Dr. Savita Patil	ECE
	6 22ETC156 Introduction to Drone Technology	8		ECE
7	7 22ETC157 Electric Vehicles		Prof. Jagadish Patil	EEE
	8 22ETC158 Renewable Energy Sources		Prof. Shivakumar Rachoti	Mech
í				

Ċ	PLC-OE : Programming Language Course - Open Elective		
卢	22PLC151 Web Programming	Prof. Anand N. Patil	CSE
2	22PLC152 Programming with JAVA	Prof. Gajendra	SE
ω	22PLC153 Python programming	Prof. Veerendra Basreddy	SS

		١		
 N	AEC-OE: Ability Enhancement Course - Open Elective		(0.000	
 ᆸ	22AEC161 Communication Skills	- 10		English
 2	22AEC162 Networking			CSE
 ω	22AEC163 Welding Technology			MECH
 4	22AEC164 Electrical Wiring			EEE
5	22AEC165 Public Adress System O & M			ECE
9	22AEC166 AutoCAD			CIV
7	22AEC167 NCC organisation and National Integration			NCC
8	22AEC168 Personality Development, Social Service.			NSS
9	22AEC169 Environmental Studies		unne	CIV

Sharnbasva University, Kalaburagi

Scheme for B.Tech., First Year Program from the Academic Year: 2022-23

All the B. Tech., branches offered by the University are grouped in to Four Streams (CES, MES, EES and CSS)

										AEC-OE: Ability Enhancement Course - Open Elective	:nhancement	DE: Ability E	AEC-C
					Course	ind Management Course	ces and M	Social Scient	HSMC: Humanities, Social Sciences a	PLC-OE: Programming Language Course - Open Elective	nming Langua)E : Progran	PLC-C
				i.	3	Open Elective		pment Cour	SDC-OE: Skill Development Course -	ETC-OE: Emerging Technology Course -Open Elective	ng Technology)E: Emergin	ETC-C
						3	ring Design	led Enginee	CAED: Computer Aided Engineering	Course - Open Elective	ESC-OE: Engineering Science Course -	E : Enginee	ESC-C
						em (S)	eering Stre	nce & Engine	CSE: Computer Science & Engineering Stream (S)	IFSE	ESC - Engineering Science Course	Engineering	ESC -
				8		,	ن	g Stream (C	CES: Civil Engineering Stream (C)	ASC (IC) - Applied Science Course - (IC - Integrated Course)	d Science Cour	IC) - Applied	ASC (I
20	1000	500	500	83 83					Total				
F	Ī	Ų	J.	7 10 T	/tutoniai	ties)	ctice/activities)	or 2 hours of practice,	or 2 hours of practice/activities)			000	į
٠	3	л 5	5	1000	inches)	different bra	branch or	idents (same	A batch of 4 to 5 students (same branch or different branches)	Project - 1	22PRO110	SDC - OF	10
1	100	50	50	2	0	2	0	0	CSE/AI&ML/ AI&DS	Programming for Problem Solving Lab	22PPSL19	ESC-L	9
1	100	50	50	2	0	2	0	0	Physics	Physics Lab	22PHYL18	ASC-L	∞
1	100	50	50	1 or 2	<u> </u>	itles or any other f all of them.	ns of all o	/practice/activities or any o combinations of all of them	Kannada	Samskrutika Kannada/Balake Kannada	22HSM17	HSMC	7
1	001	50	50	1 or 2		1 hour theory or 2 hours tutorial	ary or 2 ho	1 hour thec	Any Dept.	Ability Enhancement Course-I	22AEC16X	AEC-OE	o,
ŭ	TOU	50	50	3 OF 3+2	U	ilitegrated)		3 01 2 (101	Any Dept.	Programming Language Course - I	22PLC15X	PLC-OE	u
J	3	3	3	3	>	ntod)		3 27 2	Any Engg. Dept./	Emerging Technology Course-I or	22ETC15X	ETC-OE /	л
2	100	50	50	3 or 3+2	0	0	2000 0000	2	Respective Dept.	Engineering Science Course-I	22ESC14X	ESC-OE	4
ω	100	50	50	3 or 3+2	0	integrated)		3 or 2 (for	CSE/AI&ML/ AI&DS	Principles of Programing with C (for CSE/AI&ML/AI&DS only)	22PPC13	C	,
ω	100	50	50	3 or 3+2	0	integrated)		3 or 2 (for	Civil Engg	Engineering Mechanics (for students of Civ Engg. only)	22CIV13	ECO.	υ
ω	100	50	50	ω	0	0		3	FIIYSICS	Physics for CSS	22PHYS12	Ž	1
3	100	50	50	3	0	0		3	Dhyrice	Physics for CES	22PHYC12	ASS.	J
4	100	50	50	3+2	0	2		3	Mantellancs	Mathematics for CSS - I	22MATS11	200	-
4	100	50	50	3+2	0	2		3	Mathematics	Mathematics for CES - I	22MATC11	ASC (1C)	٠.
	Marks	Marks	Marks	Duration	es	Drawing	TUCOTIAL	Lecture	. aloca occurred popular		Code		1
Credits	Total	SEE	CIE		Activiti			Theory/	Teaching Department/	Course Title	Course	Course	<u> </u>
		tion	Examination			Teaching hours/week	eaching h	1					2
	nches	S bra	AI&D	AI&ML and AI&DS branches)	E, AI&	ling Civil, CSE,	luding	CES & CSS includ	streams CES &	B.Tech., I Semester, Physics Group - (for streams	., I Semes	B.Tech	

The following courses are elective under different categories, students can choose the courses based on their choice/interest. FSC-OF · Engineering Science Course - Open Elective

and the second states			
22ESC143 Introduction to Electronics Engineering 22ESC144 Introduction to Mechanical Engineering 22ESC144 Introduction to Electronics Engineering 22ESC144 Introduction to Mechanical Engineering 22ESC144 Introduction Engineering 22ES	22ESC143 22ESC144 22ESC145	22ESC143 22ESC144 22ESC145 22ESC146	22ESC143 22ESC144 22ESC145 22ESC146 22ESC147
22ESC143 Introduction to Electronics Engineering 22ESC144 Introduction to Mechanical Engineering	Introduction to Electronics Engineering Introduction to Mechanical Engineering Introduction to Energy Engineering	Introduction to Electronics Engineering Introduction to Mechanical Engineering Introduction to Energy Engineering Introduction to Computer Science & Engineering	Introduction to Electronics Engineering Introduction to Mechanical Engineering Introduction to Energy Engineering Introduction to Computer Science & Engineering Introduction to AI & MIL
22ESC144 Introduction to Mechanical Engineering	ESC144 Introduction to Mechanical Engineering ESC145 Introduction to Energy Engineering	ESC144 Introduction to Mechanical Engineering ESC145 Introduction to Energy Engineering ESC146 Introduction to Computer Science & Engineering	ESC144 Introduction to Mechanical Engineering ESC145 Introduction to Energy Engineering ESC146 Introduction to Computer Science & Engineering ESC147 Introduction to AI & ML
	22ESC145 Introduction to Energy Engineering	22ESC145 Introduction to Energy Engineering 22ESC146 Introduction to Computer Science & Engineering	22ESC145 Introduction to Energy Engineering 22ESC146 Introduction to Computer Science & Engineering 22ESC147 Introduction to AI & ML

The student has to select one course from ESC-OE Group mentioned above excluding the course of his/her branch.

For Example: Civi Engineering Students shall opt for any one of the courses from ESC-OE group except 22ESC141 - Introduction to Civil Engineering.

핀	-OE: Emergin	ETC-OE: Emerging Technology Course -Open Elective	Teaching Faculty	Dept
1	22ETC151	22ETC151 Cyber Security	Dr. Syeda Asra	CSE
2	22ETC152	22ETC152 Introduction to Block Chain & Digital Currency	Dr. Laxmi Math	CSE
ß	22ETC153	22ETC153 Waste Management	Prof. Sharanamma Patil	Civil
4	22ETC154	22ETC154 Sustainable Technology	Prof. Sharnkumar Itagi	Civil
(J)	22ETC155	22ETC155 Introduction to IOT	Dr. Savita Patil	ECE
6	22ETC156	22ETC156 Introduction to Drone Technology	Dr. Sharanagauda N	ECE
7	22ETC157	22ETC157 Electric Vehicles	Prof. Jagadish Patil	EEE
·	22ETC158	8 22ETC158 Renewable Energy Sources	Prof. Shivakumar Rachoti	Mech

PL	PLC-OE: Programming Language Course - Open Elective		
	1 22PLC151 Web Programming	Prof. Anand N. Patil	CSE
	2 22PLC152 Programming with JAVA	Prof. Gajendra	CSE
	3 22PLC153 Python programming	Prof. Veerendra Basreddy	CSE
AE	AEC-OE: Ability Enhancement Course - Open Elective		
	1 22AEC161 Communication Skills		English
	2 22AEC162 Networking		CSE
	3 22AEC163 Welding Technology		MECH
	4 22AEC164 Electrical Wiring		EEE
	5 22AEC165 Public Adress System O & M		ECE
	6 22AEC166 AutoCAD		CIV
	7 22AEC167 NCC organisation and National Integration		NCC
	8 22AEC168 Personality Development, Social Service.		NSS
	9 22AEC169 Environmental Studies	٠	CIV

	PLC-OE	ETC-OE	ESC-OE	ESC - Ei	ASC (IC			10 s	9 E	8 4	7	6 4	5	_	4 E	3 E	۸ 	~	+		No.		<u>:</u>]					
:: Ability I	: Prograi	: Emergir	: Engine	ngineerin) - Applie			SDC - OE	ESC-L	ASC-L	HSMC	AEC-OE	PLC-OE	ETC-OE /	ESC-OE	ESC	ASC	3	45C (IC)	50 (10)		Course		B.Tech				
Enhancemen	nming Langu	ng Technolog	ering Science	ESC - Engineering Science Course	ASC (IC) - Applied Science Course - (IC -			22PROJ20	22EECL29	22CHEL28	22HSM27	22AEC26X	22PLC25X	22ETC25X/	22ESC24X	22CED23	22CHES22	22CHEC22	22MATS21	22MATC21	Code	Course		າ., II Sem	A	Sc		
AEC-OE: Ability Enhancement Course - Open Elective	PLC-OE : Programming Language Course - Open Elective	ETC-OE: Emerging Technology Course -Open Elective	ESC-OE : Engineering Science Course - Open Elective	urse	urse - (IC - Integrated Course)			Project - II	Electronics and Electrical Lab	Chemistry Lab	Indian Constitution	Ability Enhancement Course-II	Programming Language Course-Ii	Emerging Technology Course-II/	Engineering Science Course-II	CAED	Chemistry for CSS	Chemistry for CES	Mathematics for CSS - II	Mathematics for CES - II		Course Title		B.Tech., II Semester, Chemistry Group - (for streams CES & CSS incl	All the B.Tech., branches offered by the University are grouped in to Fo	Scheme for B.Tech., First Year Program from the	Sharnb	
	HSMC: Humanities, Social Sciences and	SDC-OE: Skill Development Course - Op	CAED: Computer Aided Engineering Design	CSS: Computer Science & Engineering	CES: Civil Engineering Stream (C)	Total	or 2	A batch of 4 to 5 students (same branch or different branches) with a guide, may udertake one project (1 hour of theory/tutorial	ECE or EEE	Chemistry	Respective Dept	Any Dept.	Any Dept.	Any Engg. Dept./	Respective Dept.	Mech Engg	Cilentistry	Chamicta	INIGHICHIGANGS	Mathematics	rapei setting board	Teaching Department/		(for streams Cl	the University are	Year Progra	Sharnbasva University, Kalaburagi	
	Social Scien	pment Cou	led Engine	nce & Engir	g Stream (or 2 hours of practice/activities)	idents (sam ertake one	0	0	any other combinations	1 hour theory or 2 hours	3 or 2	,	2	2	3	3	3	3	Lecture	Theory/	_	S & CS	grouped	m fron	rsity,	
Đ)		ırse - Open	ering Desig		C		ctice/activ	e branch or project (1 h	0	0	binations of a	or 2 hours tute	3 or 2 (for integrated)			2	}	3	3	3	lutorial	Tutodol	Teaching hours/week	S incluc	in to Four	188	Kalal	
	Management Course	en Elective	ă	Stream (S)			ities)	or different branches) thour of theory/tutori	2	2	of all of them.	tutorial /practice/activitles or	(rated)		0	2	0	0	2	2	Drawing	Practical/	ours/week	ling CIV	Streams (cadem	ourag	
	t Course			8 6				anches) //tutorial	0	0		activities or	0	<u> </u>	0	0	0	0	0	0	es	Activiti		, CSE, /	CES, ME	iic Yea		
					,			1 or 2	2	2	1 or 2	1 or 2	3 or 3+2	,	3 or 3+2	3 or 3+2	သ	3	3+2	3+2	Duration	Dimation		uding CIV, CSE, AI&ML, AI&DS branches)	ur Streams (CES, MES, EES and CSS)	Academic Year: 2022-23		
						500		50	50	50	50	50	50	<u></u>	50	50	50	50	50	50	Marks	CIE	Examination	AI&DS	css)	2-23		
						500		50	50	50	50	50	50	,	50	50	50	50	50	50	Marks	SEE	tion	bran				
					i	1000		100	100	100	100	100	100	3	100	100	100	100	100	100	Marks	Total		ches)				
						20		, 14	1	בן	בן	<u>حا</u>	ω	,	2	ω	ω	ω	4	4		Credits					ľ	

The following courses are elective under different categories, students can choose the courses based on their choice/interest.

22ESC248 Introduction to AI & DS		∞
22ESC247 Introduction to AI & ML	22ESC	7
22ESC246 Introduction to Computer Science & Engineering	22ESC	6
22ESC245 Introduction to Energy Engineering	22ESC	5
22ESC244 Introduction to Mechanical Engineering	22ESC	4
22ESC243 Introduction to Electronics Engineering	22ESC	ω
22ESC242 Introduction to Electrical Engineering	22ESC	2
22ESC241 Introduction to Civil Engineering	22ESC	1
ESC-OE : Engineering Science Course - Open Elective	-0E : Eng	ESC

The student has to select one course from ESC-OE Group mentioned above excluding the course of his/her branch.

For Example: Civi Engineering Students shall opt for any one of the courses from ESC-OE group except 22ESC141 - Introduction to Civil Engineering.

E	ETC-OE: Emerging Technology Course -Open Elective	Teaching Faculty	Dept
	22ETC251 Cyber Security	Dr. Syeda Asra	SE
	22ETC252 Introduction to Block Chain & Digital Currency	Dr. Laxmi Math	SE
113	22ETC253 Waste Management		Civil
7	22ETC254 Sustainable Technology	Prof. Sharnkumar Itagi	Civil
(=	22ETC255 Introduction to IOT	Dr. Savita Patil	ECE
	22ETC256 Introduction to Drone Technology	Dr. Sharanagauda N	ECE
	22ETC257 Electric Vehicles	Prof. Jagadish Patil	EEE
_	22ETC258 Renewable Energy Sources	Prof. Shivakumar Rachoti	Mech

AEC 3 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	22PLC251 22PLC252 22PLC253 22PLC253 22PLC253 22AEC261 22AEC263	PLC-OE : Programming Language Course - Open Elective 1 22PLC251 Web Programming 2 22PLC252 Programming with JAVA 3 22PLC253 Python programming AEC-OE: Ability Enhancement Course - Open Elective 1 22AEC261 Communication Skills 2 22AEC262 Networking 3 22AEC263 Welding Technology	Prof. Anand N. Patil Prof. Gajendra Prof.Veerendra Basreddy	CSE CSE CSE
s	22AEC263	22AEC263 Welding Technology		MECH
4		22AEC264 Electrical Wiring		EEE
5	22AEC265	22AEC265 Public Adress System O & M		ECE
1 6	22AEC266 AutoCAD	AutoCAD		CIV
	22AEC268	22AEC267 NCC organisation and National Integration 22AEC268 Personality Development, Social Service.		NSS NCC
9		22AEC269 Environmental Studies		CIV

Scheme for B.Tech., First Year Program from the Academic Year: 2022-23 All the B.Tech., branches offered by the University are grouped in to Four Streams (CES, MES, EES and CSS) Sharnbasva University, Kalaburagi

Π	B.Tech	., II Semo	B.Tech., II Semester, Physics Group - (for streams MES &	streams MES	& EES inclu	cluding	ding Mech,	Energ	Energy, EEE and	nd EC	E brar	ECE branches)	
<u>.</u>		Course		Tooching Danasanasi	1	eaching ho	Teaching hours/week			Examination	tion		
<u>z</u>	Course	Code	Course Title	Paper Setting Board	Theory/	Tutorial	Practical/	Activiti	200	CIE	SEE	Total	Credits
					Lecture		Drawing	es	Paradion	Marks	Marks	Marks	
	ASC (IC)	22MATM21	Mathematics for MES - II	Mathamatica	3		2	0	3+2	50	25	100	4
,		22MATE21	Mathematics for EES -II	Islamicillatics	3		2	0	3+2	50	50	100	4
)	ASC	22PHYM22	Physics for MES	Dhucian	3		0	0	ယ	50	50	100	w
,		22PHYE22	Physics for EES	Filysics	ယ		0	0	ω	50	50	100	ω
		22EME23	Elements of Mechanical Engg (for Mech & Energy Engg. only)	Civil Engg	3 or 2	3 or 2 (for integrated)	rated)	0	3 or 3+2	50	50	100	ω
ω	ESC	22BEE23	Basic Electrical Engineering (for EEE only)	EEE	3 or 2	or 2 (for integrated)	rated)	0	3 or 3+2	50	50	100	ω
		22BEL23	Basic Electronics (for ECE only)	ECE	3 or 2	or 2 (for integ	itegrated)	0	3 or 3+2	25	50	10	ω
4	ESC-OE	22ESC24X	Engineering Science Course-II	Respective Dept.	2		0	0	3 or 3+2	50	50	100	2
ъ	ETC-OE / PLC-OE	22ETC25X 22PLC25X	Emerging Technology Course-II/ Programming Language Course-II	Any Engg. Dept./ Any Dept.	3 or 2	3 or 2 (for integrated)	rated)	0	3 or 3+2	50	50	100	ω
6	AEC-OE	22AEC26X	Ability Enhancement Course-II	Any Dept.	1 hour theory or		2 hours tutorial		1 or 2	50	50	100	Н
7	HSMC	22HSM27	Samskrutika Kannada/Balake Kannada	Kannada	/practice/activities or any other combinations of all of them.	ctivitles or ns of all of	es or any other all of them.	,	1 or 2	50	50	100	1
œ	ASC-L	22PHYL28	Physics Lab	Physics	0	0	2	0	2	50	50	100	ב
9	ESC-L	22PPSL29	Programming for Problem Solving Lab	CSE/AI&ML/ AI&DS	0	0	2	0	2	50	50	100	ь
10	SDC - OE	22PROJ20	Project - II	A batch of 4 to 5 students (same branch or different branches) with a guide, may udertake one project (1 hour of theory/tutoricor 2 hours of practice/activities)	5 students (same branch or diffi ny udertake one project (1 hour o or 2 hours of practice/activities)	branch or o oject (1 ho tice/activit	h or different branches) (1 hour of theory/tutorial ctivities)	nches) ⁄tutorial	1 or 2	50	50	100	14
				Total	20000			0		500	500	1000	20
ASC (I	C) - Applied	Science Cou	ASC (IC) - Applied Science Course - (IC - Integrated Course)	MES: Mechanical Engineering Stream	gineering St	ream (M)							
ESC - I	Engineering	ESC - Engineering Science Course		EES: Electrical & Electronics Engineeria	tronics Engi		ng Stream (E)						
ESC-O	E : Engineer	ring Science (ESC-OE : Engineering Science Course - Open Elective	PROJ: Project						86.		8	
ETC-0	E: Emerging	g Technology		SDC-OE: Skill Development Course - O	oment Cour	se - Open I	pen Elective						
	E : Program	iming Langua	PLC-OE: Programming Language Course - Open Elective	HSMC: Humanities, Social Sciences an	ocial Scienc	es and Ma	d Management Course	Course			8		
AEC-C	E: Ability E	nhancement	AEC-UE: Ability Enhancement Course - Open Elective										

The following courses are elective under different categories, students can choose the courses based on their choice/interest.

[ESC-OF: Engineering Science Course - Open Flective]

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|   | ESC-O | ESC-OE: Engineering Science Course - Open Elective      |
|---|-------|---------------------------------------------------------|
| - | 1     | 22ESC241 Introduction to Civil Engineering              |
| _ | 2     | 22ESC242 Introduction to Electrical Engineering         |
| _ | ယ     | 22ESC243 Introduction to Electronics Engineering        |
| _ | 4     | 22ESC244 Introduction to Mechanical Engineering         |
| _ | 5     | 22ESC245 Introduction to Energy Engineering             |
| _ | 6     | 22ESC246 Introduction to Computer Science & Engineering |
|   | 7     | 22ESC247 Introduction to AI & ML                        |
|   | œ     | 22ESC248 Introduction to AI & DS                        |

The student has to select one course from ESC-OE Group mentioned above excluding the course of his/her branch.

For Example: Civi Engineering Students shall opt for any one of the courses from ESC-OE group except 22ESC241 - Introduction to Civil Engineering.

|                                   |                            | Г                                         | Т                            |                                 | Т                         |                                                         | Γ.                      |                                                   |
|-----------------------------------|----------------------------|-------------------------------------------|------------------------------|---------------------------------|---------------------------|---------------------------------------------------------|-------------------------|---------------------------------------------------|
| ∞                                 | 7                          | 6                                         | 5                            | 4                               | ω                         | 2                                                       | 1                       |                                                   |
| 22ETC258                          | 22ETC257                   | 22ETC256                                  | 22ETC255                     | 22ETC254                        | 22ETC253                  | 22ETC252                                                | 22ETC251                | ETC-OE: E                                         |
| 22ETC258 Renewable Energy Sources | 22ETC257 Electric Vehicles | 22ETC256 Introduction to Drone Technology | 22ETC255 Introduction to IOT | 22ETC254 Sustainable Technology | 22ETC253 Waste Management | 22ETC252 Introduction to Block Chain & Digital Currency | 22ETC251 Cyber Security | ETC-OE: Emerging Technology Course -Open Elective |
|                                   |                            |                                           | 0                            |                                 |                           |                                                         |                         |                                                   |
| Prof. Shivakumar Rachoti          | Prof. Jagadish Patil       | Dr. Sharanagauda N                        | Dr. Savita Patil             | Prof. Sharnkumar Itagi          | Prof. Sharanamma Patil    | Dr. Laxmi Math                                          | Dr. Syeda Asra          | Teaching Faculty                                  |
| Mech                              | EEE                        | ECE                                       | ECE                          | Civil                           | Civil                     | 333                                                     | SS                      | Dept                                              |

| Prof. Anand N. Patil Prof. Gajendra Prof. Veerendra Basred |
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| NSS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 22AEC268 Personality Development, Social Service.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | œ     |
| NCC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 22AEC267 NCC organisation and National Integration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 7     |
| CIV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 22AEC266 AutoCAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 6     |
| ECE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 22AEC265 Public Adress System O & M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 5     |
| 333                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 22AEC264 Electrical Wiring                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 4     |
| MECH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 22AEC263 Welding Technology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ω     |
| CSE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 22AEC262 Networking                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 2     |
| English                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 22AEC261 Communication Skills                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | נ     |
| £                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | AEC-OE: Ability Enhancement Course - Open Elective                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | AEC-O |