

DEPARTMENT OF ECE: Curriculum Draft

1st Year Semester I

sr. no	Broad Category	Category code	Paper Code	Course	Contact Hours/ W				Credit Po	Evaluation scheme					
					L	P	T	Total		ISE 1	ISE 2	ESE	IC A	ESE	Total
Part A: UG Certificate course															
1	Basic Sciences	BSC			3	0	1		4	25	25	50			100
	Basic Sciences	BSC			3	0	0		3	25	25	50			100
2	Engineering Science	ESC		C Programming	3	0	0		3	25	25	50			100
	Engineering Science	ESC		Basic Electronics	3	0	0		3	25	25	50			100
4	Ability Enhancement Course	AEC		Communication skill	2	0	0		2	25	25	50			100
	Engineering Science	ESC			0	2	0		1				25	25	50
	Basic Sciences	BSC			0	2	0		1				25	25	50
	Engineering Science	ESC		C Programming Lab	0	2	0		1				25	25	50
3	Vocational and Skill Enhancement Course (VSEC)	VSEC		practical of any ESC can be take	0	4	0		2					25	25
5	Co-curricular Courses (CC)	CC		Yoga		4	0		2				25	0	25

			Total Hours :		14	14	1		22							700
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1st Year Semester II															
sr. no	Broad Category	Category	Paper Code	Course	Contact Hours/ W				Credit Po	Evaluation scheme					
					L	P	T	Total		ISE 1	ISE 2	ES E	ICA	EESE	Total
Part B: UG Certificate course															
1	Basic Sciences	BSC			3	0	0		3	25	25	50			100
2	Basic Sciences	BSC			3	0	0		3	25	25	50			100
3	Engineering Science	ESC			3	0	0		3	25	25	50			100
4	Engineering Science	ESC		Data Communication	3	0	0		3	25	25	50			100
5	Programme Core Course	PCC		Python Programming	3	0	0		3	25	25	50			100
6	Indian Knowledge System	IKS		BASICS OF ART	1	0	0		1				25	0	25
7	Basic Sciences	BSC			0	2	0		1				25	25	50
8	Engineering Science	ESC			0	2	0		1				25	25	50

9	Vocational and Skill Enhancement Course	VSEC		practical of any PCC can be taken	0	4	0		2				25	25	50
10	Programme Core Course	PCC		Python Programming Lab	0	2	0		1				25	25	50
11	Co-curricular Courses	CC		NSS / NCC / Club Activities	0	0	2		2				25	0	25
12	Non credit mandatory course	AU		SOFT SKILL	2	0	0		0				0	0	0
			Total Hours:		18	10	2		23						750

2nd Year Semester III

sr. no	Broad Category	Category	Paper Code	Course	Contact Hours/ W				Credit Po	Evaluation scheme				
					L	P	T	Total		ISE 1	ISE 2	ES E	ICAESE	Total
Part A: Diploma certificate course														
1	Open Elective Other than a particular program	OE		From OE Bucket	3	0	0		3	25	25	50		100
2	Programme Core Course	PCC		Engineering Mathematics-III	2	0	0		2	25	25	50		100

3	Programme Core Course	PCC		Principles of Data Structure	3	0	0		3	25	25	50			100
4	Programme Core Course	PCC		Electronics Devices & Circuits	3	0			3	25	25	50			100
5	Multidisciplinary Minor	MDM		From MDM Bucket	2	0	0		2	25	25	50			100
6	Entrepreneurship/Economics/Management Courses	EMC		Engineering Management - I	2	0	0		2	25	25	50			100
7	Value Education Course	VEC		Environmental Science (SWAYAM/NPTEL)	2	0	0		2				50	0	50
8	Programme Core Course	PCC		Principles of Data Structure Lab	0	2	0		1				25	25	50
9	Comm. Engg. Project /Field Project	CEP / FP		Electronics Devices & Circuits Lab	0	2	0		1				25	0	25
10	Comm. Engg. Project /Field Project	CEP / FP		Seminar -I	0	2	0		1			0	25	0	25
11	Non credit mandatory	AU		Constitution of India	2				0						
12	Non credit mandatory	AU		UHV I	2				0						
				Total Hours:	21	6	0		20						750

UHV - I Non credit mandatory course to be taken

2nd Year Semester IV

sr. no	Broad Category	Category	Paper Code	Course	Contact Hours/ W				Credit Po	Evaluation scheme					
					L	P	T	Tot		ISE 1	ISE 2	ES E	ICAESE	Total	
Part B: Diploma certificate course															
1	Open Elective Other than a particular program	OE		From OE Bucket	2	0	0		2	25	25	50			100
2	Programme Core Course	PCC		Digital Electronics and Microprocessor	3	0	0		3	25	25	50			100
3	Programme Core Course	PCC		Operating System	3	0	0		2	25	25	50			100
4	Programme Core Course	PCC		Computer Architecture & Organisation	3	0	0		3	25	25	50			100
5	Multidisciplinary Minor	MDM		From MDM Bucket	3	0	0		3	25	25	50			100
6	Entrepreneurship/Economics/Management Courses	EMC		Engineering Management - II	2	0	0		2	25	25	50			100
7	Value Education Course	VEC		UHV - II	2	0	0		2				50	0	50
8	Programme Core Course	PCC		Digital Electronics and Microprocessor lab	0	4	0		2				25	25	50

10	Ability Enhancement Course	AEC		Technical report writing/ PREOFESIONAL SKILL	0	4	0		2				25	25	50
11	Vocational and Skill Enhancement Course	VSEC		Internship	0	2	0		1				25	25	50
12	Non credit mandatory	AU		LIFE OF DR BABASAHEB AMBEDKAR / CH. SHIVAJI MAHARAJ	2										
			Total Hours:		20	10	0		22						800

3rd Year Semester V															
sr. no	Broad Category	Category	er Cod	Course	Contact Hours/ W				dit Po	Evaluation scheme					
					L	P	T	Tot		ISE 1	ISE 2	ES F	ICA	ESE	Total
Part A: Bachelors degree certificate course															
1	Open Elective Other than a particular program	OE		From OE Bucket	3	0	0		3	25	25	50			100
2	Programme Core Course	PCC		Computer Network	3	0	0		3	25	25	50			100
3	Programme Core Course	PCC		Database Management Systems	3	0	0		3	25	25	50			100

Sl. no	Broad Category	Category	Course Code	Course	L	P	T	Total	Credit Points	ISE 1	ISE 2	ES E	ICA	EESE	Total
Part B: Bachelors degree certificate course															
1	Programme Core Course	PCC		Soft Computing	3	0	0		3	25	25	50			100
2	Programme Core Course	PCC		IOT	3	0	0		3	25	25	50			100
3	Programme Core Course	PCC		Image Processing	3	0	0		3	25	25	50			100
4	Programme Elective Course	PEC		From PEC Bucket	4	0	0		4	25	25	50			100
5	Programme Elective Course	PEC		From PEC Bucket	3	0	0		3	25	25	50			100
6	Multidisciplinary Minor	MDM		From MDM Bucket	3	0	0		3	25	25	50			100
8	Vocational and Skill Enhancement Course	VSEC		Advanced Python Programming	0	4	0		2				25	25	50
9	Vocational and Skill Enhancement Course	VSEC		Mini Project	0	2	0		1				25	25	50
10	Programme Elective Course	PEC		From PEC Bucket	0	2	0		1				25	25	50

11	Non credit mandatory	AU			2										
			Total Hours:		21	8	0		23						750

4th Year Semester VII															
sr. no	Broad Category	Category	er Cod	Course	Contact Hours/ W				dit Po	Evaluation scheme					
					L	P	T	Tot		1	2	3	4	5	ICAESE
Part B: Bachelors Honours certificate course															
1	Programme Core Course	PCC		Cloud Computing	3	0	0		3	25	25	50			100
2	Programme Core Course	PCC		Embedded Systems	2	0	0		2	25	25	50			100
3	Programme Elective Course	PEC		From PEC	4	0	0		4	25	25	50			100
4	Programme Elective Course	PEC		From PEC	3	0	0		3	25	25	50			100
5	Multidisciplinary Minor	MDM		From MDM Bucket	3	0	0		3	25	25	50			100
6	Programme Elective Course	PEC		From PEC Bucket	0	2	0		1				25	25	50
8	Project	PRJ - I			0	4	0		2				##	50	150

			Total Hours:		15	6	0		18						700
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4th Year Semester VIII

sr. no	Broad Category	Category	Paper Code	Course	Contact Hours/ W				Credit Po	Evaluation scheme					
					L	P	T	Total		ISE 1	ISE 2	ES E	ICAESE	Total	
Part A: Bachelors Honours certificate course															
1	Internship/ Job training	OJT	Online reviews must take place each month.		0	24	0		12				##	50	150
2	Project	PRJ - II			0	4	0		2				##	150	250

4	Research methodology	RM	MO OC S/ NP TEL / SW AY AM	A survey / review paper must be published	4	0	0		4				25	25	50
			Total Hours:		4	28	0		18						450

Total credits for all the 04 years for completing one major / one minor degree course	for assessment in four years as per a
168	5650

Open Elective

Sr. No	Choice	Subject Name	SEM
1	A	Digital Electronics	III
	B	Linear Circuit	
	C	Digital System	
2	A	Human Computer Interaction	IV
	B	Numerical Methods	
	C	Graphics and Multimedia	
3	A	Geographic Information System	V
	B	Internet of Things	
	C	Embedded Systems	

Sr. No	Choice
1	A
	B
	C
2	A
	B
	C
3	A
	B
	C

ECE OE

Subject Name	SEM
	III
Theory of Computation	
	IV
Compiler Design	
Software Testing	V
Human Computer Interaction	
Numerical Methods	

 Internet of Things

 Embedded Systems

ECE Programme Elective Course

Sr. N	Choice	Subject Name	SEM
1	A	Power Electronics	V
	B	Unix Operating System	
	C	Automotive Electronics	
	A	Power Electronics LAB	V
	B	Unix Operating System Lab	
	C	Automotive Electronics LAB	
3	A	Microcontroller and Applications	VI
	B	Microwave and Optical Fiber Communication	
	C	Distributed System	
4	A	DevOps	VI
	B	Automotive Electronics	
	C	Electronic Instrumentation	
5	A	Microcontroller and Applications LAB	VI
	B	Microwave and Optical Fiber Communication LAB	
	C	Distributed System Lab	
6	A	Cryptography & Network Security	VII
	B	VLSI Design	
	C	Digital Image and Video Processing	
7	A	Computer Vision	VII
	B	Data Analysis	
	C	NLP	
8	A	Computer Vision Lab	VII
	B	Data Analysis LAB	
	C	NLP Lab	

MDM List

From CSE

Sr. No	Subject Name	SEM
1	Web Development	III
2	Software Engineering	IV
3	Software Testing	V
4	Test Driven Development	VI
5	Full Stack Development	VII

From ECE

Sr. No	Subject Name	SEM
1	Computer Network	III
2	Network Security	IV
3	Computer Graphics	V
4	Introduction to IoT	VI
5	Natural Language Processing	VII

From AIML

Sr. No	Subject Name	SEM
1	Mathematic Foundation for AIML	III
2	Artificial Intelligence	IV
3	Machine Learning	V
4	Deep Learning	VI
5	Large Language Models (LLMs)	VII