

DHANALAKSHMI SRINIVASAN ENGINEERING COLLEGE
(An Autonomous Institution, Affiliated to Anna University, Chennai)

PERAMBALUR - 621212

REGULATIONS – 2023

CHOICE BASED CREDIT SYSTEM

CURRICULA AND SYLLABI



M.E. COMMUNICATION SYSTEMS

(Applicable to the students admitted from the Academic year 2023 – 2024)

Discussed in BOS-3 meeting Dated: 20.04.2023 / ECE

Ratified & Approved in Academic Council

DHANALAKSHMI SRINIVASAN ENGINEERING COLLEGE**(AUTONOMOUS)****PERAMBALUR – 621 212****M.E – COMMUNICATION SYSTEMS****REGULATIONS – 2023****CHOICE BASED CREDIT SYSTEM****I – IV SEMESTER CURRICULA AND SYLLABI****SEMESTER I**

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY								
1	P23MAT14	Linear Algebra, Probability and Queuing Theory	FC	4	3	1	0	4
2	P23CUT11	Advanced Wireless Communication	PCC	3	3	0	0	3
3	P23CUT12	Advanced Statistical Signal Processing	PCC	3	3	0	0	3
4	P23CUT13	Advanced Digital Communication Systems	PCC	3	3	0	0	3
5	P23CUT14	Research Methodology and IPR	RMC	3	3	0	0	3
6	P23CUT15	Antenna and Radiating Systems	PCC	3	3	0	0	3
7		Audit Course – I*	AC	2	2	0	0	0
PRACTICALS								
8	P23CUP11	Advanced Communication Systems Laboratory	PCC	4	0	0	4	2
9	P23CUP12	Advanced Digital Signal Processing Laboratory	PCC	4	0	0	4	2
TOTAL				29	20	1	8	23

SEMESTER II

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY								
1	P23CUT21	RF System Design	PCC	3	3	0	0	3
2	P23CUT22	Microwave Integrated Circuits	PCC	3	3	0	0	3
3	P23CUT23	Advanced Wireless Networks	PCC	3	3	0	0	3
4	P23CUT24	Machine Learning	PCC	3	3	0	0	3
5		Professional Elective I	PEC	3	3	0	0	3
6		Professional Elective II	PEC	3	3	0	0	3
7		Audit Course – II*	AC	2	2	0	0	0
PRACTICALS								
8	P23CUP21	Communication System Design Laboratory	PCC	4	0	0	4	2
9	P23CUP22	Term Paper Writing and seminar	EEC	2	0	0	2	1
TOTAL				26	20	0	6	21

SEMESTER III

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY								
1	P23CUT31	Optical Communication and Networking	PCC	3	3	0	0	3
2		Professional Elective III	PEC	3	3	0	0	3
3		Professional Elective IV	PEC	3	3	0	0	3
4		Open Elective	OEC	3	3	0	0	3
PRACTICALS								
5	P23CUP31	Project Work I	EEC	12	0	0	12	6
TOTAL				24	12	0	12	18

SEMESTER IV

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
PRACTICAL								
1	P23CUP41	Project Work II	EEC	24	0	0	24	12
TOTAL				24	0	0	24	12

TOTAL NUMBER OF CREDITS TO BE EARNED FOR THE AWARD OF DEGREE: 74

PROFESSIONAL ELECTIVES
SEMESTER II, ELECTIVE I

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1	P23CUV11	Electromagnetic Interference and Compatibility	PEC	3	3	0	0	3
2	P23CUV12	Advanced Satellite Communication and Navigation Systems	PEC	3	3	0	0	3
3	P23CUV13	High Speed Switching and Networking	PEC	3	3	0	0	3
4	P23CUV14	Signal Integrity for High Speed Design	PEC	3	3	0	0	3
5	P23CUV15	Wavelets and Subband Coding	PEC	3	3	0	0	3

SEMESTER II, ELECTIVE II

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1	P23CUV21	Multimedia Compression Techniques	PEC	3	3	0	0	3
2	P23CUV22	Cognitive Radio Networks	PEC	3	3	0	0	3
3	P23CUV23	Speech Processing	PEC	3	3	0	0	3
4	P23CUV24	Millimeter Wave Communication	PEC	3	3	0	0	3
5	P23CUV25	Analog and Mixed Signal VLSI Design	PEC	3	3	0	0	3

SEMESTER III, ELECTIVE III

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1	P23CUV31	Ultra Wide Band Communications	PEC	3	3	0	0	3
2	P23CUV32	VLSI for Wireless Communication	PEC	3	3	0	0	3
3	P23CUV33	MEMS and NEMS	PEC	3	3	0	0	3
4	P23CUV34	Advanced Antenna Design	PEC	3	3	0	0	3
5	P23CUV35	Software Defined Radios	PEC	3	3	0	0	3

SEMESTER III, ELECTIVE IV

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1	P23CUV41	Image Processing and Video Analytics	PEC	3	3	0	0	3
2	P23CUV42	Radar Signal Processing	PEC	3	3	0	0	3
3	P23CUV43	Telecommunication System Modeling and Simulation	PEC	3	3	0	0	3
4	P23CUV44	Signal Detection and Estimation	PEC	3	3	0	0	3
5	P23CUV45	Real Time Embedded Systems	PEC	3	3	0	0	3

AUDIT COURSES (AC)

(Registration for any of these courses is optional to students)

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1	P23CUA01	English for Research Paper Writing	AC	2	2	0	0	0
2	P23CUA02	Disaster Management	AC	2	2	0	0	0
3	P23CUA03	Constitution of India	AC	2	2	0	0	0
4	P23CUA04	நற்றமிழ் இலக்கியம்	AC	2	2	0	0	0

OPEN ELECTIVES

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1	P23CUO01	Advanced Wireless Communication	OEC	3	3	0	0	3
2	P23CUO02	Software Defined Radios	OEC	3	3	0	0	3
3	P23CUO03	Cognitive Radio Networks	OEC	3	3	0	0	3
4	P23CUO04	High Speed Switching and Networking	OEC	3	3	0	0	3
5	P23CUO05	Electromagnetic Interference and Compatibility	OEC	3	3	0	0	3

SUMMARY

M.E. Communication Systems							
S. NO.	Subject Area	Credits per Semester				Credits Total	Percentage %
		I	II	III	IV		
1	Foundation Course (FC)	4	-	-	-	4	5.41%
2	Professional Cores Course (PCC)	16	14	3	-	33	44.59%
3	Professional Electives Course (PEC)	-	6	6	-	12	16.22%
4	Research Methodology And IPR Courses (RMC)	3	-	-	-	3	4.05%
5	Open Electives Course (OEC)	-	-	3	-	3	4.05%
6	Employability Enhancement Courses (EEC)	-	1	6	12	19	25.68%
7	Non Credit/Audit Course	√	√	-	-	-	-
Total		23	21	18	12	74	100%