DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

COURSE STRUCTURE & SYLLABUS M.Tech ECE Common for

I.   Digital Electronics & Communication Engineering (DECE)
II. Digital Electronics & Communication Systems (DECS)
III. Electronics & Communication Engineering (ECE)

Programme

(Applicable for batches admitted from 2019-2020)

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

I Semester

S. No.	Course Type/Code	Course Name	Teaching Scheme			Credits
			L	T	P	
1	Core 1	Digital System Design	3	0	0	3
2	Core 2	Digital Data Communications	3	0	0	3
3	Prog. Specific Elective	**Elective I** a. Transform Techniques b.VLSI Technology and Design c. Radar Signal Processing	3	0	0	3
4	Prog. Specific Elective	**Elective II** a. Statistical Signal Processing b. Optical Communication Technology c. Network Security & Cryptography	3	0	0	3
5	Lab 1	System Design Using Verilog HDL Laboratory	0	0	4	2
6	Lab2	Data Communications Laboratory	0	0	4	2
7		Research Methodology and IPR	2	0	0	2
8	Aud 1	Audit Course 1	2	0	0	0
		Total Credits	16	0	8	18

II Semester

S. No.	Course Type/Code	Name of the Subject	Teaching Scheme			Credits
			L	T	P	
1	Core 3	Image and Video Processing	3	0	0	3
2	Core 4	Wireless Communications and Networks	3	0	0	3
3	Prog. Specific Elective	**Elective III** a. CMOS Analog & Digital IC Design b. Advanced Computer Architecture c. Soft Computing Techniques	3	0	0	3
4	Prog. Specific Elective	**Elective IV** a. DSP Processors and Architectures b. EMI/ EMC c. Object Oriented Programming	3	0	0	3
5	Lab 1	Advanced Communications Laboratory	0	0	4	2
6	Lab2	Advanced digital Image & video processing Laboratory	0	0	4	2
7		Mini Project	0	0	4	2
8	Aud 2	Audit Course 2	2	0	0	0
		Total Credits	14	0	12	18

III Semester

S. No.	Course Type/Code	Subject	Teaching Scheme			Credits
1	Prog. Specific Elective	a) Detection & Estimation Theory b) Advanced Digital Signal Processing c) Coding Theory and Applications	3	0	0	3
2	Open Elective	a) Business Analytics b) Industrial Safety c) Operations Research d) Cost Management of Engineering Projects e) Composite Materials f) Waste to Energy	3	0	0	3
3	Dissertation	Dissertation Phase – I	0	0	20	10
		Total	**6**	**0**	**20**	**16**

IV Semester

S. No.	Course Code	Subject	Teaching Scheme			Credits
			L	T	P	
1	Dissertation	Dissertation Phase – II	--	--	32	16
		Total Credits	--	--	32	**16**

Audit course 1 & 2

1. English for Research Paper Writing

2. Disaster Management

3. Sanskrit for Technical Knowledge

4. Value Education

5. Constitution of India

6. Pedagogy Studies

7. Stress Management by Yoga

8. Personality Development through Life Enlightenment Skills.