5 Year Dual Degree B. Tech. (Electronics & Communication Engineering) + M.Tech. (Wireless Communication & Networks) /MBA

2015-2020

SEMESTER I

Sr. No.	Courses Code	Courses	L-T-P		Credits
1	CY101	Engineering Chemistry	3-1-0	FC-C1	4
2	MA101	Engineering Mathematics – I	3-1-0	FC-C2	4
3	ES 101	Environmental Studies	2-1-0	AECC1	3
4	CS101	Computer Programming – I	2-0-0	FC-C3	2
5	EC101	Basic Electronics	2-1-0	FC-C4	3
6	EN101	English Proficiency	2-0-0	AECC2	2
7	BS101	Human Values & Buddhist Ethics	2-0-0	AECC3	2
8	CY103	Engineering Chemistry Lab	0-0-2	FC-C5	1
9	CS 181	Computer Programming Lab1	0-0-2	FC-C6	1
10	CE103	Engineering Graphics	0-0-3	FC-C7	2
11	EC181	Basic Electronics Lab	0-0-2	FC-C8	1
12	GP	General Proficiency	------	Non Credit	0
			Total Credits		25
			Total Contact Hours	16-4-9	29

Ability Enhancement Compulsory Course (AECC):

1. EN101 English Proficiency
2. ES 101 Environmental Studies
3. BS101 Human Values & Buddhist Ethics

SEMESTER II

Sr. No.	Courses Code	Courses	L-T-P		Credits
1	PH102	Engineering Physics	3-1-0	FC- C9	4
2	MA102	Engineering Mathematics – II	3-1-0	FC-C10	4
3	ME 101	Engineering Mechanics	2-1-0	FC-C11	3
4	CS102	Computer Programming – II	2-0-0	FC-C12	2
5	EE102	Electrical Technology	2-1-0	FC-C13	3
6	HU102	Professional Communication	2-0-0	AECC4	2
7		Open Elective I	2-0-0	OE1	2
9	PH104	Engineering Physics Lab	0-0-2	FC-C14	1
10	CS182	Computer Programming Lab - II	0-0-2	FC-C15	1
11	EE104	Electrical Technology Lab	0-0-2	FC-C16	1
12	ME102	Engineering Workshop	0-0-3	FC-C17	2
13	GP	General Proficiency	------	Non Credit	
			Total Credits		25
			Total Contact Hours	16-4-9	29

2

5 Year Dual Degree B. Tech. (Electronics & Communication Engineering) + M.Tech. (Wireless Communication & Networks) /MBA

2015-2020

Ability Enhancement Compulsory Course (AECC):

1. HU 102 Professional Communication

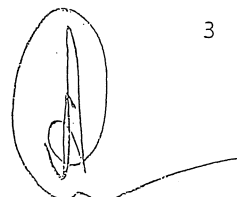Open Elective I (OE) Courses offered from other school

SEMESTER – III

Sr. No.	Course Code	Courses	L-T-P		Credits
1	MA201	Engineering Mathematics III	3-1-0	FC-C18	4
2	EC201	Digital Electronics	3-0-0	FC-C19	3
3	EC203	Network Analysis and Synthesis	3-0-0	C20	3
4	EC205	Signal and Systems	2-1-0	C21	3
5	CS205	Data Structures and Algorithms	2-1-0	SEC1	3
6	EC207	Electronic Devices and Circuits	3-0-0	C22	3
7	EC281	Digital Electronics Lab	0-0-3	FC-C23	2
8	EC283	Electronic Circuits Lab	0-0-3	C24	2
9	CS283	Data Structures and Algorithms Lab	0-0-3	C25	2
10	GP	General Proficiency		Non Credit	
		Total Credits			25
		Total Contact Hours	16-3-9		28

Skill Enhancement Course (SEC):

1. CS 205 Data Structures and Algorithms

SEMESTER – IV

Sr. No	Course Code	Courses	L-T-P		Credits
1	MA202	Numerical and Statistical Analysis	3-1-0	C26	4
2	EC202	Analog Communication	3-1-0	C27	4
3	EC204	Linear IC Applications	3-0-0	C28	3
4	EE202	Measurements and Instrumentation	2-0-0	FC-C29	2
5	EC206	Digital Signal Processing	3-0-0	C30	3
6	EC208	Electromagnetic Theory	3-0-0	C31	3
7	EE216	Measurements and Instrumentation Lab	0-0-2	FC-C32	1
8	EC282	Analog Communication Lab	0-0-3	C33	2
9	EC284	Digital Signal Processing Lab	0-0-3	C34	2
10	GP	General Proficiency		Non Credit	
		Total Credits			24
		Total Contact Hours	17-2-8		27

5 Year Dual Degree B. Tech. (Electronics & Communication Engineering) + M.Tech. (Wireless Communication & Networks) /MBA

2015-2020

SEMESTER – V

Sr. No.	Course Code	Courses	L-T-P		Credits
1	EC301	Digital Logic Design	3-0-0	C35	3
2	EC303	Digital Communication Systems	3-0-0	C36	3
3	EC305	Antenna and Wave Propagation	2-1-0	C37	3
4	EC307	Introduction to Control Theory	2-1-0	C38	3
5	CS309	Computer Organization and Architecture	3-0-0	C39	3
6		Open Elective II	2-0-0	OE2	2
7	EC381	Logic Design Lab	0-0-3	C40	2
8	EC383	Digital Communication Lab	0-0-3	C41	2
9	EC385	Antenna and Wave propagation Lab	0-0-3	C42	2
10	GP	General Proficiency		Non Credit	
		Total Credits			23
		Total Contact Hours	15-2-9		26

SEMESTER – VI

Sr. No.	Course Code	Courses	L-T-P		Credits
1	EC302	Microwave Engineering	3-0-0	C43	3
2	EC304	Microprocessors & Interfacing	2-1-0	C44	3
3	EC306	Microelectronics Engineering	3-0-0	C45	3
4	EC308	Information Theory & Coding	2-1-0	C46	3
5	CS310	Data Networks	3-0-0	C47	3
6	CS312	Management Information System	2-0-0	SEC2	2
7	EC382	Microwave Engineering Lab	0-0-3	C48	2
8	EC384	Microprocessor and Interfacing Lab	0-0-3	C49	2
9	CS382	Computer Networks Lab	0-0-3	C50	2
10	GP	General Proficiency		Non Credit	
		Total Credits			23
		Total Contact Hours	15-2-9		26

Skill Enhancement Course (SEC):
1. CS312 Management Information System

4

5 Year Dual Degree B. Tech. (Electronics & Communication Engineering) + M.Tech.
(Wireless Communication & Networks) /MBA

2015-2020

SEMESTER – VII

Sr. No.	Courses Code	Courses	L-T-P		Credits
1.		Generic Elective	3-1-0	GE 1	4
2	EC401	Optical Communication	3-0-0	C51	3
3	EC403	Semiconductor Device Modeling and Technology	2-1-0	C52	3
4		Elective 1	3-0-0	DSE1	3
5		Elective 2	3-0-0	DSE2	3
6	EC481	Optical Communication Lab	0-0-3	C53	2
7	EC491	Seminar	0-0-2	DP1	1
8	EC493	Minor Project	0-0-8	DP2	4
9	GP	General Proficiency	------	Non Credit	
		Total Credits			23
		Total Contact Hours	14-2-13		29

Elective: 1 & 2

Sr.No	Course Code	Courses
1	EC441	Design with Microcontrollers
2	EC443	Telecommunication Switching and Networks
3	EC445	Satellite Communication
4	EC447	Digital Image Processing
5	EC449	Communication Networks and Transmission Lines
6	EC465	Principles of VLSI Design
7	EC467	RADAR and TV Engineering
8	CS441	Software Project Management
9	CS443	Object Oriented Software Engineering
10	EC405	Wireless Mobile Communication

Generic Elective (GEI)

1. MA406 Operation Research Techniques
2. MA507 Optimization Techniques
3. MA417 Number Theory

5 Year Dual Degree B. Tech. (Electronics & Communication Engineering) + M.Tech. (Wireless Communication & Networks) /MBA

2015-2020

SEMESTER- VIII

Sr. No	Course Code	Courses	L-T-P		Credits
1		Generic Elective	3-1-0	GE2	4
2	EC540	Wireless Networks	3-0-0	C54	3
3	EC534	Wireless System Design	3-0-0	C55	3
4	EC546	Ad-hoc Wireless Networks	3-0-0	C56	3
5		Elective-3	3-0-0	DSE3	3
6	EC584	Design Lab-1	0-0-3	C57	2
7	EC592	Major Project	0-0-10	DP3	5
8	GP	General Proficiency	--	Non Credit	
		Total Credits			23
		Total Contact Hours	15-1-13		29
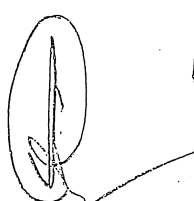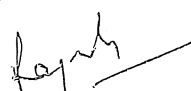
Elective: 3

Sr.No	Course Code	Courses
1	EC562	Optical Networks
2	EC544	Advanced RF Engineering
3	EC550	Advanced Microwave Communication
4	EC542	Advanced Computer Networks
5	EC532	Advanced Communication Networks

Generic Elective (GE2)

1. MA 402 Modeling and Simulation
2. MA416 Probability and Stochastic Process

Sr. No	Courses Code	Courses	L-T-P		Credits
		Summer Semester (After 8th Semester)			
1	EC490	Summer Project / Industrial Training		DP4	5
		Total Credits			5
		Total Contact Hours			4-6 weeks

SEMESTER – IX

2015-2020

Sr. No.	Course Code	Courses	L-T-P		Credits
1	EC631	Security in Wireless Networks	3-0-0	C58	3
2	EC635	Mobile Computing	3-0-0	C59	3
3		Elective-4	3-0-0	DSE 4	3
4		Elective-5	3-0-0	DSE 5	3
5	EC681	Design Lab-II	0-0-3	C60	2
6	EC691	Dissertation Part-I	0-0-14	DP5	7
7	GP	General Proficiency	---	Non Credit	
		Total			21
		Total Contact Hours	12-0-17	29	

Electives : 4 & 5

Sr.No	Course Code	Courses
1	EC639	Discrete Signal Transformations
2	EC641	Network Reliability
3	EC643	Smart Antenna Systems
4	EC645	Broadband Wireless Networks
5	EC647	Sensor Networks
6	EC651	Multicast Communication

SEMESTER-X

Sr. No	Course Code	Courses	L-T-P		Credits
1	EC690	Dissertation Part-II	---	DP6	23
2	GP	General Proficiency	---	Non Credit	
		Total	---		23

Grand Total Credits = 240

Open Elective I (OE) Courses offered from other school

1. SS102 History of Science & Technology
2. BSC 201 Introduction to Buddhist Meditation: Theories & Practises
3. BSCU305 Buddhist Art & Architect

Open Elective II (OE) Courses offered from other school

1. CS311 Ecommerce
2. CE311 Engineering Economics

7