

**M.E. COMMUNICATION SYSTEMS**

**REGULATION -2021**

**I TO IV SEMESTERS CURRICULAM AND SYLLABI**

**SEMESTER I**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	2101CO101	Applied Engineering Mathematics for Communication System	FC	3	2	0	5	4
2.	2102CO102	Antenna Design and Analysis	PCC	3	0	0	3	3
3.		Program Elective – I	PEC	3	0	0	3	3
4.		Program Elective – II	PEC	3	0	0	3	3
5.		Research Methodology and IPR	RMC	3	0	0	3	3
6.		Audit Course – I	AC	2	0	0	2	0
<b>PRACTICALS</b>								
7.	2102CO103	Communication System Laboratory	PCC	0	0	4	4	2
8.	2102CO104	RF System Design Laboratory	PCC	0	0	2	2	1
<b>TOTAL</b>				<b>17</b>	<b>02</b>	<b>06</b>	<b>25</b>	<b>19</b>

**SEMESTER II**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	2102CO201	Wireless Communication Engineering	PCC	3	0	0	3	3
2.	2102CO202	Optical Switching and Networking	PCC	3	0	0	3	3
3.	2102CO203	High Speed Communication Networks	PCC	3	0	0	3	3
4.		Program Elective – III	PEC	3	0	0	3	3
5.		Program Elective – IV	PEC	3	0	0	3	3
6.		Audit Course – II	AC	2	0	0	2	0

PRACTICALS								
7.	2102CO204	Wireless Communication Networks Laboratory	PCC	0	0	4	4	2
8.	2104CO205	Mini Project with Seminar	EEC	0	0	4	4	2
<b>TOTAL</b>				<b>17</b>	<b>00</b>	<b>08</b>	<b>25</b>	<b>19</b>

### SEMESTER III

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	2102CO301	Advanced Digital Communication	PCC	3	0	0	3	3
2.		Program Elective – V	PEC	3	0	0	3	3
3.		Open Elective	OEC	3	0	0	3	3
PRACTICALS								
4.	2104CO302	Project Work – Phase - I	EEC	0	0	20	20	10
<b>TOTAL</b>				<b>09</b>	<b>00</b>	<b>20</b>	<b>29</b>	<b>19</b>

### SEMESTER IV

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
PRACTICALS								
1.	2104CO401	Project Work–Phase II	EEC	0	0	32	32	16
<b>TOTAL</b>				<b>00</b>	<b>00</b>	<b>32</b>	<b>32</b>	<b>16</b>

**TOTAL CREDITS TO BE EARNED FOR THE AWARD OF THE DEGREE - 73**

  
**Dr. S. RAMABALAN, M.E., Ph.D.,**  
 PRINCIPAL  
 E.G.S. Pillay Engineering College,  
 Thethi, Nagore - 611 002.  
 Nagapattinam (Dt) Tamil Nadu.

**PROGRAM CORE COURSES (PCC)**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	2101CO101	Applied Engineering Mathematics for Communication System	FC	3	2	0	5	4
2.	2102CO102	Antenna Design and Analysis	PCC	3	0	0	3	3
3.	2102CO103	Communication System Laboratory	PCC	0	0	4	4	2
4.	2102CO104	RF System Design Laboratory	PCC	0	0	2	2	1
5.	2102CO201	Wireless Communication Engineering	PCC	3	0	0	3	3
6.	2102CO202	Optical Switching and Networking	PCC	3	0	0	3	3
7.	2102CO203	High Speed Communication Networks	PCC	3	0	0	3	3
8.	2102CO204	Wireless Communication Networks Laboratory	PCC	0	0	4	4	2
9.	2102CO301	Advanced Digital Communication	PCC	3	0	0	3	3

**PROGRAM ELECTIVE COURSES (PEC)**

**SEMESTER - I, ELECTIVE - I**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	2103CO001	Electromagnetic Interference and Compatibility in System Design	PEC	3	0	0	3	3
2.	2103CO002	Information Retrieval Techniques	PEC	3	0	0	3	3
3.	2103CO003	Multimedia Compression Techniques	PEC	3	0	0	3	3
4.	2103CO004	Advanced Microwave Communication	PEC	3	0	0	3	3
5.	2103CO005	FPGA Based Communication System Design	PEC	3	0	0	3	3

**ATTESTED**

*(Signature)*  
**Dr. S. RAMABALAN, M.E., Ph.D.,**  
**PRINCIPAL**

E.G.S. Pillay Engineering College,  
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**SEMESTER - I, ELECTIVE - II**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	2103CO006	Network Routing Algorithms	PEC	3	0	0	3	3
2.	2103CO007	Biometrics for Network Security	PEC	3	0	0	3	3
3.	2103CO008	Embedded Networking	PEC	3	0	0	3	3
4.	2103CO009	Advanced Digital Signal Processing	PEC	3	0	0	3	3
5.	2103CO010	Network Engineering and Management	PEC	3	0	0	3	3

**SEMESTER - II, ELECTIVE - III**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	2103CO011	Mobile Adhoc Networks	PEC	3	0	0	3	3
2.	2103CO012	RF System Design for Wireless Communication	PEC	3	0	0	3	3
3.	2103CO013	Artificial Intelligent Techniques	PEC	3	0	0	3	3
4.	2103CO014	Cognitive Radio	PEC	3	0	0	3	3
5.	2103CO015	Radiating Systems	PEC	3	0	0	3	3

**SEMESTER - II, ELECTIVE - IV**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	2103CO016	Speech and Audio Signal Processing	PEC	3	0	0	3	3
2.	2103CO017	Beam forming in Wireless Communication	PEC	3	0	0	3	3
3.	2103CO018	Microwaves and Radar	PEC	3	0	0	3	3
4.	2103CO019	Optical Signal Processing	PEC	3	0	0	3	3
5.	2103CO020	Remote Sensing by Lasers	PEC	3	0	0	3	3

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PRINCIPAL

E.G.S. Pillay Engineering College,  
Thenni, Nagore - 611 002.  
Tamil Nadu.

**SEMESTER - III, ELECTIVE – V**

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	2103CO021	Network on Chip Design	PEC	3	0	0	3	3
2.	2103CO022	Communication Network Security	PEC	3	0	0	3	3
3.	2103CO023	Machine Learning Algorithms	PEC	3	0	0	3	3
4.	2103CO024	Advanced Display System	PEC	3	0	0	3	3
5.	2103CO025	Medical Image Processing	PEC	3	0	0	3	3

**RESEARCH METHODOLOGY AND IPR COURSES (RMC)**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY			PERIODS PER WEEK	TOTAL CONTACT PERIODS
			L	T	P		
1.	2101RMX01	Research Methodology and IPR	3	0	0	3	3

**OPEN ELECTIVE COURSES [OEC]**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	2103CO026	Data Converters	OEC	3	0	0	3	3
2.	2103CO027	Smart Antennas	OEC	3	0	0	3	3
3.	2103CO009	Advanced Digital Image processing	OEC	3	0	0	3	3
4.	2103CO028	Embedded System Design using MSP430	OEC	3	0	0	3	3
5.	2103CO029	Microwave Remote Sensing	OEC	3	0	0	3	3
6.	2103CO030	High Speed Switching Architecture	OEC	3	0	0	3	3
7.	2103CO031	RFIC Design	OEC	3	0	0	3	3
8.	2103CO032	Space Time Communication	OEC	3	0	0	3	3
9.	2103CO033	Communication Protocol Engineering	OEC	3	0	0	3	3

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**Dr. S. RAMABALAN, M.E., Ph.D.,**  
**PRINCIPALS**

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**AUDIT COURSES (AC)**

SL. NO	COURSE CODE	COURSE TITLE	PERIODS PER WEEK			CREDITS
			L	T	P	
1.	2101AU001	English for Research Paper Writing	2	0	0	0
2.	2101AU002	Disaster Management	2	0	0	0
3.	2101AU003	Sanskrit for Technical Knowledge	2	0	0	0
4.	2101AU004	Value Education	2	0	0	0
5.	2101AU005	Constitution of India	2	0	0	0
6.	2101AU006	Pedagogy Studies	2	0	0	0
7.	2101AU007	Stress Management by Yoga	2	0	0	0
8.	2101AU008	Personality Development Through Life Enlightenment Skills	2	0	0	0

**EMPLOYABILITY ENHANCEMENT COURSES (EEC)**

SL. No.	Course Code	Course Title	Periods per week			Credits	Semester
			Lecture	Tutorial	Practical		
1.	2104CO205	Mini Project with Seminar	0	0	4	2	2
2.	2104CO302	Project Work – Phase - I	0	0	20	10	3
3.	2104CO401	Project Work – Phase - II	0	0	32	16	4

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## SUMMARY

<b>M.E COMMUNICATION SYSTEMS</b>						
	<b>Subject Area</b>	<b>Credits Per Semester</b>				<b>Credits Total</b>
		I	II	III	IV	
1.	FC	04	00	00	00	04
2.	PCC	07	11	03	00	21
3.	PEC	06	06	03	00	15
4.	RMC	03	00	00	00	03
5.	OEC	00	00	03	00	03
6.	EEC	00	02	10	16	30
7.	Non Credit / Audit Courses	✓	✓	00	00	00
	<b>Total Credit</b>	<b>19</b>	<b>19</b>	<b>19</b>	<b>16</b>	<b>73</b>

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