

**M.E. (Electronics and Telecommunications-
VLSI and Embedded Systems)**

**2017 Pattern
Syllabus Structure**

First Year – Semester I

Sr.No.	Subject Code	Subject	Examination Scheme						Credits
			L/P	Paper				Total	
				ISA	ESA	TW	OR		
1	504201	Digital CMOS Design	4	50	50	-	-	100	4
2	504202	Reconfigurable Computing	4	50	50	-	-	100	4
3	504203	Embedded System Design	4	50	50	-	-	100	4
4	504204	Research Methodology	4	50	50	-	-	100	4
5	504205	Elective I	5	50	50	-	-	100	5
6	504206	Lab. Practice I	4	-	-	50	50	100	4
		Total	25	250	250	50	50	600	25

Elective I:

1. Micro Electromechanical Systems
2. Nano Technology
3. Processor Design
4. Wireless Sensor Networks
5. MOS Device Modeling and Characterization

First Year – Semester II

Sr.No.	Subject Code	Subject	Examination Scheme					Credits	
			L/P	Paper		TW	OR		Total
				ISA	ESA				
1	504207	Analog CMOS Design	4	50	50	-	-	100	4
2	504208	System on Chip	4	50	50	-	-	100	4
3	504209	Embedded Automotive Systems	4	50	50	-	-	100	4
4	504210	Elective II	5	50	50	-	-	100	5
5	504211	Lab. Practice II	4	--	---	50	50	100	4
6	504212	Seminar I	4	-	-	50	50	100	4
Total			25	200	200	100	100	600	25

Elective II :

1. Embedded Product Design
2. High Speed ICs
3. Mixed Signal IC Design
4. Embedded Signal Processor Architectures
5. Real Time Operating Systems

SEMESTER III

CODE	SUBJECT	TEACHING SCHEME	EXAMINATION SCHEME				CREDITS		
			Lect./ Pr	Paper		TW		Oral/ Presentation	Total
				In Semester Assessment	End Semester Assessment				
604201	Fault Tolerant Systems	4	50	50	-	-	100	4	
604202	ASIC Design	4	50	50	-	-	100	4	
604103	Elective III	5	50	50	-	-	100	5	
604204	Seminar II	4	-	-	50	50	100	4	
604205	Project Stage I	08	-	-	50	50	100	8	
Total		25	150	150	100	100	500	25	

SEMESTER IV

CODE	SUBJECT	TEACHING SCHEME	EXAMINATION SCHEME				CREDITS
		Lect./ Pr	Paper	TW	Oral/ Presentation	Total	
604206	Seminar III	5	-	50	50	100	5
604207	Project Work Stage II	20	-	150	50	200	20
Total		25	-	200	100	300	25

Elective I	<ol style="list-style-type: none"> 1. Mathematics for VLSI and Embedded Systems 2. Neural Networks In Embedded Applications 3. Processor Design 4. Wireless Sensor Network 5. *LATEX
Elective II	<ol style="list-style-type: none"> 1. Embedded Product Design 2. VLSI Interconnections 3. Mixed Signal Circuit Design 4. Software Defined Radio 5. *Software Tools
Elective- III	<ol style="list-style-type: none"> 1. Value Education, Human Rights and Legislative Procedures 2. Environmental Studies 3. Energy Studies 4. Disaster Management 5. Knowledge Management 6. Foreign Language 7. Economics for Engineers 8. Engineering Risk – Benefit Analysis 9. Technology Play 10. Optimization Techniques 11. Fuzzy Mathematics 12. Design and Analysis of Algorithms 13. CUDA

Note: Syllabus for Elective III is common for all discipline.