

**13.Courses of Study and Scheme of Assessment
ME VLSI DESIGN**

**(2021 REGULATIONS)
(Minimum No. of credits to be earned: 70*)**

Course Code	Course Title	Hours/Week			Credits	Maximum Marks			CAT
		Lecture	Tutorial	Practical		CA	FE	Total	
III SEMESTER									
21LV__	Professional Elective – IV	3	0	0	3	50	50	100	PE
21LV__	Open Elective	3	0	0	3	50	50	100	OE
21LV71	Project Work I	0	0	12	6	50	50	100	EEC
Total 18 hrs		6	0	12	12	150	150	300	
IV SEMESTER									
21LV81	Project Work II	0	0	24	12	50	50	100	EEC
Total 24 hrs		0	0	24	12	50	50	100	
PROFESSIONAL ELECTIVE THEORY COURSES (Four to be opted)									
VLSI System Design									
21LV21	Advanced Computer Architecture and Parallel Processing	3	0	0	3	50	50	100	PE
21LV22	Computer Aided Design for VLSI Systems	3	0	0	3	50	50	100	PE
21LV23	Electronic Packaging Technologies	3	0	0	3	50	50	100	PE
21LV24	Hardware Security	3	0	0	3	50	50	100	PE
21LV25	Low Power VLSI Design	3	0	0	3	50	50	100	PE
21LV26	Semiconductor Memory Design	3	0	0	3	50	50	100	PE
21LV27	System on Chip Design	3	0	0	3	50	50	100	PE
21LV28	VLSI for IOT Systems	3	0	0	3	50	50	100	PE
21LV29	VLSI Signal Processing	3	0	0	3	50	50	100	PE
Analog / RF Circuit Design									
21LV38	Current-mode Analog Signal Processing	3	0	0	3	50	50	100	PE
21LV30	High Speed Digital Design	3	0	0	3	50	50	100	PE
21LV31	Mixed Signal VLSI Design	3	0	0	3	50	50	100	PE
21LV32	RF Circuit Design	3	0	0	3	50	50	100	PE
21LV33	VLSI for Wireless Communication	3	0	0	3	50	50	100	PE
Nanoelectronics / Quantum Computing									
21LV34	Modelling and Simulation of Nanoscale Transistors	3	0	0	3	50	50	100	PE
21LV35	Nanoscale Devices	3	0	0	3	50	50	100	PE
21LV39	Quantum Circuit Design	3	0	0	3	50	50	100	PE
21LV36	Quantum Dot Cellular Automata Nanotechnology	3	0	0	3	50	50	100	PE
21LV37	VLSI Technology	3	0	0	3	50	50	100	PE
Open Electives									
21LV91	Smart Cities	3	0	0	3	50	50	100	OE
21LV92	Radiation Hazards	3	0	0	3	50	50	100	OE

* Indicated is the minimum number of credits to be earned by a student.

CAT – Category; PC – Professional Core; PE - Professional Elective; RMC - Research Methodology and IPR; EEC – Employability Enhancement Course; MC - Mandatory Course; Grade – Completed / Not completed; OE – Open elective

