AFFILIATED INSTITUTIONS

ANNA UNIVERSITY, CHENNAI

REGULATIONS - 2013

M.E. VLSI DESIGN

I TO IV SEMESTERS CURRICULA AND SYLLABI (FULL TIME)

SEMESTER I

SL. NO	COURSE CODE	COURSE TITLE	L	T	P	C
THEORY						
1.	MA7157	Applied Mathematics for Electronics Engineers	3	1	0	4
2.	VL7101	VLSI Signal Processing	3	0	0	3
3.	VL7102	VLSI Design Techniques	3	0	0	3
4.	VL7103	Solid State Device Modelling and Simulation	3	0	0	3
5.		Elective I	3	0	0	3
6.		Elective II	3	0	0	3
PRACTICAL						
7.	VL7111	VLSI Design Laboratory I	0	0	3	2
		TOTAL	**18**	**1**	**3**	**21**

SEMESTER II

SL. NO	COURSE CODE	COURSE TITLE	L	T	P	C
THEORY						
1.	AP7201	Analysis and Design of Analog Integrated Circuits	3	0	0	3
2.	VL7201	CAD for VLSI Circuits	3	0	0	3
3.	VL7202	Low Power VLSI Design	3	0	0	3
4.		Elective III	3	0	0	3
5.		Elective IV	3	0	0	3
6.		Elective V	3	0	0	3
PRACTICAL						
7.	VL7211	VLSI Design Laboratory II	0	0	3	2
		TOTAL	**18**	**0**	**3**	**20**

SEMESTER III

SL. NO	COURSE CODE	COURSE TITLE	L	T	P	C
THEORY						
1.	VL7301	Testing of VLSI Circuits	3	0	0	3
2.		Elective VI	3	0	0	3
3.		Elective VII	3	0	0	3
PRACTICAL						
1.	VL7311	Project Work (Phase I)	0	0	12	6
		TOTAL	**9**	**0**	**12**	**15**

SEMESTER IV

SL. NO	COURSE CODE	COURSE TITLE	L	T	P	C
PRACTICAL						
1.	VL7411	Project Work (Phase II)	0	0	24	12
		TOTAL	**0**	**0**	**24**	**12**

TOTAL NO. OF CREDITS:68

LIST OF ELECTIVES

ELECTIVE I

SL. NO	COURSE CODE	COURSE TITLE	L	T	P	C
1.	AP7008	DSP Integrated Circuits	3	0	0	3
2.	AP7001	Computer Architecture and Parallel Processing	3	0	0	3
3.	AP7202	ASIC and FPGA Design	3	0	0	3
4.	VL7001	Analog and Mixed Mode VLSI Design	3	0	0	3

ELECTIVE II

5.	VL7002	Security Solutions in VLSI	3	0	0	3
6.	VL7003	Genetic Algorithms and its Applications	3	0	0	3
7.	VL7004	Asynchronous System Design	3	0	0	3

ELECTIVE III

8.	CU7002	MEMS and NEMS	3	0	0	3
9.	VL7005	Physical Design of VLSI Circuits	3	0	0	3
10.	VL7006	Analog VLSI Design	3	0	0	3
11.	VL7007	Process and Device Simulation	3	0	0	3

ELECTIVE IV

12.	VL7008	Design of Semiconductor Memories	3	0	0	3
13.	AP7071	Hardware Software Co-Design	3	0	0	3
14.	CU7001	Real Time Embedded Systems	3	0	0	3
15.	VL7009	Nano Scale Transistors	3	0	0	3

ELECTIVE V

16.	AP7016	System on Chip design	3	0	0	3
17.	CP7023	Reconfigurable Computing	3	0	0	3
18.	VL7010	Submicron VLSI Design	3	0	0	3

ELECTIVE VI

19.	AP7301	Electro Magnetic Interference and Compatibility	3	0	0	3
20.	VL7011	Signal Integrity for High Speed Devices	3	0	0	3
21.	VL7012	Mixed signal IC Test and Measurements	3	0	0	3

ELECTIVE VII

22.	AP7010	Data Converters	3	0	0	3
23.	VL7013	VLSI for Wireless Communication	3	0	0	3
24.	VL7014	IP Based VLSI Design	3	0	0	3
25.	VL7015	Nanoscale Devices and Circuit Design	3	0	0	3