SCHOOL OF INFORMATION AND COMMUNICATION TECHNOLOGY

(Department of Electronics and Communication Engineering)

COURSE STRUCTURE

2 – Years M. Tech. in ICT

(Specialization in VLSI Design)



GAUTAM BUDDHA UNIVERSITY, GREATER NOIDA 2015-2017

2- Year M.Tech. in ICT $\,$ (Specialization in VLSI Design) $\,$ (2015 -2017) SEMESTER I

Sr. No.	Subject	Courses		L-T-P	
	Code				
1	EC535	Digital IC Design	3-1-0	C1	4
2	CS523	Advanced Computer Architecture	3-1-0	C2	4
3	EC531	Advanced Digital Communication System	3-1-0	C3	4
4	CS527	Research Techniques in ICT	3-1-0	SEC1	4
5		Open Elective-1	3-0-0	OE1	3
6	EC585	Design IC Design Lab	0-0-3	C4	2
7	EC581	Advanced Digital Communication Lab	0-0-3	C5	2
8	GP	General Proficiency		Non	
				Credit	
		Total Credits			23
		Total Contact Hours	15-4-6	25	

1. Open Electives-I Electives from other school

SEMESTER II

Sr. No	Subject Code	Courses	L-T-P		Credits
1		Generic Elective	3-1-0	GE1	4
2	EC536	IC- Technology	3-0-0	C6	3
3	EC538	Analog IC Design	3-0-0	C7	3
4	EC578	CMOS VLSI Design	3-0-0	C8	3
5		Elective-1	3-0-0	DSE1	3
6	EC580	Design Lab I	0-0-3	C9	2
7	EC592	Major Project	0-0-10	DP1	5
8	GP	General Proficiency		Non	
				Credit	
		Total Credits		23	
		Total Contact Hours	15-1-13	29	

Elective - 1

S. No	Subject Code	Courses
1	EC574	Integrated Circuit Physical Design
2	EC568	Design of Semiconductor Memories
3	EC576	CMOS RF Circuit Design

Generic Elective (GE1)

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

2- Year M.Tech. in ICT (Specialization in VLSI Design) (2015 -2017) SEMESTER-III

Sr.	Subject Code	Courses	L-T-P		Credits
No					
1	EC633	Low Power VLSI Design	3-0-0	C10	3
2	EC675	Mixed Signal VLSI Design	3-0-0	C11	3
3		Elective- 2	3-0-0	DSE2	3
4		Elective- 3	3-0-0	DSE3	3
5	EC683	Design Lab II	0-0-3	C12	2
6	EC691	Dissertation Phase-I	0-0-14	DP2	7
7	GP	General Proficiency		Non	
				Credit	
		Total Credits			21
		Total Contact Hours	12-0-17	29	

Elective - 2 & 3

Sr. No	Subject Code	Courses
1	EC665	VLSI ASIC Design
2	EC667	RF MEMS Design and Technology
3	EC673	VLSI-Reliability Engineering
4	EC669	Algorithm for VLSI Design Automation
5	EC677	DSP Integrated Circuits
6	EC679	Test and Verification of VLSI Circuits

$\boldsymbol{SEMESTER-IV}$

Sr. No	Subject Code	Courses	L-T-P		Credits
1	EC690	Dissertation Phase-II		DP3	23
2	GP	General Proficiency		Non Credit	
		Total			23

Grand Total Credits = 90