

SCHOOL OF INFORMATION AND COMMUNICATION TECHNOLOGY

(Department of Electronics and Communication Engineering)

COURSE STRUCTURE

2- Years M. Tech. in Embedded Systems



GAUTAM BUDDHA UNIVERSITY, GREATER NOIDA

2015-2017

2- Year M.Tech. (Embedded Systems) (2015-2017)**SEMESTER- I**

Sr.No	Course Code	Courses	L-T-P		Credits
1	EC537	Embedded Systems Concepts and Design	3-1-0	C1	4
2	CS523	Advanced Computer Architecture	3-1-0	C2	4
3	EC539	Advanced Digital Signal Processing	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	EC589	Advanced Digital Signal Processing Lab	0-0-3	C4	2
7	EC587	Embedded System 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.	Course Code	Courses	L-T-P		Credits
1	MA402	Generic Elective	3-1-0	GE1	4
2	EC560	VLSI Architecture	3-0-0	C6	3
3	EC564	Software for Embedded Systems	3-0-0	C7	3
4	EC566	Real Time Systems	3-0-0	C8	3
5		Elective-1	3-0-0	DSE1	3
6	EC586	VLSI Architecture Lab	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

2- Year M.Tech. (Embedded Systems) (2015-2017)**Electives (1)**

Sr.No	Course Code	Courses
1	EC538	Analog IC design
2	EC552	CMOS Digital IC Design
3	EC554	Embedded Systems for Wireless and Mobile Communication
4	EC556	VLSI Technology
5	EC558	Embedded C
6	EC570	System Specifications and Modeling
7	EC572	Elements of System Reliability
8	EC598	Embedded Linux
9	EC548	System on Chip

Generic Elective (GE1)

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

SEMESTER – III

Sr. No.	Course Code	Courses	L-T-P	Credits	
1	EC661	FPGA Architecture and Applications	3-0-0	C10	3
2	EC663	Hardware Software Co design	3-0-0	C11	3
3		Elective-2	3-0-0	DSE2	3
4		Elective-3	3-0-0	DSE3	3
5	EC685	Hardware Software Co Design Lab	0-0-3	C12	2
7	EC691	Dissertation Part-I	0-0-14	DP2	7
8.	GP	General Proficiency		Non Credit	
		Total Credits	12-0-17		21
		Total Contact Hours		29	

Electives (2 & 3)

Sr. No	Course Code	Courses
1	EC653	Network for Embedded Systems
2	EC655	Sensor and Actuator
3	EC657	Microelectronics
4	EC659	Microcontrollers for Embedded System Design
5	EC669	Algorithm for VLSI design Automation
6	EC671	Microcontroller Based System Design
7	CS699	Robotics
8	CS661	Expert Systems Design
9	CS679	Fuzzy Set Theory
10	CS647	Software Maintenance

2- Year M.Tech. (Embedded Systems) (2015-2017)**SEMESTER – IV**

Sr. No	Subject Code	Courses	L-T-P		Credits
1	EC690	Dissertation Phase-II	---	DP3	23
2	GP	General Proficiency	---	Non Credit	0
		Total Credits	---		23

Grand Total Credits = 90