CURRICULUM

B.Tech. Electronics and Communication Engineering (EDM)
with specialization in Design and Manufacturing
(According to 30th Senate meeting held on 22nd March 2016)

SEMESTER 1					
Courses	**I**	**P**	**C**	**Category**	**Code**
Calculus	3	0	3	BSC	MAT104T
Engineering Mechanics	3	0	3	BSC	PHY108T
Computational Engineering / Basic Electrical and Electronics Engineering	3	0	3	BEC / BEC	COM105T / ELE103T
Concepts in Engineering Design/ Science and Engineering of Materials	3	0	3	DES / BEC	DES101T / INT108T
English for Communication	2	0	2	HMC	INT107T
Earth, Environment & Design/ Professional Ethics for Engineers	2		P/F	DES / HMC	DES103T / MAN102T
Engineering Skills Practice	0	3	2	BEC	INT110P
Materials & Mechanics Practice	0	3	2	BSC	PHY109P
Computational Engineering Practice/ Measurement & Data Analysis Practice	0	3	2	BEC / BSC	COM105P / INT111P
Engineering Graphics	1	3	3	BEC	INT109P
Total			**23**		
SEMESTER 2					
Courses	**I**	**P**	**C**	**Category**	**Code**
Differential Equations	3	0	3	BSC	MAT105T
Engineering Electromagnetics	3	0	3	BSC	PHY107T
Basic Electrical and Electronics Engineering/ Computational Engineering	3	0	3	BEC / BEC	ELE103T / COM105T
Science and Engineering of Materials / Concepts in Engineering Design	3	0	3	BEC / DES	INT108T / DES101T
Design History	2	0	2	DES	DES102T
Professional Ethics for Engineers/ Earth, Environment & Design	2	0	P/F	HMC / DES	MAN102T / DES103T
Measurement & Data Analysis Practice/ Computational Engineering Practice	0	3	2	BSC / BEC	INT111P / COM105P
Industrial Design Sketching	0	3	2	DES	DES104P
Engineering Electromagnetics Practice	0	3	2	BSC	PHY107P
Design Realization	0	3	2	DES	DES105P
Total			**22**		
SEMESTER 3					
Courses	**I**	**P**	**C**	**Category**	**Code**
Linear Algebra	3	0	3	BSC	MAT204T
Systems Thinking for Design	2	0	2	DES	DES201T
Engineering Economics	2	0	2	HMC	MAN201T
Digital Logic Design	3	0	3	PEC	ELE217T
Signals and Systems	3	0	3	PEC	ELE218T
Analog Circuits	3	0	3	PEC	ELE223T
Analog Circuits Practice	0	3	2	PEC	ELE223P
DLD Practice	0	3	2	PEC	ELE217P
Total			**20**		

SEMESTER 4					
Courses	**I**	**P**	**C**	**Category**	**Code**
Probability Theory	3	0	3	BSC	MAT205T
Designing Intelligent Systems	2	0	2	DES	DES203T
Sociology of Design	2	0	2	HMC	MAN202T
Control Systems	3	0	3	PEC	ELE221T
Digital Signal Processing	3	0	3	PEC	ELE222T
Power Electronics	3	0	3	PEC	ELE219T
Data Structures and Algorithms Practice	1	3	3	PEC	COM208P
Electrical Drives Practice	1	3	3	PEC	ELE220P
Digital Signal Processing Practice	0	3	2	PEC	ELE222P
Total			**24**		
SEMESTER 5					
Courses	**I**	**P**	**C**	**Category**	**Code**
Sustainable Design	2	0	2	DES	DES301T
Entrepreneurship and Management Functions	2	0	2	HMC	MAN301T
Information Theory and Coding	3	0	3	PEC	ELE319T
Micro Processors and Computer Architecture	3	0	3	PEC	ELE315T
Analog and Digital Communication	3	0	3	PEC	ELE313T
Sensing and Instrumentation Practice	0	3	2	PEC	ELE314P
Micro Processors and Micro Controllers Practice	0	3	2	PEC	ELE315P
Analog and Digital Communication Practice	0	3	2	PEC	ELE313P
Electronic Manufacturing and Prototyping	1	3	3	PEC	ELE302A
Total			**22**		
SEMESTER 6					
Courses	**I**	**P**	**C**	**Category**	**Code**
Design for Quality and reliability	2	0	2	DES	DES302T
Product Management	2	0	2	HMC	MAN303T
VLSI Design	3	0	3	PEC	ELE311
Data Communication Networks	3	0	3	PEC	ELE316T
VLSI Design Practice	0	3	2	PEC	ELE311P
Embedded System Design	1	3	3	PEC	ELE504A
Product Design Practice	0	3	2	PCD	INT303
Elective I	3	0	3	ELE	-
Elective II	3	0	3	ELE	-
Total			**23**		
SEMESTER 7					
Courses	**I**	**P**	**C**	**Category**	**Code**
Internship	0	-	5	PCD	INT404
Mechanical Design of Electronic Systems	3	0	3	PEC	INT405T
Free Elective – I	3	0	3	ELE	-
Design Project	0	6	5	DES	DES401
Total			**16**		
SEMESTER 8					
Courses	**I**	**P**	**C**	**Category**	**Code**
Elective – III	3	0	3	ELE	-
Free Elective-II	3	0	3	ELE	-
Innovation Management	2	0	2	HMC	MAN407T
Project	0	-	10	PCD	INT405
Total			**18**		

*Internship is for a period of 5 months