CURRICULUM

B. Tech. Computer Engineering + M. Tech. Computer Engineering (CED)
(According to 31st Senate meeting held on 1st July 2016)

S.No	Course Name	I	P	C	Category	Code
Semester 1						
1	Calculus	3	0	3	BSC	MAT104T
2	Engineering Mechanics	3	0	3	BSC	PHY108T
3	Computational Engineering/ Science and Engineering of Materials	3	0	3	BEC/ BEC	COM105T / INT108T
4	Concepts in Engineering Design/ Basic Electrical and Electronics Engineering	3	0	3	DES/ BEC	DES101T / ELE103T
5	English for Communication	2	0	2	HMC	INT107T
6	Earth, Environment & Design/ Professional Ethics for Engineers	2	0	P/F	DES/ HMC	DES103T / MAN102T
7	Engineering Skills Practice	0	3	2	BEC	INT110P
8	Computational Engineering Practice / Measurements and Data Analysis Practice	0	3	2	BEC/ BSC	COM105P / INT111P
9	Materials & Mechanics Practice	0	3	2	BSC	PHY109P
10	Engineering Graphics	1	3	3	BEC	INT109P
	Total Credits			**23**		
Semester 2						
1	Differential Equations	3	0	3	BSC	MAT105T
2	Engineering Electromagnetics	3	0	3	BSC	PHY107T
3	Science and Engineering of Materials/ Computational Engineering	3	0	3	BEC/ BEC	INT108T / COM105T
4	Basic Electrical and Electronics Engineering/ Concepts in Engineering Design	3	0	3	BEC/ DES	ELE103T / DES101T
5	Design History	2	0	2	DES	DES102T
6	Professional Ethics for Engineers / Earth, Environment & Design	2	0	P/F	HMC/ DES	MAN102T / DES103T
7	Engineering Electromagnetics Practice	0	3	2	BSC	PHY107P
8	Measurement & Data Analysis Practice / Computational Engineering Practice	0	3	2	BSC/ BEC	INT111P / COM105P
9	Industrial Design Sketching	0	3	2	DES	DES104P
10	Design Realization	0	3	2	DES	DES105P
	Total Credits			**22**		
Semester 3						
1	Linear Algebra	3	0	3	BSC	MAT204T
2	Systems thinking for design	2	0	2	DES	DES201T
3	Engineering Economics	2	0	2	HMC	MAN201T
4	Discrete structures for computing	3	0	3	PEC	COM205T
5	Digital and Analog Circuits Design	3	0	3	PEC	COM206T
6	Signals, Systems and Communication	3	0	3	PEC	ELE216T
7	Programming and Data Structures	3	0	3	PEC	COM207T
8	Digital and Analog Circuits Design Practice	0	3	2	PEC	COM206P
9	Data Structures Practice using C programming	0	3	2	PEC	COM207P
	Total Credits			**23**		

	Semester 4					
1	Probability Theory	3	0	3	BSC	MAT205T
2	Designing Intelligent Systems	2	0	2	DES	DES203T
3	Sociology of Design	2	0	2	HMC	MAN202T
4	Design and Analysis of Algorithms	3	0	3	PEC	COM209T
5	Database Systems	3	0	3	PEC	COM212T
6	Computer Organization and Design	3	0	3	PEC	COM211T
7	Object Oriented Algorithm Design and Analysis practice	0	3	2	PEC	COM210P
8	Database Systems Practice	0	3	2	PEC	COM212P
9	Computer Organization and Design Practice	0	3	2	PEC	COM211P
	Total Credits			**22**		
	Semester 5					
1	Sustainable Design	2	0	2	DES	DES301T
2	Entrepreneurship and Management Functions	2	0	2	HMC	MAN301T
3	Operating Systems	3	0	3	PEC	COM301
4	Computer Networking	3	0	3	PEC	COM302
5	VLSI System Design	3	0	3	PEC	ELE301T
6	Automata and Compiler Design	3	0	3	PEC	COM306T
7	Computer Networking Practice	0	3	2	PEC	COM302P
8	Operating Systems Practice	0	3	2	PEC	COM301P
9	VLSI System Design Practice	0	3	2	PEC	ELE301P
	Total Credits			**22**		
	Semester 6					
1	Design for Quality and Reliability	2	0	2	DES	DES302T
2	Product Management	2	0	2	HMC	MAN303T
3	Embedded Systems	3	0	3	PEC	ELE323T
4	Computer Architecture	3	0	3	PEC	COM307T
5	Elective-I	3	0	3	ELE	-
6	Elective-II	3	0	3	ELE	-
7	Embedded Systems Practice	0	3	2	PEC	ELE323P
8	Computer Architecture Practice	0	3	2	PEC	COM307P
9	Product Design Practice	0	3	2	DES	INT303
	Total Credits			**22**		
	Semester 7					
1	Data Analytics	2	0	2	HMC	MAN406T
2	High Performance Computing	3	0	3	PEC	COM403T
3	Interactive Computer Graphics	3	0	3	PEC	COM404T
4	Elective-III	3	0	3	ELE	-
5	Free Elective - I	3	0	3	ELE	-
6	High Performance Computing Practice	0	3	2	PEC	COM403P
7	Interactive Computer Graphics Practice	0	3	2	PEC	COM404P
	Total Credits			**18**		

	Semester 8						
1	Innovation Management	2	0	2	HMC	MAN407T
2	Device Drivers	3	0	3	PEC	COM405T
3	Analytics & Systems of Big Data	3	0	3	PEC	COM406T
4	Elective-IV	3	0	3	ELE	-
5	Elective-V	3	0	3	ELE	-
6	Free Elective-II	3	0	3	ELE	-
7	Device Drivers Practice	0	3	2	PEC	COM405P
8	Analytics & Systems of Big Data Practice	0	3	2	PEC	COM406P
9	Comprehensive Viva-voce			2	PEC	INT604
	Total Credits			**23**		
	Semester 9						
1	Elective-VI	3	0	3	ELE	-
2	Human Computer Interaction	3	0	3	PEC	COM507T
3	Design Project			6	DES	DES512
4	Internship			5	PCD	INT511
	Total Credits			**17**		
	Semester 10						
1	Project			18	PCD	INT512
	Total Credits			**18**		
				210		