Curriculum of B.Tech Computer Engineering

Semester 1			
Course Name	**I**	**P**	**C**	**Category**
Calculus	3	0	3	BSC
Engineering Mechanics	3	0	3	BSC
Computational Engineering	3	0	3	BEC
Concepts in Engineering Design	3	0	3	DES
English for Communication	2	0	2	HMC
Earth, Environment & Design	2		P/F	DES
Engineering Skills Practice	0	3	2	BEC
Materials & Mechanics Practice	0	3	2	BSC
Computational Engineering Practice	0	3	2	BEC
Engineering Graphics	1	3	3	DES
Total	**17**	**12**	**23**	

Semester 2			
Course Name	**I**	**P**	**C**	**Category**
Differential Equations	3	0	3	BSC
Engineering Electromagentics	3	0	3	BSC
Science and Engineering of Materials	3	0	3	BEC
Basic Electrical & Electronics Engineering	3	0	3	BEC
Design History	2	0	2	DES
Professional Ethics for Engineers	2	0	P/F	HMC
Industrial Design Sketching	0	3	2	BEC
Measurement & Data Analysis Practice	0	3	2	BSC
Engineering Electromagnetics Practice	0	3	2	BSC
Design Realization	0	3	2	DES
	16	**12**	**22**	

Semester 3			
Course Name	**I**	**P**	**C**	**Category**
Linear Algebra	3	0	3	BSC
Engineering Economics	3	0	3	HMC
Discrete Structures for Computing	3	0	3	PEC
Digital and Analog Circuits Design	3	0	3	PEC
Signals, Systems and Communication	3	0	3	PEC
Programming and Data structures	3	0	3	PEC
Digital and Analog Circuits Design Practice	0	3	2	PEC
Data Structures Practice using C-programming	0	3	2	PEC
Total	**18**	**6**	**22**	

Semester 4			
Course Name	**I**	**P**	**C**	**Category**
Probability Theory	3	0	3	BSC
Sociology of Design	3	0	3	DES
Design and Analysis of Algorithms	3	0	3	PEC
Database Systems	3	0	3	PEC
Computer Organization & Design	3	0	3	PEC
Object Oriented Algorithm Design and Analysis Practice	0	3	2	PEC
Database Systems Practice	0	3	2	PEC
Computer Organization & Design Practice	0	3	2	PEC
Total	**15**	**9**	**21**	

Semester 5				
Course Name	**I**	**P**	**C**	**Category**
Entrepreneurship and Management Functions	3	0	3	HMC
Operating Systems	3	0	3	PEC
Computer Networking	3	0	3	PEC
VLSI System Design	3	0	3	PEC
Automata and Compiler Design	3	0	3	PEC
Computer Networking Practice	0	3	2	PEC
Operating Systems Practice	0	3	2	PEC
VLSI System Design Practice	0	3	2	PEC
Total	**15**	**9**	**21**	
Semester 6				
Design for Quality and reliability	3	0	3	DES
Artificial Intelligence	3	0	3	PEC
Computer Architecture	3	0	3	PEC
Computer Architecture Practice	0	3	2	PEC
Embedded Systems Practice	1	3	3	PEC
Product Design Practice	0	3	2	PCD
Elective - I	3	0	3	ELE
Elective – II	3	0	3	ELE
Total	**15**	**9**	**22**	
Semester 7				
Course Name	**I**	**P**	**C**	**Category**
Industry Internship	0	-	5	PCD
Free Elective - I	3	0	3	ELE
Design Project	0	6	5	DES
Total	**3**	**6**	**13**	
Semester 8				
Course Name	**I**	**P**	**C**	**Category**
Elective – III	3	0	3	ELE
Free Elective-II	3	0	3	ELE
Design Elective	3	0	3	DES
Project	0	-	10	PCD
Total	**9**		**19**	

Note:
   Elective courses such as Designing Intelligent systems, Sustainable Design, Systems
   thinking for design will be offered as a group to choose in Design Elective
*Internship is for a period of 5 months

Category	Credit Distribution	Credit Distribution in %
BSC	24	15
BEC	16	10
DES	23	14
Elective	15	9
HMC	8	5
PEC	60	36
PCD	17	11
Total	163	