

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

S.No	Course Name	I	P	C	Category
<b>Semester 1</b>					
1	Calculus	3	0	3	BSC
2	Engineering Mechanics	3	0	3	BSC
3	Computational Engineering/ Science and Engineering of Materials	3	0	3	BEC/ BEC
4	Concepts in Engineering Design/ Basic Electrical & Electronics Engineering	3	0	3	DES/ BEC
5	English for Communication	2	0	2	HMC
6	Earth, Environment & Design/ Professional Ethics	2	0	P/F	DES/ HMC
7	Engineering Skills Practice	0	3	2	BEC
8	Computational Engineering / Measurement & Data Analysis	0	3	2	BEC/ BSC
9	Basic Materials & Mechanics Practice	0	3	2	BSC
10	Engineering Graphics	1	3	3	BEC
	<b>Total Credits</b>			<b>23</b>	
<b>Semester 2</b>					
1	Differential Equations	3	0	3	BSC
2	Engineering Electromagnetics	3	0	3	BSC
3	Science and Engineering of Materials/ Computational Engineering	3	0	3	BEC/ BEC
4	Basic Electrical & Electronics Engineering/ Concepts in Engineering Design	3	0	3	BEC/ DES
5	Design History	2	0	2	DES
6	Professional Ethics/ Earth, Environment & Design	2	0	P/F	HMC/ DES
7	Engineering Electromagnetics Practice	0	3	2	BSC
8	Measurement & Data Analysis / Computational Engineering	0	3	2	BSC/ DES
9	Industrial Design Sketching	0	3	2	DES
10	Design Realization	0	3	2	DES
	<b>Total Credits</b>			<b>22</b>	
<b>Semester 3</b>					
1	Linear Algebra	3	0	3	BSC
2	Systems thinking for design	2	0	2	DES
3	Engineering Economics	2	0	2	HMC
4	Discrete structures for computing	3	0	3	PEC
5	Digital and Analog Circuits Design	3	0	3	PEC
6	Signals, Systems and Communication	3	0	3	PEC
7	Programming and Data Structures	3	0	3	PEC
8	Digital and Analog Circuits Design Practice	0	3	2	PEC
9	Data Structures Practice using C programming	0	3	2	PEC
	<b>Total Credits</b>			<b>23</b>	

Semester 4					
1	Probability Theory	3	0	3	BSC
2	Designing Intelligent Systems	2	0	2	DES
3	Sociology of Design	2	0	2	HMC
4	Design and Analysis of Algorithms	3	0	3	PEC
5	Database Systems	3	0	3	PEC
6	Computer Organization and Design	3	0	3	PEC
7	Object Oriented Algorithm Design and Analysis practice	0	3	2	PEC
8	Database Systems Practice	0	3	2	PEC
9	Computer Organization and Design Practice	0	3	2	PEC
	<b>Total Credits</b>			<b>22</b>	
Semester 5					
1	Sustainable Design	2	0	2	DES
2	Entrepreneurship and Management Functions	2	0	2	HMC
3	Operating Systems	3	0	3	PEC
4	Computer Networking	3	0	3	PEC
5	VLSI System Design	3	0	3	PEC
6	Automata and Compiler Design	3	0	3	PEC
7	Computer Networking Practice	0	3	2	PEC
8	Operating Systems Practice	0	3	2	PEC
9	VLSI System Design Practice	0	3	2	PEC
	<b>Total Credits</b>			<b>22</b>	
Semester 6					
1	Design for Quality and Reliability	2	0	2	DES
2	Product Management	2	0	2	HMC
3	Embedded Systems	3	0	3	PEC
4	Computer Architecture	3	0	3	PEC
5	Elective-I	3	0	3	ELE
6	Elective-II	3	0	3	ELE
7	Embedded Systems Practice	0	3	2	PEC
8	Computer Architecture Practice	0	3	2	PEC
9	Product Design Practice	0	3	2	DES
	<b>Total Credits</b>			<b>22</b>	
Semester 7					
1	Data Analytics	2	0	2	HMC
2	Human Computer Interaction	3	0	3	PEC
3	High Performance Computing	3	0	3	PEC
4	Interactive Computer Graphics	3	0	3	PEC
5	Elective-III	3	0	3	ELE
6	Free Elective - I	3	0	3	ELE
7	High Performance Computing Practice	0	3	2	PEC
8	Interactive Computer Graphics Practice	0	3	2	PEC
	<b>Total Credits</b>			<b>21</b>	

<b>Semester 8</b>					
1	Innovation Management	2	0	2	HMC
2	Device Drivers	3	0	3	PEC
3	Analytics & Systems of Big Data	3	0	3	PEC
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
8	Analytics & Systems of Big Data Practice	0	3	2	PEC
9	Comprehensive Viva-voce			2	PEC
	<b>Total Credits</b>			<b>23</b>	
<b>Semester 9</b>					
1	Elective-VI	3	0	3	ELE
2	Design Project			6	DES
3	Internship			5	PCD
	<b>Total Credits</b>			<b>14</b>	
<b>Semester 10</b>					
1	Project			18	PCD
	<b>Total Credits</b>			<b>18</b>	
				<b>210</b>	