Revised Curriculum Structure
(to be effective from 2018-19 admission batch)

Department: Electronics & Communication Engineering

Curriculum for B.Tech

Under Autonomy (**GR A:** ECE, EE, EIE, BME; **GR B:** CSE, IT, ME, CE, FT)

1st Semester								
Sl No	**Course Code**	**Paper Code**	**Theory**	**Contact Hours /Week**				**Credit Points**
				L	**T**	**P**	**Total**	
A. THEORY								
1	BS	M 101	Mathematics -I	3	1	0	4	4
2	BS	CH 101/ PH 101	Chemistry-I (Gr. A) / Physics - (Gr. B)	3	0	0	3	3
3	ES	EE 101/ EC 101	Basic Electrical Engineering (Gr. A) / Basic Electronics Engineering (Gr. B)	3	0	0	3	3
4	HS	HU 101	English	2	0	0	2	2
Total of Theory							**12**	**12**
B. PRACTICAL								
5	BS	CH 191/ PH191	Chemistry-I Lab (Gr. A) / Physics- I Lab (Gr. B)	0	0	3	3	1.5
6	ES	EE 191/ EC 191	Basic Electrical Engineering Lab (Gr. A) / Basic Electronics Engineering Lab (Gr. B)	0	0	3	3	1.5
7	ES	ME 191/ ME 192	Engineering Graphics & Design (Gr A) / Workshop/Manufacturing Practices (Gr-B)	0	0	3	3	1.5
C. SESSIONAL								
8	MC	XC181	Extra-Curricular Activity I	0	0	0	0	2 units
D. PROJECT*								
9		**Project Code**	**Project Name**	**Contact Hours /Week**				**Credit Points**
		M 151	Mathematics Project	1				0.5
		ME 151	Engineering Mechanics Project	1				0.5
		CH 151/ PH 151	Chemistry Project (Gr. A) / Physics Project (Gr. B)	1				0.5
		EE 151/ EC 151	Basic Electrical Project (Gr. A) /Basic Electronics Project (Gr. B)	1				0.5
Total of Theory, Practical, Sessional & Project				**23**				**16.5+1**

* Student need to select any two projects (Total Credit: 0.5+0.5=1)

2nd Semester								
Sl No	**Course Code**	**Paper Code**	**Theory**	**Credit Hours /Week**				**Credit Points**
				L	**T**	**P**	**Total**	
A. THEORY								
1	BS	M 201	Mathematics -II	3	1	0	4	4
2	BS	CH 201/ PH 201	Chemistry-I (Gr. B) / Physics – I (Gr. A)	3	0	0	3	3
3	ES	EE 201/ EC 201	Basic Electrical Engineering (Gr. B) / Basic Electronics Engineering (Gr. A)	3	0	0	3	3
4	ES	CS 201	Programming for Problem Solving	3	0	0	3	3
5	ES	ME 201	Engineering Mechanics	3	0	0	3	3
Total of Theory							**16**	**16**
B. PRACTICAL								
6	ES	CS291	Programming for Problem Solving Lab	0	0	3	3	1.5
7	BS	CH 291/ PH 291	Chemistry I Lab (Gr. B) / Physics - I Lab (Gr. A)	0	0	3	3	1.5
8	ES	EE 291/ EC 291	Basic Electrical Engineering Lab (Gr. B) / Basic Electronics Engineering Lab (Gr. A)	0	0	3	3	1.5
9	ES	ME 291/ ME 292	Engineering Graphics & Design (Gr B) / Workshop/Manufacturing Practice (Gr-A)	0	0	3	3	1.5
10	HS	18_HU 291	Language Lab and Seminar Presentation	0	0	2	2	1
C.SESSIONAL								
11	MC	XC 281	Extra-Curricular Activity II	0	0	0	0	2 Units
D. PROJECT*								
12		**Project Code**	**Project Name**	**Credit Hours /Week**				**Credit**
		M 251	Mathematics Project	1				0.5
		CS 251	Programming for Problem Solving Project	1				0.5
		ME 251	Engineering Mechanics Project	1				0.5
		CH 251/ PH 251	Chemistry Project (Gr. B) / Physics Project (Gr. A)	1				0.5
		EE 251/ EC 251	Basic Electrical Project (Gr. B) / Basic Electronics Project (Gr. A)	1				0.5
Total of Theory, Practical, Sessional & Project				**32**				**23+1**

* Student need to select any two projects (Total Credit: 0.5+0.5=1)

3rd Semester								
Sl No	**Course Code**	**Paper Code**	**Theory**	**Contact Hours /Week**				**Credit Points**
				L	**T**	**P**	**Total**	
A. THEORY								
1	BS	M 301	Mathematics-III	3	1	0	4	4
2	ES	M (CS) 301	Numerical Methods	3	0	0	3	3
3	PC	EC 301	Solid State Devices	3	0	0	3	3
4	PC	EC 302	Circuit Theory & Networks	3	1	0	4	4
5	ES	CS(ECE) 301	Data Structure	3	0	0	3	3
6	HS	HU 302	Values & Ethics in Profession	2	0	0	2	2
Total of Theory							**19**	**19**
B. PRACTICAL								
7	ES	M (CS) 391	Numerical Methods Lab	0	0	3	3	1.5
8	PC	EC 392	Circuit Theory & Networks Lab	0	0	3	3	1.5
9	ES	CS (ECE) 391	Data Structure Lab	0	0	3	3	1.5
C.SESSIONAL								
10	MC	MC 381	Extra-Curricular Activity III	0	0	0	0	2 Units
D. PROJECT*								
11		**Project Code**	**Project Name**	**Credit Hours /Week**				**Credit Points**
		M 351	Projects on Mathematics-III	1				0.5
		M (CS) 351	Projects on Numerical Methods	1				0.5
		EC 351	Projects on Solid State Devices	1				0.5
		EC 352	Projects on Circuit Theory & Networks	1				0.5
		CS (ECE) 351	Projects on Data Structure	1				0.5
Total of Theory, Practical, Sessional & Project				**32**				**23.5+2**

* Student need to select any four projects (Total Credit: 0.5 x4=2)

4th Semester								
Sl No	**Course Code**	**Paper Code**	**Theory**	**Contact Hours /Week**				**Credit Points**
				L	**T**	**P**	**Total**	
A. THEORY								
1	BS	PH(ECE) 401	Physics II	3	1	0	4	4
2	PC	EC 401	Signals & Systems	3	0	0	3	3
3	PC	EC 402	Analog Electronic Circuits	3	1	0	4	4
4	PC	EC 403	Digital Electronic and Circuits	3	1	0	4	4
5	PC	EC 404	Analog Communication	3	0	0	3	3
Total of Theory							**18**	**18**
B. PRACTICAL								
6	BS	PH(ECE)491	Physics II Lab	0	0	3	3	1.5
7	PC	EC 492	Analog Electronic Circuits Lab	0	0	3	3	1.5
8	PC	EC 493	Digital Electronic and Circuits Lab	0	0	3	3	1.5
9	PC	EC 494	Analog Communication Lab	0	0	3	3	1.5
C.SESSIONAL								
10	MC	MC 401	Environmental Science	2	0	0	2	2 Units
11	MC	MC 481	Co-Curricular Activity I	0	0	0	0	2 Units
D. PROJECT*								
12		**Project Code**	**Project Name**	**Credit Hours /Week**				**Credit Points**
		PH(ECE) 451	Physics II	1				0.5
		EC 451	Signals & Systems	1				0.5
		EC 452	Analog Electronic Circuits	1				0.5
		EC 453	Digital Electronic and Circuits	1				0.5
		EC 454	Analog Communication	1				0.5
Total of Theory, Practical, Sessional & Project				**36**				**24+2**

* Student need to select any four projects (Total Credit: 0.5 x4=2)

5th Semester								
Sl No	**Course Code**	**Paper Code**	**Theory**	**Contact Hours /Week**				**Credit Points**
				L	**T**	**P**	**Total**	
A. THEORY								
1	HS	HU 503	Economics for Engineers	2	0	0	2	2
2	PC	EC 501	Digital Communication Systems	3	1	0	4	4
3	PC	EC 502	Microprocessor & Micro Controller	3	1	0	4	4
4	PC	EC 503	Digital Signal Processing	3	1	0	4	4
Total of Theory							**14**	**14**
B. PRACTICAL								
6	PC	EC 591	Digital Communication Systems Lab	0	0	3	3	1.5
7	PC	EC 592	Microprocessor & Micro Controller Lab	0	0	3	3	1.5
8	PC	EC 593	Digital Signal Processing Lab	0	0	3	3	1.5
C.SESSIONAL								
9	MC	MC 581	Extra-Curricular Activity IV	0	0	0	0	2 Units
10	MC	MC 582	Technical Report writing & Language Practice	0	0	2	2	2 Units
D. PROJECT*								
11		**Project Code**	**Project Name**	**Credit Hours /Week**				**Credit Points**
		HU 553	Economics for Engineers	1				0.5
		EC 551	Digital Communication Systems	1				0.5
		EC 552	Microprocessor & Micro Controller	1				0.5
		EC 553	Digital Signal Processing	1				0.5
Total of Theory, Practical, Sessional & Project				**29**				**18.5+2**

* Student need to select any four projects (Total Credit: 0.5 x4=2)

6th Semester								
Sl No	**Course Code**	**Paper Code**	**Theory**	**Contact Hours /Week**				**Credit Points**
				L	**T**	**P**	**Total**	
A. THEORY								
1	PC	EC 601	EM Wave Propagation & Antenna	3	1	0	4	4
2	PC	EC 602	Control System	3	1	0	4	4
3	PE	EC 603	A. Optical Fiber Communication & Network	3	0	0	3	3
			B. Advanced Microprocessor Microcontroller					
			C. Computer Communication & Network					
4	PE	EC 604	A. Information Theory & Coding	3	0	0	3	3
			B. Mobile Communication & network					
			C. Renewable Source & Applications					
5	OE	CS (ECE) 605	A. Object Oriented Programming using JAVA	3	0	0	3	3
			B. Computer Organization & Architecture					
			C. Soft Computing					
	Total of Theory						**1**	**17**
	B. PRACTICAL							
6	PC	EC 691	EM Wave Propagation & Antenna	0	0	3	3	1.5
7	PC	EC 692	Control System	0	0	3	3	1.5
8	PE	EC 693	A. Optical Fiber Communication & Network Lab	0	0	3	3	1.5
			B. Advanced Microprocessor & Microcontroller					
			C. Computer Communication & Network Security Lab					
9	OE	CS (ECE) 695	A. Object Oriented Programming using JAVA Lab	0	0	3	3	1.5
			B. Computer Organization & Architecture Lab					
			C. Soft Computing Lab					
	C.SESSIONAL							
10	MC	MC 681	Extra-Curricular Activity V	0	0	0	0	2 Units
11	MC	MC 682	Technical Seminar Presentation & Group Discussion	0	0	0	3	2 Units
	D.PROJECT*							
12		**Project Code**	**Project Name**	**Credit Hours /Week**				**Credit Points**
		EC 651	EM Wave Propagation & Antenna	1				0.5
		EC 652	Control System	1				0.5
		EC 653	A. Optical Fiber Communication & Network	1				0.5
			B. Advanced Microprocessor Microcontroller					
			C. Computer Communication & Network					
		EC 654	A. Information Theory & Coding	1				0.5
			B. Mobile Communication & network					
			C. Renewable Source & Applications					
		EC 655	A. Object Oriented Programming using JAVA	1				0.5
			B. Computer Organization & Architecture					
			C. Soft Computing					
	Total of Theory, Practical, Sessional & Project						**36**	**23+2**

* Student need to select any four projects (Total Credit: 0.5 x4=2)

7th Semester								
Sl No	**Course Code**	**Paper Code**	**Theory**	**Contact Hours /Week**				**Credit Points**
				L	**T**	**P**	**Total**	
A. THEORY								
1	HS	HU 705	Principles of Management	2	0	0	2	2
2	PC	EC 701	VLSI & Microelectronics	3	1	0	4	4
3	PE	EC 702	A. RF & Microwave Engineering	3	0	0	3	3
			B. Digital Image Processing					
			C. Electronics Measurement					
4	OE	CS (ECE) 703	A. Data Base Management Systems	3	0	0	3	3
		EC 703	B. Artificial Intelligence & Robotics					
		EC 703	C. FPGA & Reconfigurable Computing					
Total of Theory							**12**	**12**
B. PRACTICAL								
5	PC	EC 791	VLSI & Microelectronics Lab	0	0	3	3	1.5
6	PE	EC 792	A. RF & Microwave Engineering Lab	0	0	3	3	1.5
			B. Digital Image Processing Lab					
			C. Electronics Measurement Lab					
7	OE	CS (ECE) 793	A. Data Base Management Systems Lab	0	0	3	3	1.5
		EC 793	B. Artificial Intelligence & Robotics Lab					
		EC 793	C. FPGA & Reconfigurable Computing Lab					
8	PW	EC 781	Project I	0	0	0	6	3
9	PW	EC 782	Summer Training / Internship	0	0	0	0	1
C.SESSIONAL								
10	MC	MC 781	Co-Curricular Activity II	0	0	0	0	2 Units
11	MC	MC 782	Seminar I	0	0	0	0	2 Units
Total of Theory, Practical & Sessional							**27**	**20.5**

8th Semester								
Sl No	**Course Code**	**Paper Code**	**Theory**	**Contact Hours /Week**				**Credit Points**
				L	**T**	**P**	**Total**	
A. THEORY								
1	PE	EC 801	A. Satellite Communication & Remote	3	0	0	3	3
			B. Audio & Speech Processing					
			C. Embedded System					
2	OE	CS (ECE) 802	A. Cloud Computing	3	0	0	3	3
			B. Big Data Analysis					
			C. Quantum Computation					
3	OE	EC 803	A. Biomedical Electronics & Imaging	3	0	0	3	3
			B. Engineering System Design & Analysis					
			C. Physical Design, Verification & Testing					
Total of Theory							**9**	**9**
B. PRACTICAL								
4	PE	EC 891	A. Satellite Communication & Remote Sensing Lab	0	0	3	3	1.5
			B. Audio & Speech Processing Lab					
			C. Embedded System Lab					
5	PW	EC 881	Project II	0	0	0	8	4
6	PW	EC 882	Grand Viva	0	0	3	3	1.5
C.SESSIONAL								
7	MC	MC 881	Extra-Curricular Activity	0	0	0	0	2 Units
8	MC	MC 882	Seminar II	0	0	0	0	2 Units
Total of Theory, Practical & Sessional							**23**	**16**

Mandatory Credit Point=165 +10 (Project Based Learning)

For Honors additional 10 Credit Point is to be earned (1st Sem to 8th Sem) through MOOCs courses. All the Certificates received by the students across all semester for MOOCs Courses from approved organization (Listed by AICTE / MAKAUT) is to be submitted to CoE office prior to 8th Semester Examination and the Credit earned through MOOCs courses will be reflected in their DGPA.

Credit Distribution Ratio:

Category	Total Credit Allocation	Credit Allocation As per Autonomy	Credit Allocation As per AICTE
Basic Sciences	26.5	15.14%	15 to 20%
Humanities & Social Sciences	9	5.14%	5 to 10%
Engineering Sciences and Skills	28.5	16.29%	15 to 20%
Professional Core	60	34.29%	30 to 40%
Professional Electives	16.5	10.00%	10 to 15%
Open Elective	15	8.57%	5 to 10%
Project work, seminar, internship	19.5	11.147%	10 to 15%
Environmental Science, Co & extracurricular activities			Non-credited

Subject Distribution in Different Category:

A. BASIC SCIENCE (BS)							
Sl No	**Paper Code**	**Theory**	**Contact Hours /Week**				**Credit Points**
			L	**T**	**P**	**Total**	
1	M 101	Mathematics -I	3	1	0	4	4
2	CH 101/ PH 101	Chemistry-I (Gr. A) / Physics - (Gr. B)	3	0	0	3	3
3	CH 191/ PH191	Chemistry-I Lab (Gr. A) / Physics- I Lab (Gr. B)	0	0	3	3	1.5
4	M 201	Mathematics -II	3	1	0	4	4
5	CH 201/ PH 201	Chemistry-I (Gr. B) / Physics – I (Gr. A)	3	0	0	3	3
6	CH 291/ PH 291	Chemistry I Lab (Gr. B) / Physics - I Lab (Gr. A)	0	0	3	3	1.5
7	M 301	Mathematics-III	3	1	0	4	4
8	PH(ECE) 401	Physics II	3	1	0	4	4
9	PH(ECE)491	Physics II Lab	0	0	3	3	1.5
		Total Credit:					**26.5**
B. HUMANITIES & SOCIAL SCIENCES (HS)							
1	HU 101	English	2	0	0	2	2
2	HU 291	Language Lab and Seminar Presentation	0	0	2	2	1
3	HU 302	Values & Ethics in Profession	2	0	0	2	2
4	HU 503	Economics for Engineers	2	0	0	2	2
5	HU 705	Principles of Management	2	0	0	2	2
		Total Credit:					**9**
C. ENGINEERING SCIENCES AND SKILLS (ES)							
1	EE 101/ EC 101	Basic Electrical Engineering (Gr. A) / Basic Electronics Engineering (Gr. B)	3	0	0	3	3
2	EE 191/ EC 191	Basic Electrical Engineering Lab (Gr. A) / Basic Electronics Engineering Lab (Gr. B)	0	0	3	3	1.5
3	ME 191/ ME 192	Engineering Graphics & Design (Gr A) / Workshop/Manufacturing Practices (Gr-B)	0	0	3	3	1.5
4	EE 201/ EC 201	Basic Electrical Engineering (Gr. B) / Basic Electronics Engineering (Gr. A)	3	0	0	3	3
5	CS 201	Programming for Problem Solving	3	0	0	3	3
6	ME 201	Engineering Mechanics	3	0	0	3	3
7	CS291	Programming for Problem Solving Lab	0	0	3	3	1.5
8	EE 291/ EC 291	Basic Electrical Engineering Lab (Gr. B) / Basic Electronics Engineering Lab (Gr. A)	0	0	3	3	1.5
9	ME 291/ ME 292	Engineering Graphics & Design (Gr B) / Workshop/Manufacturing Practice (Gr-A)	0	0	3	3	1.5
10	M (CS) 301	Numerical Methods	3	0	0	3	3
11	M (CS) 391	Numerical Methods Lab	0	0	3	3	1.5
12	CS(ECE) 301	Data Structure	3	0	0	3	3
13	CS (ECE) 391	Data Structure Lab	0	0	3	3	1.5
		Total Credit:					**28.5**
D. PROFESSIONAL CORE (PC)							
1	EC 301	Solid State Devices	3	0	0	3	3
2	EC 302	Circuit Theory & Networks	3	1	0	4	4

3	EC 392	Circuit Theory & Networks Lab	0	0	3	3	1.5
4	EC 401	Signals & Systems	3	0	0	3	3
5	EC 402	Analog Electronic Circuits	3	1	0	4	4
6	EC 403	Digital Electronic and Circuits	3	1	0	4	4
7	EC 404	Analog Communication	3	1	0	4	4
8	EC 492	Analog Electronic Circuits Lab	0	0	3	3	1.5
9	EC 493	Digital Electronic and Circuits Lab	0	0	3	3	1.5
10	EC 494	Analog Communication Lab	0	0	3	3	1.5
11	EC 501	Digital Communication Systems	3	1	0	4	4
12	EC 502	Microprocessor & Micro Controller	3	1	0	4	4
13	EC 503	Digital Signal Processing	3	0	0	3	3
14	EC 591	Digital Communication Systems Lab	0	0	3	3	1.5
15	EC 592	Microprocessor & Micro Controller Lab	0	0	3	3	1.5
16	EC 593	Digital Signal Processing Lab	0	0	3	3	1.5
17	EC 601	EM Wave Propagation & Antenna	3	1	0	4	4
18	EC 602	Control System	3	1	0	4	4
19	EC 691	EM Wave Propagation & Antenna	0	0	3	3	1.5
20	EC 692	Control System	0	0	3	3	1.5
21	EC 701	VLSI & Microelectronics	3	1	0	4	4
22	EC 791	VLSI & Microelectronics Lab	0	0	3	3	1.5
		Total Credit:					**60**
E. PROFESSIONAL ELECTIVES (PE)							
1	EC 603	A. Optical Fibre Communication & Network B. Advanced Microprocessor Microcontroller C. Computer Communication & Network Security	3	0	0	3	3
2	EC 604	A. Information Theory & Coding B. Mobile Communication & network C. Renewable Source & Applications	3	0	0	3	3
3	EC 693	A. Optical Fibre Communication & Network Lab B. Advanced Microprocessor & Microcontroller Lab C. Computer Communication & Network Security Lab	0	0	3	3	1.5
4	EC 702	A. RF & Microwave Engineering B. Digital Image Processing C. Electronics Measurement	3	0	0	3	3
5	EC 792	A. RF & Microwave Engineering Lab B. Digital Image Processing Lab C. Electronics Measurement Lab	0	0	3	3	1.5
6	EC 801	A. Satellite Communication & Remote Sensing B. Audio & Speech Processing C. Embedded System	3	0	0	3	3
8	EC 891	A. Satellite Communication & Remote Sensing Lab B. Audio & Speech Processing Lab C. Embedded System Lab	0	0	3	3	1.5
		Total Credit:					**16.5**

F. OPEN ELECTIVE (OE):							
1	CS (ECE) 605	A. Object Oriented Programming using JAVA	3	0	0	3	3
		B. Computer Organization & Architecture					
		C. Soft Computing					
2	CS (ECE) 695	A. Object Oriented Programming using JAVA Lab	0	0	3	3	1.5
		B. Computer Organization & Architecture Lab					
		C. Soft Computing Lab					
3	CS (ECE) 703	A. Data Base Management Systems	3	0	0	3	3
	EC 703	B. Artificial Intelligence & Robotics					
	EC 703	C. FPGA & Reconfigurable Computing					
4	CS (ECE) 793	A. Data Base Management Systems Lab	0	0	3	3	1.5
	EC 793	B. Artificial Intelligence & Robotics Lab					
	EC 793	C. FPGA & Reconfigurable Computing Lab					
5	CS (ECE) 802	A. Cloud Computing	3	0	0	3	3
		B. Big Data Analysis Lab					
		C. Quantum Computation					
6	EC 803	A. Biomedical Electronics & Imaging	3	0	0	3	3
		B. Engineering System Design & Analysis					
		C. Physical Design, Verification & Testing					
		Total Credit:					**15**
G. PROJECT WORK, SEMINAR, INTERNSHIP (PW)							
1		Project based learning (1st sem to 6th Sem)					10
2	EC 781	Project I	0	0	0	6	3
3	EC 782	Summer Training / Internship	0	0	0	0	1
4	EC 881	Project II	0	0	0	8	4
5	EC 882	Grand Viva	0	0	3	3	1.5
6		**Total Credit:**					**19.5**
H. ENVIRONMENTAL SCIENCE, CO & EXTRACURRICULAR ACTIVITIES (MC)							
1	XC181	Extra-Curricular Activity I	0	0	0	0	2 units
2	XC 281	Extra-Curricular Activity II	0	0	0	0	2 Units
3	MC 381	Extra-Curricular Activity III	0	0	0	0	2 Units
4	MC 401	Environmental Science	2	0	0	2	2 Units
5	MC 481	Co-Curricular Activity I	0	0	0	0	2 Units
6	MC 581	Extra-Curricular Activity IV	0	0	0	0	2 Units
7	MC 582	Technical Report writing & Language Practice	0	0	2	2	2 Units
8	MC 681	Extra-Curricular Activity V	0	0	0	0	2 Units
9	MC 682	Technical Seminar Presentation & Group Discussion	0	0	0	3	2 Units
10	MC 781	Co-Curricular Activity II	0	0	0	0	2 Units
11	MC 782	Seminar I	0	0	0	0	2 Units
12	MC 881	Extra-Curricular Activity	0	0	0	0	2 Units
13	MC 882	Seminar II	0	0	0	0	2 Units

Implementation Scheme of Mandatory Project Work:

Semester	Credit	Number of papers to be assessed under mandatory project
1st	1	Two (0.5 Credit per paper)
2nd	1	Two (0.5 Credit per paper)
3rd	2	Four (0.5 Credit per paper)
4th	2	Four (0.5 Credit per paper)
5th	2	Four (0.5 Credit per paper)
6th	2	Four (0.5 Credit per paper)
Total	10	

Mandatory Project Work
For B.Tech Students from AY 2018-19
(1st semester to 6th Semester)

a. **Each Project Work will carry 0.5 Credit Point**

b. In the 1st and 2nd semester, students will do project work on any two subjects. The Choice of the subject on which a student wants to carry out his/her project work solely depends on the student. A Student can choose any 2 subjects of his/her own choice.

c. In upper semesters like 3rd, 4th, 5th and 6th, the total credit allocation is 2 for each semester. Hence, a student will have to carry out 4 project works to score 2 credits

d. In 7th and 8th Semester, there will be no separate project work like previous semesters, since they have Major Project Work with high credit point

e. Each Project will have total 100 marks

f. Below given Table shows the allocation of credit and marks:

Semester	**Total Credit Point**	**No. of Project to be carried out (Choice Based)**	**Marks allocation in each project**	**Total Marks allocated in Project Works**
1st Year				
1st Semester	0.5+0.5=1.0	2	100	200
2nd Semester	0.5+0.5=1.0	2	100	200
2nd Year				
3rd Semester	1.0+1.0=2.0	4	100	400
4th Semester	1.0+1.0=2.0	4	100	400
3rd Year				
5th Semester	1.0+1.0=2.0	4	100	400
6th Semester	1.0+1.0=2.0	4	100	400
Total Credit	**10**			

Format for Project Work Evaluation (B.Tech)

College Name: **Department :**

Paper Name : **Paper Code :**

STREAM : **Semester :**

University Roll No.	Name of the Student	Title of the Project	Semester Examination								
			Project Report (10)	Development of Prototype/ Model (20)	Power point presentation (15)	Viva-Voce (15)	Usage of Modern Tool / Technology (10)	Innovative-ness (10)	Individual contribution (10)	Group activity (10)	Total (100)

(Signature of the Project Supervisor(s)) (Signature of the HoD)

Guidelines for execution of mandatory Project Work

1. Student will carry out project work on any two of the relevant papers in each semester of 1st year and any four of the relevant papers in each semester of 2nd and 3rd year.
2. Number of students under a given project would be decided by the Head of Dept. However, maximum number of students under a given project should not cross five.
3. Within one month of the commencement of the new semester, each student will identify and confirm the selection of subjects under which project works will be carried out and accordingly, continuous project work evaluation will be carried out by the respective supervisor
4. Credit point allocation on each project is 0.5
5. A 'Digital Repository' would be created about project work/presentation of a given student and same has to be maintained for all 4 years, so that the student can realize his/her gradual development with semesters.
6. In a semester, there would be at least two interim evaluation about the progress of project work (should be carried out along with Unit Tests I and II) followed by final assessment in the end semester examination.
7. 50% of the project will be evaluated by project guide and rest of 50% will be evaluated by external expert.(average value will be taken}

Assessment Guideline of Power Point Presentation (15):

i) Body language (5 marks) ii) Communication Skills (5 marks) iii) Content of the power point presentation (5 marks)

MOOCs Courses
For B.Tech Students for AY 2018-19
(1st Semester to 8th Semester)

Total Credit for MOOCs Subjects will be 10.

List of websites which offers online certification Courses

List of Websites which offers online certification courses:

1. Swayam- https://swayam.gov.in/
2. NPTEL- https://onlinecourses.nptel.ac.in/
3. Mooc- http://mooc.org/
4. Edx - https://www.edx.org/
5. Coursera- https://www.coursera.org/
6. Udacity - https://in.udacity.com/
7. Udemy - https://www.udemy.com/
8. Khanacademy - https://www.khanacademy.org/
9. Skillsahre - https://www.skillshare.com/
10. Harvard University - https://online-learning.harvard.edu/
11. Ted - https://ed.ted.com/
12. Alison - https://alison.com/
13. Futurelearn - https://www.futurelearn.com/
14. Web Development - https://digitaldefynd.com/best-free-web-development-courses-tutorials-certification/
15. Digital Marketing - https://digitaldefynd.com/best-free-digital-marketing-certifications/
16. ios app development - https://digitaldefynd.com/best-ios-app-development-course-tutorial/
17. Open Learn - http://www.open.edu/openlearn/
18. Future Learn - https://www.futurelearn.com/
19. Tuts Plus - https://tutsplus.com/
20. Open Culture - http://www.openculture.com/

For Honors additional 10 Credit Point is to be earned (1st Sem to 8th Sem) through MOOCs courses. All the Certificates received by the students across all semester for MOOCs Courses from approved organization (Listed by AICTE / MAKAUT) is to be submitted to CoE office prior to 8th Semester Examination and the Credit earned through MOOCs courses will be reflected in their DGPA.

List of Activity Heads and Sub-Activity Heads along with their capping of the Activity Points that can be earned by the students during the entire B.Tech duration.

Sl. No.	Name of the Activity	Points	Maximum Points Allowed
1.	MOOCS (SWAYAM/NPTEL/Spoken Tutorial) (per course)	20	40
2.	Tech Fest/Teachers Day/Freshers Welcome		
	Organizer	5	10
	Participants	3	6
5.	Rural Reporting	5	10
6.	Tree Plantation (per tree)	1	10
7.	Participation in Relief Camps	20	40
8.	Participation in Debate/Group Discussion/ Tech quiz	10	20
9.	Publication of Wall magazine in institutional level (magazine/article/internet)	10	20
10.	Publication in News Paper, Magazine & Blogs	10	20
11.	Research Publication (per publication)	15	30
12.	Innovative Projects (other than course curriculum)	30	60
13.	Blood donation	8	16
	Blood donation camp Organization	10	20
15.	Participation in Sports/Games		
	College level	5	10
	University Level	10	20
	District Level	12	24
	State Level	15	30
	National/International Level	20	20
21.	Cultural Programme (Dance, Drama, Elocution, Music etc.)	10	20
22.	Member of Professional Society	10	20
23.	Student Chapter	10	20
24.	Relevant Industry Visit & Report	10	20
25.	Photography activities in different Club (Photography club, Cine Club, Gitisansad)	5	10
26.	Participation in Yoga Camp (Certificate to be submitted)	5	10
27.	Self-Entrepreneurship Programme	20	20
28.	Adventure Sports with Certification	10	20
29.	Training to under privileged/Physically challenged	15	30
30.	Community Service & Allied Activities	10	20