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

Department: Electrical Engineering

Curriculum for B.Tech

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

			1st Semester				<u> </u>	
Sl	Cotogowy	Paper Code	Subject	Co	ntact]	Hours	/Week	Credit
No	Category	Paper Code	Subject	L	T	P	Total	Points
		<u>, </u>	A. THEORY					
1	BS	M101	Mathematics -I	3	1	0	4	4
2	BS	CH101	Chemistry - I	3	0	0	3	3
3	ES	EE101	Basic Electrical Engineering	3	0	0	3	3
4	HS	HU101	English	2	0	0	2	2
		To	otal of Theory				12	12
			B. PRACTICAL					
5	BS	CH191	Chemistry - I Lab	0 0 3		3	1.5	
6	ES	EE191	Basic Electrical Engineering Lab	0	0	3	3	1.5
7	ES	ME191	Engineering Graphics & Design	0	0	3	3	1.5
			C. SESSIONAL					L
8	MC	XC181	Extra-Curricular Activity I	0	0	0	0	2 units
			D. PROJECT*					
9	Proj	ect Code	Project Name	Co	ntact]	Hours	/Week	Credit Points
	M151		Mathematics Project			1		0.5
	HU 151		English Project			1		0.5
	CH151		Chemistry Project			1		0.5
	EE151		Basic Electrical Project			1		0.5
	То	tal of Theory, F	Practical, Sessional & Project				23	16.5+1

^{*} Student need to select any two projects (Total Credit: $0.5 \times 2 = 1$)

			2nd Semester					
Sl	Category	Paper Code	Subject	Con	tact F	Iours/	Week	Credit
No	Category	raper Code	Subject	L	T	P	Total	Points
			A. THEORY					
1	BS	M201	Mathematics -II	3	1	0	4	4
2	BS	PH201	Physics - I	3	0	0	3	3
3	ES	EC201	Basic Electronics Engineering	3	0	0	3	3
4	ES	CS201	Programming for Problem Solving	3	0	0	3	3
5	ES	ME201	Engineering Mechanics	3	0	0	3	3
		T	otal of Theory				16	16
			B. PRACTICAL	_				
6	ES	CS291	Programming for Problem Solving Lab	0	0	3	3	1.5
7	BS	PH291	Physics - I Lab	0	0	3	3	1.5
8	ES	EC291	Basic Electronics Engineering Lab	0	0	3	3	1.5
9	ES	ME292	Workshop/Manufacturing Practices	0	0	3	3	1.5
10	HS	HU291	Language Lab and Seminar Presentation	0	0	2	2	1
			C. SESSIONAL					
11	MC	XC281	Extra-Curricular Activity II	0	0	0	0	2 units
			D. PROJECT*					
12	Proj	ect Code	Project Name	Con	tact F	Iours/	Week	Credit Points
	N	M251	Mathematics Project			1		0.5
	C	S251	Programming for Problem Solving Project			1		0.5
	M	IE251	Engineering Mechanics Project			1		0.5
	P	H251	Physics Project			1		0.5
	E	C251	Basic Electronics Project			1		0.5
	To	otal of Theory,	Practical, Sessional & Project				32	23+1

^{*} Student need to select any two projects (Total Credit: $0.5 \times 2 = 1$)

			3rd Semester						
Sl	Cotogowy	Doman Cada	Cubic et	Con	Contact Hours/Week				
No	Category	Paper Code	Subject	L	T	P	Total	Points	
			A. THEORY						
1	ES	EE301	Electrical Circuit Analysis	3	1	0	4	4	
2	PC	EE302	Measurement and Instrumentation	3	0	0	3	3	
3	PC	EE303	Analog Electronics	3	0	0	3	3	
4	BS	M(EE)301	Mathematics - III	3	1	0	4	4	
	•	T	otal of Theory				14	14	
			B. PRACTICAL				•		
5	ES	EE391	Electrical Circuit Analysis Laboratory	0	0	3	3	1.5	
6	PC	EE392	Measurement and Instrumentation Laboratory 0 0 3			3	3	1.5	
7	PC	EE393	Analog Electronics Laboratory	0	0	2	2	1	
			C. SESSIONAL						
8	MC	MC301	Environmental Science	2	0	0	2	2 Units	
9	MC	MC381	Basic innovations, Creativity & Aptitude	0	0	2	2	2 Units	
			D. PROJECT*						
10	Proje	ect Code	Project Name	Con	ntact F	Iours/	Week	Credit Points	
	Е	E351	Projects on Electrical Circuit Analysis			1		0.5	
	Е	E352	Projects on Measurement and Instrumentation			1		0.5	
	Е	E353	Projects on Analog Electronics			1		0.5	
	M()	EE)351	Projects on Mathematics - III			1		0.5	
	To	tal of Theory,	Practical, Sessional & Project				30	18+2	

^{*} Student need to select any four projects (Total Credit: $0.5 \times 4 = 2$)

			4th Semester					
Sl	Catagomy	Doman Cada	Cubic of	Con	Credit			
No	Category	Paper Code	Subject	L	Т	P	Total	Points
			A. THEORY					
1	PC	EE401	Electrical Machines – I	3	0	0	3	3
2	PC	EE402	Power Electronics	3	1	0	4	4
3	PC	EE403	Digital Electronics	3	0	0	3	3
4	PC	EE404	Electromagnetic Fields	3	0	0	3	3
5	BS	PH401	Physics –II	3	0	0	3	3
		Т	otal of Theory				16	16
			B. PRACTICAL					
6	PC	EE491	Electrical Machines Laboratory – I	0	0	3	3	1.5
7	PC	EE492	Power Electronics Laboratory	0	0	3	3	1.5
8	PC	EE493	Digital Electronics Laboratory	0	0	2	2	1
9	BS	PH491	Physics –II Lab	0	0	3	3	1.5
			C. SESSIONAL					
10	PW	EE481	Electrical System Design and Mini Project-I	1	0	3	4	2
			D. PROJECT*					
11	Proje	ect Code	Project Name	Con	ıtact H	lours/	Week	Credit Points
	E	E451	Projects on Electrical Machines – I			1		0.5
	EE452		Projects on Power Electronics			1		0.5
	EE453		Projects on Digital Electronics			1		0.5
	E	E454	Projects on Electromagnetic Fields			1		0.5
	P	H451	Projects on Physics –II			1		0.5
	To	tal of Theory,	Practical, Sessional & Project				35	23.5+2

^{*} Student need to select any four projects (Total Credit: $0.5 \times 4 = 2$)

No				5th Semester							
No		Category		Subject				Credit			
PC	No	Category	Code	Subject	L	T	P	Total	Points		
PC			,	A. THEORY							
A	1	PC	EE501	Electrical Machines – II	3	1	0	4	4		
OE	2	PC	EE502	Power System-I	3	1	0	4	4		
A	3	PC	EE503	·	3	0	0	3	3		
A				•							
B. Computer Network C. Internet of Things Program Elective – I A. Electrical Energy Conservation and Auditing B. Electromagnetic Waves C. Illumination Engineering D. Power Plant Engineering D. Power System Laboratory – I D. D. D. D. D. D. D.	4	OE.	CS(EE)504	A. Data Structure	3	0	0	3	3		
Program Elective - I	•	OL	CS(LL)304	B. Computer Network			U		3		
A. Electrical Energy Conservation and Auditing B. Electromagnetic Waves C. Illumination Engineering D. Power Plant Engineering D. PRACTICAL Fig. Fi				C. Internet of Things							
S				Program Elective – I							
C. Illumination Engineering D. Power Plant Engineering D. PRACTICAL				A. Electrical Energy Conservation and Auditing							
D. Power Plant Engineering	5	PE	EE505	B. Electromagnetic Waves	3	0	0	3	3		
Total of Theory B. PRACTICAL				\mathcal{E}							
B. PRACTICAL											
Forcing Figure				•				17	17		
PC	_		T								
Section Project Proj											
Open Elective - I Lab	-			·							
OE	8	PC	EE593		0	0	3	3	1.5		
OE											
B. Computer Network Lab C. Internet of Things Lab C. SESSIONAL	9	OE	CS(EE)594	OE CS(EE)594	OE CS(EE)594		0	0	2	2	1
C. SESSIONAL			, , , , , ,								
Description PW EE581 Electrical Machine Design and Mini Project-II 1 0 3 4 2											
Project Code					ı	1	1	ı			
Project Code	10	PW	EE581	Electrical Machine Design and Mini Project-II	1	0	3	4	2		
EE551				D. PROJECT*							
EE552	11	Proje	ct Code	Project Name	Con	tact H	Iours/	Week	Credit Points		
EE553 Projects on Control System-I CS(EE)554 Projects on Open Elective - I A. Data Structure B. Computer Network C. Internet of Things Projects on Program Elective - I A. Electrical Energy Conservation and Auditing B. Electromagnetic Waves C. Illumination Engineering		El	E551	Projects on Electrical Machines – II			1		0.5		
CS(EE)554 Projects on Open Elective - I A. Data Structure B. Computer Network C. Internet of Things Projects on Program Elective – I A. Electrical Energy Conservation and Auditing B. Electromagnetic Waves C. Illumination Engineering		El	E552	Projects on Power System-I			1		0.5		
CS(EE)554 A. Data Structure B. Computer Network C. Internet of Things Projects on Program Elective – I A. Electrical Energy Conservation and Auditing B. Electromagnetic Waves C. Illumination Engineering		El	E553	Projects on Control System-I			1		0.5		
EE555 B. Computer Network C. Internet of Things Projects on Program Elective – I A. Electrical Energy Conservation and Auditing B. Electromagnetic Waves C. Illumination Engineering				Projects on Open Elective - I							
B. Computer Network C. Internet of Things Projects on Program Elective – I A. Electrical Energy Conservation and Auditing B. Electromagnetic Waves C. Illumination Engineering		CS(EE)554		A. Data Structure			1		0.5		
Projects on Program Elective – I A. Electrical Energy Conservation and Auditing B. Electromagnetic Waves C. Illumination Engineering				B. Computer Network			I		0.5		
EE555 A. Electrical Energy Conservation and Auditing B. Electromagnetic Waves C. Illumination Engineering				C. Internet of Things							
EE555 A. Electrical Energy Conservation and Auditing B. Electromagnetic Waves C. Illumination Engineering											
B. Electromagnetic Waves C. Illumination Engineering			3555						^ -		
C. Illumination Engineering		I FESSS					1		0.5		
				_							
I VIGI VI I II VI 1 I I VI VI 1 I I VI VI VI I I VI VI VI VI VI I VI VI		7	Total of Theor					36	24.5+2		

^{*} Student need to select any four projects (Total Credit: $0.5 \times 4 = 2$)

			6th Semester					
Sl	Category	Paper	Subject	Contact Hours/Week L T P Total			Credit	
No	Category	Code	Subject	L	T	P	Total	Points
			A. THEORY					
1	PC	EE601	Microprocessor and Microcontroller	3	0	0	3	3
2	PC	EE602	Power System-II	3	0	0	3	3
3	PC	EE603	Control System-II	3	0	0	3	3
4	OE	CS(EE)604	Open Elective - II A. Data Base Management System B. Embedded Systems C. Software Engineering	3	0	0	3	3
5	PE	EE605	Program Elective – II A. Digital Signal Processing B. High Voltage Engineering C. Computer Architecture	3	3	3		
			Total of Theory				15	15
			B. PRACTICAL	1	1			
6	PC	EE691	Microprocessor and Microcontroller Laboratory	0	0	3	3	1.5
7	PC	EE692	Power System Laboratory – II	0	0	3	3	1.5
8	PC	EE693	Control System Laboratory-II	0	0	3	3	1.5
9	OE	CS(EE)694	Open Elective - II Lab A. Data Base Management System Lab B. Embedded Systems Lab C. Software Engineering Lab	0	0	3	3	1.5
			C. SESSIONAL		,			
10	MC	MC681	Quantitative aptitude and Group Discussion	0	0	2	2	2 Units
			D. PROJECT*					
11	Proje	ct Code	Project Name	Con	tact H	lours/	Week	Credit Points
	EF	E651	Projects on Microprocessor and Microcontroller			1		0.5
	EF	E652	Projects on Power System-II			1		0.5
	EF	E653	Projects on Control System-II			1		0.5
	CS(EE)654		Projects on Open Elective - II A. Data Base Management System B. Embedded Systems C. Software Engineering	1			0.5	
		E655	Projects on Program Elective – II A. Digital Signal Processing B. High Voltage Engineering C. Computer Architecture			1	22	0.5
		otal of Theor	ry, Practical, Sessional & Project				33	21+2

^{*} Student need to select any four projects (Total Credit: $0.5 \times 4 = 2$)

			7th Semester					
Sl	Category	Paper Subject		Con	ntact Hours/Week			Credit
No	Category	Code	Subject	L	T	P	Total	Points
			A. THEORY					
1	PC	EE701	Electrical Drives	3	0	0	3	3
2	OE	CS(EE)702	Open Elective - III A. Object Oriented Programming using JAVA B. Big Data Analysis C. Digital Image Processing	2	0	0	2	2
3	PE	EE703	Program Elective - III A. Power System-III B. Restructured Electrical Power System C. Computer Applications in Power System	3	0	0	3	3
4	PE	EE704	Program Elective - IV A. Power System Dynamics and Control B. Power Quality and FACTS C. HVDC Transmission Systems	3	0	0	3	3
5	HS	HU705	Industrial and Financial Management	3	0	0	3	3
		1	Total of Theory				14	14
			B. PRACTICAL					
6	PC	EE791	Electrical Drives Laboratory	0	0	3	3	1.5
7	OE CS(EE)792 Open Elective - III Lab A. Object Oriented Programming Lab B. Big Data Analysis Lab C. Digital Image Processing Lab		0	2	2	2	1	
8	PW	EE781	FINAL PROJECT Stage-I	0	0	3	6	3
			C. SESSIONAL					
9	PW	EE782	Report Writing and Seminar Presentation on Industrial Training/Internship	1	0	3	4	2
	7	Total of Theor	y, Practical, Sessional & Project				29	21.5

			8th Semester					
Sl	Category	Paper	Subject	Contact Hours/Week				Credit
No	Category	Code	Subject	L	T	P	Total	Points
			A. THEORY					
			Program Elective – V					
1	DE	EE901	A. Wind and Solar Energy Systems.	3	0	0	2	3
1	1 PE EE801		B. Utilization Of Electric Power	3	U	U	3	3
			C. Line Commutated and Active Rectifiers					
			Program Elective – VI				3 3	
2	PE	EE802	A. Advanced Electric Drives.	3	0	0	2	3
2	PE	EE802	B. Control Systems Design.	3	U	U	3	3
			C. Industrial Electrical System					
3	HS	HU802	Values and Ethics in Profession	3	0	0	3	3
			Total of Theory				9	9
	B. PRACTICAL							
4	PW	EE881	FINAL PROJECT Stage-II	0	0	16	16	8
Total of Theory, Practical, Sessional & Project 25 1								

Mandatory Credit Point = 165 (4 years UG) + 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	1st Semester	2nd Semester	3rd Semester	4th Semester	5th Semester	6th Semester	7th Semester	8th Semester	Total Credit (Category Wise)	% Credit Distribution	Credit Allocation as per AICTE
Basic Sciences (BS)	8.5	8.5	4	4.5	0	0	0	0	25.5	15.45%	15 to 20%
Humanities & Social Sciences (HS)	2	1	0	0	0	0	3	3	9	5.45%	5 to 10%
Engineering Sciences and Skills (ES)	6	13.5	5.5	0	0	0	0	0	25	15.15%	15 to 20%
Professional Core (PC)	0	0	8.5	17	15.5	13.5	4.5	0	59	35.76%	30 to 40%
Professional Electives (PE)	0	0	0	0	3	3	6	6	18	10.91%	10 to 15%
Open Elective (OE)	0	0	0	0	4	4.5	3	0	11.5	6.97%	5 to 10%
Project work, seminar, internship (PW)	0	0	0	2	2	0	5	8	17	10.30%	10 to 15%
Environmental Science, Co & extracurricular activities (MC)	0	0	0	0	0	0	0	0	0	0.00%	Non- credited
Total Credit (Semester Wise)	16.5	23	18	23.5	24.5	21	21.5	17	165	100.0	00%

a) Subjects under Basic Sciences (BS) Category:

Sl. No.	Subject Name	Subject Code	Semester	Credit
1.	Mathematics -I	M101	1 st	4
2.	Chemistry-I	CH101	1 st	3
3.	Chemistry-I Lab	CH191	1 st	1.5
4.	Mathematics -II	M201	2 nd	4
5.	Physics - I	PH201	2 nd	3
6.	Physics -I Lab	PH291	2 nd	1.5
7.	Mathematics - III	M301	3 rd	4
8.	Physics – II	PH401	4 th	3
9.	Physics –II Lab	PH491	4 th	1.5

b) Subjects under Humanities & Social Sciences (HS) Category:

Sl. No.	Subject Name	Subject Code	Semester	Credit
1.	English	HU101	1 st	2
2.	Language Lab and Seminar Presentation	HU291	2 nd	1
3.	Industrial and Financial Management	HU705	7 th	3
4.	Values and Ethics in Profession	HU802	8 th	3

c) Subjects under Engineering Sciences and Skills (ES) Category:

Sl. No.	Subject Name	Subject Code	Semester	Credit
1.	Basic Electrical Engineering	EE101	1 st	3
2.	Basic Electrical Engineering Lab	EE191	1 st	1.5
3.	Engineering Graphics & Design	ME191	1 st	1.5
4.	Basic Electronics Engineering	EC201	2 nd	3
5.	Programming for Problem Solving	CS201	2 nd	3
6.	Engineering Mechanics	ME201	2 nd	3
7.	Basic Electronics Engineering Lab	EC291	2 nd	1.5
8.	Programming for Problem Solving Lab	CS291	2 nd	1.5
9.	Workshop/Manufacturing Practice	ME292	2 nd	1.5
10.	Electrical Circuit Analysis	EE301	3 rd	4
11.	Electrical Circuit Analysis Lab	EE391	3 rd	1.5

d) Subjects under Professional Core (PC) Category:

Sl. No.	Subject Name	Subject Code	Semester	Credit
1.	Measurement and Instrumentation	EE302	3 rd	3
2.	Analog Electronics	EE303	3 rd	3
3.	Measurement and Instrumentation Lab	EE392	3 rd	1.5
4.	Analog Electronics Lab	EE393	$3^{\rm rd}$	1
5.	Electrical Machines – I	EE401	4 th	3
6.	Power Electronics	EE402	4 th	4
7.	Digital Electronics	EE403	4 th	3
8.	Electromagnetic Fields	EE404	4 th	3
9.	Electrical Machines Lab – I	EE491	4 th	1.5
10.	Power Electronics Lab	EE492	4 th	1.5
11.	Digital Electronics Lab	EE493	4 th	1
12.	Electrical Machines – II	EE501	5 th	4
13.	Power System-I	EE502	5 th	4
14.	Control System-I	EE503	5 th	3
15.	Electrical Machines Laboratory – II	EE591	5 th	1.5
16.	Power System Laboratory – I	EE592	5 th	1.5
17.	Control System Laboratory-I	EE593	5 th	1.5
18.	Microprocessor and Microcontroller	EE601	6 th	3
19.	Power System-II	EE602	6 th	3
20.	Control System-II	EE603	6 th	3
21.	Microprocessor and Microcontroller Lab	EE691	6 th	1.5
22.	Power System Laboratory – II	EE692	6 th	1.5
23.	Control System Laboratory-II	EE693	6 th	1.5
24.	Electrical Drives	EE701	7^{th}	3
25.	Electrical Drives Lab	EE791	7 th	1.5

e) Subjects under Professional Electives (PE) Category:

Sl. No.	Subject Name	Subject Code	Semester	Credit
1.	Program Elective – I A. Electrical Energy Conservation and Auditing. B. Electromagnetic Waves C. Illumination Engineering	EE505	5 th	3
2.	Program Elective – II A. Digital Signal Processing B. High Voltage Engineering C. Computer Architecture	EE605	6 th	3
3.	Program Elective - III A. Power System-III B. Restructured Electrical Power System C. Computer Applications in Power System	EE703	7 th	3
4.	Program Elective - IV A. Power System Dynamics and Control. B. Power Quality and FACTS. C. HVDC Transmission Systems	EE704	7 th	3
5.	Program Elective – V A. Wind and Solar Energy Systems. B. Utilization Of Electric Power C. Line Commutated and Active Rectifiers	EE801	8 th	3
6.	Program Elective – VI A. Advanced Electric Drives. B. Control Systems Design. C. Industrial Electrical System	EE802	8 th	3

f) Subjects under Open Elective (OE) Category:

Sl. No.	Subject Name	Subject Code	Semester	Credit	
1.	Open Elective - I A. Data Structure B. Computer Network C. Internet of Things	EE504	5 th	3	
2.	Open Elective - I Lab A. Data Structure lab B. Computer Network Lab C. Internet of Things Lab	EE594	5 th	1	
3.	Open Elective - II A. Data Base Management System B. Embedded Systems C. Software Engineering	System EE604 s ong			
4.	Open Elective – II Lab A. Data Base Management System Lab B. Embedded Systems Lab C. Software Engineering Lab	EE694	6 th	1.5	
5.	Open Elective - III A. Object oriented programming using JAVA. B. Big Data Analysis C. Digital Image Processing	EE702	7 th	2	
6.	Open Elective - III Lab A. Object oriented Programming Lab. B. Big Data Analysis Lab C. Digital Image Processing Lab.	EE792	7 th	1	

g) Subjects under Project work, seminar, internship (PW) Category:

Sl. No.	Subject Name	Subject Code	Semester	Credit
1.	Electrical System Design and Mini Project-I	EE481	4 th	2
2.	Electrical Machine Design and Mini Project-II	EE581	5 th	2
3.	FINAL PROJECT Stage-I	EE781	7^{th}	3
4.	Report writing and seminar presentation on industrial training/Internship	EE782	7 th	2
5.	FINAL PROJECT Stage-II	EE881	8 th	8

h) Subjects under Environmental Science, Co & extracurricular activities (Non-Credited MC) Category:

Sl. No.	Subject Name	Subject Code	Semester	Credit
1.	Extra-Curricular Activity I	XC181	1 st	0
2.	Extra-Curricular Activity II	XC281	2 nd	0
3.	Environmental Science	MC301	3 rd	0
4.	Basic innovations, Creativity& Aptitude	MC381	3 rd	0
5.	Quantitative aptitude and Group Discussion	MC681	6 th	0

Implementation Scheme of Mandatory Project Work:

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

Mandatory Project Work For B.Tech Students from AY 2018-19

 $(1^{st}$ semester to 6^{th} 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							
	1 st Year										
1 st Semester	0.5+0.5=1.0	2	100	200							
2 nd Semester	0.5+0.5=1.0	2	100	200							
	2 nd Y	Year									
3 rd Semester	1.0+1.0=2.0	4	100	400							
4 th Semester	1.0+1.0=2.0	4	100	400							
	3 rd Y	Year									
5 th Semester	1.0+1.0=2.0	4	100	400							
6 th 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 :

						Semes	ster Examinati	on			
University Roll No.	Name of the Student	Title of the Project	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 1^{st} year and any four of the relevant papers in each semester of 2^{nd} and 3^{rd} 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

Sl. No.	Online Cerification Courses	Website
		https://gyvoyrom.gov.in/
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.	Khan Academy	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.

Activity Heads and Sub-Activity Heads along with their capping of the Activity Points that to 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
	Tech Fest/Teachers Day/Freshers Welcome		
2.	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
1.2	Blood donation	8	16
13.	Blood donation camp Organization	10	20
	Participation in Sports/Games		
	College level	5	10
15.	University Level	10	20
13.	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

Record of Activities for Mandatory Additional Requirement

Colleg	ge Name (College Code):						Departmen	nt:				
Stude	nt Name:	Unive	ersity Rol	ll No:		Registration No:						
Sl No	Activity	Points	Max. Points Allowed				Po	oints Earne	d			
51 140	Activity	Poi	Ma Poir Allo	Sem1	Sem2	Sem3	Sem4	Sem5	Sem6	Sem7	Sem8	Total
1	MOOCS (SWAYAM/NPTEL/Spoken Tutorial) per course											
	For 12 weeks duration	20	40									
	For 8 weeks duration	16	40									
2	Tech Fest/Teachers Day/Freshers Welcome											
	Organizer	5	10									
	Participants	3	6									
3	Rural Reporting	5	10									
4	Tree Plantation and up keeping (per tree)	1	10									
5	Participation in Relief Camps	20	40									
6	Participation in Debate/Group Discussion/ Tech quiz	10	20									
7	Publication of Wall magazine in institutional level (magazine/article/internet)											
	Editor	10	20									
	Writer	6	12									
8	Publication in News Paper, Magazine & Blogs	10	20									
9	Research Publication (per publication)	15	30									
10	Innovative Projects (other than course curriculum)	30	60									
11	Blood donation	8	16									
111	Blood donation camp Organization	10	20									

Record of Activities for Mandatory Additional Requirement (Contd.)

CLNo	A .4244	Points	IX. Its				Po	oints Earne	d			
Sl No	Activity	Poi	Max. Points Allowed	Sem1	Sem2	Sem3	Sem4	Sem5	Sem6	Sem7	Sem8	Total
12	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									
13	Cultural Programme (Dance, Drama, Elocution, Music etc.)	10	20									
14	Member of Professional Society	10	20									
15	Student Chapter	10	20									
16	Relevant Industry Visit & Report	10	20									
17	Photography activities in different Club(Photography club, Cine Club, Gitisansad)	5	10									
18	Participation in Yoga Camp (Certificate to be submitted)	5	10									
19	Self-Entrepreneurship Programme	20	20									
20	Adventure Sports with Certification	10	20									
21	Training to under privileged / Differently abled	15	30									
22	Community Service & Allied Activities	10	20									
	Total Points											
	Signature of Mentor	•										
	Signature of HoD											