Scheme Structure & Semester-wise credit distribution (as per AICTE flexible curricula)

General Definition:

HSMC	Humanities and Social Sciences including Management Courses
BSC	Basic Science Courses
ESC	Engineering Science Courses
DC	Departmental Core Courses
DE	Departmental Elective Courses
OC	Open Category Courses
DLC	Departmental Laboratory Courses/ Project & Seminar & Internship
MC	Mandatory Courses
SL^*	Massive Open Online Course (MOOCs)

^{*}Applicable for those willing to appear for degree with Honours or Specialization in Minor Engineering.

Definition of Credit:

1 Hr. Lecture (L) per week	1 credit
1 Hr. Tutorial (T) per week	1 credit
2 Hours Practical(Lab)/week	1 credit

Range of Credits:

A student will be eligible to get Under Graduate degree after earning minimum 160-200 credits whereas a student will be eligible to get Under Graduate degree with Honours or additional specialization in Minor Engineering, if a student completes 180-220 credits. These could be acquired through MOOCs.

Note: In partial fulfillment of flexible curriculum design, a mandate provision to earn credits through E-Learning (NPTEL/MOOC etc.) based Departmental Core/Elective (DC/DE) has been introduced. Additionally, to give the students more flexibility to orient themselves as per their interest while retaining the discipline specific knowledge and capabilities, provision for Open Category (OC) Courses have been made.

1 Hr Lecture	1 Hr Tutorial	2 Hr Practical
1 Credit	1 Credit	1 Credit

Proposed Structure of Undergraduate Engineering program as per AICTE Flexible Curricula

S. No.	Category	Component wise credit allotment of Courses by AICTE	For a Graduate Degree in Engineering	For a Graduate Degree in Engineering with Honours Or A Minor Specialization
1	Humanities and Social Sciences including Management Courses (HSMC)	12	10-15	10-15
2	Basic Science Courses (BSC)	25	24-30	24-30
3	Engineering Science courses including workshop, drawing, basics of electrical/mech/comp. (ESC)	24	18-30	18-30
4	Departmental Core Courses (DC)	48	48-65	48-65
5	Departmental Elective Courses relevant to specialization/branch (DE)	18	15-25	15-25
6	Open Category- Electives from other technical and /or emerging subjects (OC)	18	15-18	15-18
7	Project work and seminar / Internship in industry or appropriate work place/ academic and research institutions.(DLC)	15	10-20	10-20
8	Mandatory courses (Intellectual Property Right, Ethics in engineering, disaster management, Cyber security, Essence of Indian Traditional Knowledge) (MC)	N	Non Credit Course	es
9	Massive Open Online Courses (MOOCS)* (SL)	20	-	20
10	Participation & Winning in International/National Level Competitions ⁸ (NLC) authorized by IOA (Indian Olympic Association)	03/04 ^{\$}	-	-
11	Swachh Bharat Summer Internship Unnanat Bharat Abhiyaan (100Hrs)/	-	2	2
12	Total	160	160-200	180-220
*for gettin	g degree in honours or minor specialization \$ any one so	ubject of same credit can be exchanged in	lieu of that achievemen	t

1 Hr Lecture	1 Hr Tutorial	2 Hr Practical
1 Credit	1 Credit	1 Credit

Proposed Scheme of Examination as per AICTE Flexible Curricula Group A: I Semester (B Tech) *W.E.F. JULY 2018*

		5				num Marks A	/			Contact Hours per week			
S.	Subject	Category	Subject Name	Theory			Practical		Total	Contac	t Hours pe	r week	Total
No.	Code			End Sem.	Mid Sem.	Quiz/ Assignme nt	End Sem.	Lab work & Sessional	Marks	L	Т	P	Credits
1.	100201	BSC	Engineering Chemistry (BSC-2)	70	20	10	30	20	150	3	-	2	4
2.	100202	BSC	Mathematics-I (BSC-3)	70	20	10	-	-	100	3	1	-	4
3.	100203	HSMC	English for Communication (HSMC-3)	70	20	10	30	20	150	3	-	2	4
4.	100204	ESC	Basic Electrical & Electronics Engineering(ESC-4)	70	20	10	30	20	150	2	-	2	3
5.	100205	ESC	Engineering Graphics(ESC-5)	70	20	10	30	20	150	2	-	2	3
6.	100206	ESC	Manufacturing Practices(ESC-6)	-	-	-	15	10	25	-	-	2	1
7	100207	DLC	Internship-I (60 Hrs Duration) at the Institute level	To be completed during or at the end of the second semester. Its evaluation/credit to be added in third semester.									
8	100208	DLC	Swachh Bharat Summer Internship Unnanat Bharat Abhiyaan (100Hrs)/ Rural Out reach				15	10	25	-	-	4	2
9			Total	350	100	50	150	100	750	13	1	14	21

GROUP A: (CS, IT, EE, EX, EI, FT, AT, MI, BT & BM)

1 Hr Lecture	1 Hr Tutorial	2 Hr Practical
1 Credit	1 Credit	1 Credit

Proposed Scheme of Examination as per AICTE Flexible Curricula GROUP A: II Semester (B. Tech) W.E.F. JULY 2018

			02100		~~	icster (Da		77 (23)	CET 2010				
		5				<u>kimum Mark</u>				Contac	t Hours p	er week	
S.No	Subject	0,	Subject Name	Theory Slot				tical Slot	Total				Total
5.1.10	Code	Category		End	Mid	Quiz/	End	Lab work	Marks				Credits
				Sem.	Sem	Assignme	Sem.	&		L	T	P	0 1 0 02 1 0
					Exam.	nt		Sessional					
Mandatory Induction Program (First Three weeks)				_		, ,			Values, Liter	2 /	_		ectures by
					ent People	, Visits to lo	cal Areas,	, Familiarizat	tion to Dept./	Branch &	Innovation	ons	
Fourt	h week onv	vards						The class	ses will start				
1.	100101	BSC	Engineering Physics	70	20	10	30	20	150	2	1	2	4
			(BSC-1)										
2.	100102	HSMC	Energy & Environmental	70	20	10	-	-	100	3	-	-	3
			Engineering (HSMC-1)										
3.	100103	ESC	Basic Computer	70	20	10	30	20	150	3	-	2	4
			Engineering (ESC-1)										
4.	100104	ESC	Basic Mechanical	70	20	10	30	20	150	3	-	2	4
			Engineering(ESC-2)										
5.	100105	ESC	Basic Civil Engineering	70	20	10	30	20	150	3	-	2	4
			&										
			Mechanics(ESC-3)										
6.	100106	HSMC	Language Lab. &	-	-	-	30	20	50	-	-	4	2
			Seminars (HSMC-2)										
7.	100107	DLC	Internship-I										
			(60 Hrs Duration)	T	o be compl	leted during	first/secon	nd semester.]	Its evaluation	credit to l	be added i	n third se	mester.
			at the Institute level										
8			Total	350	100	50	150	100	750	14	1	12	21

GROUP A: (CS, IT, EE, EX, EI, FT, AT, MI, BT & BM)

1 Hr Lecture	1 Hr Tutorial	2 Hr Practical
1 Credit	1 Credit	1 Credit

Proposed Scheme of Examination as per AICTE Flexible Curricula GROUP B: I Semester (B. Tech) W.E.F. JULY 2018

						ster (D. 1			CEI ZUIU				
		>			Max	kimum Mark	s Allotted		Total	Contac	t Hours p	er week	
S.No	Subject	or.		Theory Slot			Pract	ical Slot	Marks				Total
	Code	ategory	Subject Name	End	Mid	Quiz/	End	Lab work					Credits
•	Coue	Cat		Sem.	Sem	Assignme	Sem.	&		L	T	P	Credits
					Exam.	nt		Sessional					
Mandatory Induction Program (First Three weeks)				Physic	cal activity	y, Creative A	Arts, Unive	ersal Human	Values, Liter	ary, Profi	ciency M	odules, L	ectures by
				Emine	ent People	, Visits to lo	cal Areas,	Familiarizat	ion to Dept./	Branch &	Innovation	ons	
Fourt	h week onv	vards						The class	es will start				
1.	100101	BSC	Engineering Physics	70	20	10	30	20	150	2	1	2	4
			(BSC-1)										
2.	100102	HSMC	Energy & Environmental	70	20	10	-	-	100	3	-	-	3
			Engineering (HSMC-1)										
3.	100103	ESC	Basic Computer	70	20	10	30	20	150	3	-	2	4
			Engineering (ESC-1)										
4.	100104	ESC	Basic Mechanical	70	20	10	30	20	150	3	-	2	4
			Engineering(ESC-2)										
5.	100105	ESC	Basic Civil Engineering	70	20	10	30	20	150	3	-	2	4
			&										
_			Mechanics(ESC-3)										
6.	100106	HSMC	Language Lab. &	-	-	-	30	20	50	-	-	4	2
		77.0	Seminars (HSMC-2)										
7.	100107	DLC	Internship-I	_									
			(60 Hrs Duration)	To	o be compl	leted during	first/secon	nd semester. I	ts evaluation	credit to	be added i	n third se	mester.
			at the Institute level								_		
8			Total	350	100	50	150	100	750	14	1	12	21

GROUP B: (AU, ME, IP, CE, IEM, TX, EC & CM)

1 Hr Lecture	1 Hr Tutorial	2 Hr Practical
1 Credit	1 Credit	1 Credit

Proposed Scheme of Examination as per AICTE Flexible Curricula Group B: II Semester (B. Tech) W.E.F. JULY 2018

		5				num Marks A				Contact Hours per week			
S.	Subject	Code Code	Subject Name	Theory			Practical		Total	Contact Hours per week			Total
No.	Code			End Sem.	Mid Sem.	Quiz/ Assignme nt	End Sem.	Lab work & Sessional	Marks	L	T	P	Credits
1.	100201	BSC	Engineering Chemistry (BSC-2)	70	20	10	30	20	150	3	-	2	4
2.	100202	BSC	Mathematics-I (BSC-3)	70	20	10	-	-	100	3	1	-	4
3.	100203	HSMC	English for Communication (HSMC-3)	70	20	10	30	20	150	3	-	2	4
4.	100204	ESC	Basic Electrical & Electronics Engineering(ESC-4)	70	20	10	30	20	150	2	-	2	3
5.	100205	ESC	Engineering Graphics(ESC-5)	70	20	10	30	20	150	2	-	2	3
6.	100206	ESC	Manufacturing Practices(ESC-6)	-	-	-	15	10	25	-	-	2	1
7	100207	DLC	Internship-I (60 Hrs Duration) at the Institute level	To be completed during or at the end of the second semester. Its evaluation/credit to be added in third semester.									
8	100208	DLC	Swachh Bharat Summer Internship Unnanat Bharat Abhiyaan (100Hrs)/ Rural Out reach				15	10	25	-	-	4	2
9			Total	350	100	50	150	100	750	13	1	14	21

GROUP B: (AU, ME, IP, CE, IEM, TX, EC & CM)

1 Hr Lecture	1 Hr Tutorial	2 Hr Practical
1 Credit	1 Credit	1 Credit

Proposed Scheme of Examination as per AICTE Flexible Curricula B.Tech. III Semester

For batches admitted in July, 17 & July, 18 (w.e.f. July, 2018)

	Maximum Marks Allotted Theory Practical										act H		
	Subject				Theor	y	1	Practical	Total	pε	er wee	k	Total
S.No.	Code	Category	Subject Name	End Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem	Term work Lab Work & Sessional	Marks	L	T	P	Credits
1.	200301	BSC	Mathematics-II (BSC-4)	70	20	10	-	-	100	3	1	1	4
2.	200302	DC	DC-1	70	20	10	-	-	100	3	1	-	4
3.	200303	DC	DC-2	70	20	10	30	20	150	3	-	2	4
4.	200304	DC	DC-3	70	20	10	30	20	150	3	-	2	4
5.	200305	DC	DC-4	70	20	10	30	20	150	3	-	2	4
6.	200306	DLC	DLC-1	-	-	-	30	20	50	-	-	4	2
8.	100107/ 100207	DLC	Evaluation of Internship-I completed at I year level	-	-	-	-	50	50			4	2
9	200307	DLC	90 hrs Internship based on using various software's – Internship -II	To be o	completed a	nytime during T		th semester. Its even	aluation/o	credit 1	to be a	added	in fifth
10			Total	350	100	50	120	130	750	15	2	14	24
11.	200308	MC	Biology (MC-1) (only for Biotech Engg)	Non Credit Course									
12	200309	NLC	Participation & Winning in National level competition	-	-	-	-	-	-			8	4
NSS/NCC													

1 Hr Lecture	1 Hr Tutorial	2 Hr Practical
1 Credit	1 Credit	1 Credit

Proposed Scheme of Examination as per AICTE Flexible Curricula B.Tech. IV Semester

For batches admitted in July, 17 & July, 18 (w.e.f. July, 2018)

					Ma	aximum Marks A		admitted in July	, , , , , , , , , , , , , , , , , , , ,	Cor	itact Ho	ours	
S.		ıry			Theory		I	Practical		ŀ	JCI WCC.	N.	_ s
No .	Subject Code	Category	Subject Name	End	Mid Sem.	Quiz/	End	Term work	Total Marks	_	T	D	Total Credits
)		Sem.	Exam.	Assignment	Sem.	Lab Work & Sessional		L	Т	P	
1.	200401	BSC	Mathematics- III (BSC-5)	70	20	10	-	-	100	3	2	-	5
2.	200402	DC	DC-5	70	20	10	30	20	150	2	1	2	4
3.	200403	DC	DC-6	70	20	10	30	20	150	2	1	2	4
4.	200404	DC	DC-7	70	20	10	-	-	100	3	0	2	4
5.	200405	DC	DC-8	70	20	10	-	-	100	3	1	-	4
6.	200406	DC	DC-9	70	20	10	-	-	100	3	0	-	3
7.	200407	DLC	DLC-2	-	-	-	30	20	50	ı	ı	2	1
8.	200408	DLC	90 hrs Internship based on using various software's –Internship -II	T	o be completed a	nytime during four	th semester.	Its evaluation/credit	to be added in	fifth ser	mester.		3
9.			Total	420	120	60	90	60	750	16	5	8	25
10.	200409	MC	Cyber Security (MC-2)				Non-	credit course					
11.	200410	NLC	Participation & Winning in National level competition									8	4
12			NSS/NCC										

^{*}A minimum of 2hours per week should be allotted for the Virtual Lab along with the slot fixed for the conventional lab classes e.g. a session of 2hour should be should be combined with that of traditional lab classes

1 Hr Lecture	1 Hr Tutorial	2 Hr Practical
1 Credit	1 Credit	1 Credit

Proposed Scheme of Examination as per AICTE Flexible Curricula B.Tech. V Semester

For batches admitted in July, 17 & July, 18(w.e.f. July, 2018)

						<u> </u>	n butt	nes aammue	a in july, 1	L/ cz ji	шу, 10	w.e.j. j	uty, 201 <u>0</u>
					Maxii	mum Marks.	Allotted			Con	tact Hou	rs per	
C	G 1.				Theory		P	ractical	75. 4. 1		week	•	m . 1
S. No.	Subject Code	Category	Subject Name	End Sem.	Mid Sem Exam.	Quiz/ Assisgnment	End Sem.	Lab work & Sessional	Total Marks	L	Т	P	Total Credits
1.	300501	HSMC/MC	Intellectual Property & Copy Right (HSMC-4)	70	20	10	-	-	100	3	-	-	3
2.	300502	DC	DC-10	70	20	10	-	-	100	3	1	-	4
3.	300503	DC	DC-11	70	20	10	30	20	150	2	1	2	4
4.	300504	DC	DC-12	70	20	10	30	20	150	2	1	2	4
5.	300505	DC	DC-13	70	20	10	30	20	150	2	1	2	4
6.	300506	DLC	Minor Project-I (DLC-3)	-	-	-	30	20	50	-	-	4	2
7.	300507	DLC	Internship –II (Evaluation)	-	-	-	50	-	50	-	-	6	3
8	300508	DLC	60 hrs Internship in Industry or elsewhere Internship-III			To be	e evalua	ited in VII S	Semester				2
9			Total	350	100	50	170	80	750	12	4	16	24
10.	300509	MC	Ethics in Engineering (MC-3)	Non-credit course									
11.	300510	SL	MOOCs	_	_	_	_	-	-	_	_	_	4
12	300511	NLC	Participation & Winning in National level competition									8	4

1 Hr Lecture	1 Hr Tutorial	2 Hr Practical
1 Credit	1 Credit	1 Credit

Proposed Scheme of Examination as per AICTE Flexible Curricula B.Tech. VI Semester

For batches admitted in July, 17 & July, 18 (w.e.f. July, 2018)

								· Datches dami	iteu iii juiy	, 1 / & Ju	y, 10 (w.e.j. ju	y, 2010)
		x				imum Ma	rks Allotted			Contact	Hours n	er week	
S.	Subject	or			Theory		P	ractical	Total	Contact	rrours b	CI WCCK	Total
No	Code	Category	Subject Name	End Sem.	Mid Sem Exam.	Quiz/ Assign ment	End Sem.	Lab work & Sessional	Marks	L	T	P	Credits
1.	300601	DC	DC-14	70	20	10	30	20	150	2	1	2	4
2.	300602	DE	DE-1	70	20	10	-	-	100	3	1	-	4
3.	300603	DE	DE-2	70	20	10	-	-	100	3	1	-	4
4.	300604	DE	DE-3	70	20	10	-	-	100	3	1	-	4
5.	300605	OC	OC-1	70	20	10	-	-	100	3	1	-	4
6.	300606	ESC/ MC	Disaster Management	70	20	10	-	-	100	2	-	-	2
7.	300607	DLC	Minor Project-II (DLC-4)	-	-	-	50	50	100	-	-	4	2
8.	300608	DLC	60 hrs Internship in Industry or elsewhere Internship-III				To be eva	luated in VII S	emester				3
9.			Total	420	120	60	80	70	750	16	5	6	24
10.	300609	NLC	Participation & Winning in National level competition	-	-	-	-	-	-	-	- 8		4
11.	300610	SL	MOOCs	-	-	-	-	-	-	-			4

1 Hr Lecture	1 Hr Tutorial	2 Hr Practical
1 Credit	1 Credit	1 Credit

Proposed Scheme of Examination as per AICTE Flexible Curricula B.Tech. VII Semester

For batches admitted in July, 17 & July, 18 (w.e.f. July, 2018)

						A C	I Date!	ies uummtteu m	L July, I'	$\alpha_j \alpha_j$,, <u>a</u> c	(Wiely	. jaij, 20
		_			M	aximum Mark	s Allotte	d		C	4 Ti	r	
	Subject	Or,			Theo	ory]	Practical	Total			lours	Total
S.N.	Code	teg	Subject Name & Title	End	Mid	Quiz/	End	Term Work	Marks	per week			Credits
		Category		Sem.	Sem. Exam	<u> </u>		Lab Work & Sessional	Marks	L	Т	P	Credits
1.	400701	DE	DE-4	70	20	10	25	25	150	3	-	2	4
2.	400702	DE	DE -5	70	20	10	-	-	100	2	-	-	2
3.	400703	DE	DE-6	70	20	10	-	-	100	2	1	-	3
4.	400704	OC	OC-2	70	20	10	-	-	100	3	-	-	3
5.	400705	MC	Creative Problem Solving Or Essence of Indian Traditional Knowledge (MC-4)				N	on Credit Course					
6.	400706	DLC	Departmental Lab (DLC-5)	-	-	-	50	50	100	-	-	4	2
7.	400707	DLC	Internship -III) (Evaluation)	-	-	-	100	100	200	-	-	8	4
8			Total	350	100	50	125	125	750	10	1	14	18
9	400708	NLC	Participation & Winning in National level competition									6	4
10	400709	SL	MOOCs										4

1 Hr Lecture	1 Hr Tutorial	2 Hr Practical
1 Credit	1 Credit	1 Credit

Proposed Scheme of Examination as per AICTE Flexible Curricula B-Tech VIII Semester

For batches admitted in July, 17 & July, 18 (w.e.f. July, 2018)

S.N.	Subject	Category	Subject Name &			Maximum Ma		, , , , , , , , , , , , , , , , , , , ,	Total		onta		Total
	Code		Title		Theo	ry	Pr	actical	Marks	Ho	urs p	per	Credits
				End	End Mid Quiz/ E		End Sem.	Term Work		week		(
				Sem.	Sem.	Assignment		Lab Work &		L	T	P	
					Exam			Sessional					
1.	400801	DE	DE-7	70	20	10	30	20	150	3	-	2	4
2.	400802	OC	OC-3	70	20	10	-	-	100	3	-	-	3
3.	400803	OC	OC-4	70	20	10	-	-	100	3	-	-	3
4.	400804	DLC	Major Project (DLC-6)	-	-	-	250	150	400	-	-	6	3
5			Total	210	60	30	280	170	750	9	-	8	13
6	400805	NLC	Participation & Winning in National level competition									8	4
7	400806	SL	MOOCs										8

1 Hr Lecture	1 Hr Tutorial	2 Hr Practical
1 Credit	1 Credit	1 Credit