



Ref. No.:

Date:

SUBJECT: 3RD MEETING OF FACULTY OF ENGINEERING & TECHNOLOGY TO BE HELD ON 29.09.2020

To

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Sir/Madam,

It is to inform you that 3rd Meeting of Faculty of Engineering & Technology of Maharaja Ranjit Singh Punjab Technical University has been scheduled on 29/09/2020 at 11.00 AM in Committee Room of Giani Zail Singh Campus College of Engg., & Tech., Bathinda. You are requested to make it convenient to attend this meeting. TA/Honorarium will be paid as per MRSPTU, Bathinda norms.

Dr. S. K. Bath
Member Secretary,
Faculty of Engg. & Tech.,
MRSPTU, Bathinda

NOTE: Keeping in view the prevailing conditions due to COVID-19, on-line meeting through Google hangout will also be arranged for the members which are from far-off places and the Link for the same will be shared on the same day about half an hour before the start of the meeting. Chairpersons of Board of Studies of engineering branches are requested to attend the meeting in person. It will be beneficial if the local members from the college can attend the meeting in person, but if there is any unavoidable situation due to COVID-19, they may attend it online also.

Copy to:

1. PA to Vice Chancellor, MRSPTU, Bathinda for information to Vice Chancellor please.
2. Registrar, MRSPTU, Bathinda
3. Professor I/C, Finance, MRSPTU, Bathinda
4. Dean Academic Affairs, MRSPTU, Bathinda

**AGENDA – 3rd MEETING OF FACULTY OF ENGG. & TECH. OF MRSPTU
BATHINDA**

ITEM NO. 03.01 APPROVAL OF SYLLABI OF UG-ENGG PROGRAMMES

In the light of AICTE model curriculum 2K18, Syllabi of B. Tech Engineering Programmes have been prepared by the concerned Board of Studies as per following details:

S.No.	ITEM	Annexure-F1	
		SubPage	Main Page Nos.
1.	Syllabus of B. Tech. (Aeronautical Engg.) 5 th -6 th Sem. for Batch 2K18 onwards	01-27	1-27
2.	Scheme & Syllabus of B. Tech. (Civil Engg.) 5 th Semester for Batch 2K18 onwards	01-19	28-46
3.	Scheme of B. Tech. (Civil Engg.) 6 th – 8 th Sem. for Batch 2K18 onwards	01-04	47-50
4.	Scheme & Syllabus of B. Tech. (Civil Engg.) 3 rd Sem. 2K19 Batch onwards	01-15	51-65
5.	Scheme of B. Tech. (Civil Engg.) 4 th – 8 th Sem. Batch 2K19 onwards	01-06	66-71
6.	Scheme & Syllabus of B. Tech. (Computer Science & Engg.) 5 th -8 th Sem. for Batch 2K18 onwards	01-38	72-109
7.	Scheme & Syllabus of B. Tech. (Electrical Engg.) 5 th -8 th Sem. for Batch 2K18 onwards	01-17 01-23 01-14 01-12	73-126 127-149 150-163 164-175
8.	Scheme & Syllabus of B. Tech. (Electronics & Communication Engg.) 5 th & 6 th Sem. for 2K18 Batch onwards	01-16 01-17	176-191 192-208
9.	Scheme of B. Tech. (Electronics & Communication Engg.) 7 th – 8 th Sem. for Batch 2K18 onwards	01-02	209-210
10.	Scheme & Syllabus of B. Tech. (Information Technology) 5 th -8 th Sem. for Batch 2K18 onwards	01-13 01-30	211-223 224-253
11.	Scheme & Syllabus of B. Tech. (Mechanical Engg.) 5 th Sem. for Batch 2K18 onwards	01-17	254-270
12.	Scheme & Syllabus of B. Tech. (Textile Engg.) 5 th -8 th Sem. for Batch 2K18 onwards	01-02 01-35	271-272 273-307

Owing to the start of new academic session (July-Dec 2020), some of these were uploaded on university website after necessary approval from Vice Chancellor *cum* Chairman Academic Council in anticipation to the approval of Faculty of Engg & Tech / Academic Council.

Put up before Faculty of Engineering & Technology for deliberations and approval for further recommending it to Academic Council please.

**AGENDA – 3rd MEETING OF FACULTY OF ENGG. & TECH. OF MRSPTU
BATHINDA**

ITEM NO. 03.02 APPROVAL OF SCHEME & SYLLABI OF B. TECH WITH MINOR DEGREE

B. Tech additional optional Minor Degree program has been notified by Dean (Academic affairs) MRSPTU and implemented in MRSPTU Bathinda with effect from July-2020 (Annexure-F2-PP-1-48). Accordingly, as per the requirements, Scheme and Syllabi of B. Tech. with Minor Degree have been prepared by concerned Board of Studies (In line with AICTE APH 2020-21 clause 7.3.2 (c) reproduced as: Universities are free to evolve their own Syllabus for any Minor Degree / Hons. for which Model Syllabus is not available on AICTE's Website) as per details given below:

S.N.	ITEM	Annexure-F2	
		Sub pages	Main pages
1.	Scheme & Syllabus of B. Tech. with Minor Degree in (Civil Engg.) for Batch 2K19 onwards	01-02	1-2
2.	Scheme & Syllabus of B. Tech. with Minor Degree in (Computer Science & Engg.) for Batch 2K19 onwards	01-04	3-6
3.	Scheme & Syllabus B. Tech. with Minor Degree in (Electrical Engg.) for Batch 2K19 onwards	01-04	7-10
4.	Scheme & Syllabus B.Tech with Minor Degree in (Electronics & Communication Engg.) for Batch 2K19 onwards	01-17	11-27
5.	Scheme & Syllabus of B. Tech. with Minor Degree in (Mechanical Engg.) for Batch 2K19 onwards	01-05	28-32
6.	Scheme & Syllabus of B. Tech. with Minor Degree in (Textile Engg.) for Batch 2K19 onwards	01-16	33-48

Owing to the start of new academic session (July-Dec 2020), some of these were uploaded on university website after necessary approval from Vice Chancellor *cum* Chairman Academic Council in anticipation to the approval of faculty of Engg & Tech / Academic Council.

Put up before Faculty of Engineering & Technology for deliberations and approval for further recommending it to Academic Council please.

ITEM NO. 03.03 APPROVAL OF SCHEME & SYLLABI OF B. TECH WITH HONORS DEGREE

B. Tech with additional optional Honors Degree program has been notified by Dean (Academic affairs) MRSPTU and implemented in MRSPTU Bathinda with effect from July-2020 (Annexure-F3-PP-1-102). Accordingly, as per the requirements, Scheme and Syllabi of B. Tech with Honors Degree have been prepared by concerned Board of Studies (In line with AICTE APH 2020-21 clause 7.3.2 (c) reproduced as: Universities are free to evolve their own

**AGENDA – 3rd MEETING OF FACULTY OF ENGG. & TECH. OF MRSPTU
BATHINDA**

Syllabus for any Minor Degree / Hons. for which Model Syllabus is not available on AICTE's Website) as per details given below:

S.N.	ITEM	Annexure-F3	
		Sub page No.	Main page No.
1.	Scheme of B. Tech with Honors Degree in (Civil Engg.) for Batch 2K19 onwards	01	01-01
2.	Scheme & Syllabus of B. Tech. with Honors Degree in (Computer Science & Engg.) for Batch 2K18 onwards	01-14	02-15
3.	Scheme & Syllabus of B. Tech. with Honors Degree in (Electronics & Communication Engg.) for Batch 2K18 onwards	01-23	16-38
4.	Scheme & Syllabus of B. Tech. with Honors Degree in (Mechanical Engg.) for Batch 2K18 onwards	01-51	39-89
5.	Scheme & Syllabus of B. Tech. with Honors Degree in (Textile Engg.) for Batch 2K18 onwards	01-13	90-102

Owing to the start of new academic session (July-Dec 2020), some of these were uploaded on university website after necessary approval from Vice Chancellor *cum* Chairman Academic Council in anticipation to the approval of Faculty of Engg & Tech / Academic Council.

Put up before Faculty of Engineering & Technology for deliberations and approval for further recommending it to Academic Council please.

ITEM NO. 03.04 APPROVAL OF SYLLABI OF UG-ENGG & TECH OPEN ELECTIVE SUBJECTS

It is proposed to extend the use/purview of the already existing Scheme & Syllabus of Open Elective subjects offered by various boards of studies as detailed below.

Sr. No	Name of Subject	Subject Code	Offering Department	Applicable for Batches	REMARKS
1.	Environmental Pollution	BCIE0-F91	Old List - I of Open Electives by Civil Engg. L T P C 3 0 0 0		
2.	Traffic Engineering	BCIE0-F92			
3.	Soil Mechanics	BCIE0-F93			
4.	Design of Steel Structures	BCIE0-F94			

**AGENDA – 3rd MEETING OF FACULTY OF ENGG. & TECH. OF MRSPTU
BATHINDA**

5.	Fluid Mechanics	BCIE0-F95	Old List - II of Open Electives by Civil Engg. L T P C 3 0 0 0	Bat ch 2K1 6 On war ds	
6.	Building Maintenance	BCIE0-F96			
7.	Civil Engineering Materials	BCIE0-F97			
8.	Design of Concrete Structure-I	BCIE0-F98			Old List - III of Open Electives by Civil Engg. L T P C 3 0 0 0
9.	Surveying	BCIE0-F99			
10.	Environmental Engineering – I	BCIE0-F9A			
11.	Object Oriented Programming Using C++	BCSE0-F92	Old List - I of Open Electives by CSE L T P C 3 0 0 0	Bat ch 2K1 6 On war ds	
12.	Essentials of IT	BCSE0-F93			
13.	Computer Programming & Data Structures	BCSE0-F91	Old List - II of Open Electives by CSE L T P C 3 0 0 0	Bat ch 2K1 6 On war ds	
14.	Operating Systems	BCSE0-F94			
15.	Data Base Management Systems – I	BCSE0-F95			
16.	Computer Networks –I	BCSE0-F96			
17.	Internet Web Development	BCSE0-F97	Old List – III of Open Electives by CSE L T P C 3 0 0 0	Bat ch 2K1 6 On war ds	
18.	Cloud Computing & Big Data	BCSE0-F98			
19.	Elements of Power Plants	BELE0-F91	Old List - I of Open Electives Electrical Engg. L T P C 3 0 0 0	Bat ch 2K1 6 On war ds	
20.	Basics of Instrumentation Engg.	BELE0-F92			
21.	Substation Equipment	BELE0-F93			
22.	Renewable Energy Sources	BELE0-F94	Old List - II of Open Electives Electrical Engg. L T P C 3 0 0 0	Bat ch 2K1 6 On war ds	
23.	Basics of Transformers	BELE0-F95			
24.	Electrical Machines & Drives	BELE0-F96			
25.	Energy Management	BELE0-F97	Old List - III of Open Electives Electrical Engg.	Bat ch 2K1 6 On war ds	
26.	Special Electrical Machines	BELE0-F98			

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BATHINDA**

27.	Microcontrollers	BELE0-F99	L T P C 3 0 0 0		
Open Elective (I/II/III) (L-T-P-C :: 3-0-0-3) Subjects offered by Electronics & Communication Engg Deptt for 2k16 Batch					
28.	Optical Communication	BECE0-F91	Open Elective-I	Annexure	
29.	Cellular & Mobile Communication	BECE0-F92			
30.	Biomedical Electronics & Instrumentation	BECE0-F93			
31.	Communication Systems	BECE0-F94	Open Elective-II		
32.	Robotics & Automation	BECE0-F95			
33.	Electronic System Design	BECE0-F96			
34.	Advance Process Control	BECE0-F97	Open Elective-III		
35.	Digital Signal Processing	BECE0-F98			
36.	Antenna & Wave Propagation	BECE0-F99			
Open Elective Subjects offered by Electrical & Electronics Engg Deptt for 2k16 Batch onwards					
37.	Power Plant Engineering	BEEE0-F91	Open Elective-I	Batch 2K1 6 On wards	
38.	Analog & Digital Circuit Analysis	BEEE0-F92			
39.	Digital Signal Processing	BEEE0-F93			
40.	Non-Conventional Energy Resources	BEEE0-F94	Old List – II of Open Electives by EEE L T P C 3 0 0 0		
41.	High Voltage Engineering	BEEE0-F95			
42.	Nano Science & Nano Technology	BEEE0-F96			
43.	Electrical Machines & Power Utilization	BEEE0-F97	Old List – III of Open Electives by EEE L T P C 3 0 0 0		
44.	Soft computing	BEEE0-F98			
45.	Image Processing	BEEE0-F99			
Open Elective (I/II/III) Subjects offered by Mechanical Engg Deptt for 2k16 Batch onwards					
46.	Industrial Safety & Environment	BMEE0-F91	Old List – I of Open Electives by Mechanical Engg. L T P C		
47.	Refrigeration & Air Conditioning	BMEE0-F92			

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			3 0 0 0	Bat ch 2K1 6 On war ds	
48.	Heat & Mass Transfer	BMEE0-F93	Old List – II of Open Electives by Mechanical Engg. L T P C 3 0 0 0		
49.	Material Science & Engineering	BMEE0-F94	Old List – III of Open Electives by Mechanical Engg. L T P C 3 0 0 0		
50.	Robotics Engineering	BMEE0-F95			
51.	Engineering Metrology	BMEE0-F96			
52.	Operations Research	BMEE0-F97			
Open Elective (I/II/III) Subjects offered by Textile Engg Deptt for 2k16 Batch onwards					
53.	Apparel Merchandising	BTEX0-F91	Old List – III of Open Electives by Textile Engg. L T P C 3 0 0 0	Bat ch 2K1 6 On war ds	
54.	Intellectual Property Rights & Patenting System in India	BTEX0-F92			

In addition to the above existing lists of Open Elective courses, Boards of Studies of some departments have proposed Scheme & Syllabus of new Open Elective subjects as detailed below:

Sr. No.	Name of Subject	Subject Code	Offering Department	Applicable for Batches	Annexure -F4
1.	Data Structures & Algorithms	BCSEO1-001	Computer Science & Engg.	Batch 2K18 onwards	(Scheme)- (P-01) Syllabus (02-16)
2.	MATLAB Programming	BCSEO1-002			
3.	Database Management Systems	BCSEO1-003			
4.	Artificial Intelligence	BCSEO1-004			
5.	Image Processing	BCSEO1-005			
6.	Soft Computing	BCSEO1-006			
7.	Big data Analytics	BCSEO1-007			
8.	Data Mining	BCSEO1-008			
9.	Software Engineering	BCSEO1-009			
10.	Computer Networks	BCSEO1-010			
11.	Machine Learning	BCSEO1-011			
12.	Internet of Things	BCSEO1-012			

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13.	Operating Systems	BCSEO1-013			
14.	Object Oriented Programming	BCSEO1-014			
15.	Information Technology in Engineering	BCSEO1-015			
16.	Power Plant Engineering	BMECO1-001	Mechanical Engg.	Batch 2K18 onwards	(17-32)
17.	Thermal & Fluid Engineering	BMECO1-002			
18.	Strength of Materials	BMECO1-003			
19.	Fluid Machinery	BMECO1-004			
20.	Automobile Engineering	BMECO1-005			
21.	Modern Manufacturing Processes	BMECO1-006			
22.	Fundamentals of Electronic Communication Systems	BECEO1-001	Electronics & Communication Engg.	Batch 2K18 onwards	(33-39)
23.	Cellular and Mobile Communication	BECEO1-002			
24.	Fundamentals of Wireless Communication	BECEO1-003			
25.	Industrial Automation	BECEO1-004			
26.	Bio-Medical Electronics & Instrumentation	BECEO1-005			
27.	Android based Operating Systems	BECEO1-006			
28.	Neural Networks & Fuzzy Logic	BECEO1-007			

Put up before Faculty of Engineering & Technology for deliberations and approval for further recommending it to Academic Council please.

ITEM NO. 03.05 TO MAINTAIN/ FINALIZE THE SYLLABUS AND UNIFORMITY OF MANDATORY NON-CREDIT COURSES.

The following Mandatory Non-Credit Courses are being offered by the University:

S N	Subjects	Codes	Int Marks	Annexure- F5-Page Nos.
1.	Constitution of India	BMNCC0-001	100	01
2.	Essence of Indian Knowledge Tradition	BMNCC0-006	100	02
3.	Drug Abuse: Problem, Management & Prevention	BMNCC0-004	100	03-04
4.	Human Values & Professional Ethics	BHUMA0-	100	05

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		103		
5.	Environment Science (3-different types of syllabus are there for the same course)	BMNCC0-002	100	06-12

Following observations require the careful attention of the Faculty of Engg & Tech please:

- (i) Contents of some of the above subjects are not in uniformly adopted pattern.
- (ii) Contact hours of these Mandatory Non-Credit Courses are proposed to be uniform as L T P C: 2 0 0 0.
- (iii) Internal marks are proposed to be 100.
- (iv) Besides this, Evaluation procedure being not in position; needs to be decided and elaborated.

Put up before Faculty of Engineering & Technology for deliberations and approval for further recommending it to Academic Council please.

ITEM NO. 03.06 TO APPROVE THE SUBJECT “INTRODUCTION TO CONCERNED BRANCH” FOR 1ST SEMESTER B. TECH. 2K19 BATCH ONWARDS

Syllabi of the subject/s “Introduction to concerned Branch” have been prepared by concerned Boards of Studies as detailed below.

Sr. No.	Name of Subject	Contact Hours	Old Course Codes	Annexure -F6
				Page Nos.
1.	Introduction to Aeronautical Engg.	30	BCOBE0-101	1-2
2.	Introduction to Aerospace Engg.	30	BCOBE0-101	3-3
3.	Introduction to Civil Engg.	30	BCOBE0-101	4-4
4.	Introduction to Computer Sc & Engg	24	BCOBE0-101	5-5
5.	Introduction to Electrical Engg.	24	BCOBE0-101	6-7
6.	Introduction to Electronics & Comm Engg.	30	BCOBE0-101	8-8
7.	Introduction to Information Technology	24	BCOBE0-101	9-9
8.	Introduction to Mechanical Engg.	30	BCOBE0-101	10-11
9.	Introduction to Textile Engg.	24	BCOBE0-101	12-12

Following observations requires the careful attention of the Faculty of Engg & Tech please:

- (i) Duration of these Introductory Non-Credit Courses are proposed to be uniform as 30-Hours; because per week load is as L T P C: 2 0 0 0.
- (ii) Also Course codes need to be decided.
- (iii) Internal marks are proposed to be 100.
- (iv) Besides this, Evaluation procedure needs to be decided and elaborated.

**AGENDA – 3rd MEETING OF FACULTY OF ENGG. & TECH. OF MRSPTU
BATHINDA**

Put up before Faculty of Engineering & Technology for deliberations and approval for further recommending it to Academic Council please.

ITEM NO. 03.07 TO APPROVE THE FOLLOWING SUBJECT FOR M. TECH. TEXTILE ENGG. 2K16 BATCH ONWARDS.

Syllabus of the subject “Professional Skills” has been prepared by concerned BOS of Textile Engg.

Sr. No.	NAME OF SUBJECT	Annexure-F7 Pages
1.	*Syllabus of Subject: Professional Skills for M. Tech. Textile Engg. 3 rd semester for Batch 2K16 onwards	02

* Duration may be changed from 40 Hours to 60 Hours

Put up before Faculty of Engineering & Technology for deliberations and approval for further recommending it to Academic Council please.

ITEM NO. 03.08 TO APPROVE THE OPEN ELECTIVE SUBJECTS FROM OTHER TECHNICAL AREAS AND/OR EMERGING AREAS (AS PER THE GUIDELINES CONTAINED IN THE AICTE MODEL CURRICULUM)

All branches of Engineering and Technology shall offer Elective Courses in the EMERGING AREAS viz., Artificial Intelligence (AI), Internet of Things (IoT), Blockchain, Robotics, Quantum Computing, Data Sciences, Cyber Security, 3D Printing and Design, Augmented Reality/ Virtual Reality (AR/VR), (As per clause 7.3.2 at Page 99 of AICTE APH: 2020-21)

S. No.	Subjects	Subject Codes	Int Marks	Ext Marks	Points for Discussion
1.	Artificial Intelligence (AI) (CSE-OE)				
2.	Block Chain				
3.	Cyber Security				
4.	Data Sciences (CSE-OE-Data Mining)				
5.	Internet of Things (IoT) (CSE-OE)				
6.	Robotics				
7.	Quantum Computing				

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8.	3D-Printing and Design				
9.	Virtual Reality (VR)				

Accordingly, it is proposed to include these subjects as an additional choice to open elective subjects list. Further, unlike open elective subjects; these can be taught by any of the competent department especially EE/ECE/IT/Mech/CSE.

Put up before Faculty of Engineering & Technology for deliberations and approval for further recommending it to Academic Council please.

ITEM NO. 03.09 TO APPROVE THE SUBJECT FOR PRE-Ph.D. COURSE WORK

UGC in its 543th meeting held on 9th August, 2019 approved a 2-credit course (30-Hrs.) for awareness about Publication Ethics and Misconducts entitled “**Research and Publication Ethics (RPE)**” to be made compulsory for all Ph.D. students as a part of pre-registration course work from academic session 2020-21. The syllabus for the subject has been suggested by UGC.

Sr. No.	Name of Subject	Credits	Hours/ Week	Annexure-F9 Page Nos.
1.	Syllabus of the subject “ Research and Publication Ethics ”	2	30	03

Put up before Faculty of Engineering & Technology for deliberations and approval for further recommending it to Academic Council please.

ITEM NO. 03.10 TO ADOPT AICTE MINOR DEGREE/HONS IN EMERGING AREAS

(As per Clause 7.32 a) at page 99 of AICTE APH: 2020-21) UG Degree Courses in EMERGING AREAS shall be allowed as specialization from the same Department. The minimum additional Credits for such Courses shall be in the range of 18-20 and the same shall be mentioned in the degree, as specialization in that particular area. For example, doing extra credits for Robotics in Mechanical Engineering shall earn B.E./ B.Tech. (Hons.) Mechanical Engineering with specialization in Robotics.

To be read along with clause 7.32 e): The Institutions/ Universities shall adopt the following important instruction while offering the Minor Degrees/Hons. in Emerging Areas. The applicable and proposed to be adopted as an optional additional as per local conditions are tabulated below (with the applicability of UGC guidelines of Swayam/NPTEL for these courses also):

SN_o	AREA OF SPECIALIZATION	APPLICABLE BRANCH OF ENGG
1.	Artificial Intelligence and Machine	

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	Learning	
2.	Blockchain	Electronics and Communication Engineering Computer Science & Engineering
3.	Cyber Security	
4.	Data Science	
5.	Internet of Things (IoT)	
6.	Sensors Technology	
7.	Robotics	Electronics and Communication Engineering Mechanical Engineering
8.	GIS and Remote Sensing	Civil Engineering
9.	Construction Technology	
10.	3D Printing	Mechanical Engineering Civil Engineering
11.	Electric Vehicles	Electrical Engineering Mechanical Engineering

It is proposed to adopt the above for the AICTE approved B.Tech in Civil Engg; Computer Engg; Electrical Engg; Electronics & Comm. Engg. & Mech. Engg. as running in GZSCCET Bathinda as applicable from the B.Tech. 2020-21 admissions.

Put up before Faculty of Engineering & Technology for deliberations and approval for further recommending it to Academic Council please.

ITEM NO. 03.11 TO DELIBERATE ABOUT THE STRUCTURE OF UNDERGRADUATE ENGINEERING PROGRAMMES

Syllabus structure of various undergraduate engineering programs proposed by the concerned Board of Studies, based on the instructions given in AICTE Model Curriculum 2K18 is as follows:

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S. No.	Category	CIVIL			EE		ECE		ME		CSE	
		Suggested Breakup of Credits by AICTE (Total 1160)	Actual Scheme (Total 1167) #	Actual Scheme (Total 1164) ##	Suggested Breakup of Credits by AICTE (Total 1158)	Actual Scheme (Total 1164/166)	Suggested Breakup of Credits by AICTE (Total 1160)	Actual Scheme (Total 161)	Suggested Breakup of Credits (Total 160) by AICTE	Actual Scheme (Total 164)	Suggested Breakup of Credits (Total 160) by AICTE	Actual Scheme (Total 164)
1.	Humanities and Social Sciences including Management courses	12	14	9	12	12	12	09	12	9	12	12
2.	Basic Science courses	26	20	20	26	22	25	22	25	25	24	20
3.	Engineering Science courses including workshop, drawing, basics of electrical/mechanical/computer etc.	29	32	26	20	20# 22#	24	20	24	25	29	24
4.	Professional core courses	47	62	61	53	66	48	57	48	59	49	54
5.	Professional Elective courses relevant to chosen specialization/branch	23	21	24	18	15	18	21	18	15	18	18
6.	Open subjects – Electives from other technical and /or emerging subjects	11	5	12	18	15	18	12	18	15	12	12
7.	Project work, seminar and internship in industry or elsewhere	12	13	13	11	14	15	20	15	16	15	20
8.	Mandatory Courses [Environmental Sciences, Induction Program, Indian Constitution, Essence of Indian Knowledge Tradition]	non-credit	Assigned all subjects as per AICTE list	Assigned all subjects as per AICTE list	non-credit	non-credit	non-credit	non-credit	Non Credits	0	Non Credits	00
	Total	160*	167	165	158*	164# 166##	160	161	160*	164	159	160

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* Minor variation is allowed as per need of the respective disciplines.

For Batch 2K18

For Batches 2K19 onwards

Put up before Faculty of Engineering & Technology for deliberations and approval for further recommending it to Academic Council please.

03.10.06 No Model Curriculum or Structure has been suggested by AICTE for B. Tech Textile Engineering program as per the information provided by Chairperson of BOS of Textile Engg. Some common areas of study may be deliberated upon (if found necessary) to suggest directions regarding the structure of Textile Engg.

ITEM NO. 03.11 TO APPROVE ALL DECISIONS TAKEN ON FILE INCLUDING CONDUCT OF UG/PG ENGG. & TECH. PROGRAMS ONLINE CLASSES; ATTENDANCE MEASURES AND PROCESS ADOPTED FOR INTERNAL / EXTERNAL EVALUATION DURING FORCE MAJURE COVID -19 PANDEMIC

Put up before Faculty of Engineering & Technology for deliberations and approval for further recommending it to Academic Council please.

ITEM NO. 03.12 Any other agenda Item/Items with the permission of the chair.