हरकोर्ट बटलर प्राविधिक विश्वविद्यालय

नवाबगंज, कानपुर–208002, उ0प्र0, (भारत)

Harcourt Butler Technical University

Nawabganj, Kanpur-208002, U.P. (INDIA)

(Formerly Harcourt Butler Technological Institute, Kanpur)

Phone: +91-0512-2534001-5, Fax : +91-0512-2533812, Website : http://www.hbtu.ac.in E-mail : vc@hbtu.ac.in

Department: Plastic Technology

School: School of Chemical Technology

Name of Programme: M. Tech. (M. Tech. started at 2021-22)

Academic Session 2021-22

Total no. of courses in the Programme: 24

% Change in the course curriculum : M. Tech. Course Started from session 2021-22

No. of courses where syllabus revision was carried out BoS		
S. No.	Name of course	Course code
1	-	-

Number of Courses related with employability/ entrepreneurship/ skill development

Courses related with employability/ entrepreneurship/ skill development		
S. No.	Name of course	Course code
1	Advanced Polymer Chemistry	TPL 551
2	Advanced Polymer Processing	TPL 553
3	Advances in Modelling and Simulation of Chemical Processes	TPL 555
4	Advanced Chemical Reaction Engineering	TPL 557
5	Advanced Polymer Rheology	TPL 559
6	Polymer Processing	TPL 563
7	Industrial Stoichiometery	TPL 567
8	Advanced Plastic Product and Mould Design	TPL 554
9	Polymer Testing and Characterization	TPL 556
10	Advances in Polymer Composites	TPL 558
11	Advances in Rubber Technology	TPL 560
12	Technology of Polymer Blends & Alloys	TPL 651
13	Biodegradable Polymers, Packaging and Waste Management	TPL 653
14	Polymer Nano Technology	TPL 655

Elective courses in the programme

S. No.	Program Elective Courses	Name of Course	Course code
1	PEC I	Advances in Polymer Composites	TPL 558
		Advances in Rubber Technology	TPL 560
2	PEC II	Biodegradable Polymers, Packaging and Waste Management	TPL 653
		Polymer Nano Technology	TPL 655

New courses introduced		
S. No.	Name of course	Course code
1	Advanced Polymer Chemistry	TPL 551
2	Advanced Polymer Processing	TPL 553
3	Advances in Modelling and Simulation of Chemical Processes	TPL 555
4	Advanced Chemical Reaction Engineering	TPL 557
5	Advanced Polymer Rheology	TPL 559
6	High Polymer Chemistry	TPL 561
7	Polymer Processing	TPL 563
8	Industrial Stoichiometery	TPL 567
10	Advanced Polymerization Engineering	TPL 552
11	Advanced Plastic Product and Mould Design	TPL 554
12	Polymer Testing and Characterization	TPL 556
13	Advances in Polymer Composites	TPL 558
14	Advances in Rubber Technology	TPL 560
15	Audit Course Critical review of research publication on one relevant Topic	TPL 562
16	Audit Course Research Methodology and IPR	TPL 564
17	Technology of Polymer Blends & Alloys	TPL 651
18	Biodegradable Polymers, Packaging and Waste Management	TPL 653
19	Polymer Nano Technology	TPL 655
20	Audit Course Critical Review of Research Publications on one Relevant Topic	TPL 611
21	Audit Course	TPL 613

	Research Methodology and IPR	
22	Seminar	TPL 697
23	Dissertation/Project	TPL 695
24	Dissertation/ Project	TPL 698

Signature and Seal

Head of Department

Dr. Indira Nigam
Professor & Head
Dept. of Plastic Technology
H.B. Technical University, Kanpur

HARCOURT BULTER TECHNICAL UNIVERSITY KANPUR
SCHOOL OF CHEMICAL TECHNOLOGY
DEPARTMENT OF CHEMICAL TECHNOLOGY - PLASTIC TECHNOLOGY

Semester wise Course Structure

M. Tech. Chemical Technology - Plastic Technology
(Applicable from Session 2020-2021 for new entrants)

Year I, Semester I

(A Stream Only for students having B.Tech in Plastic Technology background)
(B Stream Only for students having B.Tech in other than Plastic Technology background)
(C Stream Only for students of M.Sc (Chemistry/Applied Chemistry /Industrial Chemistry) background)

Stream A

Sr. No.	Course Type	Subject Code	Course Title	Credits	Periods			Sessional Marks				ESE	Total Marks
					L	T	P	MSE	TA	Lab	Total		
1.	PCC	TPL 551	Advanced Polymer Chemistry	5	3	1	2	15	20	15	50	50	100
2.	PCC	TPL 553	Advanced Polymer Processing	4	3	1	0	30	20	-	50	50	100
3.	PCC	TPL 555	Advances in Modelling and Simulation of Chemical Processes	4	3	1	0	30	20	-	50	50	100
4.	PEC	TPL 557	Advanced Chemical Reaction Engineering	4	3	1	0	30	20	-	50	50	100
		Total		**17**	**12**	**4**	**2**				**200**	**200**	**400**

OR

Stream B/C

Sr. No.	Course Type	Subject Code	Course Title	Credits	Periods			Sessional Marks				ESE	Total Marks
					L	T	P	MSE	TA	Lab	Total		
1.	PCC	TPL 559	Advanced Polymer Rheology	4	3	1	0	30	20	-	50	50	100
2.	PCC	TPL 561	High Polymer Chemistry	5	3	1	2	15	20	15	50	50	100
3.	PCC	TPL 563	Polymer Processing	4	3	1	0	30	20	-	50	50	100
4.	PEC	TPL 567	Industrial Stoichiometery	4	3	1	0	30	20	-	50	50	100
5.	*MC (Non Credit)	BMA 551	Engineering Mathematics	2	2	0	0	-	-	-	-	-	-
		Total		**17**	**12**	**4**	**2**				**200**	**200**	**400**

*Only for students of Non-mathematics background at graduation level

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SCHOOL OF CHEMICAL TECHNOLOGY
DEPARTMENT OF CHEMICAL TECHNOLOGY - PLASTIC TECHNOLOGY

Semester wise Course Structure

M. Tech. Chemical Technology - Plastic Technology
(Applicable from Session 2020-2021 for new entrants)

Year I, Semester II

Sr. No.	Course Type	Subject Code	Course Title	Credits	Periods			Sessional Marks				ESE	Total Marks
					L	T	P	MSE	TA	Lab	Total		
1.	PCC	TPL 552	Advanced Polymerization Engineering	4	3	1	0	30	20	-	50	50	100
2.	PCC	TPL 554	Advanced Plastic Product and Mould Design	4	3	1	0	30	20	-	50	50	100
3.	PCC	TPL 556	Polymer Testing and Characterization	5	3	1	2	15	20	15	50	50	100
4.	PEC	TPL 558 TPL 560	Advances in Polymer Composites Advances in Rubber Technology	4	3	1	0	30	20	-	50	50	100
5.	MC (Non Credit)	TPL 562	Audit Course Critical review of research publication on one relevant Topic		0	2	0						
6.	MC (Non Credit)	TPL 564	Audit Course Research Methodology and IPR		0	1	0						
		Total		**17**	**12**	**4**	**2**				**200**	**200**	**400**

HARCOURT BULTER TECHNICAL UNIVERSITY KANPUR
SCHOOL OF CHEMICAL TECHNOLOGY
DEPARTMENT OF CHEMICAL TECHNOLOGY - PLASTIC TECHNOLOGY

Semester wise Course Structure

M. Tech. Chemical Technology - Plastic Technology
(Applicable from Session 2021-2022)

Year II, Semester III

Sl. No.	Course Type	Subject Code	Course Title	Credits	Periods			Sessional Marks				ESE	Total Marks
					L	T	P	MSE	TA	Lab	Total		
1.	PCC	TPL 651	Technology of Polymer Blends & Alloys	4	3	1	0	30	20	-	50	50	100
2.	PEC	TPL 653 TPL 655	Biodegradable Polymers, Packaging and Waste Management Polymer Nano Technology	4	3	1	0	30	20	-	50	50	100
3.	MC (Non Credit)	TPL 611	Audit Course Critical Review of Research Publications on one Relevant Topic		0	2	0						
4.	MC (Non Credit)	TPL 613	Audit Course Research Methodology and IPR		2	1	0						
5.	Seminar	TPL 697	Seminar	4	0	0	8	-	50	-	50	50	100
6.	Dissertation/ Project	TPL 695	*Dissertation/Project	2	0	0	4	-	50	-	50	50	100
		Total		**14**	**8**	**5**	**12**				**200**	**200**	**400**

*Dissertation to be continued in fourth semester.

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SCHOOL OF CHEMICAL TECHNOLOGY
DEPARTMENT OF CHEMICAL TECHNOLOGY - PLASTIC TECHNOLOGY

Semester wise Course Structure

M. Tech. Chemical Technology - Plastic Technology
(Applicable from Session 2021-2022)

Year II, Semester IV

Sl. No.	Course Type	Subject Code	Course Title	Credits	Periods			Sessional Marks				ESE	Total Marks
					L	T	P	MSE	TA	Lab	Total		
1.	Dissertation/ Project	TPL 698	Dissertation/Project	12	0	0	24	-	50	-	50	50	100
		Total		**12**	**0**	**0**	**24**		**50**		**50**	**50**	**100**