Uttarakhand Technical University, Dehradun

Scheme of Examination as per AICTE Flexible Curricula

Evaluation Schemes for B. Tech 2nd to 4thYear

W.E.F. Academic Session 2020-21

III to VIII SEMESTER

Bachelor of Technology (B. Tech.)

in

[Plastic and Polymer Engineering]

Uttarakhand Technical University,
Dehradun

New Scheme of Examination as per AICTE Flexible Curricula

Bachelor of Technology (B.Tech.)II Year
[Plastic and Polymer Engineering]
W.E.F. Academic Session 2020-21

III Semester

S. No.	Subject Code	Category	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours per week			Total Credits
				Theory			Practical						
				End Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem	Term work Lab Work & Sessional		L	T	P	
1.	BAST 301	BSC-5	Mathematics-III	100	30	20	-	-	150	3	1	-	4
2.	BMET 302	DC-1	Basic Thermodynamics	100	30	20	-	-	150	3	1	-	4
3.	BMET303 BMEP303	DC-2	Materials Science & Technology	100	30	20	30	20	200	3	-	2	4
4.	BCST305 BCSP305	DC-3	Object OrientedProgramming &Methodology	100	30	20	30	20	200	3	1	2	5
5.	BPPT 301	DC-4	Introduction to Polymer Science	100	30	20	-	-	150	3	1	0	4
6.	BCSP 307	DLC-3	Programming Practices (Introduction to MATLAB)	-	-	-	-	50	50	-	-	2	1
7.	BPPP 302	DLC	Virtual Lab Experiments related to III semester Labs					50	50	-	-	2	1
8.	BASP 107	DLC-1	Evaluation of Internship-I completed at I Year Level	-	-	-	-	50	50			4	2
9.	BASP 307	DLC-4	90 hrs Internship based on using various software's – Internship -II	To be completed anytime during Third/ fourth semester. Its evaluation/credit to be added in fifth semester.									
			Total	500	150	100	60	190	1000	15	3	12	25
10	BCSP 308	MC	Cyber Security	Non Credit Course									
			NSS/ NCC										

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IVSemester

S. No.	Subject Code	Category	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours per week			l Cred
				Theory			Practical						
				End Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Term work Lab Work & Sessional		L	T	P	
1.	BECT 402	DC	Energy & Environmental Engineering	100	30	20	-	-	150	3	1	-	4
2.	BPPT401 BPPP401	DC	Polymer Chemistry	100	30	20	30	20	200	3	1	2	5
3.	BPPT402 BPPP402	DC	Thermoplastic Materials	100	30	20	30	20	200	3	1	2	5
4.	BPPT403 BPPP403	DC	Thermoset Materials	100	30	20	30	20	200	3	1	2	5
5.	BMET404 BMEP401	DC	Fluid Mechanics	100	30	20	30	20	200	3	0	2	4
8.	BPPP 404	DC	Virtual Lab Experiments related to IV semester Labs	-	-	-	-	50	50			2	1
9.	BMEP 407	DLC	90 hrs Internship based on using various software's –Internship - II	To be completed anytime during fourth semester. Its evaluation/credit to be added in fifth semester.									2
Total				500	150	100	120	130	1000	15	4	10	26
8.	BCST 408	MC	Cyber Security	Non-credit course									
			NSS/NCC										

New Scheme of Examination as per AICTE Flexible Curricula

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V Semester

S. No.	Subject Code	Category	Subject Name	Maximum Marks Allotted					Total marks	Contact Hours per Week			Total Credit
				Theory			Practical						
				End Sem	Mid Sem	Quiz / Assignment	End Sem	Term Work /Lab Work &Sessional		L	T	P	
1.	BPPT501 BPPP501	DC	Analysis and Characterization of Polymers	100	30	20	30	20	200	3	1	2	5
2.	BPPT-502 BPPP502	DC	Plastic Testing Techniques	100	30	20	30	20	200	3	1	2	5
3.	BPPT-503 BPPP -503	DC	Plastic Processing-1	100	30	20	30	20	200	3	1	2	5
4.	BPPT -504	DE	Departmental Elective	100	30	20	-	-	150	3	1	0	3
5.	BOME -505	OE	Open Elective	100	30	20	-	-	150	3	0	0	3
6.	BPPP -506	D Lab	Synthesis & Polymerization Lab	-	-	-	30	20	50	0	0	4	2
7	BPPT -507	DLC	Evaluation of Internship-II completed at II year level`	-	-	-	-	50	50	-	-	4	2
8		IN	Internship –III	To be completed any time during Fifth/ Sixth semester. Its evaluation/credit to be added in Seventh semester									
Total				500	150	100	120	130	1000	15	4	14	25
NSS/NCC													

Departmental Electives		Open Electives	
BPPT 504(A)	Polymer Structure & Properties Relationship	BOME 505(A)	Principle of Management
BPPT 504(B)	Conducting Polymers	BOME 505(B)	TQM and SQC
BPPT 504(C)	Speciality Polymers	BOET 504(D)	Innovation and Entrepreneurship

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[Plastic and Polymer Engineering]
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VI Semester

S. No.	Subject Code	Category	Subject Name	Maximum Marks Allotted					Total marks	Contact Hours per Week			Total Credit
				Theory			Practical						
				End Sem	Mid Sem	Quiz / Assignment	End Sem	Term Work /Lab Work &Sessional		L	T	P	
1.	BPPT 601 BPPP601	DC	Polymer Rheology	100	30	20	30	20	200	3	1	2	5
2.	BPPT 602 BPPP602	DC	Plastics Productand Moulds Design	100	30	20	30	20	200	3	1	2	5
3.	BPPT-603 BPPP603	DC	Plastic Processing-2	100	30	20	30	20	200	3	1	2	5
4.	BPPT - 604(A/B/C)	DE	Departmental Elective	100	30	20			150	3	1	0	3
5.	BOME -605	OE	Open Elective	100	30	20			150	3	0	0	3
6	BMEP -607	P	Minor Project -I					50	50	0	0	4	2
7	BMEP -608	P	Open Source Lab	-	-	-	30	20	50	0	0	4	2
		IN	Internship –III	To be completed any time during Fifth/ Sixth semester. Its evaluation/credit to be added in Seventh semester									
Total				500	150	100	120	130	1000	15	4	14	25

Departmental Electives		Open Electives	
BPPT 604(A)	Additives and Compounding	BOME 605(A)	Robotics
BPPT 604 (B)	Adhesives & Surface Coating	BOME 605 (B)	Optimization Techniques
BPPT 604 (C)	Polymer Degradation and Stabilization	BOME 605 (C)	Renewable Energy Technology

***Students may also earn credits of open elective through NPTEL/Swayam.**

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VII Semester

S. No.	Subject Code	Category	Subject Name	Maximum Marks Allotted					Total marks	Contact Hours per Week			Total Credit
				Theory			Practical						
				End Sem	Mid Sem	Quiz / Assignment	End Sem	Term Work /Lab Work &Sessional		L	T	P	
1.	BPPT 701 BPPP-701	DC	Polymer Blends & Composites	100	30	20	30	20	200	3	1	2	5
2.	BPPT-702	DC	Plastic Packaging Technology	100	30	20	-	-	150	3	1	0	3
3.	BPPT-703	DE	Departmental Elective	100	30	20	-	-	150	3	1	0	3
4.	BMET-704	OE	Open Elective	100	30	20	-	-	150	3	0	0	3
5.	BPPP-705	D Lab	Additives & Compounding Lab	-	-	-	30	20	50	0	0	4	2
6.	BPPP-707	IN	Internship III	-	-	-	-	100	100	-	-	2	1
7.	BPPP-706	P	Minor Project-2	-	-	-	50	50	100	0	0	4	2
Total				400	120	80	110	190	900	12	3	12	19
NSS/NCC													

Departmental Electives		Open Electives	
BPPT 703(A)	Fiber Manufacturing Technology	BMET 704(A)	Energy Conservation
BPPT 703(B)	Nylon Technology	BMET 704(B)	Introduction to AI
BPPT 703(C)	Polymer Nano Materials	BMET 704(C)	MEMS & Microsystems Technology

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Bachelor of Technology (B.Tech.)IV Year
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W.E.F. Academic Session 2020-21

VIII Semester

S. No.	Subject Code	Category	Subject Name	Maximum Marks Allotted					Total marks	Contact Hours per Week			Total Credi
				Theory			Practical						
				End Sem	Mid Sem	Quiz / Assignment	End Sem	Term Work /Lab Work & Sessional		L	T	P	
1.	BPPT 801	DC	Rubber Technology	100	30	20			150	3	1	0	4
2	BPPT 802	DC	Plastic Waste Management & Recycling	100	30	20			150	3	1	0	4
3	BPPT-803	DE	Departmental Elective	100	30	20			150	3	0	0	3
4.	BPPT-804	OE	Open Elective	100	30	20			150	3	0	0	3
5	BPPP-805	S	Open source Lab					50	50	0	0	2	1
6	BPPP-806	D Lab	Plastic Product Testing Lab				30	20	50	0	0	4	2
7	BPPP-807	P	Major Project				100	100	200	0	0	8	4
Total				400	120	80	130	170	900	12	2	14	21

Departmental Electives		Open Electives	
BMET-802 (A)	Polyurethane Technology	BPPT-804 (A)	Industrial Safety and Hazard Management
BMET-802 (B)	Biodegradable Polymers	BMET-804 (B)	Environment and Ecology
BMET-802 (C)	Biomedical Plastics	BMET-804 (C)	Programming in python