



# बिरला प्रौद्योगिकी संस्थान BIRLA INSTITUTE OF TECHNOLOGY

(वि.अनु.आ.अधिनियम १९६ की धारा ३ के तहत मन्त्रित्व विश्वविद्यालय | A Deemed to be University u/s 3 of UGC Act. 1956)

मेसरा, राँची- ८३५२१५ (भारत) | MESRA, RANCHI - 835 215 (INDIA)

## DEPARTMENT OF PRODUCTION & INDUSTRIAL ENGINEERING


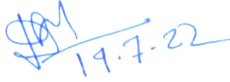
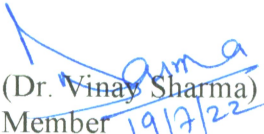



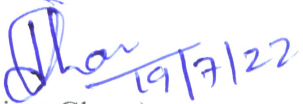
July 19, 2022.

### Minutes of the meeting of the Board of Studies held on 19.07.2022.

A meeting of the Board of Studies of the Department was held on July 19, 2022, at 10.30 A.M. in the office of the undersigned to discuss the inclusion of course structure and syllabi of MT 132 and MT133 Communication Skills for all UG & P.G. students.

The members of the Board of Studies discussed the matter and suggestions received from the Dean, UGS and Dean, PGS vide Notice Ref. No. UGS/PGS/CS/2021-22/126 dated 20.6.2022. The members of the Board of Studies concur with the decision of the Academic Council for further processes.

Signature: Members of Board of Studies:

 (Dr. Utpal Baul) Member	 (Dr. D.P. Mishra) Member	 (Dr. Vinay Sharma) Member	 (Dr. R.K. Singh) Member
 (Dr. L.N. Pattanaik) Member	 (Dr. Somak Datta) Member	 (Dr. Joyjeet Ghose) Chairman	

## PROGRAMME COURSE STRUCTURE

**BIRLA INSTITUTE OF TECHNOLOGY- MESRA, RANCHI**  
**REVISED COURSE STRUCTURE - Effective from academic session 2022-23**  
**Based on CBCS & OBE Model**

**Recommended scheme of study for M.Tech in PRODUCTION & INDUSTRIAL ENGINEERING**

SEMESTER / Session of Study (Recommended)	Course Level	Category of Course	Course Code	Courses	Mode of delivery & Credits <i>L-Lecture; T-Tutorial; P-Practical</i>			Total Credits <i>C- Credits</i>	
					L (Periods/ week)	T (Periods/ week)	P (Periods/ week)	C	
<b>THEORIES</b>									
FIRST / Monsoon	Fifth	Programme Core (PC)	PE 503	Planning & Control of Production System	3	0	0	3	
			PE 511	Computer Integrated Manufacturing	3	0	0	3	
			PE 522	Optimization Techniques	3	0	0	3	
			PE 523	Manufacturing Strategies	3	0	0	3	
			PE 524	Advanced Manufacturing Technologies	3	0	0	3	
	<b>LABORATORIES</b>								
	Fifth	Humanities and Social Science (HSS)	MT 132	Communication Skills - I	0	0	3	1.5	
		(PC)	PE 502	Computer Aided Manufacturing Lab	0	0	4	2	
			PE 525	Advanced Manufacturing Technologies Lab	0	0	4	2	
	<b>TOTAL</b>								<b>20.5</b>
<b>THEORIES</b>									
SECOND/ Spring	Fifth	Electives of Production & Operations Management Specialization (Any 5 courses)	PE 504	Modelling and Simulation	3	0	0	3	
			PE 508	Operations & Supply Chain Management	3	0	0	3	
			PE 518	Data Analytics	3	0	0	3	
			PE 521	Quality Engineering and Robust Design	3	0	0	3	
			PE 526	Advanced Topics in Operations Research	3	0	0	3	
			PE 527	Soft Computing in Manufacturing	3	0	0	3	
		Electives of Production Technology Specialization (Any 5 courses)	PE 510	Robotics & Robot Applications	3	0	0	3	
			PE 521	Quality Engineering and Robust Design	3	0	0	3	
			PE 527	Soft Computing in Manufacturing	3	0	0	3	
			PE 528	Manufacturing Automation	3	0	0	3	
			PE 529	Advanced Machining Technologies	3	0	0	3	
			PE 530	Materials for Engineering Applications	3	0	0	3	
			PE 531	Analysis of Material Deformation Processes	3	0	0	3	
			PE 532	Additive Manufacturing	3	0	0	3	
			ME 506	Applied Tribology	3	0	0	3	

Introduced and approved in Meeting of Board of Studies, dated 23/04/2018,

Revised and approved in Meeting of Board of Studies, dated 21/06/2021

**Revised and Approved in Meeting of Board of Studies, dated 15/02/2022, 19/07/22.**

R.K. Singh  
19/7/22

Sam  
19/7/22

Nama  
19/7/22

SECOND/ Spring	LABORATORIES							
	Fifth	(HSS)	MT 133	Communication Skills - II	0	0	3	1.5
		(PC)	PE 505	Manufacturing Simulation Lab	0	0	4	2
			PE 517	Computer Aided Design & Drafting Lab	0	0	4	2
TOTAL							20.5	

THIRD / Monsoon	THEORIES							
	Sixth	(PC)	PE 600	Thesis (Part I)				8
		Open Elective (OE)		Open Elective - I / MOOC - I	3	0	0	3
				Open Elective - II / MOOC - II	3	0	0	3
TOTAL							14	
FOURTH/ Spring	Sixth	(PC)	PE650	Thesis (Part II)			16	
	TOTAL							16
GRAND TOTAL FOR M. TECH PROGRAMME (41 + 30)							71	

### OPEN ELECTIVE COURSES


LEVEL / SESSION	Code no.	Name of the OE courses	Prerequisites courses with code	L	T	P	C
SISTH / (MO)	PE 601	Automated Manufacturing	None	3	0	0	3
SIXTH / (MO)	PE 602	Smart Manufacturing	None	3	0	0	3

\* OPEN ELECTIVES TO BE OPTED ONLY BY OTHER DEPARTMENT STUDENTS

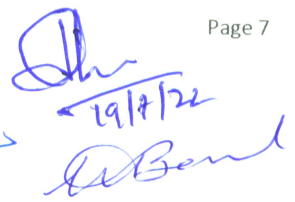
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R.K. Singh  
19/7/22

  
S.M.  
19/7/22

  
Anma  
19/7/22



  
19/7/22  
A. Bond



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Dated: 18.07.2022

## NOTICE

A meeting of internal members of the Board of Studies Department of PIE is scheduled on 19.07.2022 at 10.30 AM to discuss the inclusion of course structure and syllabi of MT 132 and MT133 Communication Skills for all UG & P.G. students as per suggestions received from the Dean, UGS and Dean, PGS vide Notice Ref. No. UGS/PGS/CS/2021-22/126 dated 20.6.2022.

Joyjeet Ghose  
Chairman, BOS PIE  
Head, PIE

Copy to:

1. Office copy
2. Concerned members