





Annual Report 2021-2022

NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING





Annual Report 2021-2022

Annual Report
National Institute of Industrial Engineering
(NITIE), Mumbai
(1 April 2021 – 31 March 2022)



National Institute of Industrial Engineering

Vision

"To be the thought leader in Industrial Engineering education and research, and partner in the manufacturing renaissance of the nation"

Mission

"To advance transformative education and industry-inspired research in Industrial Engineering"



CONTENTS

1.	Int	rodu	ction - About NITIE
2.	Ins	titut	e Governance
	a.	Boa	ard of Governors / Society
	b.	Dea	ans & Faculty Resources
	c.	Adı	ministrative Officers
3.	Rai	nking	g and Accreditation
4.	Aca	adem	ic Activities
	a.	Aca	demic Programmes
		i.	Fellow Programme
		ii.	M.Tech Equivalent Programme
			a) PGDIE
		iii.	MBA Equivalent Programme
			a) PGDIM
			b) PGDSM
		iv.	Post Graduate Diploma for Executives in Visionary Leadership for Manufacturing (PGDEX-VLFM)
		v.	General Management Programme (GMP) for Defense Personnel
	b.	Are	as and Faculty Activities
		i.	Operations and Supply Chain Management
		ii.	Analytics & Data Science
		iii.	Sustainability Management
		iv.	Finance and Economics
		v.	Marketing, Organisational Behaviour and Human Resource Management
		vi.	Faculty Involvement in Student Projects
	c.	Lab	poratories and Research Centres
		i.	Ergonomics Laboratory
		ii.	Digital Manufacturing Laboratory
		iii.	Industrial Environment Laboratory
		iv.	Centre for Innovation, Incubation and Entrepreneurship
		v.	Centre for Environmental Studies
		vi.	Centre of Excellence in Logistics and Supply Chain Management





NIT	TE
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5 .	Out	reach: Institute - Industry Collaboration	54
	a.	Management Development Programme (MDP)	55
	b.	Unit-Based Programme (UBP)	57
	c.	Social Outreach Programme	62
	d.	Consultancy Services	65
	e.	Memorandum of Understanding (MoUs)	66
6.	We	binars/Online Talks/Sessions/Workshops and Institutional Achievements	67
7.	Stu	dent Affairs and Activities	73
8.	Phy	sical Facilities and Infrastructure	99
	•	Library	100
	•	DISC	103
	•	Estate - Infrastructue Creation and Maintenance	105
	•	NITIE Dispensary	110
	•	Security and Transport	111
9.	NIT	TE Alumni Association	112
10.	Ins	titute Events	116
11.	•	NITIE Concludes its XXVI Convocation Ceremony	117
	•	Inauguration of "COE in Logistics & Supply Chain Management"	118
	•	Official Language Implementation	119
	•	Vigilance Awareness Week	123
	•	NITIE Welfare Activities & Events	125
	•	Ek Bharat Shreshtha Bharat	130
	•	Fit India Movement	132
12.	AN	NUAL ACCOUNTS	134
	•	Fund Flow for the Year	135
	•	Grant-in-aid received and expenditure incurred	136
	•	Balance Sheet	138
	•	Institute - Extracts - Form GFR-22	155
13.	AN	NEXURES	161
	Info	ormation relating to Civilian posts – Academic and Non-Academic posts	162



ABOUT NITIE

NITIE was established as an autonomous Institute in 1963 by the Government of India with the assistance of the United Nations Development Program through International Labour Organization.

NITIE offers:

- A two-year Post-Graduate Program in Industrial Engineering (PGDIE), Industrial Management (PGDIM), and Sustainability Management (PGDSM).
- Fellowship Program, which is recognized as equivalent to a Ph. D. of an Indian University.
- A six-month General Management Program (GMP) for Defense Personnel.
- Jointly a one-year full-time Post-Graduate Diploma for Executives–Visionary Leadership for Manufacturing (PGDEX-VLFM) with IIT Delhi. This program is specially designed for experienced engineers with 5-12 years of experience in the manufacturing domain.

In addition, NITIE has been conducting several short-term Management Development Programs of short duration in various areas of Industrial Engineering and Management. The training programs of NITIE emphasize learning with a purpose and are accompanied by an abiding people concern.

Besides training, NITIE is also engaged in applied research and offers consultancy in the various facets of Industrial Engineering, Operations Research, Decision Sciences, Sustainability Management, Marketing Management, Finance, Economics and Strategy, Organization Behavior and Human Resource Management, Project Management and Manufacturing Management.

NITIE faculty members, drawn from various basic disciplines, have diverse experience in business, industry, and government and thus align academic concepts with practical problems. By introducing new concepts, techniques, and programs to meet the changing needs of rapid technological development and socio-economic transformation, NITIE endeavors to equip efficient performance to the managers, administrators and specialists in government, public utilities, industry and other service sectors with the necessary skills and expertise.

NITIE was ranked 9th in the Management category of NIRF. Also, NITIE, Mumbai, was ranked 73rd with a 74.6 score in the UN Sustainable Goal No. 4 Quality Education in the World and 2nd in India by the prestigious THE Impact Rankings 2022.

NITIE campus is located in one of the most picturesque surroundings of Mumbai, flanked by Powai and Vihar Lakes. NITIE is administered through a Board of Governors representing industry, government, labour and professional bodies.

INSTITUTE GOVERNANCE

- i. NITIE Board of Governors/Society
- ii. Deans and Faculty Resource
- iii. Administrative Officers



Annual Report 2021-2022



NITIE BOARD OF GOVERNORS/SOCIETY

NITIE BOARD OF GOVERNORS

I	Chairman	Chairman – To be appointed by the Ministry
II	One nominee of the Central Government representing Ministry of Finance	Member – To be nominated by the Ministry
III	One nominee of the Central Government representing Ministry of Education	
IV	One eminent Professor with Industrial Engineering/ Management Background to be nominated by AICTE	Member – To be nominated by AICTE
V	One eminent representative from among the Directors of premier institutions - IITs, IISC, and IIMs to be nominated by the Central Government	Member - To be nominated by the Ministry
VI	One eminent representative from the Industry to be nominated by the Central Government	Member - To be nominated by the Ministry
VII	One eminent representative of the Industry ${f to}$ be ${f co}$ -opted by ${f the}$ Board	Member
VIII	One eminent alumnus to be co-opted by the Board, who has significantly contributed to the industry and donated to the Institute for its growth and development;	Member
IX	The Principal Secretary/Secretary, Higher and Technical Education Government of Maharashtra	Member
X	The Director of the Institute	Ex – Officio Member - Director, NITIE
XI & XII	Two members from the teaching faculty of the Institute to be co-opted by the Director with the approval of Chairman on year-to-year basis. Such members may be re-nominated for one more term consecutively.	Professor, NITIE Associate Professor, NITIE
XIII	Registrar of the Institute	Secretary

NITIE SOCIETY

I	Chairman	Chairman - To be appointed by the Ministry
II	One nominee of the Central Government representing Ministry of Finance	Member - To be nominated by the Ministry
III	One nominee of the Central Government representing Ministry of Education	
IV	One eminent representative of Industry nominated by the Central Government	Member - To be nominated by the Ministry



V	One eminent representative of the Industry Coopted by the Board	Member
VI	One eminent representative from among the Directors of premier institutions - IITs, IISC, and IIMs, to be nominated by the Central Government	Member – To be nominated by the Ministry
VII	The Director of the Institute (Ex-officio Member)	Ex-Officio Member - Director, NITIE
VIII & IX	Two members from the teaching faculty of the Institute (<i>To be co-opted by the Director with the approval of Chairman on year-to-year basis.</i> Such members may be re-nominated for one more term consecutively)	 Prof. Hema Date, Professor (Analytics and Data Science) Prof. Vivek Khanzode, Associate Professor (Operations & Supply Chain Management)
X	Registrar of the Institute (Ex-officio Secretary)	Secretary

NITIE FINANCE COMMITTEE

1.	Chairman	Chairman - To be appointed by the Ministry
2.	Nominee of Ministry of Education	Member – To be nominated by the Ministry
3.	Nominee of Integrated Finance Division, Ministry of Education	Member – To be nominated by the Ministry
4.	One Board Member, NITIE –	Member To be nominated by the Chairman
5.	Director, NITIE	Member
6.	Registrar, NITIE	Secretary

BUILDING & WORKS COMMITTEE (B&WC)

1	Director, NITIE	Chairman
2	One Professor from Dept. of Civil Engineering (from Institute of repute like IITs, IISc, etc.)	Member To be Co-opted by the Director NITIE
3	Professor In-Charge, Estate, NITIE	Member
4	One nominee of the Central Government representing Ministry of Education, GOI	Member To be nominated by the Ministry
5	One nominee of the Central Government from representing Integrated Finance Division, GOI	Member To be nominated by the Ministry
6	Registrar, NITIE	Member
7	Superintending Engineer (CPWD)	Member
8	Superintending Engineer (PWD)	Member
9	Executive Engineer, NITIE	Secretary



NITIE BOARD OF GOVERNORS/SOCIETY (26th March 2021 to 26th March 2024)

I	Chairman	Shri Shashi Kiran Shetty Founder & Chairman, Allcargo Logistics Ltd. Chairman, ECU Worldwide and Gati Ltd. 6th Floor Awashya House, CST Road, Kalina, Santacruz (East), MUMBAI - 400 098. (Up to 06.11.2024)	
II	Ministry of Finance	Ms Darshana M. Dabral Joint Secretary & Financial Advisor, MoE Department of Higher Education Ministry of Human Resource Development Government of India, Room No. 111 -C Wing, Shastri Bhavan, NEW DELHI - 110 001.	
III	Ministry of Education	Soumya Gupta (IAS) Jt. Secretary, DHE MoE Department of Higher Education Ministry of Human Resource Development Government of India, Room No. 111 – C Wing Shastri Bhavan, NEW DELHI – 110 001.	
IV	Representative of the All India Council for Technical Education	Prof. S.G. Deshmukh, Dept. of Mech. Engg. IIT Delhi, Hauz Khas, NEW DELHI – 110 016.	
V	A representative from among the Directors of premier Institutions – IITs, IISC, and IIMs to be nominated by the Central Government	Dr. Bhimaraya Metri, Director, IIM, Nagpur	
VI	A representative from the Industry to be nominated by the Central Government	Shri S.N. Subramanyan, CEO & MD, Larsen & Tubro, MUMBAI – 400 072.	
VII	Representative of the Industry to be co- opted by the Board	Shri Ajit Kumar Rai, CMD – Suprajit Engineering Ltd.	
VIII	Eminent alumnus to be co-opted by the Board who has significantly contributed to its growth and development	Mr Diwakar Singhal, Senior Vice President, Clint Partner at Genpact Ltd. Sector Road, Sector 53, Phase V DLF City, Gurgaon - 123 002.	
IX	Eminent represented of the Industry Coopted by the Board	Shri V.S. Parthasarthy, Coach, Mentor & Entrepreneur Ex-GCFO & President Mahindra Group.	
X	The Principal Secretary/Secretary, Higher and Technical Education Government of Maharashtra	Shri Vikas Rastogi, IAS, Principal Secretary, Higher and Technical Education Government of Maharashtra Madam Cama Road, Hutatma Rajguru Chowk Mantralaya, Mumbai – 400 032.	
X	Ex-Officio – Member	Prof. Manoj K. Tiwari, Director, NITIE	



Annual Report 2021-2022

XI & XII	Two members from the teaching faculty of the Institute (to be co-opted by the Chairman)	Prof. Hema Date, Professor (Analytics and Data Science) Prof. Vivek Khanzode, Associate Professor (Operation & Supply Chain Management)
XIII	Ex-Officio- Secretary	Dr. Basavaraj Swamy, Registrar

The number of Board/Society Meetings for the FY 2021-22:

Board Meeting No.	<u>Date</u>	Society Meeting No.	<u>Date</u>
159	06.04.2021	-	-
160	17.03.2022	-	-

The number of Finance Committee Meetings for the FY 2021-22:

<u>Finance Committee</u>	<u>Date</u>	Society Meeting No.	<u>Date</u>
-	06.04.2021	-	-
91	17.03.2022	-	-



NITIE DEANS & FACULTY RESOURCES

DIRECTOR

Prof Manoj Kumar Tiwari

Deans:

1. Prof. Hema A Date - Dean (Alumni & International Affairs)

2. Prof. Shankar Murthy - Dean (Academic)

3. Prof. Shirish S Sangle
4. Prof. Rauf Iqbal
Dean (Faculty Affairs)
Dean (Student Affairs)

5. Prof. Vivek Khanzode - Dean (Planning & Coordination)

Associate Deans

1. Prof. Anju Singh - Associate Dean (Infrastructure Planning & Development

2. Prof. Neeraj Pandey - Associate Dean (International Relations (IR)

3. Prof. Sumi Jha - Associate Dean (Academic)

4. Prof. Utpal Chattopadhyay - Associate Dean (Student Welfare and Hostel)
5. Prof. Priyanka Verma - Associate Dean (Planning & Coordination)

Professor In-Charge Education and Research

1. Prof. KS Ranjani - PIC Alumni

2. Prof. Upasna A Agarwal - PIC (Diversity, Equity and Inclusivity (DEI) Cell

3. Prof. Poonam Singh - PIC Branding

4. Prof. BE Narkhede - PIC Industry Connect

5. Prof. Ravindra Gokhale - PIC Placement
 6. Prof. Rakesh Raut - PIC Research

Facilities

1. Prof. Milind A Akarte - PIC DISC

2. Prof. Rakesh Verma - PIC CPSC and Stores

3. Prof. BE Narkhede - PIC Estate

4. Prof. B Koteswara Rao Naik - PIC (Security & Transport)

Warden

1. Prof. Utpal Chattopadhyay - Chief Warden

Prof. Ajay Panda - Warden - Taylor Hall
 Prof. Vidyadhar Gedam - Warden - Taylor Hall
 Prof. (Ms.) Jinil Persis - Warden - Gilberth Hall

5. Prof. Nikhil Mehta - Warden – Vikram Sarabhai Hall

Professor

1. Prof. D K Srivastava

2. Prof. S K Nair

3. Prof. L Ganapathy

4. Prof. (Ms.) Seema Unnikrishnan



- 5. Prof. (Ms) Vijaya Gupta
- 6. Prof. M Venkateshwarlu
- 7. Prof. M K Jha
- 8. Prof. T Prasad
- 9. Prof. V B Khanapuri
- 10. Prof. (Ms.) Hema A Date
- 11. Prof. Shankar Murthy
- 12. Prof. (Ms) Purnima S Sangle
- 13. Prof. Shirish Sangle
- 14. Prof. Milind A Akarte
- 15. Prof. Padmanav Acharya
- 16. Prof. (Ms.) R D Chikhalkar
- 17. Prof. (Ms.) Anju Singh
- 18. Prof. Sanjeev Verma
- 19. Prof. Rakesh Verma
- 20. Prof. S K Md. Rauf Igbal
- 21. Prof. Vivek V Khanzode
- 22. Prof. Utpal Chattopadhyay
- 23. Prof. Neeraj Pandey
- 24. Prof. (Ms.) Sumi Jha
- 25. Prof. (Ms.) Upasna A Agarwal
- 26. Prof. B Koteswara Rao Naik
- 27. Prof. Balkrishna Eknath Narkhede

ASSOCIATE PROFESSOR

- 1. Prof. Sachin Kamble
- 2. Prof. Ranjan Chaudhuri
- 3. Prof. Nikhil K Mehta
- 4. Prof. Somshekhar Bhattacharya
- 5. Prof. (Ms) Hema Diwan
- 6. Prof. Binilkumar A S
- 7. Prof. (Ms.) Priyanka Verma
- 8. Prof. (Ms.) Ruchita Gupta
- 9. Prof. Ravindra Shridhar Gokhale
- 10. Prof. Rakesh Dulichand Raut
- 11. Prof. (Ms.) KS Ranjani
- 12. Prof. (Ms.) Poonam Singh
- 13. Prof. Vipul Kumar Singh
- 14. Prof. Ajaya Kumar Panda
- 15. Prof. Mainak Mazumdar
- 16. Prof. (Ms.) Sushmita A Narayana
- 17. Prof. (Ms.) Kanchan D Joshi
- 18. Prof. Debabrata Das

ASSISTANT PROFESSOR

- 1. Prof. Vidyadhar Gedam
- 2. Prof. Rofin T M

ADJUNCT FACULTY

- 1. Prof. Krupa Shankar
- 2. Prof. R. K. Shamsundar
- 3. Prof. R. K. Srivastava

ADMINISTRATIVE OFFICERS

Registrar

Dr. Basavaraj Swamy

Controller of Examination

Dr. Utpal Kumar Debnath

Medical Officer

Dr Smruti R Patel

Assistant Registrar

Smt. Sangeeta Jadhav

Lt. Col. Smt. Nisha Singh (Retd)

Shri T M Hariram

Shri Prashant R Salunkhe

System Designer & OIC, Network Administration

Shri S. M. Venkatramaiah Ramagiri

Officer In-charge (DISC)

Dr. Pratima N Dabholkar

Library & Information Officer

Prof. Binilkumar A S (LIO In-charge)

Executive Engineer

Shri R M Gaikwad

Senior Programmer

Shri K. Yeshwantha Rao

Programmer

Shri J K Karande

Hindi Officer

Shri Md. Aftab Alam

Assistant Library & Information Officer

Shri Prashant Goswami



RANKING AND ACCREDITATION

NIRF Rankings in the Management Category

NITIE has performed exceedingly well across different parameters and received NIRF rankings 12th and 9th, respectively, in the years 2021 and 2022 in the management category of NIRF. NITIE's various comprehensive growth-oriented initiatives in academics, industry connect, applied research and social front, with an active presence on social media, have enabled us to improve our scores substantially compared to last year's. Various improvements made during the year were as follows:

- Research and professional practice parameters,
- Focus on industry-oriented quality research,
- Graduation outcomes. E.g., Many new companies came for recruitment this year.
- Initiated conducting a series of Global Certification Programs with reputed universities in the last year

THE Impact Ranking

NITIE, Mumbai, has been ranked:

- 68th in the world in SDG-8(Decent work and economic growth), scoring 71.6 (2021).
- 73rd with a 74.6 score in the UN Sustainable Goal No. 4 Quality Education in the World (2022)
- 2nd in India by the prestigious THE Impact Rankings 2022.

NITIE scored well in the:

- Goal No. 9 (Industry, Innovation, and Infrastructure)
- Goal No. 1 (No Poverty)
- Goal No. 8 (Decent Work and Economic Growth)
- Goal No.6 (Clean Water and Sanitation)

The NITIE Ranking team consisted of Prof Vijaya Gupta, Prof Seema Unnikrishnan, Prof Rakesh Raut, Prof Ravindra Gokhale and an active ranking team of students and dedicated other faculty, officers, and staff.

AACSB Accreditation Membership

The Committee filled up Institute Eligibility Application and received the Institutional Membership of AACSB. The Committee is working towards the further process of accreditation with its international mentor appointed by AACSB. The Accreditation Committee consisted of Prof Vijaya Gupta, Prof Nikhil K Mehta, Prof Binil Kumar AS, Prof Hema Diwan, Prof Ranjan Chaudhary, Prof Jinil Persis and Dr Utpal Debnath, and a team of students have worked under the leadership of Prof Manoj Kumar Tiwari, Director, NITIE. AACSB is a global non-profit association that provides quality assurance, business education intelligence, and learning and development services to over 1,700 member organizations and more than 840 accredited business schools worldwide.

ACADEMIC ACTIVITIES

a. Academic programmes

- i. Fellow Programme
- ii. M.Tech Equivalent Programme
 - PGDIE
- iii. MBA Equivalent Programme
 - PGDIM
 - PGDSM
- iv. Post Graduate Diploma for Executivesin Visionary Leadership for Manufacturing(PGDEX-VLFM)
- v. General Management Program for Defense Personnel
- b. Admissions
- c. Convocation
- d. Areas and Faculty Activities
 - Operations and Supply Chain Management
 - Analytics & Data Science
 - Sustainability Management
 - Finance and Economics
 - Marketing, OB and HR

Annual Report 2021-2022



ACADEMIC PROGRAMMES

NITIE offers the following Academic Programmes:

1. FELLOW (Doctoral) Programme

The Fellow (Doctoral) programme started in 1984 and aimed to admit individuals with a sound academic background, strong motivation, and potential to become excellent researchers at national and international levels. In addition, the programme's interdisciplinary nature stimulated opportunities to explore different facets of research areas. Admission criteria for the fellow programme were:

- Master's degree or equivalent in Engineering/ Technology, Management, Economics, Commerce, Social Science, Life Sciences, and Pure Sciences with 60% aggregate marks {relaxable 5% in case of SC/ST/PwD (Person with Disability) candidates} from recognized University/Institution, CA/ICWA and ACS. The details of the Fellow (Doctoral) programme are as follows:
- 11 Students have presented the LR-PR Seminar.
- 57 Students have presented the Credit Seminar.
- 19 Students have presented the Pre-Synopsis Seminar.
- 05 Students have presented the Progress Seminar
- 10 Students have presented the Viva-Voce Examination successfully

2. Post Graduate Diploma in Industrial Engineering (PGDIE)

A two-year residential Post Graduate Diploma in Industrial Engineering was introduced in 1971, equivalent to a Master's Degree in Industrial Engineering, recognized by the Government of India, the Association of Indian Universities, and the All India Council for Technical Education. The PGDIE program has a focus on techno-managerial and cross-functional skills. Admission is restricted

to the candidates who qualify through the Graduate Aptitude Test in Engineering (GATE), followed by Group Discussion and Personal Interview. Industry Sponsored candidates fulfilling eligibility criteria are also considered for admission.

3. Post Graduate Diploma in Industrial Management (PGDIM)

NITIE introduced a two-year' residential Post Graduate Diploma in Industrial Management (PGDIM) in 1994, recognized by the All India Council for Technical Education. The PGDIM addresses all the strategic, tactical and operational issues involved in today's business. Understanding the various perspectives and dimensions of business is at this programme's base. The programme focuses on Systems, Operations, SCM, Business Policy, Tools and Techniques, Human Resources, Marketing and Finance, which help develop the right knowledge amalgamation. The programme addresses the needs of the industry by targeting the entire value chain of the business organization.

Admission to the PGDIM programme is restricted to Engineering Graduates who qualify through Common Admission Test (CAT) conducted by the IIMs, followed by Group Discussion and Personal Interview.

4. Post Graduate Diploma in Sustainability Management (PGDSM)

NITIE introduced a two-year' residential Post-Graduate Diploma in Industrial Safety and Environmental Management in 2001, approved by the All India Council for Technical Education. The objective of the Programme is to provide knowledge to improve the quality of Industrial safety and environmental practices to equip the students.

The programme aimed at providing the necessary expertise to effectively manage Industrial safety and environmental problems. The programme paves the way for cleaner and safer production, teaching a systematic approach to dealing with Industrial Safety and Environmental Management through



scientific management methodologies available for decision-making, and providing the foundation for specialized studies and research in safety and environment.

Admission to PGDISEM Programme is restricted to Engineering Graduates who qualify through Common Admission Test (CAT) conducted by the IIMs, followed by Group Discussion and Personal Interview.

5. Post Graduate Diploma for Executives in Visionary Leadership for Manufacturing (PGDEX-VLFM)

NITIE and IIT Delhi jointly launched a one-year full-time post-graduate diploma for Executives in Visionary Leadership for Manufacturing (PGDEX-VLFM) with IIT Delhi in 2017. This programme is specially designed for experienced engineers with 5 – 12 years of experience in the manufacturing domain. Professionals eager to drive the manufacturing renaissance by putting themselves through a challenging, peer-driven, experiential learning experience are encouraged to apply in individual or sponsored categories.

PGDEX-VLFM, Class of 2021-22, with an average work experience of 8.3 years, boasted twenty aspiring leaders with rich domain expertise over diversified backgrounds like oil and gas, power, metals, mining, white goods, automobile, and consulting. At NITIE, they are groomed to explore business opportunities. The PGDEX-VLFM students

had already been performers in their respective organizations before joining the program and were chosen for this course after a rigorous selection process including profile shortlisting, written tests and interviews.

6. General Management Programme (GMP) for Défense Personnel

NITIE has partnered with the Directorate General Resettlement (Ministry of Defence) for one of the prestigious training programmes, the "General Management Program" for Defence Officers. The programme aimed to support retiring defence officers resettling in different corporate-level positions. The program offered them opportunities to choose a new career path after their outstanding service to the nation for 10 - 30 years. The General Management Program runs for 24 weeks. During 2021-2022, two batches have undergone the GMP programme for two batches.

The programme covered the following:

- The fundamental perspective of the managerial system included various core management aspects such as operations, project management, strategic marketing management, human resource management and information design systems, finance and accounting, economics and sustainability management.
- Vertical specializations such as General Management or Operations & Supply Chain Management.

ADMISSION

The number of students admitted in the various programmes 2021-2023(PGDIE, PGDIM, PGDSM): 2021-22 (VLFM); 2021(GMP)

YEAR	FELLOW	PGDIE	PGDIM	PGDSM	VLFM	GMP-I	GMP-II
2021	16	235	293	17	20	49	49

	FE	ELLO	W	1	PGDIE	C	I	PGDIN	1	F	GDSI	I		VLFM		G	MP-I&	:II
M	I	F	Т	M	F	Т	M	F	Т	M	F	Т	M	F	Т	M	F	Т
10)	6	0	189	46	0	252	41	0	14	3	0	16	4	0	81	17	0



CONVOCATION

XXVI CONVOCATION

NITIE, Mumbai, organized its XXVI convocation ceremony in hybrid mode on October 31, 2021. Dr K Radhakrishnan graced the event, Chairman, IIT Kanpur, Address by Shri Dharmendra Pradhan, Hon'ble Minister of Education & Guest of Honour, Dr Anil Sahasrabudhe, Chairman, AICTE. The post-graduate diploma and fellowship certificates have been awarded as per the following:

FELLOW (2020)	PGDIE (2018-20)	PGDIM (2018-20)	PGDISEM (2018-20)	PGDMM (2018-20)	PGDPM (2018-20)	VLFM (2020)
8	108	242	15	28	22	9
FELLOW (2021)	PGDIE (2019-21)	PGDIM (2019-21)	PGDISEM (2019-21)	PGDMM (2019-21)	PGDPM (2019-21)	VLFM (2021)

Gender-wise details of graduation:

FI	ELLO	W	F	GDI	E	P	GDII	VI	PG	DISI	EM	P	GDM	M	P	GDP	M	7	VLFN	ſ
M	F	Т	M	F	Т	M	F	Т	M	F	Т	M	F	Т	M	F	T	M	F	Т
14	11	0	95	13	0	210	32	0	12	3	0	28	0	0	21	1	0	9	0	0
			94	28	0	222	46	0	13	6	0	36	1	0	40	0	0	25	1	0

TABLE 6. DETAILS OF AWARD OF FELLOW OF NITIE-(CONVOCATION HELD ON 31.10.2021)

Sr. No	Name	Batch	Gender	Area	Title	Faculty Name
1	Tavishi Tewary	2011	M	F&E	"An Empirical Investigation to Study the Impact of Regional Trade Agreement on World Trade: A case of South Asia."	Prof. K S Ranjani
2	Snehal Tawate	2014	F	OSCM	"Technology Commercialization in Bio-Industrial firms in India: An Empirical Study."	Prof. Ruchita Gupta/Prof. Karuna Jain
3	Ravindra Baliga	2014	M	OSCM	Analyzing the Effect of Interactions between Lean Practices, Supply Management and Motivators in Sustainable Supply Chains Management"	Prof. Sachin Kamble/ Prof. Rakesh Raut
4	Balasaheb Shahaji Gandhare	2011	М	IEMS	"Evaluation of Maintenance Performance in Select Agro-Based Industries"	Prof. Milind Akarte



Sr. No	Name	Batch	Gender	Area	Title	Faculty Name
5	Vilas Kharat	2013	M	OSCM	"A Study on the Effect of Project Portfolio Management Components on Business Success in Indian Auto components Industry"	Prof. Koteshwara Naik
6	Aditee Ashok Potdar	2012	F	EENM	"Study of factors Influencing Climate change Management in Indian Organization."	Prof. Seema Unnikrishnan
7	Saurabh Kulkarni	2014	M	IEMS	"The Dynamic of Manufacturing Strategy"	Prof.Priyanka Verma
8	Mugdha Yogesh Keskar	2012	F	F&E	"Development of Customer Satisfaction under for Measuring Customer satisfaction Levels of Internet Banking Customer in India"	Prof. Neeraj Pandey
9	Anand Sasikumar	2015	M	IEMS	"Lean Performance Assessment in Bias Type Manufacturing: A Case- Based Study in India"	Prof. P Acharya
10	Anjali Shrishodia	2014	F	OSCM	"Development of an Integrated Framework for Analyzing Project Risks and assessing Project Network Residence	Prof. Priyanka Verma
11	Shilpi Srivastava	2016	F	EENM	"Life Cycle Sustainability Assessment of Crude oil in India"	Prof. Seema Unnikrishnan
12	Nidhi Bansal	2014	F	OBHR	"Examining spillover &Crossover Effects of Work-Family Conflict, Enrichment and Balance: A Study of Indian Dual- Working Couples."	Prof. Upasna Agarwal
13	Rajesh Kumar Arora	2012	M	ADS	"A study on Knowledge Management Practices in Indian Steel Industry"	Prof. Hema Date
14	Vishnu A Patankar	2011	M	OBHR	"Study of Cultural Impact and Business Environment among MSME Entrepreneurs of Certain Indian Communities operating in Maharashtra"	Prof. Nikhil Mehta
15	Srichandan Sahu	2012	M	IEMS	Barriers to supply chain management Adoption in India: An Empirical Investigation."	Prof. K V S S Narayana Rao



Sr. No	Name	Batch	Gender	Area	Title	Faculty Name
16	Chandan Kumar Jha	2012	M	F&E	"Climate Change & Indian Agriculture Analyzing Adoption Strategies For improving Farm Productivity & Profitability in Bihar."	Prof. Vijaya Gupta
17	Reenu Singh	2016	F	IEMS	"Ergonomic Evaluation and Product Design Intervention to Seduce Physical Strain of Construction Paints in India"	Prof. Ashok Pundir
18	Rohit Sharma	2017	M	OSCM	"Impact of Modern Technologies to Enhancing Sustainable Agricultural Supply Chain Performance"	Prof. Sachin Kamble/ Prof. Sushmita Narayana
19	Rajesh Ranjan	2012	M	OBHR	"Psychosocial Work: Environment and its Outcomes: An Empirical Study on Railway Loco Pilots in India"	Prof. T Prasad
20	Ramkrishna S Bharsakade	2016	M	IEMS	" Modeling and Analysis of Lean Implementation in Healthcare Systems in India: A Case-based Study"	Prof. P Acharya / Prof. L Ganapathy
21	Preeti Nayal	2016	F	M&S	"Enhancing Intention to Redeem Digital Coupons Among Moviegoers"	Prof. Neeraj Pandey
22	Swapna Sonali Panda	2015	F	SM	"A study to Investigate the Relationship between Sustainable Development Strategies and Social License to Operate and Innovate."	Prof. Shirish Sangle
23	Neha Yadav	2014	F	M&S	"Examining the Influence of Electronic Word of Mouth (eWOM) on Behavioral Intentions of Leisure Traveler."	Prof. Sanjeev Verma
24	Harshad Sonar	2016	M	IEMS	"Evaluating the impact of Addictive Manufacturing on Firm Competitiveness."	Prof. Vivek Khanzode/Prof. Milind Akarte
25	Prachi Patel	2011	F	OSCM	"The Relationship Between Physical Activity and Health -Related Fitness Across select Organized and unorganized Occupational Groups in India."	Prof. Rauf Iqbal



OPERATIONS AND SUPPLY CHAIN MANAGEMENT

Area Chair: Prof. L. Ganapathy

1. Introduction to Area:

Operations and Supply Chain Management (OSCM Area) is positioned as a strategic, multidisciplinary area dedicated to teaching, carrying out specialised theoretical and applied research, and consultancy related to Operations and Supply Chain Management, Industrial Engineering and Manufacturing Systems, and Engineering Technology and Project Management. This year, three areas, i.e., Operations & Supply Chain Management, Industrial Engineering & Manufacturing System & Engineering Technology & Project Management, were merged and rechristened as Operations & Supply Chain Management.

Operations & Supply Chain Management

Operations management is the business function that focuses on different aspects of work related to the manufacturing and service industries. It broadly optimises various business functions, including sourcing, operations planning, inventory management, store layout developments, distribution channels, logistics, retail, demand forecasting, and order fulfilment, balancing demand and supply. The objectives include:

- To educate and train students & practising executives to support their transformation as industry leaders
- ii. To conduct research that contributes significantly to the theory and practice of Operations and Supply Chain Management
- iii. To act as a forum to initiate interaction and dialogue on supply chain-related issues, challenges, and solutions between industry and academia

Courses offered

The Core Faculty of the Area are active in Operations and Supply Chain Management: Sustainable Supply Chain Management, Agriculture and Food Supply Chain, TQM and Six Sigma, Supply Chain Modelling, Supply Chain Analytics, Inventory Management, and Logistics Management.

Teaching - Courses currently offered in the area

Operations Management, Supply Chain Management, Materials Management, Logistics Management, Quality Management, Advanced Supply Chain Management

Industrial Engineering & Manufacturing System

Industrial Engineering and Manufacturing Systems (IEMS) was merged with Operations and Supply Chain Management and Engineering Technology and Project Management to enhance interdisciplinary effectiveness. The area objective included *driving* Industrial Engineering and Manufacturing Systems research to enhance national competitiveness in the manufacturing and service sector.

During the year, the faculty members focussed on designing, improving, and optimising:

- Work systems were firmly entrenched in the philosophy of continuous improvement of various work systems.
- Various traditional and modern methods of organizing production.
- Systems that integrate people, products (or services) and processes.

Courses Offered

Industrial Engineering, Manufacturing Strategy, MCDM, Additive Manufacturing Industrial Engineering, System Dynamics, Ergonomics and Human Factors Engineering, Work System Design, Lean Manufacturing, Facilities Planning, Simulations and modelling analysis, Evolutionary multi-objective optimization techniques

Engineering Technology and Project Management

Engineering Technology and Project Management (ETPM) is an amalgamation of two vital areas, Engineering Technology and Project Management, with the following goals:

To provide a platform to identify, create and implement strategies that enable technologies to reach their potential.



To build capability for resolving business problems in integrated engineering, technology, and business functions.

During the year, the area aligned its objectives to create a competitive edge business strategy with technology management for several businesses through teaching, research, and outreach. In addition, faculty members established student competencies to handle and manage projects and technology for competitive advantage.

The core faculty of the area were active in the following domains of Project Management, Technology, and Innovation Management, Quantitative Models for Project Management, Project Risk Management, Strategic NPD, Managing Creativity & Innovation, Large Engineering Projects, R&D Project Management, IP Management, and Business Research Methods.

2. Faculty members and their specializations:

Operations & Supply Chain Management

Sr. No.	Faculty	Focus Area	Spectrum of Work
1.	Prof. Rakesh Raut	Operations Management / Supply Chain Management	Collaborative Network Organization, Agriculture Supply Chain, Cold Supply Chain, 3PL
2	Prof. Ravindra Gokhale	Operations Management / Supply Chain Management	Manufacturing Planning and Control, Supply Chain Modelling, Urban Transportation Systems, Logistics Management
3	Prof. Sachin Kamble (on lien)	Operations Management / Supply Chain Management	Agriculture Supply Chain, Cold Supply Chain, Retail Supply Chain
4	Prof. Sushmita Narayana	Operations Management / Supply Chain Management	Healthcare Operations Management, Sustainable Supply Chain Management

Industrial Engineering & Manufacturing System

Sr. No	Faculty	Designation	Specialization
1	Prof. Manoj Kumar Tiwari	Professor and Director	Industrial Engineering, Supply Chain Analytics, Operations Management
2	Prof. L. Ganapathy	Professor	Quantitative Methods, Project Management
3	Prof. Milind Akarte	Professor	Industrial Engineering, Operations & Supply Chain Management, Manufacturing Strategy, MCDM, Additive Manufacturing
4	Prof. Padmanav Acharya	Professor	Industrial Engineering, System Dynamics, Project Management, Logistics Supply Chain
5	Prof. S.K. Rauf Iqbal	Associate Professor	Ergonomics and Human Factors Engineering, Work System Design
6	Prof. Vivek Khanzode	Associate Professor	Industrial Engineering, Operations Management, Lean Manufacturing
7	Prof. Balkrishna E. Narkhede	Associate Professor	Industrial Engineering, Supply Chain Management, Manufacturing Strategy, Project Management



Sr. No	Faculty	Designation	Specialization
8	Prof. Priyanka Verma	Assistant Professor	Industrial Engineering, Supply Chain Modelling, Facilities Planning, Operations, Quantitative Techniques
9	Prof. Jinil Persis	Assistant Professor	Operations Research, Simulations and modelling analysis, Evolutionary multi-objective optimization techniques
10	Prof. T M Rofin	Assistant Professor	

Engineering Technology and Project Management

Sr. No.	Faculty	Focus Area	Spectrum of Work
1	Prof. Kanchan Joshi (On lien)	Operations Research / Project Management	Project Management, Scheduling, Resource Planning, Optimization, Metaheuristics Algorithms, OR models for Social Entrepreneurs
2	Prof. Koteswara Rao Naik B.	Technology Management/IPR	Creativity, IP Management, Technology Management, and Entrepreneurship
3	Prof. Ruchita Gupta	Technology Management/ Project Risk Management	Diffusion and Adoption, Technology Transfer and Commercialisation, Technology Forecasting, Technology Entrepreneurship
4	Prof. Vivekanand Khanapuri	Project Management /Maintenance Management	Project stakeholder management, Project monitoring and control, Project selection. Maintenance Management, BPR & IT

3. Publications:

- Singh, S., Kumar, R., Panchal, R., & Tiwari, M. K. (2021). Impact of COVID-19 on logistics systems and disruptions in food supply chain. *International Journal of Production Research*, 59(7), 1993-2008.
- Ghadge, A., Jena, S. K., Kamble, S., Misra, D., & Tiwari, M. K. (2021). Impact of financial risk on supply chains: a manufacturer-supplier relational perspective. *International Journal* of *Production Research*, 59(23), 7090-7105.
- Mogale, D. G., De, A., Ghadge, A., & Tiwari, M. K. (2022). Designing a sustainable freight transportation network with cross-docks. *International Journal of Production Research*, 1-24.

- Mogale, D. G., Ghadge, A., Cheikhrouhou, N., & Tiwari, M. K. (2022). Designing a food supply chain for enhanced social sustainability in developing countries. *International Journal* of Production Research, 1-21.
- Mishra, A., Verma, P., & Tiwari, M. K. (2021). A circularity-based quality assessment tool to classify the core for recovery businesses. *International Journal of Production Research*, 1-19.
- Sahoo, R., Pasayat, A. K., Bhowmick, B., Fernandes, K., & Tiwari, M. K. (2022). A hybrid ensemble learning-based prediction model to minimise delay in air cargo transport using bagging and stacking. *International Journal of Production Research*, 60(2), 644-660.



- Shukla, M., Sarmah, S. P., & Tiwari, M. K. (2022). A multi-objective framework for the identification and optimisation of factors affecting cybersecurity in the Industry 4.0 supply chain. *International Journal of Production Research*, 1-16.
- Sahoo, R., Bhowmick, B., & Tiwari, M. K. (2021). Developing a model to optimise the cost of consolidated air freight considering the varying scenarios. *International Journal of Logistics Research and Applications*, 1-25.
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- Akarte, M., Khanzode, V., Iqbal, R., & Tiwari, M. K. (2021). IE Tools for Boosting Competitiveness in Iron and Steel Industry: A Review. *Transactions of the Indian Institute of Metals*, 74(5), 1065-1076.
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- Badulescu, Y., Tiwari, M. K., & Cheikhrouhou, N. MCDM approach to select IoT devices for the reverse logistics process in the Clinical Trials supply chain.
- Chakrabarti, A., Suwas, S., & Arora, M. (2021).
 Industry 4.0 and Advanced Manufacturing.
 Springer,.
- Bharsakade, R. S., Acharya, P., Ganapathy, L.,
 & Tiwari, M. K. (2021). A lean approach to healthcare management using multi criteria

- decision making. Opsearch, 58(3), 610-635.
- Avikal, S., Singh, A. R., & Ram, M. (Eds.).
 (2021). Sustainability in Industry 4.0: Challenges and Remedies. CRC Press.
- Akhtar, P., Osburg, V. S., Kabra, G., Ullah, S., Shabbir, H., & Kumari, S. (2022). Coordination and collaboration for humanitarian operational excellence: big data and modern information processing systems. *Production Planning & Control*, 33(6-7), 705-721.
- VK Verma, SS Kamble, L Ganapathy, "3D-printed medical models supply chain: barriers modelling and analysis", *Rapid Prototyping Journal* (2022)
- VK Verma, SS Kamble, L Ganapathy, PK Tarei, "Overcoming the post-processing barriers for 3D-printed medical models", Rapid Prototyping Journal (2022)
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- RS Bharsakade, P Acharya, L Ganapathy, MK Tiwari, "A lean approach to healthcare management using multi-criteria decision making", *Opsearch* 58 (3), 610-635 (2021)
- SS Kamble, A Belhadi, A Gunasekaran, L Ganapathy, S Verma, "A large multi-group decision-making technique for prioritizing the big data-driven circular economy practices in the automobile component manufacturing industry", Technological Forecasting and Social Change 165, 120567 (2021)
- V Singh, L Ganapathy, AK Pundir, "An improved genetic algorithm for solving multi depot Vehicle Routing Problems", Research anthology on multi-industry uses of genetic programming and algorithms (2021)
- Rambabu Lavuri, Abhinav Jindal, Umair Akram, B. Koteswara Rao Naik and Alrence Santiago Halibas, Exploring the antecedents of sustainable consumers' purchase intentions:



- Evidence from emerging countries, Sustainable Development, Accepted: 5 August 2022.
- Rahul Mishra, B. Koteswara Rao Naik, Rakesh D. Raut and Sanjoy Kumar Paul, Circular economy principles in community energy initiatives through stakeholder perspectives, Sustainable Production and Consumption, 2022, Vol. 33, pp. 256-270.
- Rahul Mishra, B. Koteswara Rao Naik, Rakesh D. Raut and Mukesh Kumar, Internet of Things (IoT) adoption challenges in renewable energy:
 A case study from a developing economy, Journal of Cleaner Production, 2022, Vol. 371, p. 133595.
- B. Koteswara Rao Naik and Ajay Guruve, Perforated Cushioning & Spacing Element for Helmet, Ref. No./Application No. 202221019654, TEMP/E-1/21604/2022-MUM, Filed on 31st March 2022.
- B. Koteswara Rao Naik and Ajay Guruve, Air Vent for Helmet (with Opening & Closing Flaps), Ref. No./Application No. 202221019664, TEMP/E-1/21581/2022-MUM, Filed on 31st March 2022.
- B. Koteswara Rao Naik and Ajay Guruve, Design of Air Vent Helmet, Ref. No./Application No. 361669-001, C.B.R.No. 215483, Filed on 31st March 2022.
- B. Koteswara Rao Naik and Ajay Guruve, Design of an Integrated lathe-milling-sharpening Machine, Ref. No./Application No. 361670-001, C.B.R.No. 215483, Filed on 31st March 2022.
- Amalendu Singha Mahapatra, Maheswar Singha Mahapatra, Biswajit Sarkar and Sanath Kumar Mazumder (2022). Use of preservation technology for time-dependent deterioration with promotion and fuzzy learning, *Expert Systems with Applications*, 201.
- Maheswar Singha Mahapatra, Pravas Chandra Pradhan and J K Jha (2021). Sourcing Decisions with Order Allocation under Supply Disruption Risk Considering Quantitative and Qualitative Criteria. Operational Research

- Maheswar Singha Mahapatra and Dinesh Shenoy (2021). Lean maintenance index: a measure of leanness in maintenance organizations. Journal of Quality in Maintenance Engineering.
- Rofin T M, Maheswar Singha Mahapatra and Biswajit Mahanty (2021). Impact of green retail operations on the profit of the manufacturer and the retailer under different pricing strategies. OPSEARCH, 58, 125-143.
- Suman Banerjee, Bithika Pal, Maheswar Singha Mahapatra (2021). Social Distancing-Based Facility Location Approach for Combating COVID-19. 21st International Conference on Computational Science and its Applications.
- Amalendu Singha Mahapatra, Hardik N Soni, Maheswar Singha Mahapatra, Biswajit Sarkar and Sanath Kumar Mazumder (2021).
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- Kirti Nayal, Rakesh Raut, Vinay Yadav, Pragati Priyadarshinee, Balkrishna Narkhede(2021), "The impact of sustainable development strategy on sustainable supply chain firm performance in the digital transformation era", Business Strategy and the Environment.
- Kirti Nayal, Rakesh Raut, Balkrishna Narkhede, Pragati Priyadarshinee, Gajanan Panchal, V. Gedam (2021), "Antecedents for blockchain technology-enabled sustainable agriculture supply chain", Annals of Operations Research.
- S Parhi, K Joshi, T Wuest, M Akarte, "Factors affecting Industry 4.0 adoption—A hybrid SEM-ANN approach", Computers & Industrial Engineering 168, 108062 (2022)
- S Parhi, K Joshi, A Gunasekaran, K Sethuraman, "Reflecting on an empirical study of the digitalization initiatives for sustainability on logistics: The concept of Sustainable Logistics 4.0", Cleaner Logistics and Supply Chain, 100058 (2022)
- S Parhi, K Joshi, M Akarte, "Decisionmaking in smart manufacturing: A framework for performance measurement", International Journal of Computer Integrated Manufacturing, 1-29 (2022)
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- V Khanzode, K Joshi, "Supply Chain Configurations of Social Enterprise: Typology and Generic Framework", In Search of Business Models in Social Entrepreneurship, 169-185 (2021)
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- emerging economy, International Journal of Emerging Markets, 2021
- Bharsakade, R. S., Acharya, P., Ganapathy, L.,
 & Tiwari M.K, Lean Approach to healthcare management using Multi-Criteria Decision making, OPSEARCH, 2021
- A systematic review of manufacturing strategy studies focusing on the congruence aspect. Dohale, Vishwas, Milind M. Akarte, and Priyanka Verma. Benchmarking: An International Journal (2021).
- COVID-19 and supply chain risk mitigation: a case study from India. Dohale, Vishwas, Priyanka Verma, Angappa Gunasekaran, and Priya Ambilkar. The International Journal of Logistics Management (2021).
- A circularity-based quality assessment tool to classify the core for recovery businesses.
 Mishra, Ashutosh, Priyanka Verma, and Manoj Kumar Tiwari. International Journal of Production Research (2021): 1-19.
- 52 Years of manufacturing strategy: an evolutionary review of the literature (1969–2021). Dohale, Vishwas, Angappa Gunasekaran, Milind Akarte, and Priyanka Verma. International Journal of Production Research (2021): 1-26.
- An Integrated Delphi-MCDM-Bayesian Network Framework for Production System Selection. Dohale, Vishwas, Angappa Gunasekaran, Milind Akarte, and Priyanka Verma. *International Journal of Production Economics* (2021): 108296.
- Unpacking the role of primary packaging material in designing green supply chains: An integrated approach. Tanksale, Ajinkya N., Debabrata Das, Priyanka Verma, and Manoj Kumar Tiwari. International Journal of Production Economics 236 (2021): 108133.
- Supply chain risk mitigation strategies during COVID-19: exploratory cases of "make-to-order" handloom saree apparel



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- MF Pynadath, TM Rofin, S Thomas, "Evolution of customer relationship management to data mining-based customer relationship management: a scientometric analysis", Quality & Quantity (2022)
- TM Rofin, U Mishra, JZ Wu, "Performance of Channel Members under Emission-Sensitive Demand for Green Supply Chain Management: A Game Theory Approach", Mathematics 10 (11), 1879 (2022)
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- S Raju, TM Rofin, S Pavan Kumar, "Delivery lead time competition between e-tailers: A game-theoretic study", 2021 International Conference on Data Analytics for Business and Industry
- TM Rofin, B Mahanty, "Impact of wholesale price discrimination on the profit of chain members under different channel power structures", Journal of Revenue and Pricing Management 20 (2), 91-107
- Meherishi, L., Narayana, S. A., & Ranjani, K. S. (2021). Integrated product and packaging decisions with secondary packaging returns and protective packaging management. European Journal of Operational Research, 292(3), 930-952.
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- Sharma, M., Gupta, R, Acharya, P, & Jain, K., (2021) Systems Approach to Cloud Computing Adoption in Emerging Economy, Accepted in September 2021, International Journal of Emerging Markets.
- Gupta, R Gupta, D., Jain, K., & Momaya, K. (2021). User Involvement in Technologybased Service Innovations in Telecom: Cases from India, Accepted in July 2021, IEEE Transactions on Engineering Management.
- Sharma, M., Gupta, R., & Premchandani, S. (2021). Warehouse Location Selection using AHP: A Case of Third-Party Logistics Provider in India. Accepted in Feb 2021, Int. J. of Supply Chain and Inventory Management (Publisher-Inderscience)

4. Outreach:

Details are given in the Outreach section.



ANALYTICS AND DATA SCIENCE

Area Chair: Prof. Rakesh Verma

I. Introduction

During the year, the area aimed to prepare the students to conceptualize, design, analyze, develop, and deliver leading-edge information systems that support business processes and data-driven decision-making.

ADS achieved these objectives by extending and integrating knowledge from Industrial Engineering, Information Systems, Enterprise Systems, Quantitative Techniques, Operations Research, Statistics, Artificial intelligence, and Business Analytics.

The area collected and analysed up-to-date business information from its customers, competitors, and business partners. Faculty members explored advanced tools and technologies to enable business organizations to meet the business environment's volatility, uncertainty, complexity, and ambiguity. Faculty members honed the students' much-needed quantitative/analytical and technical skills.

II. Faculty members/Area of Research

Purnima Sangle	Rakesh Verma	Debabrata Das
Business Analytics, AI/	Multi-modal logistics,	Reverse Logistics,
ML Driven CRM, MLops,	Quantification model for	Closed Loop Supply
Omnichannel, Business	Cyber Security, MCDM	Chain, Circular
Value of IT, Deep	approach to Cyber	Economy, Crowed-
Learning, Data Mining,	Security, Sustainable	Sourced Logistics,
Enterprise Systems,	Supply Chain	Q-commerce.
Neural Networks,		
Neuro-Fuzzy Models.		
	Business Analytics, AI/ ML Driven CRM, MLops, Omnichannel, Business Value of IT, Deep Learning, Data Mining, Enterprise Systems, Neural Networks,	Business Analytics, AI/ ML Driven CRM, MLops, Omnichannel, Business Value of IT, Deep Learning, Data Mining, Enterprise Systems, Neural Networks, Multi-modal logistics, Quantification model for Cyber Security, MCDM approach to Cyber Security, Sustainable Supply Chain

III. Courses offered:

III. Oddiscs official.			
Hema Date	Purnima Sangle	Rakesh Verma	Debabrata Das
<u>PGP</u>	PGP	PGP	PGP
1. Information systems and Artificial Intelligence (2 sections)	1. Information Systems and Artificial Intelligence (2 sections)	1. Quantitative Techniques for Decision Making (2 sections)	1. Quantitative Techniques for Decision Making (2 sections)
 Business Analytics Business Intelligence, DSS and AI Application Data Analytics and Knowledge Management 	2. Business Analytics	 Operations Research Business Analytics using Data Mining Big Data Analytics Concept in Data Structure and Algorithm using 	 Operations Research Business Analytics Concepts of Machine Learning
5. IT Consultancy Management		Python Programming	



Hema Date	Purnima Sangle	Rakesh Verma	Debabrata Das
<u>VLFM</u>	<u>VLFM</u>	<u>VLFM</u>	<u>VLFM</u>
	Info. Systems for Manufacturing Asset Management Enterprise Systems in Manufacturing	Operations Research in Manufacturing	Data Analytics
<u>DGMP</u>		<u>DGMP</u>	<u>DGMP</u>
Information and Decision systems		Information and Decision systems	Data Analytics & Digital Strategy

IV. Research & Publications

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- Debabrata Das, Priyanka Verma, Ajinkya Tanksale (2022). Designing a closed-loop supply chain for reusable packaging materials: A risk-averse two-stage stochastic programming model using CVaR. Computers & Industrial Engineering. (Forthcoming)
- Ajinkya Tanksale, Debabrata Das, Priyanka Verma, Manoj K. Tiwari (2021). Unpacking the role of primary
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- Singh, S., Verma, R., and Koul, S. (2021) A collaborative method for simultaneous operations: case of an eye clinic. OPSEARCH, pp 1-21.
- Singh, S., Verma, R., and Koul, S. (2021) A data-driven approach to shared decision-making in a healthcare environment. OPSEARCH, pp 1-15.



SUSTAINABILITY MANAGEMENT

Area Chair: Prof. Shankar Murthy

I. Introduction to Area:

The Sustainability Management (SM) area is interdisciplinary and cross-functional. The area interfaces with engineering and management aspects in the environment and safety domain with the broader objective of excelling in Environmental Management, Safety, CSR and Sustainability. The area focuses on the following:

- · developing strategies and methods for sustainable growth of the industry, and
- improving its environmental performance and minimizing its ecological footprint and impacts.

The area has dedicated faculty members with strong academic and research backgrounds in Environment, Sustainability, Health and Safety. The faculty interacts with industry, academic and research institutes to provide insights into several areas. The area is active and organizes several academic and outreach activities yearly.

Courses offered

Sustainable development for business, Sustainable Manufacturing, Energy Efficiency and Carbon Management, Environment and Safety Legislation, Noise and E-waste management, Fire and Safety Management, Disaster Management, Energy Management, EIA and EIA for developmental projects, Business strategy for sustainability, Shop floor waste management, Business strategies for climate change, Process Safety Management, SHE audits system, Sustainability Laboratory, Business strategies for climate change, Strategic CSR, Sustainable operation and management, Sustainability Frameworks (ESG) & Standards, Carbon Accounting.

II. List of Members and their specialization

SN	Faculty	Designation	Focus Area
1	Prof. Seema Unnikrishnan	Professor	Life Cycle Assessment, Environmental law and Policy, Disaster Management,
2	Prof. Shankar Murthy	Professor	Environmental Engineering, Process Safety, Industrial Wastewater Management
3	Prof. Shirish Sangle	Professor	Organization and Natural Environment
4	Prof. Anju Singh	Professor	Business sustainability, Environmental management, Corporate Social Responsibility
5	Prof. Hema Diwan	Associate Professor	Industrial pollution control, EIA, Sustainability management, ESG, Non-Financial Reporting
6	Prof. Vidyadhar Gedam	Assistant Professor	Chemical Hazard and Safety, Sustainable Development, Mineral Waste Management, Water Quality Assessment

III. Research & Publications -

 Purva Mhatre; Vidyadhar Gedam; Seema Unnikrishnan (2021). Material Circularity Potential for Construction Materials-the case of Transportation Infrastructure in India. Resources Policy; 74; 102446. Link: https://doi.org/10.1016/j.resourpol.2021.102446. (SSCI, IF-5.63, ABDC-B Category, Publisher-Elsevier).



- 2. Shrivastava, S., & Unnikrishnan, S. (2021). Life Cycle Sustainability Assessment of crude oil in India. *Journal Of Cleaner Production*, Vol.no. 283 124654.
- 3. Mukesh Kumar, Vikas Choubey, Anurag Deepak, Vidyadhar V. Gedam, Rakesh Raut (2021). Life cycle assessment (LCA) of dairy processing industry: A case study of North India. Journal of Cleaner Production, 326:129331. Link: https://doi.org/10.1016/j.jclepro.2021.129331 (SCIE, IF-9.29, ABDC-A Category, Scopus and SCIE indexed, Publisher-Elsevier).
- 4. Vidyadhar V Gedam; Rakesh D Raut; Ana Beatriz Lopes de, Sousa Jabbour; Nishant Agrawal (2021). Moving Forward on Circular Economy in Mining Industry: Challenges to Closed-Loop Governance. Resources Policy, Volume 74, 102279. (SSCI, IF-5.63, ABDC-B Category, Publisher-Elsevier). Link: https://doi.org/10.1016/j.resourpol.2021.102279
- 5. Vidyadhar Gedam, Rakesh Raut, Zeeshan Inamdar, Vaibhav Narwane, Balkrishna Narkhede. Swapnil Dharaskar (2021).COVID-19 critical success factors in Indian Healthcare sector- a DEMATEL Approach. Journal of Multi-Criteria Decision Analysis. (IF-2.59, ESCI, Scopus indexed, ABCD-Category B, Wiley Publication). DOI: 10.1002/ mcda.1763.
- Nayal, K., Raut, R., Lopes de Sousa Jabbour, A.B., Narkhede, B.E. and Gedam, V.V. (2021), "Integrated technologies toward sustainable agriculture supply chains: missing links", Journal of Enterprise Information Management, https://doi.org/10.1108/JEIM-09-2020-0381. (SSCI, IF-5.39, ABDC-A Category, Scopus indexed, Publisher- Emerald group publishing).
- Sunil Deokar, Himanshu Patel, Priyanka Thakare, Sanjay Bhagat, Vidyadhar V. Gedam, Pranav Pathak (2021). Adsorptive Column Studies for Removal of Acid Orange 7 Dye Using Bagasse Fly Ash. Indian J. of Chemical Technology, Vol. 28 (3), pp. 319-

- 327. (IF:0.5, Scopus indexed, Publisher-CSIR-NISCAIR). Link: http://nopr.niscair.res.in/ handle/123456789/57840
- 8. Vidyadhar Gedam, Rakesh Raut, Ana Beatriz Lopes de Sousa Jabbour, Ajinkya N. Tanksale, Balkrishna Narkhede (2021). Circular economy practices in a developing economy: Barriers to be defeated. Journal of Cleaner Production, Volume 311, 127670. Link: https://doi.org/10.1016/j.jclepro.2021.127670 (SCIE, IF-9.29, ABDC-A Category, Scopus and SCIE indexed, Publisher-Elsevier).
- 9. T V Sivanandhini, Seema Unnikrishnan, Vidyadhar V. Gedam. (2021). Planning and optimization framework for lubricant supply chain with a focus on spent oil-A circular economy approach. International journal of sustainable engineering, Vol. 14(3), 1-10 (IF-1.3, ESCI, Scopus indexed, Publisher- Taylor and Francis). Link: http://dx.doi.org/10.1080/19397038.2021.1886373.
- 10. Vidyadhar V. Gedam, Rakesh D. Raut, Pragati Priyadarshinee, Sricharan Chirra, Pranav D. Pathak (2021). Analyzing the adoption barriers for sustainability in the Indian power sector (2021). International journal of sustainable engineering. (IF:1.3, ESCI, Scopus indexed, Publisher- Taylor and Francis). DOI: https://doi.org/10.1080/19397038.2021.1874072
- 11. Chitra Pandey, Hema Diwan, (2021). Assessing fertilizer use behaviour for environmental management and sustainability: a quantitative study in agriculturally intensive regions of Uttar Pradesh, India, April 2021, Environment Development and Sustainability 23(1) DOI: 10.1007/s10668-020-00848-1 Impact Factor 3.219
- 12. Rohit Panchal, Anju Singh, Hema Diwan (2021).

 Does circular economy performance lead to sustainable development? A systematic literature review, Journal of Environmental Management, 293, 2021, 112811, ISSN 0301-4797https://doi.org/10.1016/j.jenvman.2021.112811 Impact Factor 6.789



13. Rohit Panchal, Anju Singh, Hema Diwan (2021). Economic potential of recycling e-waste in India and its impact on the import of materials. Resources Policy, 74,2021,102264, ISSN 0301-4207, https://doi.org/10.1016/j.resourpol.2021.102264. Impact Factor 5.634

IV. Faculty activity

 The area faculty conducted around 8 UBPs, out of which four were for Indian Oil Corporation

- on Risk Analysis, BBS, HAZOP and Disaster Management, one on Sustainability for the chemical Industry for Accenture, Two for Mahindra Logistics on EMS and one for BPCL on Risk Analysis
- The area has also conducted a 3-month online program on BBS implementation in Industry.

V. Outreach

Details are given in the outreach section



FINANCE AND ECONOMICS

Area Chair: Prof. Vijaya Gupta

I. Introduction to the Area

Finance and Economics are the key academic areas that provide vital inputs to business management and industrial engineering. The area combines two broad disciplines, viz. Accounting & Finance and Applied Economics. Accounting, Finance and Economics are placed uniquely to provide the necessary domain knowledge and skillset to all the students pursuing post-graduate programmes and set the tone for a multidisciplinary approach to education. It provides a basket of courses that combines the tools of decision-making through accounting, finance and economics on the one hand, and theoretical and analytical principles, integrating decision-making with financial reporting and analysis, managerial finance, macroeconomic, regulatory, and environmental policies, on the other.

Furthermore, it focuses on the geographical scope of decision-making from domestic and international perspectives. The goal of the area is to align with and contribute to the vision and mission of the institute and contribute to nation-building through teaching, research, industry connect and policy-making of government bodies. In addition to offering Institute core courses like Managerial Accounting, Financial Management, and Managerial Economics common to all programs, the area has many program specific and Institute-open electives.

The faculty members undertake theoretical and empirical research on a large number of inter-disciplinary areas like Financial Reporting and Analysis, Corporate Finance, Financial Economics and Markets, Industry Analysis, Economic Environment of Business, Labour Markets, Natural Resource Management, Climate Change and Vulnerability, Carbon Markets, Strategic Leadership, Globalization, and Economic Competitiveness, International Business Strategy, Environmental Valuation, Discrete Choice Experiments, Banking Sector, Competition Policy, Behavioural Corporate

Finance, Corporate Governance, International Trade and Mergers, and Acquisitions.

Courses offered

Core Courses

Managerial Accounting, Financial Management, Managerial Economics

Electives

Financial Risk Management, Investment Analysis and Portfolio Management, Financial Time Series, Valuation and Financial Modelling, Derivatives and Modelling, Analytical Finance, Commercial Bank Management, International Finance and Forex Management, Mergers and Acquisitions, Strategic Cost Management, Advanced Financial Statement Analysis, Financial Intermediaries and Capital Markets, Infrastructure Finance and Project Appraisal, Macroeconomic Environment and Policy, Business Analysis and Econometric Applications, Economics of Regulation, Economics of Strategy, Environmental Economics, Global Trade and Institutions, Industrial Organization, Mergers and Acquisitions, Public Systems and Policy, Resource Economics, Industrial Resource Economics, Indian Economy, Behavioural Economics, Economic Application of Game Theory, Digital Economics, Economics of Retail and Distribution, Network Economics, Development Economics, Economics of Agri-Business, Rural Economy, Public Finance, Carbon Market Analysis, Economics of Climate Change, Corporate Governance, Economics of innovation, Money and Banking, Growth and Structural Change, Urban Economics, Agglomeration Economics, Advanced Econometrics, Econometrics Programme Evaluation. Environmental Valuation, Market Design, and Customer Analytics

The area has provided core courses and multiple elective courses in the area of Economics and strategy.



II. List of Faculty Members:

List of area members in the Accounting and Finance subarea:

S.No	Faculty	Focus Area	Spectrum of Work
1	Prof. M. Venkateswarlu (Professor)	Risk Management Corporate Finance Quantitative Finance Regulatory Risk, Cost of Capital and Valuation Project Finance	Teaching, Training & Research and Consulting
2	Prof. Ajaya Kumar Panda (Associate Professor)	International Finance, Applied Corporate finance, Financial Economics and Applied Econometrics	Teaching, Training, and Research
3	Prof. K. S. Ranjani (Associate Professor)	Accounting Financial Inclusion Project Finance	Teaching, Training, and Research
4	Prof. Vipul Kumar Singh (Associate Professor)	Financial Engineering, Applications of Derivatives in Project Management, Financial Markets	Teaching, Training, and Research

Economics Subarea- List of Faculty Members

S.No	Name of Faculty	Designation	Area of Research
1	Prof. Binilkumar Amarayil Sreeraman	Associate Professor	Economics of Renewable Energy and Distributed Energy Systems, Multi-modal mobility choice studies, Moral hazard of drivers and road safety, Regional Innovation Systems and Competitiveness of Industrial Clusters, Economics of Climate-Smart Agriculture, Environmental and Natural Resource Economics, Non-market Valuation of Natural resources, Environmental Policy.
2	Prof. Mainak Mazumdar	Associate Professor	Applied Econometrics, Development Economics, Industrial Economics, Economics of efficiency and productivity
3	Prof. Poonam Singh	Associate Professor	Competition Policy, Corporate Governance
4	Prof. Utpal Chattopadhyay	Professor	Economic Environment of Business, Globalization & Global Competitiveness, International Trade
5	Prof. Vijaya Gupta	Professor	Socioeconomic impacts of climate change, adaptation strategies in agriculture due to climate change, vulnerability assessment due to climate change, environmental policy, growth and environment, environmental valuation, industrial productivity, social entrepreneurship, and developmental issues.



III. Research Publications

- Apoorva H., Panda A K, Venkateshwarlu M, "Does companies' financial flexibility drive their leverage dynamics? New Evidence", (Accepted) Managerial Finance (Emerald), 2022, DOI 10.1108/MF-07-2022-0317
- 2. Apoorva H., Venkateshwarlu M, Panda A K, Kumar Satish, "What we know and what we should know about Speed of Capital Structure Adjustment: A Retrospective using Bibliometric and System Thinking Approach" (Accepted) Qualitative Research in Financial Markets (Emerald). 2022
- 3. Panda A K., Nanda S. and Sahoo S., Transmission of Monetary Policy Impulses to a Firm's Profitability: An Empirical Analysis of Manufacturing Firms (Accepted), Global Economic Review, (Taylor & Francis), 2022
- 4. Panda A K., Panda P., Nanda S., Atul Parad (2021), Information bias and its spillover effect on return volatility: A study on stock markets in the Asia-Pacific region, Pacific-Basin Finance Journal, Vol. 69, 101653 (ELSEVIER)
- Panda. A.K., Nanda S., Hegdey A., and Yadav. A. (2021), Receptivity of Capital Structure with Financial Flexibility: A study on manufacturing firms, International Journal of Finance and Economics, (Wiley)
- 6. Ranjani, K S, Poonam Singh and Rajeev Kumar Revulagadda (2022), "Mission Drift and Scale: An Empirical Analysis of Indian Micro Finance Institutions" Business Perspectives and Research, Published Online
- 8. Dixit, J., Poonam Singh and A, Haldar (2021), "Investor protection: effects of takeover convergence, International Journal of Organizational Analysis."
- Poonam Singh (2021), "Book Review of Numbers in India's Periphery the Political Economy of Government Statistics" Journal of Quantitative Economics
- 10. Thakur Barun Kumar, Gupta Vijaya, Bhattacharya Prosun, Chakraborty Tamali,

- (2022) Impact of socioeconomic factors on households' willingness to pay for arsenic-free safe drinking water A case study of Bihar, India, Groundwater for Sustainable Development, Elsevier, in press.
- 11. Chandan Kumar Jha, Vijaya Gupta, (2021), Farmer's perception and factors determining the adaptation decisions to cope with climate change: An evidence from rural India, Environmental and Sustainability Indicators, Elsevier, 10, 100112.
- 12. B.K. Thakur, V.Gupta, P.Bhattacharya, MdJakariya, Md T.Islam, (2021), Arsenic in drinking water sources in the Middle Gangetic Plains in Bihar: An assessment of the depth of wells to ensure safe water supply, Groundwater for Sustainable Development, Elsevier, 12, 100504
- 13. Chandan Kumar Jha and Vijaya Gupta, 2021, Do better agricultural extension and climate information sources enhance adaptive capacity? A micro-level assessment of farm households in rural India, Ecofeminism and Climate Change, Emerald, Volume 2 Issue 2.
- 14. Leichombam, Prasanta, Konthoujam Gyanendra Singh and Amarayil Sreeraman, Binilkumar (2022) "Socio-Economic Considerations and Stakeholders' Attitudes Towards Conservation and Management of Wetland Ecosystems: A Case Study", Accepted for Publication in International Journal of Ecological Economics and Statistics Vol 43(1)
- 15. Swati Agrawal, Poonam Singh and Mainak Mazumdar (2021) Innovation, Firm Size and Ownership: A Study of Firm Transition in India International Journal of Global business and Competitiveness
- Swati Agrawal, Poonam Singh, Mainak Mazumdar, K.V. Ramaswamy Firm transition in Indian Formal MSMEs: the role of age and size. (Forthcoming in EPW)
- Meherishi, L., Narayana, S. A., & Ranjani, K. S. (2021). Integrated product and packaging decisions with secondary packaging returns



- and protective packaging management. European Journal of Operational Research, 292(3), 930-952. (ABDC-A*)
- Ranjani, K. S., Singh, P., Revulagadda R. K. (2021) Impact of digitization on employment: A study of microfinance clients in Andhra Pradesh. Wesleyan Journal of Research, Vol. 14
- 19. Kumar, P., and Singh, V. K. (2022). Does Crude Oil Fire the Emerging Markets Currencies Contagion Spillover? A Systemic Perspective. Energy Economics (A* Category) – Accepted for Publication
- 20. Bajaj, V., Kumar, P., and, Singh, V. K. (2022). Systemwide directional connectedness from Crude Oil to sovereign credit risk. Journal of Commodity Markets, Article No. 100272. https://doi.org/10.1016/j.jcomm.2022.100272 (A Category)
- 21. Bajaj, V., Kumar, P., and, Singh, V. K. (2022). Linkage Dynamics of Sovereign Credit Risk and Financial Markets: A Bibliometric Analysis. Research in International Business and Finance, 59 (January 2022), Article No. 101566. https://doi.org/10.1016/j.ribaf.2021.101566 (B Category)

Book Chapter:

- Gupta V. (2021) Economic Policy Making in India and the Scope of Entrepreneurship Led Development. In: Mitra J. (eds) Indian Entrepreneurship. Entrepreneurship and Development in South Asia: Longitudinal Narratives. Springer Nature, Singapore, pp 41-60
- 2. PG Babu, Vikas Kumar, Poonam Singh "Employment and Covid-19: Trends and Issues in Tamil Nadu," in PG Babu (ed., 2022), Economic Policy in Covid-19 Times, Orient Blackswan

Conference/workshop/ panel discussion

1. Vijaya Gupta, (2022), Policies and Innovations for Climate-Resilient Farming in Developing Countries, International Growth Centre (IGC), London School of Economics and Political

- Sciences, with Prof Jonathan Leape, Executive Director of IGC, London School of Economics and Political Science, London, Mr Assan Ng'ombe- Resilience Officer at AGRA, South Africa and Prof Kyle Emerick- Tufts University, Public Event 16th February.
- 2. Kezia Sharma, AS Binilkumar, and Vijaya Gupta, (2022), Exploring the nexus between energy transition and energy poverty, Sustainable Development Conference, Organised by the University of Michigan, 24-28 January
- 3. Vijaya Gupta and Chandan Kumar Jha, (2022), Agricultural employment and productivity after reverse migration during Covid-19, Sustainable Development Conference, Organised by University of Michigan, 24-28 January
- 4. Vijaya Gupta (2021), Modelling the nexus of inequality, growth, and sustainability in developing countries, Bienniel Conference (virtual) of ISEE, ESEE and Degrowth, Building Alternative Livelihoods in times of ecological and political crisis and Economy and livelihoods after Covid-19, 5-8 July.
- 5. Vijaya Gupta and Chandan Jha (2021), Reverse migration during Covid-19 and agricultural employment and productivity in India, Biennial Conference (virtual) of ISEE, ESEE and Degrowth, Building Alternative Livelihoods in times of ecological and political crisis and Economy and livelihoods after Covid-19, 5-8 July.
- 6. Nidhin Francis and Vijaya Gupta, (2021), Cost minimization of IWAN in telecom sector in India: A case study, Online World Congress of International Economic Association, Equity, Sustainability and Prosperity in a Fractured World, 2-6 July 2021
- 7. Chandan Jha and Vijaya Gupta (2021), Modelling factors determining adaptation strategies to climate change and its impact on crop productivity: A case study of Bihar state of India, Online World Congress of International Economic Association, Equity, Sustainability and Prosperity in a Fractured World, Online, 2-6 July 2021



- 8. Amarayil Sreeraman, Binilkumar, Hari, Lakshmikanth and Nathan, Hippu Salk Kristle (2022) Changing Mobility Preferences and Policy in the Post COVID19 Scenario: A Case of Mumbai Metropolis, India at 3rd Sustainability and Development Conference organised by Sustainability and Development Initiative (SDI) of University of Michigan held on January 24-28, 2022 (Virtual Mode).
- 9. Jyoti Dixit and Poonam Singh (2022) "Investing in Recovery: Challenges and Opportunities for Indian Securities Markets" Third SEBI-NISM Research Conference 2022 held at NISM, February 24-25, 2022

Research Project Undertaken

- Vijaya Gupta completed a research project on Labour Productivity in Indian Manufacturing, 2021-22. Working paper with Mohit Saharan, Research Assistant
- 2. Binilkumar Amarayil Sreeraman has completed a collaborative research project on "Preference Over Multi-Modal Mobility Options of Urban Dwellers: A Case of Aizawl City in Mizoram" in collaboration with Prof. Gyanendra Singh of NIT Mizoram, funded by Indian Council of Social Science Research under IMPRESS Scheme.

IV. Faculty activities

- M. Venkateswarlu was a Keynote Speaker and Addressed the researchers at the "SymFin 2021 - Annual Research Conference" on 2nd July 2021 as a Keynote Speaker
- M. Venkateswarlu was a Member in the following Expert Committee: 'ISO TC 322' -Sustainable Finance and 'ISO TC 322/AHG and AHG 2' - Suitable Finance, International Organization for Standardization (ISO), Geneva, Switzerland.
- MSD -18, committee on Sustainable Finance, subcommittee on Terminology - Sustainable Finance, MSD -18, subcommittee on Future Standards - Sustainable Finance, MSD

- -18, subcommittee on Sustainable Fintech - Sustainable Finance Bureau of Indian Standards, New Delhi
- M Venkateswarlu acted as Indian Examiner for the thesis titled "The Impact of WTO on area, production, productivity, price and trade of natural rubber in India", submitted by Mr Syju Mathew, supervised by Dr R. Murugesan, Department of Humanities and Social Sciences, National Institute of Technology, Tiruchirappalli.
- M Venkateswarlu is a Reviewer for the Journal Business Perspectives and Research
- Ajay Panda coordinated a Professional Course Title: Deep Learning in Finance, Course instructor: Prof. Rahul Rai, Professor & Dean's Distinguished Professor, Department of Automotive Engineering, Clemson University, International Center for Automotive Research (CU-ICAR) Greenville, SC. Course Duration: 15 Hours, October 2021.
- Ajay Panda organized a "Research Methods using Design Science and Rigorous Case Study Approach" workshop by Prof. Jayanth Jayaram from the University of Oklahoma, Norman, OK 73019. Duration: 15 hours, 18th – 20th Dec 2021.
- Ajay Panda coordinated a professional course Title: "Societal development and its impact on supply chain management and logistics" Course instructor: Prof. Sunderesh Heragu from Oklahoma State University, Stillwater, OK 74078 USA, Duration: 10 Hours From 24 May – 28 May 2021.
- Poonam Singh wrote opinion pieces on "Joblessness and Opportunity in Tamil Nadu" (P G Babu and Vikas Kumar). The Hindu, July 9, 2021, Covid vaccine price discrimination requires the Competition Commission of India to step in (with Vikas Kumar), The Print 4 June 2021 and India's competition law needs to tackle regulatory shopping (with Vikas Kumar), East Asia Forum 21 May 2021



- Poonam Singh Relative Party Transactions: Implication for Investor Protection (with Vikas Kumar), NSE Quarterly Briefing, NSE Quarterly Briefing, March 2022
- Vijaya Gupta has been a Member of the Executive Committee, Diversity, Equity and Inclusion Initiative (DEI), European Association of Environmental and Resource Economists (EAERE) since 2022
- Vijaya Gupta has been nominated as a Director Member, Board of Directors, TrickerPlant, CryptoWire
- Vijaya Gupta has reviewed papers for the following journals: Scientific Reports, Springer Nature, Humanities & Social Sciences Communications, Energy Policy, International Journal of Climate Change Strategies and Management, Sustainability, and Journal of Entrepreneurship and Innovation in Emerging Economies.
- Binilkumar Amarayil Sreeraman chaired a session at the International Conference on Energy Transition for Sustainable Development organized by the Centre for

- Sustainable Development KJ Somaiya Institute of Management Studies Mumbai held on 28-30 March 2022 (on Virtual Platform).
- Binilkumar Amarayil Sreeraman is a reviewer for the following journals: Journal of Environmental Management-Elsevier, Environment, Development and Sustainability – Springer, Environment and Resource Economics-Springer, Journal of Environmental Planning and Management – Routledge, International Journal of Climate Change Strategies and Management-Emerald, International Journal of Rural Management – Sage, Business Perspectives and Research-Sage
- Mainak Mazumdar organized MSME Entrepreneurship Conclave on the topic "MSME Growth & Development Everywhere" on 3rd March 2022
- Mainak Mazumdar organized E-summit in March 2022

V. Outreach of the Area

Details are available in the Outreach section.



MARKETING, ORGANISATIONAL BEHAVIOUR AND HUMAN RESOURCE MANAGEMENT

Area Chair: Prof. D. K. Srivastava

Introduction to the Marketing Organizational Behaviour and Human Resource Management area

The Marketing, Organisational Behaviour and Human Resource Management areas deal with this training and education that support students in becoming managers. In 2020, Marketing, Organisational Behaviour, Human Resource Management, and Strategy were merged and rechristened as Marketing, Organisational Behaviour and Human Resource Management (MOBHR). The area details are as follows:

I. Introduction to the Marketing Area

Marketing is central to any business. The quintessential goal of any organization is customer acquisition and retention. Marketing provides insights for managing the marketing mix viz product, price, place, and promotion, besides undertaking STP (segmentation, targeting and positioning) to achieve customer satisfaction. Well-designed marketing leads to a delighted and loyal customer. The marketing Faculty at NITIE, having rich experience in teaching and research, helps students learn the latest concepts, practices, and tools in marketing. Training and consultancy activities in marketing help organizations achieve their goal of being 'customer oriented' and 'market focused'.

i. Marketing Courses Offered

Marketing Management, Advertising, B2B Marketing, Brand Management, Consumer Behavior, Digital Marketing, Global Marketing, Healthcare Marketing, Marketing Analytics, Marketing Research, Pricing, Retail Management, Rural Marketing, Sales and Distribution Management, Services Marketing

ii. Marketing Faculty Members/Area of Research

S.No.	Faculty	Research Area
1	Prof. Manoj Kumar Jha	Marketing Management, B2B Marketing, Software Engineering, Object Oriented Analysis and Design, Marketing research
2	Prof. Rekha D. Chikhalkar	Marketing Management
3	Prof. Sanjeev Verma	Marketing Research, Marketing Analytics, Services Mktg
4	Prof. Ranjan Chaudhuri (On Lien)	Marketing Management, Retail Management
5	Prof. Neeraj Pandey	Pricing, Digital Marketing, B2B Marketing

iii. Research and Publications

- o Lim, W. M., Kumar, S., Verma, S., & Chaturvedi, R. (2022). Alexa, what do we know about conversational commerce? Insights from a systematic literature review. *Psychology & Marketing*, 39(6), 1129-1155.
- o Verma, S., Yadav, N., & Chikhalkar, R. (2021). An integrated measure of eWOM usefulness in the leisure travel: Conceptualisation, scale development, and validation. *Journal of Marketing Communications*, 1-27.
- Yadav, N., Verma, S., & Chikhalkar, R. D. (2021). eWOM, destination preference and consumer involvement–a stimulus-organism-response (SOR) lens. *Tourism Review*.
- Verma, S., Warier, L., Bolia, B., & Mehta, S. (2022). Past, present, and future of virtual tourism-a literature review. *International Journal of Information Management Data Insights*, 2(2), 100085.



- Chandra, S., Verma, S., Lim, W. M., Kumar, S., & Donthu, N. (2022). Personalization in personalized marketing: Trends and ways forward. *Psychology & Marketing*.
- Verma, S. (2022). Sentiment analysis of public services for smart society: Literature review and future research directions. *Government Information Quarterly*, 101708.
- Verma, S., & Sheel, A. (2022). Blockchain for government organizations: past, present and future. Journal of Global Operations and Strategic Sourcing.
- Prasad, R. K., & Verma, S. (2022). Service quality measures: systematic literature review and future research directions. *International Journal of Management Practice*, 15(1), 9-23.
- Chandra, S., & Verma, S. (2021). Big data and sustainable consumption: a review and research agenda. *Vision*, 09722629211022520.
- Verma, S., & Yadav, N. (2021). Past, present, and future of electronic word of mouth (EWOM). *Journal of Interactive Marketing*, 53, 111-128.
- Srivastava, M., Pandey, N., & Saini, G. K. (2022). Reference price research in marketing: a bibliometric analysis. *Marketing Intelligence & Planning* (ahead-of-print).
- Nayal, P., & Pandey, N. (2022). What Makes a Consumer Redeem Digital Coupons? Behavioural Insights from Grounded Theory Approach. Journal of Promotion Management, 28(3), 205-238.
- Pandey, N., & Rupnawar, A. (2022). Idea Generation for New Service Development (NSD): Harnessing the Power of Social Media Platforms. Multidisciplinary Business Review, 1-10.
- Nayal, P., Pandey, N., & Paul, J. (2022). Covid-19 pandemic and consumer-employee-organization wellbeing: A dynamic capability theory approach. *Journal of Consumer Affairs*, 56(1), 359-390.
- Dwivedi, Y. K., Hughes, L., Baabdullah, A. M., Ribeiro-Navarrete, S., Giannakis, M., Al-Debei,

- M. M., ...Pandey, N. & Wamba, S. F. (2022). Metaverse beyond the hype: Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, 66, 102542.
- Pandey, N., & Jha, S. (2022). Universal Health System in India: Review and Directions for Future Research. *Journal of Health Management*, 24(3), 337-346.
- Mukul, K., Pandey, N., & Saini, G. K. (2021).
 Does social capital provide marketing benefits
 for a startup business? An emerging economy
 perspective. Asia Pacific Journal of Marketing
 and Logistics.
- Kumar, S., Pandey, N., Lim, W. M., Chatterjee, A. N., & Pandey, N. (2021). What do we know about transfer pricing? Insights from bibliometric analysis. *Journal of Business Research*, 134, 275-287.
- Donthu, N., Kumar, S., Pandey, N., Pandey, N.,
 & Mishra, A. (2021). Mapping the electronic word-of-mouth (eWOM) research: A systematic review and bibliometric analysis. *Journal of Business Research*, 135, 758-773.
- Nayal, P., Pandey, N., & Paul, J. (2021). Examining m-coupon redemption intention among consumers: A moderated moderated-mediation and conditional model. *International Journal of Information Management*, 57, 102288.
- Donthu, N., Kumar, S., Pattnaik, D., & Pandey, N. (2021). A bibliometric review of International Marketing Review (IMR): past, present, and future. International Marketing Review.
- Tripathi, A., & Pandey, N. (2021). Consumers' Perceptions of Deal Presentations for Green Products. Australasian Marketing Journal, 18393349211005201.

iv. Faculty Achievement

Prof. Neeraj Pandey: 'Best Management Faculty Award' for 2021-2022 by Bombay Management Association (BMA)



II. OB and HRM Subarea

i. Introduction

Developing potential and capabilities are vital to align with organisational, business, and social objectives. As an area of Organizational Behaviour and Human Resource Management, we are determined to understand and deal with various people-related workplace challenges. We strive to work with our students' affective, behavioural, and cognitive requirements, provide human-based interventions to organisations, and contribute to nation-building by strengthening human capabilities.

ii. Area Objectives

To develop students' and executives' engineering, managerial and leadership capabilities, focusing on organisational behaviour and HR functional aspects.

iii. List of Area members and their specialization

Sr. No	Faculty	Focus Area	Spectrum of Work
1.	Prof. D. K. Srivastava (DKS)	HR& OB, Principles of Management	Organizational Structure & Performance, Training & Development.
2.	Prof. S. K. Nair (SKN)	OB & HR, Psychology	Job Redesign & Work Motivation, Psychological Assessment, Personnel Selection, Leadership, Positive Psychology.
3.	Prof. T. Prasad (TP)	Principles of Organisation and Management, Entrepreneurship	Entrepreneurship, Start-ups, and Entrepreneurial Pedagogies
4.	Prof. Nikhil K. Mehta (NKM)	Communication, Ethics	Pedagogical Developments, Human Communication, Transactional Analysis, Bhagavad Gita, Indian Culture, Queer Studies.
5.	Prof. Sumi Jha (SJA)	OB and HR, Analytics	Leadership, HR analytics, Competency management, Organizational health and employee empowerment.
6.	Prof. Somsekhar Bhattacharyya (SSB)	Business Strategy	Corporate Social Responsibility (CSR), Business and Society and India's Developmental issues Strategic Management issues, Industry Level Analysis and Strategic Alliance
7.	Prof. Upasna A Agrawal (UAA)	OB and HR, Communication, Career development	Leadership, Gender, Entrepreneurship, Diversity and Inclusion, Discretionary behaviours

iv. Courses-

Business Communication, Organization Behaviour, Human Resource Management, Business Ethics, Strategic Management



v. Elective

HR Analytics, Diversity Equity and Inclusion, Leadership Development, Managing Negotiations, Soft Skills, Personality Theories, International Business Strategy, Strategic Corporate Social Responsibility

III. Publications of Faculty Members

- Nair B P, Prasad T & Nair S K (2021) Role of leader and followers' well-being engagement and the moderating role of psychological capital. International Journal of Productivity and Performance Management (Emerald) ISSN: 1741-0401
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Publications (Book Chapter)

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Conferences

- Mhatre, S. and Mehta, Nikhil K. (2021).
 Spirituality for Sustainable Development of Organizations: A microfoundation perspective.
 Third International Conference on Challenges in Emerging economies at K.J. Somaiya Institute of Management, Mumbai
- Das, S., & Jha, S. (2022, January 7-9). Women Career Advancement in the Indian (Gendered) workplaces: Not There Yet! 7th Biennial INDAM Conference, IIM Rohtak.
- Singh, A., & Jha, S. (2022, January 7-9).
 Strategic Leader's Approach to Innovation:
 An Exploratory Study in Indian Public sector Organizations, 7th Biennial INDAM Conference, IIM Rohtak.
- Das, S. & Jha, S. (2022, June 15-17). Career Transition of Returning Women Professionals in the Indian Workplaces. *In EURAM 2022: 22nd Annual Conference of the European Academy of Management.*

- Singh, A., & Jha, S. (2021, December 16-18). Strategic Leader's Approach to Innovation: An Exploratory Study in Indian Private sector Organizations, 8th PAN IIM World Management Conference, IIM Kozhikode.
- UA Agarwal, P Zoghbi-Manrique-de-Lara (2022). Examining Link Between Compassion, Spiritual Leadership and Organizational Citizenship Behavior. Academy of Management Proceedings, 13721
- V Khattar, UA Agarwal, SM Pathak (2022).
 Sustaining Entrepreneurial Careers: Coping with COVID-19 Career Shock, Academy of Management Proceedings 10873

IV. Achievements

- Prof. D.K. Srivastava was nominated as a member of Search-cum-Selection Committee for the selection of vice-chancellors and Pro-VC of state universities of Jharkhand by Hon. Governor Jharkhand.
- 2. Prof Upasna A Agarwal has been identified in the top 2% of the scientists' list released by Stanford University in 2021 and 2022.
- 3. Prof. Nikhil K. Mehta received Prashansa Patra from NITIE, Mumbai, for publishing his research work "Swacch Bharat Abhiyaan: Shiksha kay Sandarbha mein vyavhaar vishleshan" in Rajbhasha

V. Outreach

Please see the outreach section.



FACULTY INVOLVEMENT IN STUDENT PROJECTS

I) Nine-month Project and Summer Internship Programme

SN	Faculty Members	No. of students guided	
		9-Month Project	Summer Internship Programme
1	Prof. D.K. Srivastava, Prof. Sanjeev Verma, Prof. Hema Diwan	16	33
2	Prof. Hema A Date, Prof. Rakesh Verma, Prof. Poonam Singh	14	37
3	Prof. L. Ganapathy, Prof. T.Prasad, Prof. Koteshwar Rao Naik	20	35
4	Prof. M. Venkateswarlu, Prof. Binil.Kumar AS, Prof. Rofin TM	17	35
5	Prof. Manoj Kumar Tiwari, Prof. Sushmita Narayana Aghlaya, Prof. Debabrata Das	15	40
6	Prof. Milind Akarte, Prof. B.E. Narkhede, Prof. Vidyadhar Gedam	12	35
7	Prof. Padmanav Achaya, Prof. Anju Singh, Prof. Vivek Khanzode	10	36
8	Prof. Priyanka Verma, Prof. Ryucita Gupta, Prof. A.K. Panda	12	34
9	Prof. P. Sangle, Prof. Sumi Jha, Prof. K.S. Ranjani	11	34
10	Prof. S.K. Nair, Prof. M.K. Jha, Prof. Neeraj Pande, Prof. Rakesh Raut	17	31
11	Prof. Seema Unnikrishnan, Prof. S K Md. Rauf Iqbal, Prof. Ravindra Gokhale	17	36
12	Prof. Shankar Murthy, Prof. Vipul Kumar Singh, Prof. Mainak Mazumdar.	08	34
13	Prof.V.B. Khanapuri, Prof. Nikhil K Mehta, Prof. UA Agarwal	17	36
14	Prof. Vijaya Gupta, Prof. Shirish Sangle, Prof. Utpal Chattopadhyay	11	34

Field Projects (PGDIM-27)

Faculty Name	Area	No. of stud	Total	
		PGDIM-27	PGDISEM-20	
Prof. M K Tiwari	OSCM	8	0	8
Prof. L Ganapathy	OSCM	7	0	7
Prof. V B Khanapuri	OSCM	7	0	7
Prof. Milind M Akarte	OSCM	7	0	7
Prof. Padmanav Acharya	OSCM	7	0	7
Prof. S K Md. Rauf Iqbal	OSCM	6	0	6
Prof. Vivek Khanzode	OSCM	6	0	6
Prof. B Koteswara Rao Naik	OSCM	6	0	6



Faculty Name	Area	No. of stud	lents guided	Total	
		PGDIM-27	PGDISEM-20		
Prof. B E Narkhede	OSCM	6	0	6	
Prof. (Ms.) Priyanka Verma	OSCM	5	0	5	
Prof. (Ms.) Ruchita Gupta	OSCM	5	0	5	
Prof. Ravindra S Gokhale	OSCM	6	0	6	
Prof. Rakesh D Raut	OSCM	6	0	6	
Prof. (Ms.) Sushmita Narayana A	OSCM	5	0	5	
Prof. (Ms.) D Jinil Persis	OSCM	5	0	5	
Prof. Rofin T M	OSCM	5	0	5	
Prof. (Ms.) Hema A Date	ADS	7	0	7	
Prof. (Ms.) Purnima S Sangle	ADS	7	0	7	
Prof. Rakesh Verma	ADS	6	0	6	
Prof. Debabrata Das	ADS	5	0	5	
Prof. (Ms.) Vijaya Gupta	F&E	7	0	7	
Prof. M Venkateswarlu	F&E	7	0	7	
Prof. Utpal Chattopadhyay	F&E	6	0	6	
Prof. Binilkumar A S	F&E	5	0	5	
Prof. (Ms.) K S Ranjani	F&E	5	0	5	
Prof. (Ms.) Poonam Singh	F&E	5	0	5	
Prof. Vipul Kumar Singh	F&E	5	0	5	
Prof. Ajaya Kumar Panda	F&E	5	0	5	
Prof. Mainak Mazumdar	F&E	5	0	5	
Prof. D K Srivastava	MOBHR	6	0	6	
Prof. S K Nair	MOBHR	6	0	6	
Prof. M K Jha	MOBHR	6	0	6	
Prof. T Prasad	MOBHR	6	0	6	
Prof. (Ms.) R D Chikhalkar	MOBHR	6	0	6	
Prof. Sanjeev Verma	Marketing	6	0	6	
Prof. Ranjan Chaudhuri	Marketing	6	0	6	
Prof. Nikhil K Mehta	MOBHR	6	0	6	
Prof. Neeraj Pandey	MOBHR	6	0	6	





Faculty Name	Area	No. of stud	No. of students guided		
		PGDIM-27	PGDISEM-20		
Prof. (Ms.) Sumi Jha	MOBHR	6	0	6	
Prof. (Ms.) Upasna Agarwal	MOBHR	5	0	5	
Prof. (Ms.) Neha Srivastava	MOBHR	0	0	0	
Prof. (Ms.) Seema Unnikrishnan	SM	3	3	6	
Prof. Shankar Murthy	SM	3	3	6	
Prof. Shirish G Sangle	SM	4	3	7	
Prof. (Ms.) Anju Singh	SM	4	2	6	
Prof. (Ms.) Hema Diwan	SM	4	2	6	
Prof. Vidyadhar V Gedam	SM	4	2	6	
		259	15	274	

LABORATORIES AND RESEARCH CENTRES

- Ergonomics Laboratory
- Digital Manufacturing Laboratory
- Industrial Environment Laboratory
- Centre for Innovation, Incubation and Entrepreneurship
- Centre for Environmental Studies
- Centre of Excellence in Logistics and Supply Chain Management



Annual Report 2021-2022



ERGONOMICS LABORATORY

Name of Ergonomics lab coordinator: Prof. Rauf Iqbal

The centre has 01 faculty member, 04 Fellow students, 01 Project Assistant,

- 1. Physical Facilities available in the centre: Equipment for ergonomics research
- 2. Center Outcomes: Research findings, Doctoral thesis, published papers, Training courses, Industrial consultancy.
- 3. Intellectual property created: --
- 4. No. Conferences/Workshops:

Lab R&D Activities:

1. Institute-Sponsored Projects

New Project	Ongoing	Completed
00	02	00

2. Project:

- Title: "Study of Cognitive performance and onset of fatigue in skilled jobs: Human factors Intervention".
- Status of the project: Ongoing project in the lab.

3. Teaching:

Subjects taught to PGP students:

- i. Industrial Ergonomics
- ii. Work systems design

4. Research:

Publication: International publication in the following journal-

Publication: International publication in the following journals-

 Title: "Occupational Health Profile of workers in Terracotta Handicraft Industry"-Published by the Springer book of Technology-Enabled WorkSystem Design. <u>https://link.springer.com/chapter/10.1007/978-</u> 981-16-1884-0_15. (**Publication data**: 02nd March 2022).

- ii. **Title:** "Working Conditions of Indian Glass Artware Workers and Association with Musculoskeletal Symptoms"-Published by the Springer book of Technology-Enabled Work-System Design. https://link.springer.com/chapter/10.1007/978-981-16-1884-0_9
 (**Publication date:** 02nd March 2022)
- ii. **Title**: "Development of fuzzy based ergonomic-value stream mapping (E-VSM) tool: a case study in Indian glass artware industry"-Paper published in the journal of Production Planning and Control. https://doi.org/10.1080/09537287.2022.2035447. (**Publication date**: 09th February 2022).

5. Lab Activities:

- i. An augmented Reality / Virtual Reality (AR/ VR) system is installed in the Ergonomics laboratory.
- ii. Data were collected on 100 three-wheeler drivers on simulated driving as well as road driving for the ongoing project in the Lab. In addition, the assessment was carried out on drivers' mental states in different environmental conditions.
- iii. Extension of Project Assistant has been made for the next year to complete the project titled "Study of Cognitive performance and onset of fatigue in skilled jobs: Human factors Intervention".
- iv. Website Development and communication with National and International experts have been initiated for the International joint Ergonomics Conference on ACED 2023, BRICSplus HFE 2023 and HWWE 2023.



DIGITAL MANUFACTURING LABORATORY

Introduction and Objectives of the Laboratory

The Digital Manufacturing Laboratory (DML), formerly known as the AMCE (Advanced Manufacturing Centre of Excellence), was established through a DST project under FIST (Funds for Improvement of Science and Technology) during 2006-07. The objective of the Digital Manufacturing Laboratory was to support teaching, research, and outreach in the various manufacturing areas.

Resources

The DML had four professors: Professor Milind Akarte, Prof. Vivek Khanzode, Professor Balkrishna Narkhede, and Professor Kanchan Joshi. During the year, the DML had the following facilities:

1. Software:

- One user license of AnyLogic Simulation software.
- Witness 2006 Simulation software.
- CNC-Train, FMS-CIM, and M-Robot software.

2. Hardware

- Reverse Engineering EIN Scan Pro handheld 3D Scanner.
- Ultimaker 3 extended Rapid Prototyping System (3D Printer).
- FMS/CIM setup including XL Mill, XL Turn, Aristo Robots, Automated Storage/Retrieval (AS/RS) systems, Automated Guided Vehicle (AGV), and Automatic Assembly Station.

Laboratory Activities

Some of the important activities carried out by the DML from April 2021 – March 2022 are as below:

i. The institute conducted an online Half Day Workshop on "Additive Manufacturing for Competitiveness" on May 20, 2021. The

- workshop was open to all stakeholders, including NITIE students, faculty, and outside participants. Keynote speakers for the workshop are Professor Satyendra K Gupta, Uni. of Southern California, USA, Professor Karunakaran K P, IIT Bombay, Dr Mukesh Agarwal, 3D Product Development Pvt. Ltd., Bangalore and Professor Manoj Kumar Tiwari, Director NITIE. Its objective was to discuss Additive Manufacturing technology from academic, research, and industry perspectives. DML team members Prof. Vivek Khanzode, Prof Milind Akarte, and Dean (SRIC) coordinated the event.
- ii. A research scholar, Mr Harshad Sonar, defended his thesis titled "Evaluating the Impact of Additive Manufacturing on Firm Competitiveness" on 05-07-2021. He worked under the guidance of DML team members Prof. Vivek Khanzode and Prof Milind Akarte.
- iii. Two research scholars, Mr Shreyanshu Parhi and Mr Vishwas Dohale have submitted their thesis on smart manufacturing and manufacturing strategy, respectively. They were working with prof Milind Akarte of DML and co-guided by Professor Kanchan Joshi and Professor Priyanka Verma, respectively.
- iv. The research scholars working with the team members of the DML lab published their research in peer-reviewed international journals.
 - a. Akarte, M., Khanzode, V., Iqbal, R. and M K Tiwari, *IE Tools for Boosting Competitiveness in Iron and Steel Industry: A Review*. Trans Indian Inst Met 74, 1065–1076 (2021).
 - b. Sonar, H.C., Khanzode, V.V. & Akarte, M.M. Ranking of Additive Manufacturing Implementation Factors using Analytic Hierarchy Process (AHP). J. Inst. Eng. India Ser. C 102, 421–426 (2021).



- c. Sonar, H., Khanzode, V., & Akarte, M. (2022). Additive Manufacturing Enabled Supply Chain Management: A Review and Research Directions. Vision, 26(2), 147–162.
- d. Shreyanshu Parhi, Kanchan Joshi, Thorsten Wuest, Milind Akarte, Factors affecting Industry 4.0 adoption – A hybrid SEM-ANN approach, Computers & Industrial Engineering, Volume 168, 2022,108062,
- e. Shreyanshu Parhi, Kanchan Joshi & Milind Akarte (2021) Smart manufacturing: a framework for managing performance, International Journal of Computer Integrated Manufacturing, 34:3, 227-256.
- f. Shreyanshu Parhi, Kanchan Joshi & Milind Akarte (2022): Decision-making in smart manufacturing: A framework for performance measurement, International Journal of Computer Integrated Manufacturing
- g. Dohale, V., Akarte, M.M. and Verma, P. (2021), Systematic review of manufacturing strategy studies focusing on congruence aspect, Benchmarking: An International Journal
- h. Vishwas Dohale, Angappa Gunasekaran, Milind Akarte, Priyanka Verma, An integrated Delphi-MCDM-Bayesian Network framework for production system selection, International Journal of Production Economics, Volume 242, 021, 108296
- Vishwas Dohale, Angappa Gunasekaran, Milind Madhukarro Akarte & Priyanka Verma (2022) 52 Years of manufacturing strategy: an evolutionary review of the

- literature (1969–2021), International Journal of Production Research, 60:2, 569-594
- v. After the DML renovation, the process of hiring the human resource for the DML was completed, and one research assistant joined the DML on 1st December 2021. However, the research assistant left the position in mid of January.
- vi. The service Engineer from the Compressor supplier was requested to visit the NITIE DML lab to oversee the Compressor set-up and carry out minor maintenance along with the servicing of the compressor.
- vii. The service Engineer from MTab Engineers Pvt Ltd was requested to visit the NITIE DML lab to oversee the FMS setup and suggested the requirements for the reinstallation of the FMS set.
- viii. The following activities are proposed for the following year.
 - a. The hiring of the human resource for the DML
 - b. The reinstallation of the FMS set
 - c. Initiating the AMC process for FMS set-up for the next six months.

Working research papers:

- d. Sagar Ghuge, and Milind Akarte, Spare part segmentation for additive manufacturing.
- e. Sagar Ghuge, and Milind Akarte, Adoption of Additive Manufacturing in Indian Manufacturing Industries.
- f. Sagar Ghuge, and Milind Akarte, Identification of Spare Parts Selection Criteria for Additive Manufacturing.



INDUSTRIAL ENVIRONMENT LABORATORY

Introduction and Objectives of the Laboratory

The Industrial Environmental laboratory was established in 1990 with the objective and focus of research in industrial pollution control. With the growing impacts of industrial processes on the environment, impact assessment of these operations on air, water, and the soil become inevitable. Therefore, the industrial environment lab monitors water, air, and noise to meet the above requirements.

Resources

Prof. Vidyadhar V. Gedam coordinated the lab with one technical staff during the year.

Physical facility available in the laboratory:

Incubator, Oven, Water bath, Muffle furnace, Weighing balance, Autoclave, COD digester, Noise dose meter. Audio and sound level meter

Laboratory Activities

Analysis of various environmental samples was conducted during the year. Several Demonstrations of environmental instrumentation to students and researchers were performed. The laboratory sought and submitted research proposals for external research grants. Experimentation and analysis of

various samples are under research projects (i.e., SARASWATI and other research projects).

Laboratory outcomes

- 1. Under the Saraswati 2 project (PI Prof. Anju Singh), the entire lab has been upgraded and is being used for analysis work of the project.
- 2. The fellow and research scholars in Sustainability Management (SM) area also use the lab facility for their research. In addition, noise & Hearing Measurement equipment in the Industrial Environment laboratory is used by the students of the Post Graduate Diploma in Industrial Safety & Environmental Management (ISEM) to have "Hands-on" experience for various courses in Environment Health and Safety (EHS) area. The same is also used for demonstration to the MDP and UBP participants in the SM area.
- 3. The instruments and physical facility were used during 2020-2021 to teach the students of the Postgraduate Programme in Industrial Safety and Environmental Management (ISEM) subjects like solid waste, water and wastewater, hazardous waste, air and air and noise management, and noise and E-waste management.





CENTRE FOR INNOVATION, INCUBATION AND ENTREPRENEURSHIP (CIIE)

CIIE is an institute arm aiming to create entrepreneurial culture by igniting students' minds towards start-ups and entrepreneurship. CIIE has an area of 3500 sq. ft (approx.) on the second floor of the OCA building (opposite to AICTE office), and renovation is going on. During the year, CIIE purchased some basic tinkering tools. As a part of CIIE activities, we organize events to boost knowledge about value creation and provide guidance for students who are passionate about start-ups. During the financial year, CIIE had the following achievements:

- 1. CIIE has developed TWO inventions, viz.
 - a. Air vent for helmet (with opening & closing flaps) and
 - b. Perforated cushioning & spacing element for a helmet.
- 2. CIIE has also made two industrial designs, viz.,
 - a. Design of an integrated lathe-millingsharpening machine, and
 - b. Design of air vent helmet.
- 3. CIIE has filed four patents (Two invention patents and Two design patents).
- 4. There are two inventions in the pipeline.
- 5. CIIE has organized guest lectures on innovation and entrepreneurship.
- 6. There are 11 startup projects as part of nine months CIIE has coordinated academic activity.
- 7. Two companies are in the pipeline for incubation at CIIE.
- 8. CIIE hosted two eminent NITIE 1995 batch alumni, serial entrepreneurs:
 - a. Mr Vivek Agarwal (CEO- of Dun & Bradstreet Technologies and Data Services) &
 - b. Mr Lokesh Tayal (Founder of Math2Shine),
 Sessions on "NITIEpreneurs Start-Up Guidance: The Journey of Entrepreneurship" were organized

on August 31, 2021. Prof. Utpal Chattopadhyay welcomed the guests on behalf of NITIE. The students received the session very well, with more than 350 participants involved in the open & interactive discussion. The session included brief speeches about the entrepreneurial journeys of the two speakers followed by an interactive Q&A session, which gave great insights into the beauty of entrepreneurship, the struggle, the challenge, and the desire to achieve great heights, which overcomes all hurdles in between. CIIE Coordinator Prof. Koteswara Rao Naik Bhukya thanked the guest for their valuable inputs and time.

National Institute of Industrial Engineering NITIE Mumbai



CENTER FOR INNOVATION INCUBATION
AND ENTREPRENEURSHIP (CHE) NITIE

NITIEpreneur's StartUp Guidance Session:

The Journey of Entrepreneurship



Lokesh Tayal



Vivek Agarwal CEO, Dun & Brackstreet Technologies and Data Service

August 31, 2021 | 7.30 pm





CENTRE FOR ENVIRONMENTAL STUDIES (CES)

A. TABLE 7. INTERNATIONAL AND INDUSTRY-SPONSORED PROJECTS STATUS

Sn.	Title of Research Project	Funding Agency	Work in Progress
1	Saraswati 2.0 -Identifying best available technologies for decentralized wastewater treatment and resource recovery for India.	European Union-DST	Commissioning of STP (tentative October 2022). Chemical Analysis of samples (tentative by November 2022). Stakeholder workshop (December 2022). Review paper on RBC Paper work.
2	Research and Development on Environment Product Regulations and Policies	Ms/. Global Product compliance (Company)	Events held
3	Development of Marico's Product Sustainability Index model based on relevant ESG principles and research-based market insights.	M/s. Marico India Limited (Industry)	Product Sustainability Index framework for products developed
4	A Development of BPCL's LCA roadmap on research-based insights and carrying out Pilot LCA study	M/s. BPCL (Industry)	Project Completed
5	Presentation to the Net zero committee of BPCL on likely pathway to net zero	M/s. BPCL (Industry)	Tender floated on that basis
6	MoU with EMC and Ekconnect for 5 years		
7	Certificate program on sustainability. Module l Essentials of environmental compliances	Ekconnect knowledge foundation in	Ongoing
	Certificate program on sustainability Module 2: Going beyond compliance	participation with NITIE, and supported by Environmental Management Centre LLP	
	Certificate program on sustainability Module 3: Circular Economy		
	Certificate program on sustainability Module 4: Climate Change		
	Certificate program on sustainability Module 5: Biodiversity		
	Certificate program on sustainability Module 6: ESG		



Sn.	Title of Research Project	Funding Agency	Work in Progress
8	Assessment of Nichem Solution's BIOX product's LCA based on research-based insights and standard techniques	Nichem Solutions	Project Completed
9.	Conducting Life Cycle Analysis (LCA) for beverage 1	Beverage manuf.	Project initiated
10.	Conducting Life Cycle Analysis (LCA) for beverage 2	Beverage manuf.	Project initiated
11.	Conducting Life Cycle Analysis (LCA) for beverage 3	Beverage manuf.	Project initiated
12.	Net Zero rating system for oil & Gas	BPCL	In progress

- B. **ENVIRONMENTAL LAB** All instruments, equipment, glassware, chemicals in the lab have been upgraded and all procedures and SOPs stream lined.
- C. **PILOT SARASWATI 2** Pilot of Saraswati 2 installed at BMC site
- D. **PUBLICATIONS** 2 publications
- E. **PROJECT PROPOSALS** Two international proposals submitted In addition, Industrial Environment Laboratory and the Centre for Environmental Studies collaborated to conduct various talks on the theme "Sustainability & You". Prof. Seema Unnikrishnan, Prof Anju Singh, and Prof. Vidyadhar Gedam coordinated the events.

TABLE 8. EVENTS CONDUCTED BY INDUSTRIAL ENVIRONMENT LABORATORY

Sn.	Date	Theme	Speakers	Discussions
1	July 30, 2021	Sustainability Interfacing Financials	Mr Raja Raghavan, Executive Director, MSCI Inc	ESG-related indices in the market and their relevance in the business context.
2	August 07, 2021	Visions of a climate- resilient and Net Zero	Mr Abhidnya Joshi - Asia Pacific Regional Environmental Leader, Cummins Inc.	The sustainability vision of Cummins called Planet 2050
		future	Mr Anirban Chatterjee – Head (Business Development), S&M -India & Middle East, DNV	Different policies and standards need to be set by countries to achieve their sustainability vision while focusing on the bottom of the pyramid.
			Mr Surojit Bose - AVP- Sustainability and Climate Change, HCCB	How has Coca-Cola used Science-Based Solutions to meet their commitments towards waste minimization and recycling?
3	August 14, 2021	Building Sustainability Strategies"	Mr Anirban Ghosh – Chief Sustainability Officer, Mahindra Group	Definition of sustainability with Mahindra Group's sustainability framework. Unravelling the perplexity of Triple Bottom Line concepts by accentuating each of People, Planet, and Profit with Mahindra's approach.



Sn.	Date	Theme	Speakers	Discussions
			Mr Ashwin Kak – Procurement and Sustainability Head, AB InBev India	How is AB InBev employing sustainability principles with its four sustainability pillars as a water-intensive industry?
			Mr Biren Vora – Director, Ekaagra Technology Accelerators Private Limited	Briefing on the IPCC report and how marginalized communities are victimized by climate change.
				Dimensions of sustainability like creating value from waste, adopting a stewardship role, an inclusive value chain, and Actionable steps to embed sustainability into business strategy
4.	August 21, 2021	How are ESG strategies helping	Mr Arnesh Sharma- Vice President, YES BANK	ESG, Risks faced due to Climate Change, Global ESG developments, YES Bank's operation in Responsible Banking.
		to build business resilience and long- term value?	Mr Imran U Associate Director, Sustainalytics	how sustainability should be a global perspective and not just a localized issue, and how crucial the role of the EU in regulating disclosures
			Mr Navdeep Singh Meshram - Head CSR and sustainability, Diageo	Case study of Diageo's performance in reducing scope emissions.
			Mr. Santhosh Jayaram – Partner, KPMG	Reflections on what and who we need resilience from?





CENTER OF EXCELLENCE IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT

Centre In-charge: Prof. Hema Date

OBJECTIVES OF THE CENTER

- To be globally recognized as a Center of Excellence in Logistics and Supply Chain Management education in the contemporary business environment, focusing on nurturing and developing ethos, values, and practices of the Indian Management system blended with the agility of the Global Management practices
- To provide an ecosystem for innovation to thrive and embrace entrepreneurship.
- To energize research mindset and reduce research and development costs by providing neutral, interoperable, multi-technology stack laboratory facilities.
- To position India as a provider of end-to-end solutions in the technical space.

ACTIVITIES UNDERTAKEN SO FAR

Honorable Union Minister of Commerce & Industry, Shri Piyush Goyal, inaugurated the Center of Excellence in Logistics & Supply Chain Management (CoE-L&SCM) at NITIE.

The following activities were conducted:

- Conducted online global certification program in Supply Chain Digitization and Management and Business and Operation Analytics in collaboration with Prof. David Simchi-Levi, Director Prof. Manoj Kumar Tiwari, Data Science Lab and Professor of Business and Supply Chain Analytics, Massachusetts Institute Technology, USA.
- 2. In collaboration with Tata Consultancy Services (TCS), the centre provided an E2E integrated supply chain strategy, planning and distribution with track and trace features for vaccine distribution.
- 3. Presented e-Commerce framework for value addition of Export Industry at Bhopal at

- a national Export Promotion meeting with Thrust on Quality, organized by the Ministry of Commerce.
- 4. Center has signed MoU with SEEPZ, Govt. of India, for being a knowledge partner for IT initiatives of SEEPZ and designing export promotion policies and policies for logistics & supply chain.
- 5. The Center successfully conducted an online certificate course in digital marketing for Micro-Small & Medium Enterprises (MSME) in association with Maharashtra Center for Entrepreneurship Development (MCED). Around 30 participants benefited from it.
- 6. The centre conducted stakeholders meeting on 31st March 2022 at NITIE. Around 30+ participants from various organizations across the marine, shipping, oil & gas industries. The interaction was inaugurated by the Director of NITIE, Prof. Manoj K. Tiwari. The main objective was to enable the centre to be a driving force to train and launch top-quality programs to disseminate advanced knowledge of promoting digitization and machine learning application among all stakeholders in logistics and supply chain. The objective was also to explore the opportunities in the research domain across vertical domains.
- 7. The Center conducted a warehouse management certificate program (5 weeks 30 hrs).
- 8. The Center opted for membership in the Green Software Foundation and proposed research in various sustainability, logistics, and supply chain management areas. The focus is to work on research projects in Green AI and Green Software Applications.
- 9. Center entered MoUs with the Federation of Freight Forwarders Association in India (FFFAI) to undertake various training programs, research and consultancy assignments.



- 10. The Center is in the process of signing an MoU with M/s. Skylink Aero Pvt. Ltd. a young startup for setting up incubation to focus and link and unite into the Indian drone ecosystem and agricultural ecosystem by helping startups to develop software and hardware system for applications in the area of Logistics and Supply Chain Management.
- 11. The Center is in the process of signing an MoU with M/s. T-Layer., a young startup for setting up incubation in the area of Digital Transformation, Mobile Applications, Analytics and AI.
- 12. The Center is completing the signing of the MoU process with the Indian Registrar of Shipping (IR CLASS) to collaborate for the 1-year certificate course, research projects and consulting assignments.
- 13. The Center is working on research projects with EBTC to explore the possibilities of reducing the logistics operation load of road logistics and maximizing the Konkan Railway logistics.
- 14. The Center is working on the project of exploring the possibilities of maximizing the utilization of the JNPT port for international logistics similar to Singapore and China ports.

OUTREACH: INSTITUTE – INDUSTRY COLLABORATION

- 1. Management Development Programme (MDP)
- 2. Unit-Based Programme (UBP)
- 3. Social Outreach Programmes
- 4. Consultancy Assignments
- 5. Memorandum of Understanding (MoU)



Annual Report 2021-2022



MANAGEMENT DEVELOPMENT PROGRAMMES

TABLE 9. MANAGEMENT DEVELOPMENT PROGRAMMES CONDUCTED FROM 01/04/2021 TO 31/03/2022

Sn.	MDP Title	Period	Days	Course Leaders	No. of participants
1	Management of Intellectual Property (IP) for Gaining Competitive Advantage (Creation, Protection and Leveraging of IP)	12th -16th May 2021	3	Prof. B. Koteswara Rao Naik	9
2	Manufacturing Excellence	04th - 06th June 2021	3	Prof. L. Ganapathy Prof. Jinil D. Persis	7
3	Financial Time Series Modeling using Phyton	25th - 03rd June 2021	3	Prof. Ajaya Kumar Panda Prof. Rakesh Verma	10
4	People Analytics	05th - 07th July 2021	3	Prof. Sumi Jha	10
5	Project Risk Analytics	23rd - 27th July 2021	5	Prof. Ruchita Gupta Prof. V. B. Khanapuri	16
6	Excellence in Virtual Human Communication	02nd - 04th August 2021	3	Prof. Nikhil K. Mehta	7
7	Strategic Marketing for Business Growth	16th -20th August 2021	5	Prof. Ranjan Chaudhuri Prof. Neeraj Pandey Prof. Sanjeev Verma	8
8	Applications of AI/ML in Operations & Supply Chain Management	21st - 29th August 2021	4	Prof. Sushmita Narayana A. Prof. Priyanka Verma Prof. Debabrata Das	14
9	AI/ML Driven Customer Relationship Management	23rd - 27th August 2021	5	Prof. Purnima Sangle Prof. Neeraj Pandey Prof. Debabrata Das	7
10	Business People Analytics	23rd - 25th August 2021	3	Prof. Sumi Jha	16
11	Project Planning &Scheduling	01st - 05th September 2021	5	Prof. V. B. Khanapuri	24
12	Cultivating a Leadership Mindset	24th - 26th September 2021	3	Prof. Upasna A Agarwal	35
13	Industrial Engineering and Operational Excellence	24th - 28th September 2021	5	Prof. Milind Akarte	4



No. of Sn. MDP Title Period **Days Course Leaders** participants Prof. M. Venkateshwarlu 14 4 Market Risk Analytics 01st - 05th 5 Oct 2021 Prof. Ajaya Kumar Panda Prof. Vipul Kumar Singh 7 15 Financial Engineering & Data 18th - 23rd 6 Science for Investment October 2021 16 Sustainability Performance 08th - 12th 5 Prof. Shirish Sangle 9 Management in Post COVID-19 November Prof. Vidyadhar V. Gedam 2021 Creating Value Through 17 19th - 23rd 5 Prof. Ruchita Gupta 16 Innovation and Technology Nov 2021 Transfer Analytics 18 Case Writing and Teaching 22nd - 26th 5 Prof. Neeraj Pandev 14 Nov 2021 19 Industrial Safety and 06th - 8th 3 Prof. Seema Unnikrishnan 21 Environmental Management# Dec 2021 Prof. Hema Diwan Compliances and ESG Framework# 20 Developing Commercial and 06th - 10th Prof. K. S. Ranjani 10 Financial Skills for Strategic Dec 2021 Business 21 Strategic Pricing 10th - 14th Prof. Neeraj Pandey 8 Jan 2022 $17^{th} - 21^{st}$ 22 5 Prof. Rakesh Raut 6 Supply Chain Management Jan 2022 Prof. Ravindra Gokhale 23 Applications of AI/ML in 22nd - 29th Prof. Priyanka Verma 14 Operations & Supply Chain Prof. Sushmita Narayana A. January Prof. Debabrata Das Management 2022 24 Managing Cyber Risk in Modern 24th - 28th 5 Prof. Purnima Sangle 6 Supply Chain January Prof. Ruchita Gupta 2022 Prof. Shyamsunder 25 Self-Awareness and Effective 07th - 09th 3 Prof. Nikhil K. Mehta 5 Communication in Projects Team Feb 2022 26 Forecasting for Business 12th - 19th 3 Prof. Priyanka Verma 11 Excellence Feb 2022 Prof. Sushmita Narayana A. Prof. Debabrata Das Corporate Reporting: Integrating 7 27 16th - 20th 5 Prof. Hema Diwan Net Zero Paradigm with Feb 2022 Prof. Binilkumar Amarayil S. Sustainability Disclosures Cultivating a Growth Mindset 28 10th - 12th 3 Prof. Upasna A Agarwal 42 March 2022



UNIT-BASED PROGRAMMES (UBP)

TABLE 10.

SN	Name of Organization	Course Title	Online / Off-Line	Period	Days	Course Leader	No. of Partici- pants
1	M/s. HAL Management Academy, Bengaluru	Production & Operations Management	Online	02nd July 2021	1	Prof. Jinil D. Persis Prof. L. Ganapathy	40
2	M/s. Ericsson India Global Services Pvt. Ltd., Noida	People Analytics	Online	27th - 28th July 2021	2	Prof. Sumi Jha	15
3	M/s. Bharat Petroleum Corporation Ltd.,	Hazard Identification & Risk Analysis and Behavior Based Safety	Online	27th - 30th July 2021 (2 Days X 1/2 (Half) Day	2	Prof. Seema Unnikrishnan Prof. Shankar Murthy	38
4	M/s. Tata Electronics Pvt. Ltd., Tamil Nadu	Economics Workshop	Online	19th June, 10th July & 7th August 2021 61/2 X 3 Days	3	Prof. Poonam Singh	113
5	M/s. Larsen & Toubro Limited, Lonavala	Executive Development Programme (EDP) (1st Batch)	Lonavala	2nd - 7th August 2021 (1st Batch)	6	Prof. Upasna A Agarwal	29
6	M/s. Mahindara Logistics Limited,	Axlerate 2.0 - Expert Module - Building Operations & Logistic Strategies	Online	10th - 12th August 2021	3	Prof. Manoj K. Tiwari Prof. Sushmita Narayana	27
7	M/s. Hindustan Petroleum Corporation Limited, Mumbai	Foundation Course on Operation Management	Online	27th - 28th August 2021	2	Prof. Ruchita Gupta	33
8	M/s. HAL Management Academy, Bengaluru	Supply Chain Management	Online	14th August 2021	1	Prof. L. Ganapathy Prof. Jinil D. Persis	25



SN	Name of Organization	Course Title	Online / Off-Line	Period	Days	Course Leader	No. of Partici- pants
9	M/s. Hindustan Petroleum Corporation Limited, Mumbai	Consumer Centricity	Online	13th & 20th September 2021	2	Prof. Neha Srivastava	29
10	M/s. Indian Oil Corporation Limited, Mumbai	Risk Analysis, HAZOP, BBS and Disaster Management - 1st Batch	Online	15th - 17th September 2021	3	Prof. Seema Unnikrishnan Prof. Shankar Murthy Prof. Vidyadhr Gedam	44
11	M/s. Samarth Udyog Technology Forum	Manufacturing Systems Engineering and Simulation	Online	07th September - 12th October 2022	8	Prof. Vivek Khanzode Prof. Milind Akarte Prof. V. B. Khanapuri Prof. Kanchan Joshi	30
12	M/s. Larsen & Toubro Limited, Lonavala	Executive Development Programme (EDP) (2nd Batch)	Lonavala	25th -30th October 2021 (2nd Batch)	6	Prof. Upasna A Agarwal	37
13	M/s. Indian Oil Corporation Limited, Mumbai	Risk Analysis, HAZOP, BBS and Disaster Management - 2nd Batch	Online	27th - 29th October 2021	3	Prof. Seema Unnikrishnan Prof. Shankar Murthy Prof. Vidyadhr Gedam	34
14	M/s. Mahindra Logistics Limited, Mumbai	Axlerate 2.0 - Capability Building Program for Enterprise Mobility Services (EMS)' (Batch 1st)	Online	13th Oct & 13th Nov 2021	2	Prof. Seema Unnikrishnan Prof. B. E. Narkhede	24
15	M/s. Mahindra Logistics Limited, Mumbai	Axlerate 2.0 - Capability Building Program for Enterprise Mobility Services (EMS)' (Batch 2nd)	Online	20th & 27th Nov 2021	2	Prof. Seema Unnikrishnan Prof. B. E. Narkhede	23



SN	Name of Organization	Course Title	Online / Off-Line	Period	Days	Course Leader	No. of Partici- pants
16	M/s. ONGC Tripura Power Company Limited (OTPC), Delhi	Legal Aspect Labour Laws Compliance	Online	22nd - 25th November 2021	4	Prof. D. K. Srivastava	9
17	M/s. Indian Oil Corporation Limited, Mumbai	Risk Analysis, HAZOP, BBS and Disaster Management - 3rd Batch	Online	24th - 26th November 2021	3	Prof. Seema Unnikrishnan Prof. Shankar Murthy Prof. Vidyadhr Gedam	34
18	M/s. Larsen & Toubro Limited	Effective Stores Management	Online	06th - 10th December 2021	5	Prof. Rakesh Raut Prof. Rofin T. M.	25
19	M/s. Larsen & Toubro Limited, Lonavala	Executive Development Programme (EDP) (3rd Batch)	Lonavala	06th - 11th December 2021 (3rd Batch)	6	Prof. Upasna A Agarwal	40
20	M/s. HAL Management Academy, Bengaluru	Business Negotiations Skills	Online	08th December 2021	1	Prof. Nikhil K. Mehta	LMS Mode
21	M/s. ONGC Tripura Power Company Limited (OTPC), Delhi	Renewable Energy	Online	13th - 15th December 2021	3	Prof. Anju Singh Prof. Hema Diwan Prof. Binilkumar A. S.	11
22	M/s. Accenture Services Pvt. Ltd.,	Sustainability for Chemical Industry	Online	31st Jan - 2nd Feb 2022	3	Prof. Seema Unnikrishnan Prof. Shirish Sangle	31
23	M/s. Coromandel International	Supply Chain Management	Online	9th - 23rd Feb 2022	3	Prof. Priyanka Verma Prof. Debabrata Das Prof. Sushmita Narayana A.	24
24	M/s. HAL Management Academy, Bengaluru	Industrial Engineering Certification Programme	Online	14th - 18th February 2022	4	Prof. L. Ganapathy Prof. Jinil D. Persis	25
25	M/s. Indian Oil Corporation Limited, Mumbai	Risk Analysis, HAZOP, BBS and Disaster Management - 4th Batch	Online	16th - 18th Feb 2022	3	Prof. Seema Unnikrishnan Prof. Shankar Murthy Prof. Vidyadhr Gedam	60



SN	Name of Organization	Course Title	Online / Off-Line	Period	Days	Course Leader	No. of Partici- pants
26	M/s. Larsen & Toubro Limited, Lonavala	Executive Development Programme (EDP) (4th Batch)	Online	21st - 26th Feb 2022 (4th Batch)	6	Prof. Upasna A Agarwal	37
27	M/s. Larsen & Toubro Limited, Lonavala	Executive Development Programme (EDP) (5th batch)	Online	28th, Feb - 01st - 05th March 2022 (5th Batch)	6	Prof. Upasna A Agarwal	39
28	M/s. ONGC Tripura Power Company Limited (OTPC), Delhi	HR Audit and its IR Compliance after induction of various IR codes	Online	10th - 11th March 2022	2	Prof. D. K. Srivastava Prof. Sumi Jha	7
29	M/s. Larsen & Toubro Limited, Lonavala	Executive Development Programme (EDP) (6th batch)	Online	14th - 19th March 2022 (6th Batch)	6	Prof. Upasna A Agarwal	32
30	M/s. Mahindra Logistics Limited, Mumbai	Axlerate 2.0 Certificate Program in Supply Chain Management (Basic Module - Six Hours Online Program)	Online	18th - 19th Feb 2022 - (Batch A)	2	Prof. Sushmita Narayana Prof. Debabrata Das Prof. Priyanka Verma	185
31	M/s. Mahindra Logistics Limited, Mumbai	Axlerate 2.0 Certificate Program in Supply Chain Management (Basic Module - Six Hours Online Program)	Online	25th - 26th Feb 2022 (Batch B)	2	Prof. Sushmita Narayana Prof. Debabrata Das Prof. Priyanka Verma	183





SN	Name of Organization	Course Title	Online / Off-Line	Period	Days	Course Leader	No. of Partici- pants
32	M/s. Mahindra Logistics Limited, Mumbai	Axlerate 2.0 Certificate Program in Supply Chain Management (Basic Module - Six Hours Online Program)	Online	04th - 05th March 2022 (Batch C)	2	Prof. Sushmita Narayana Prof. Debabrata Das Prof. Priyanka Verma	161
33	M/s. Mahindra Logistics Limited, Mumbai	Axlerate 2.0 Certificate Program in Supply Chain Management (Basic Module - Six Hours Online Program)	Online	11th - 12th March 2022 (Batch D)	2	Prof. Sushmita Narayana Prof. Debabrata Das Prof. Priyanka Verma	185



SOCIAL OUTREACH PROGRAMMES

NITIE Developed a Dashboard on the Allocation of Liquid Oxygen

Prof. Manoj Kumar Tiwari, Director-NITIE and his research team developed a model to address the concerns of oxygen shortage during the peak of the second Covid wave. It is an online dashboard that optimizes oxygen allocation across the country. The study was fully supported by NITIE BOG Chairman Shri Shashi Kiran Shetty, founder of renowned logistics firm - Allcargo Logistics. The firm immediately arranged to ship 500 oxygen concentrators from Singapore free of charge.

A comprehensive mathematical NFO has been formulated to simulate the Covid situation, and linear programming is used to individually allocate the oxygen produced at various manufacturing plants to major cities in India to minimize the lead time of the oxygen supply chain.

Dashboard Link: https://oxygen-dashboard.herokuapp.com/



NITIE acts as Mumbai NODAL CENTER for Toycathon 2021

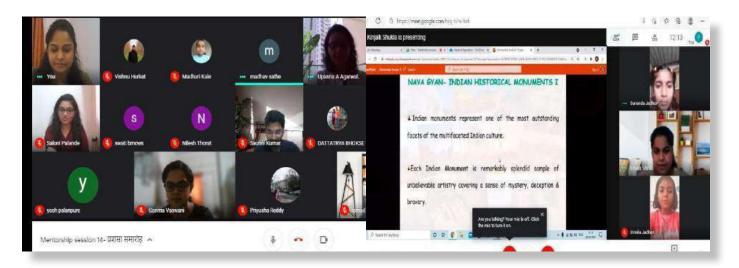
Toycathon 2021 was an inter-ministerial initiative organized by the Ministry of Education's Innovation Cell with support from the All Indian Council for Technical Education, Ministry of Women and Child Development, Ministry of Commerce and Industry, Ministry of MSME, Ministry of Textiles, and Ministry of Information and Broadcasting. Organized under the "Aatmanirbhar Bharat Abhiyan" the Toycathon was a nationwide competition for students to develop sophisticated toys and games rooted in Bharatiya culture, tradition, and ethos. The inaugural session of Toycathon's was graced by eminent personalities like Chief Guest Dr Subhasis Choudhuri, Director (IIT Bombay) & Guest of Honour, Ms. Poornima Seetharaman, Director of Game Design, Zynga. The grand finale was held at NITIE, where top-notch ideas from various parts of the country were displayed. The mentors & evaluators were Dr Sumathi S. Mr Vignesh Raja, Dr Priyadarshini, Dr B.S. Charulatha & Ms Vanishri Arun. The faculty coordinators for the event were Prof. Kanchan Joshi, Prof. Poonam Singh, & Dr Priyanka Verma.



Rural Mentorship Program" initiated by 'Parivartan

NITIE launched the "Rural Mentorship Program" initiated by the 'Parivartan" Forum towards the "National Education Policy 2020" undertaken by the Government of India. The program aims to enhance the efficiency of education in rural schools and underprivileged students in rural, urban, and semi-urban areas. The primary objectives of the projects





are: to contribute to Atmanirbhar Bharat and NEP 2020. Parivartan has collaborated with The Bombay Mothers and Children Welfare Society, an NGO working in rural and tribal villages nearby Pune. In association with Prof. Upasna Agrawal and Dr Madhav Sathe (Chairman of The Bombay Mothers & Children welfare society), the team visited three rural village schools near Talegaon. The session was conducted through video conferencing.

NITIE launches 'Apoorti Shrankhla kay Saarthi' initiative for the welfare of truck drivers



The National Institute of Industrial Engineering (NITIE) initiated an outreach programme, "Apoorti Shrankhla kay Saarthi" (Drivers of Supply Chain) to understand truck driver's issues under the leadership of Prof. Manoj K. Tiwari, Director NITIE.

Prof Nikhil K Mehta conceptualised, directed and narrated a documentary film. Prof. Shankar Muthy Dean (Academics) and Prof. Vivekananda Khanapuri, Dean (SRIC) conducted an awareness and safety training sessions for truck drivers.



TABLE 11. DEI Initiative

27 October 2021	FICCI FLO and NITIE successfully concluded its first Women Entrepreneurs Leadership Series. The program received an enthusiastic response from over 40 Women Entrepreneurs across the country. The speaker for the session was Prof. Upasna Agrawal.	Women Entrepreneurs Leadership Series: Cultivating a Growth Mindset
30th November, 2021	Prof K.S. Ranjani, Faculty Finance and Accounting, spoke on adopting a financial mindset when embarking on an entrepreneurship journey. Belief in oneself on aspiring money goals in a realistic and justifiable manner is the key to one's success.	Women Entrepreneurs Leadership Series: Adopting a Financial Mindset
17 th December 2021	Prof Priyanka Verma speaker of the session delivered the concepts of Digitization which is less about technology and more about mindset.	Women Entrepreneurs Leadership Series.: Embracing a Digital Mindset".



CONSULTANCY SERVICES

TABLE 12A. COMPLETED NITIE CONSULTANCY ASSIGNMENT Year 2021-22

Sl. No.	Name of the Organization	Area
1.	M/s. Silica Ceramica Pvt. Ltd., (A Subsidiary of M/s. Prism Johnson Ltd., Vijayawada Plant	Manpower Study

TABLE 12B. CONSULTANCY IN PROGRESS Year 2021-22

Sl. No.	Name of the Organisation	Area
1.	M/s. TVS Institute for Quality & Leadership Bangalore	Industrial Workplace Improvement Study
2.	M/s. Haldia Petrochemical Ltd.,	Organizational Structure
3.	M/s. TVS Motor Company, Hosur, Tamil Nadu	Operations Research Module
4.	M/s. Bajaj Electricals Ltd., Mumbai	Plant Capacity Assessment



TABLE 13. MEMORANDUM OF UNDERSTANDING (MOU)

Name of Industry	Date of signing of MoU	Duration	Name of NITIE Coordinator
Ohio University	24.4.2019	5-year	Prof. Anju Singh
University of Fortaleza	20.11.2019	5-year	Prof. Anju Singh
Punjab Engg.College	30.9.2019	5-year	Prof.Ashok Pundir/Prof. Rauf Iqbal
Asian Institute of Technology	9.9.2020	5-year	Prof. Neeraj Pandey
TVS Industries	7.4.2014	5-year	Prof. AK Pundir
Administrative Staff College	24.2.2020	5-year	Prof. Koteswara Rao Naik
Ministry of Higher Education	April 2020	1-year	Prof. Vijaya Gupta
Silicon Valley	20.5.2020	3-year	Prof.Sumi Jha
09 Solutions Management India	29.6.2020	5-year	Prof. V.B. Khanapuri
BTC	13.10.2020	3-years	Prof. V.B. Khanapuri
P&G	20.1.2021	1-year	Prof. V.B. Khanapuri
MCED	28.1.2021	3-year	Prof. Hema Date
Samvad (Dhanush)	01.2.2021	5-year	Prof. Hema Date



WEBINARS / ONLINE TALKS / SESSIONS / WORKSHOPS AND INSTITUTIONAL ACHIEVEMENTS

TABLE 14. ONLINE TALKS

Sr. No	Date	Speakers	Topic/Events					
	PM Gati Shakti							
1	28 th Feb'2022	 Shri Sanjay Murthy, Secretary, Department of Higher Education, MHRD; Topics: Sharing insights on higher education and NEP 2020 Speaker: Mr Dinesh R, Chairman, Logistics Sector Skill Council and Managing Director, TVS and Sons; Topics: Global opportunities in logistics eco-system Speaker: Prof. Anil Sahasrabudhe, Chairman, AICTE, Professor, IIT Guwahati; Topics: Sharing views on vocational education in academics (specifically logistics) and various other higher educational initiatives. Speaker: Mr Dipak Roy, People Director, DP World; Topics: Skilling in Logistics Speaker: Prof. Manoj Tiwari, Director, NITIE; Topics: Building world-class talent for accelerating India's growth through PM Gati shakti 	PM GatiShakti: Creating Synergy for Accelerated Economic Growth. Budget Announcement: 2022-23					
		Ved Prakash Goyal Lecture Series						
9	5 th Jan'2022	Shri Pradeep Goyal, Chairman and MD, Pradeep Metal Mr Atul Kulkarni, formerly NITIE BoG Member Mr Sourjyendu Medda, proud alumnus of NITIE and Co						
10	20 th Jan'2022	Mr Amar More, Co-Founder and Director of Kale Logist Mr Nikhil Kulkarni, Co-Founder and Director of Darwin						
11	25 th Jan'2022	Ms Apeksha Haldia, a proud NITIE alumna and founder of Zayka Ka Tadka Ms Pujyasri Jetty, a proud NITIE alumna and the founder of Moneynook						
	Distinguished Speakers							
1	11 th Oct'2021	Mr Sanjeev Suri – Senior Vice President Global Omni Channel Logistics, Amway	Leadership Talk on "The New Normal in Supply Chain and Operations".					
2	19 th Oct'2021	Mr Ankit Rathi, Business Head, Enterprise Network from Porter	Webinar on "Reimagining Secondary Transportation"					
14	16 th Jan,2022	Chief Guest -Dr. Elangovan R K DG, DGFASLI	National BBS Conference					



Sr. No	Date	Speakers	Topic/Events			
15	7 th Feb'2022	Dr Ganesh Natarajan, an alumnus of NITIE, is the Executive Chairman and Founder of 5F World	Accelerating Digital Success - Reimagining Organisations for a Post Covid 19 World			
16	4 th Feb'2022	Prof. Robert E. Siegel, Faculty, Stanford University Graduate School of Business, Stanford University, USA	Entrepreneur's Dilemma and Systems Leadership			
17	8 th Feb'2022	Mr Amol Nagar, sir; Director of Manufacturing Operations, Global Sourcing & Supply Chain, GE Aviation	My journey towards excellence			
22	12 th Mar'2022	Ms Neha Misra: Co-Founder & CEO, The Fin Lit Project Mr Gurunandan M: CFO, Tata Consulting Engineers Limited Mr Rohit Raman: CEO, Blueant Finserv Ms Rohini Sanyal: Research Economist, ISI Emerging Markets Mr Kumar Shankar Roy: Senior Assistant Editor, The Hindu Business Line	Post Budget Analysis 2022			
25	16 th Mar'2022	Kainaz Messman Harchandrai and Tina Messman Wykes, Founders of Theobroma	The Women Entrepreneurs' Learning series			
26	24 th Mar'2022	Dr Kushal Sanghvi, India and SEA Head, CitrusAD Mr Ajay Bohora, Co-Founder, HDFC Credilla Mr Saurabh Bajaj, Marketing Head, Dairy – Britannia Mr Saurabh Rai, Global Head Analytics, Tech Mahindra Mr Bharath Katta, Vice President & Head of Marketing, Easebuzz	Metaverse: Marketing Opportunities & Challenges			
21	3-5 th Feb'2022	CII, G Sunderramam, Shailesh Tiwari, Abhinash Lohia, Nitin Sharma and Shravan Sunderraman	CII workshop			
Invi	Invictus Webinar series					
1	09 th Dec'2021	Mr Badri Narayanan Gopalakrishnan, NITI Aayog	Applied Microeconomics for Business Strategies			
2	16 th Dec'2021	Mr. Sumedh Deorukhkar, Senior Economist	Economics - Perspectives and Career Prospects			
18	16 th - 17 th Feb'2022	Anand Kabra, Head of Global Workforce Management at Wipro	Mentorship session for transitioning Defence officers			



Sr. No	Date	Speakers	Topic/Events
3	22 nd Mar'2022	Mr Lokesh Venkataswamy, CEO & Managing Director, Innomantra Consulting	Design thinking
Dron	na Leadership ta	ılks	
5	23 rd Oct'2021	Mr Aditya Malik, Director, Strategy	
6	20 th Nov'2021	Mr Deepak Goel, Vice President, Shadowfax	
7	26 th Nov'2021	Mr Arindam Sen, Solution Director of SCM HCL	
8	06 th Dec'2021	Mr. Nandkumar Kulkarni, Director, Mondelez India	
DEI	Initiatives		
12	31st Jan'2022	Lt. Sandhya Suri: Head HR and Communications, Tesla Power USA Shubhrangsu Dutta: Director Femcare Supply Chain, Procter and Gamble	Leaders of Change: Women in Supply Chain
		Ashita Mittal: Planning Director - South Asia - Unilever	
		Sharmishtha B.: Director, Value stream and Portfolio Management, Johnson & Johnson Savita Gupta: Head - Procurement Knowledge Centre,	
		A.P Moller and Maersk	
13	4 th Feb'2022	Poonam Chandok: Head HR- LTHE, L&T Parmesh Shahani (he/him): Former Head - Godrej India Culture Lab + D&I, Celebrated Author	The Rainbow Strategy: Synergizing Diversity Spectrum
		Shalini Singh: Head - Corporate Communications and Sustainability, Holcime	
		Anirvan Sen: Executive Director, UBS	
		Bindu Sudhir: Managing Director and DEI Leader, PwC	
		Seema Gutgutia: Head – Talent Acquisition, Johnson & Johnson	
		Sreeram Venkiteswaran: Talent Head – Nestlé, South Africa	
Cent	tre of Excellence	e in Logistics & Supply Chain Management	
20	27 th Jan- 9 th Feb'2022	NITIE-centre of excellence in logistics & supply chain management, Maharashtra Centre for entrepreneurship development (MCED)	Digital marketing for medium, small & Micro enterprises (MSMEs)
24	28 th Mar'2022	Shri Atul Kulkarni (Director, Eurasia Special Technologies Pvt Ltd.)	Logistics shipping Media meet



TABLE 15. ONLINE COURSES

Date	Course	Instructors
	Global Online Certificati	on Program
3 rd July 2021 – 27 th September 2021	Global Online Certification Course on 'Business and Operations Analytics'	Prof. David Simchi-Levi (MIT, USA) Prof. Manoj Kumar Tiwari, Director NITIE
9 th October 2021	Global Online Certification Program on "Deep Learning in Finance"	Prof. Rahul Rai, Professor Clemson University
13 rd November- 5 th December 2021	Global Online Certification Course on 'End-to-End Supply Chain Transformation through Digitization'	Prof. David Simchi-Levi (MIT, USA) Prof. Manoj Kumar Tiwari
29 th September 2021 to 27 th October 2021	Supply Chain Operations and Disruptions Management	Prof. Tadeusz Sawik
12 th January 2022 to 2 nd March 2022	Social Network Analysis and its applications	Prof. Noshir Contractor (Northwestern University)
12 th February 2022 – 13 th March 2022	Business and Operations Analytics 2022	Prof. David Simchi-Levi (MIT, USA)
	Online Certification Pr	rogramme
24 th May to 28 th May 2021	Certification course on Societal Development and its impact on SCM & Logistics	Prof. Sunderesh S. Heragu, a Regents Professor, the Donald and Cathey Humphreys Chair, and Head of the School of Industrial Engineering and Management at Oklahoma State University.
8 th February to 10 th March 2022	Industrial AI for Manufacturing	Dr Sanjay Kumar Prasad-Distinguished Engineer, Global Metals & Mining Coc, IBM
		Mr Sunil Patil, Sr. Managing Data Scientist, Industrial Products, IBM
25 th March 2022	From Idea to reality: What Not to Do in Entrepreneurship	Mr Sanjeev Chitre, Managing partner - U-Group LLC, CEO and Chairman - LEAP and JuJu Labs
25 th March 2022 – 27 th March 2022	'Modelling and Building Digital Supply Chain Twins using anyLogistix'	Prof. Dmitry Ivanov (Professor of Supply Chain and Operations Management, Berlin School of Economics and Law, Germany)

INSTITUTIONAL ACHIEVEMENTS



Annual Report 2021-2022



NITIE FACULTY AND RESEARCH SCHOLAR INVITED AS LCA EXPERTS BY THE INTERNATIONAL TRANSPORT FORUM AND NITI AYOG

Prof. Seema Unnikrishnan and Shilpi Srivastava of the National Institute of Industrial Engineering were invited as expert speakers in this workshop during the second session which was on Life cycle assessment focusing on transport fuels in India. Prof. Seema Unnikrishnan and Dr. Shilpi presented the analytical results of their study on electricity generation from gas and coal, as well as those of oil refining, highlighting which factors make these fuel types thrive. The carbon intensity of these fuels has implications not only for India's current car fleet, which consists almost exclusively of gasoline and diesel ICE, but also on the WTW mitigation potential of EVs if used with the current power mix. The study done by Prof. Seema Unnikrishnan and Shilpi Srivastava was presented which assessed the crude oil production life cycle impacts in India including recovery, transportation and refining of crude, to the transport of the final fuel. Data for crude oil extraction and refining were complemented by information from the literature to assess the remaining life cycle phases. Findings confirm that the refining phase weighs heaviest on the footprint of fuel production. Transport also causes significant impacts, especially if trucks are used rather than maritime or rail transport or pipelines. The presentation brought out the need for Scaling up low-carbon fuels in India to mitigate environmental impacts from transport. Transport electrification should be coupled with grid decarbonization programs and avoid dependency on coal-fired power plants. The use of such power plants could limit benefits both in terms of GHG emissions and local pollution, as they are often located near cities.

Prof. Anju Singh awarded Woman Researcher Award

Prof. ANJU SINGH of Sustainability Management Area of National Institute of Industrial Engineering had been awarded Women Researcher Award as part of yearly International Scientist Awards 2021 by VDGOOD Technology Factory. She had also been recently selected as Member - Screening cum Expert Committee of Facility Creation Projects of CSIR.

Prof Rauf Iqbal honoured with Outstanding Professor In Human Factors Award

IEOM society International held its First Indian Conference on Industrial Engineering & Operations Management in Banglore, hosted by Amrita Viswa Vidyapeeth University.

Prof. Rauf Iqbal has been honoured with "Outstanding Professor In Human Factors Award", in recognition and appreciation of Outstanding Research and Teaching in Human Factors and Ergonomics And service to the Industrial Engineering & Operation Management Profession.

Honoured with Rajbhasha Keerti Award for the excellent implementation of Official Language

The Institute was honoured with Rajbhasha Keerti Award in 'B' region by the Ministry of Home Affairs, Govt. of India for the year 2019-20 for the excellent implementation of Official Language Hindi in the Institute. Dr. Basavaraj Swamy, Registrar, NITIE received the prestigious award on behalf of the Institute from Shri Ajay Kumar Mishra, Hon'ble Minister of State for Home Affairs, Govt. of India, at a grand function organized at Plenary Hall, Vigyan Bhavan, New Delhi on 14th September 2021 on the occasion of Hindi Day. On this occasion, Shri Nishit Pramanik, Hon'ble Minister of State for Home Affairs and Shri Sanjeev Kumar, Secretary (OL), Ministry of Home Affairs, Govt. of India, were present on the dais. Prof. Nikhil K. Mehta, Assoc. Professor, NITIE and Md. Aftab Alam, Hindi Officer, NITIE, were also present on this occasion.



Dr Basavaraj Swamy, Registrar, NITIE, receiving the "Rajbhasha Keerti" award on behalf of the Institute from Shri Ajay Kumar Mishra, Hon'ble Minister of State for Home Affairs, Govt. of India at Vigyan Bhavan, New Delhi on 14th September 2021.

STUDENTS AFFAIRS AND ACTIVITIES



Annual Report 2021-2022



STUDENT AFFAIRS AND ACTIVITIES

Placements

1. Summer Internship (Class of 2022)

All **508** students out of a total of **508** available students of PGDIE, PGDIM, and PGDSM first-year Batches have been placed by 31 March 2022 in **128** organizations across the country for 8-weeks Summer Internship commencing from 04 April 2022.

2. Final Placements (Class of 2021)

In all, 463 students out of a total of 463 available students of PGDIE, PGDIM, PGDISEM, PGDMM & PGDPM of the second year have been placed through Pre-placement offers, Lateral Recruitment process and Common Recruitment Process in 111 Companies.

TABLE 16. FINAL PLACEMENT 2021

SN	Particulars	Year: 2021-22					
1	No of companies		111				
2	No of the students placed	PGDIE	PGDIM	PGDISEM	PGDMM	PGDPM	Total
	PPO	42	101	5	6	4	158
	LRP	39	122	8	7	11	187
	CRP	42	34	2	24	14	116
	Domestic Total	123	257	15	37	29	461
	Foreign	1	1	0	0	0	2
	Total	124	258	15	37	29	463
3	No. of students yet to be placed	0	0	0	0	0	0
4	No. of Students opted for DPP	0	0	0	0	0	0
5	No. of students opted out of placements	4	0	0	1	0	5
6	Total number of students in the batch	128	258	15	38	29	468
7	Salary	PGDIE	PGDIM	PGDISEM	PGDMM	PGDPM	
i)	Maximum Annual Salary						
	Foreign	AED 120000	AED 120000	0	0	0	AED 120000
	Domestic (Rs Lacs)	4900000	4900000	2730000	4900000	3240000	4900000
ii)	Minimum Annual Salary						
	Foreign	2412000	2412000	0	0	0	2412000
	Domestic (Rs Lacs)	1500000	1500000	1500000	1500000	1500000	1500000
iii)	Average Annual Salary						
8	Overall Average Salary (Rs Lacs)	2438966	2650584	2067252	2503804	2266171	2541986
9	Overall Median Salary (Rs Lacs)			2200	000		



The CTC Averages for Final Placements 2022:

CTC AVERAGE (INR)				
Top 10%	4537042			
Top 20%	3859322			
Top 50%	3133636			

D2C College Champions

Dare2Compete distinguishes brilliance amongst MBA & Engineering college students and unveils "Dream Companies to work for 2021" with D2C Awards 2021. The following 10 PGP Students were ranked at top-5 in Dare to Compete "top 10 College Champions-2021".

SN	Name of the Student	Rank
1	Sai Pooja Sri K	1
2	Kashyap Kedia	2
3	Mahima Gupta	2
4	Garima Vaswani 3	
5	Loona Sethi 3	
6	Manu Modi 3	
7	Yash Shah 3	
8	Anurag Joshi 4	
9	Prashant Maurya 4	
10	Diksha Kamra	5

These champions were selected based on the stars they earned by winning various competitions throughout the last academic year on the D2C platform.



Best Summer Project Contest

NITIE, Mumbai is proud to congratulate our students Sahil Gupta, Rajdeep Poddar, and Ayush Garg for the podium finish in the "Best Summer Project Awards" organized by **YUGMA (By VANS Skilling)** - a unique offering that enhances the Industry-Academia partnership.

The final round was held on 11th July 2021, and these students emerged as winners in the Operations & Supply Chain category, in which NITIE won all the awards. The Top 60 projects were selected among entries from more than 50 premier B-schools in India and were allowed to demonstrate the impact that they created through their summer internships to a panel of CEOs and CXOs and stand out in their learning and exposure.



INDUCTION PROGRAMMES

Abhisanskaran (28 June 2021)

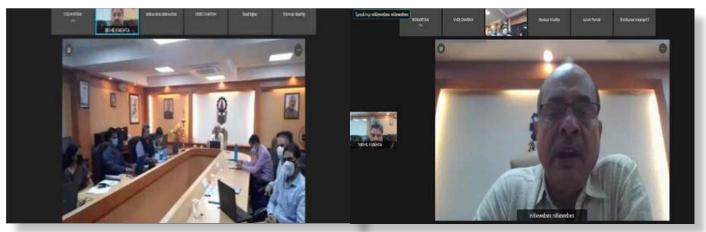
The orientation program of the National Institute of Industrial Engineering, "Abhisanskaran", was inaugurated on 28 June 2021. The session was addressed by the Chief guest, Mr Vivek Sharma, Global Head of Intelligent Automation, Hindustan Unilever Limited, Prof Manoj Kumar Tiwari, Director, NITIE, and the Deans of the Institute, Prof Hema Date (Dean, Student Affairs), Prof Padmanav Acharya (Dean Academics), Prof Vivekanand Khanapuri (Dean SRIC). Prof Shirish Sangle (Dean of Alumni Affairs), Prof Neeraj Pandey(In-charge, Admission), Prof Rauf Iqbal (Assoc Dean P&B), and Prof Utpal Chattopadhyay (Chief Warden). Over 560 students were welcomed virtually by the faculty members.



Mr Vivek Sharma shared with the students his insights and reflections on the ability to manage failure and disappointment. He suggested students continuously fight back and be inquisitive, find passion and purpose, develop communication skills, embrace diversity, and practice inclusion, enabling them to pave their path to success.

Prof Manoj Kumar Tiwari, director of NITIE, congratulated the students on their selection and shared how NITIE students can be different from others and create their space in the competitive world, how they could adapt to be analytical and overcome different barriers. He also advised students to develop their personality to match the needs of the volatile, uncertain, complex, and ambiguous business environment and takes forward the NITIE legacy.

Prof Nikhil K Mehta moderated the session.



Induction of PGDEx-VLFM Batch 4

National Institute of Industrial Engineering, Mumbai, hosted the Induction of PGDEx-VLFM Batch 4 on Aug 20, 2021. First, Prof. Manoj Tiwari, Director NITIE, inaugurated the session. Then, Shri. Rajiv Agarwal, Operating Partner, Infrastructure, Essar Group and MD, Essar Ports Ltd., delivered the address to the incoming VLFM batch. The talented pool of 20 students was welcomed virtually by all the Deans and faculty members. Mr. Agarwal shared his insights on the changing work environment and the need for digital transformation for future sustainability with the students. He reflected on how future leaders should constructively manage failure and disappointment to pave their path to success.

Prof. Manoj Tiwari, Director, NITIE, congratulated the students on their selection and successful completion of the IIT Module. He also shared how visionary leaders could act as change agents who could provide the strategic impetus on various verticals such as Operations & Supply Chain Management, Strategic Planning, Business Development, Digital Transformation, and World-Class manufacturing. He advised students to learn to develop their culture and be future-fit leaders. They should assume responsibility to take forward the NITIE legacy and help India become truly Aatmanirbhar.

The session was moderated by Arun Rajan K, Arnab Kumar Modak and Gaurav Dubey of the batch of VLFM-4.





STUDENTS' EVENTS

NITIE Markotsav

Marketing Interest Group (MIG) at the National Institute of Industrial Engineering, under the guidance of Prof. Manoj Tiwari, Director, NITIE, organized the curtain raiser event for the 17th edition of "NITIE Markotsav" on August 23, 2021. This year NITIE Markotsav is being held virtual with the motive to promote the local artisans in support of the Prime Minister's initiative of "Being vocal for local artisans".

The event was graced by the presence of the Guest of honour Mr. Akhilesh Jha, Head-Data & Strategy, Department of Science & Technology, Government of India. The Guests for the event included NITIE Alums - Mr. Sourjyendu Medda - founder of DealShare.in , Mr. Sanchit Govil, Co-founder & COO of Lal-10, and Bimal Kartheek Rebba - Co-founder of Trell.

Insights on how history can be related to marketing were thought-provoking. In addition, the earlier experiences with Markotsav & their exposure to the entrepreneurial world made the session very interesting, meaningful, and memorable. The event was coordinated by Dr Prasad Teegalapally, Mentor, NITIE Markotsav and Prof. Neeraj Pandey, Professor In charge, MIG from the National Institute of Industrial Engineering.



Arthniti

The "Economics Seminar" was conducted by ArthNiti (Public Policy Forum of NITIE, Mumbai) on the 10th of Aug 5:30 PM - 8:30 PM and on the 11th of Aug 6 PM - 8:15 PM. The event received an encouraging reception from the student fraternity.

The panelists were:

Prof. Sudipta Sarangi, HOD Economics, Virginia Tech

Topic: Formation of Multilayered Network

Assoc. Prof. Mariana Blanco, Universidad del Rosario - Colombia

Topic: To segregate or to discriminate-that is the question experiments on identity and social preferences

Prof. Narahari Y, Indian Institute of Science (IISc) Bangalore

Topic: Ballooning Multi-Armed Bandits

Asst. Prof. Matthew Kovach, Virginia Tech

Topic: Stochastic Choice: Menu and Order Effects

Topics Discussed in the seminar: Induced Value theory, Lab experiments, Field Experiments, Randomized Controlled Trials, Ultimatum game, Dictator game, Trust Game, Paper: "Generosity and Wealth: Experimental



Evidence from Bogotá Stratification", The Multigraph Model, The Multi-Armed Bandit Model, The Ballooning Multi-Armed Bandits Model, Two-Stage Game, Stochastic Choice: Menu and Order Effects, Random Utility Model, Luce Models, Nested Logit, Nested Stochastic Choice, Order Effects, Random Depth Model etc.

The event was attended by 400+ students and dignitaries from other institutes.

Prof. Mainak Mazumdar moderated the session.



LEADERSHIP TALKS, VALUE-ADDED LECTURE SERIES

Various sessions were conducted under the aegis of motivational and leadership Talks.

Table 17. Leadership Talks, Value-Added Lecture Series

SN	Date	Session	Speakers	Discussions	Moderator
1.	02 July 2021	Prerana Leadership Talk	Mr Harish Bhat, Brand Custodian of TATA Sons Limited	Shared experiences from personal life to help students discover their passion, ethos, and success.	Prof. Neeraj Pandey
2	09 July 2021	Samiksha Leadership Talk	Mr Sanat Chattopadhyay, President of the Merck Manufacturing Division, Merck & Co. and a Distinguished Alum of NITIE	Urged the students to reflect on the following: How should one craft their career in this pandemic? What is important for them and not rush to the closure without trying different options where actions can be taken by aligning heart and mind? Importance of big data analytics, financial operations optimisation, and cross-functional skills development. Importance of the intersection between technology and people management skills	Prof. Ravindra Gokhale



SN	Date	Session	Speakers	Discussions	Moderator
1.	14 July 2021	Samiksha Leadership Talk	Mr Thomas Varghese, Business Head - Textiles, Acrylic Fiber, Overseas Spinning at Aditya Birla Group and a Distinguished Alum of Indian Institute of Technology, Delhi	Views on the competencies required for leadership, followed by the attributes necessary to build these competencies over time. How should one follow their passion and achieve great success in life? Importance of learning various things in life.	Prof. Ranjan Chaudhari

Motivational Talk by Padmashri-Padmbhushan Shri Anupam Kher

Under the guidance of Prof. Manoj Kumar Tiwari, NITIE hosted Padma Shri- Padma Bhushan Shri Anupam Kher, well known Film Artist, for a virtual motivational session on 16 July 2021. Mr. Kher shared the details of his inspirational journey, his challenges from childhood to Bollywood to Hollywood, and how he overcame them. He also inspired and motivated students to pursue their authentic selves honestly. In addition, he shared several anecdotes from his own life emphasizing the lessons and values he learnt from his grandparents and parents and how he explored them functionally in living his personal and professional life.

Mr. Kher has distinguished himself with multiple awards and accolades to his name. He has wide-ranging experience in various roles and is known to speak his mind. He has also contributed immensely to social causes.

As a note of love and affection towards Padmashri-Padma Bhushan Shri Anupam Kher Ji, Our student of the PGDIE 50 batch, Dadaso Watharkar, designed a beautiful painting and Prof. Nikhil K Mehta prepared a scroll. Prof. Nikhil K Mehta moderated the session. Prof. Hema Date (Dean, Student Affairs) proposed the vote of thanks.





LEADERSHIP TALK, VALUE ADDED SERIES AND PREPLACEMENT TALKS

Table 18. Preplacement Talks

Table	18. Preplacement Talks				
S No.	Date	Guest/Company			
1	7/8/2021	CISCO			
2	8/31/2021	NIVEA.			
3	9/1/2021	Mr. Manjit Pandey, Mr. Nikunj Jain, Ms. Khadija Kowal and Ms. Ishmit Saluja of P & G			
4	9/3/2021	McKinsey & CO			
5	9/3/2021	Fidelity Investments			
6	9/4/2021	Loreal			
7	9/7/2021	Amazon			
8	9/8/2021	TATA Sky, HUL, Pidilite Ind			
9	9/9/2021	PwC USI, American Express			
10	9/10/2021	Reliance Industries Ltd., GSK Consumers			
11	9/15/2021	Flipkart			
12	9/20/2021	BD, Mibach, Shadowfax, Baker Hughes, RPG & KPMG.			
13	9/21/2021	KCC, Asian Paints, Mars, UPL, BCN, Tres Vista, TCPL, Everest, PwC India, Act Fibernet, VIOSE.			
14	9/22/2021	Diageo, Keva, VM Ware, RB, Zydus Wellness, J & J, ETLI.			
15	9/23/2021	GeP, Abott, Avery Dennison, Colgate, Sun Pharma, Mondelez, Marico, Wipro.			
16	9/24/2021	EY GDS, Indegene, Udaan, Walmart, Amway, PVM, Schindler, Cipla.			
17	9/25/2021	Signify			
18	10/7/2021	Welspun India			
19	10/22/2021	Deloitte USI			
20	11/2/2021	Vector Consulting			
21	11/3/2021	PwC USI			
22	11/5/2021	DE Shaw			
23	11/8/2021	Tres Vista			
24	11/9/2021	Accenture S & C, Varroc			
25	11/10/2021	Incture			
26	11/11/2021	Inspirage, Deloitte			
27	11/12/2021	Owens Corning			
28	11/13/2021	HUL			
29	11/15/2021	Chain Analytics			
30	11/16/2021	American Express			



S No.	Date	Guest/Company
31	11/17/2021	Dr Lal Path Lab, Wipro
32	11/18/2021	EY GDS, RPG, TATA Electronics, Marico, Accolight Digital
33	11/19/2021	Shadowfax, Credence, Flipkart
34	11/22/2021	Apollo Hospital, PwC India, Piramal, Infosys Consulting
35	12/13/2021	Jubilant Food Work
36	12/15/2021	Relaxo Footwear, Alvarez and Marshal and Bajaj Electricals
37	12/16/2021	GSK
38	12/17/2021	Microsoft
39	12/27/2021	Zydus wellness, DCM Shriram
40	12/28/2021	AkzoNobel
41	12/29/2021	TATA AIG
42	1/3/2022	IBM & Philips Carbon Black
43	1/4/2022	Diageo & O9 Solutions
44	1/5/2022	Meesho, Everest, Ind. & HashdedIn
45	1/6/2022	Homelane, KPMG Global, Blumeglobal
46	1/7/2022	Indegene & AU Bank
47	1/10/2022	DNV & Morgan Stanley

Table 19. Tarang Alumni Talk

S No.	Date	Guest/Company
1	7/10/2021	Mr Aniket Rathod, Alumnus Batch of 2013, Manager, Asian Paints.
2	7/11/2021	Mr Venu Koka, Alumnus Batch of 1980
3	7/25/2021	Ms Sandesha Shinde, Alumnus of Batch of 2015, Manager at Loreal.
4	8/1/2021	Ms Prachi Agrawal, Alumnus of Batch of 2014, Manager HCCB.
5	8/22/2021	Ms Shalini Tiwari, Alumnus Batch of 2014, HSE Program Lead, Mondelez India

Table 20. Leadership Talk

S. No.	Date	Guest/Company	
1	7/26/2021 Ms Sowmya Chaturvedi, Head of Supply Chain Management, Cummins India.		
2	7/27/2021	Ms Alice Maniyar, VP Tech and Mr Alfred Mendes, Talent Acquisition at IDFC First Bank.	
3	7/28/2021	28/2021 Mr Rohit Batra, Head Supply Chan, Business Head, Ferrero India.	
4	4 7/29/2021 Mr Venkatesh Srinivasan, Director SCM, Avery Dennison		



S. No.	Date	Guest/Company	
5	7/29/2021	Ms Bidisha Banerjee, Global Group Vice President - Talent, Culture and Employer Branding, Welspun Group	
6	7/30/2021	Ms Srividya Swamynathan, VP - Head - IT solutions for Trade Finance, Societe Generale Global Solution Centre	
7	8/18/2021	Mr Sharat Mangalpally, Head Analytics CRED	
8	8/27/2021	Mr Ashish Joshi, Alumnus of 2004 Batch, Global Supply Chain Director at HUL.	
9	9/2/2021	Ms Rituja Dwivedi, Mr Prasoon Singh, Ms Priyanka Attri, Ms Sonal Chopra, Mr Mrinal Debnath of P & G	
10	9/3/2021	Mr Jitin Sharma, Global Digital Marketing Advisor, Shell.	
11	10/10/2021	Deloitte India	
12	10/11/2021	Mr Sanjeev Suri, Sr. VP, Amway on "The new normal in Supply Chain and Operations".	
13	11/1/2021	EY GDS	

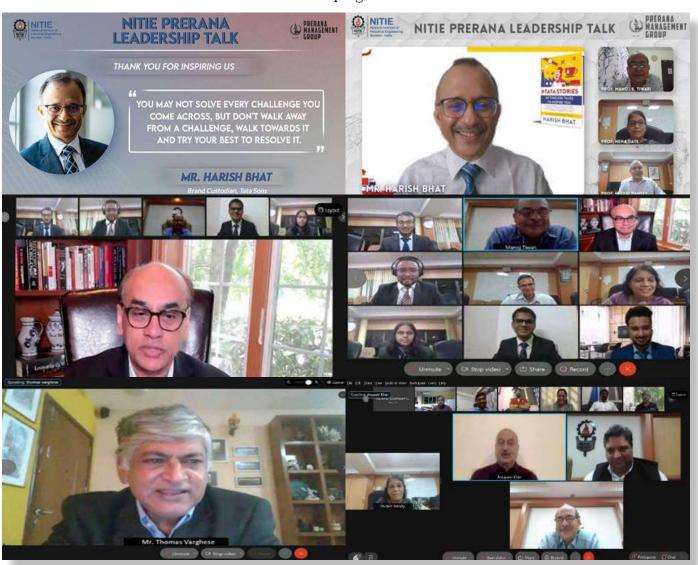
Table 21. Corporate Talks and Value-Added Sessions

S No.	Date	Guest/Company	
1	8/12/2021	Mr Vinayak Talwar, Head Talent Acquisition, Ekta Roy, HR, RPG Group	
2	8/12/2021	Mr Kushal Sanghavi, Business Head, Reliance Entertainment and Digital on Digital Analytics, Market Basket Analysis and E-commerce.	
3	12-08-2021 to 29-08-2021	Prof. Piyush Dave on Data Science- Python along with real-life Applications.	
4	8/17/2021	PwC USI	
5	8/19/2021	Col. (Retd.) Santosh Dabral, Adjunct Faculty, NITIE on Quality Management with Six Sigma applications	
6	8/20/2021	PEPSICO by Ms Anshul Sharma – Associate Director – LD&T at PepsiCo, Mr Nishant Kumar, Asso. Director SC, Mr Davis Jose, SC HR Manager	
7	27& 28-08-21	Digital Marketing by Mr Hitesh Motwani, Digital Marketing Trainer and Consultant	
8	8/29/2021	Digital Marketing by Mr Karthik Venkat, Tech Leader (Google Ads & GMP), Mentor, Education Enthusiast	
9	8/31/2021	Ms Prashana Mishra, Plant Manager, Cargill, on "Manufacturing Operations Management	
10	9/6/2021	HUL	
11	9/7/2021	HUL	
12	10/29/2021	Dr Shankar Venugopal, VP Mahindra Research Valley, Chennai, on 'Reimagining Mobility for the Future	



Alumni Mentoring Programme

In the wake of COVID-19, NITIE, Mumbai, organized an online alumnus mentoring programme for first-year students from 02-09-2021 to 22-09-21. The student mentoring sessions were organized with the objective of placement grooming. Thirty-three NITIE alumni contributed to the programme and supported students in understanding their needs. The interventions were then presented to them by students and eight guest soft skills trainers. Prof. Nikhil K Mehta coordinated the programme.



AVARTAN (23rd October 2021 - 31st October 2021)

Avartan is a grand amalgamation of all student activities. NITIE celebrated its golden jubilee in 2013, and since then, all the student activities have been amalgamated under one umbrella. Professional development programs such as Prerana, LakshyaSM, Empresario, and cultural and sports festivities such as Arohan and Josh offer student's various opportunities to connect to industry interface, find real-time solutions, and celebrate themselves in the rhythmic harmony of cultural festivities. Thus, Avartan offers them various opportunities to



bask in personal and professional glories in the holistic sense. In the wake of COVID-19 this year, Avartan was conducted online. The program marked the presence of more than 250 corporates and more than 20 CXOs. Over the years, Avartan has established itself as one of India's biggest corporate events among B-Schools. This report details various events.

Prerana Business Meet

MR. AMISH MEHTA

The Prerana Business Meet (PBM) is a business conclave that brings influential industrial leaders on the stage. They discuss the impact of critical business issues on the economic and geopolitical growth of the country. The themes in focus this year were creating a culture of innovation, bringing ESG to the mainstream, digital skill development in the industry 4.0 era, accelerating sustainable construction in India, and adaptive leadership in uncertain times. Mr. Harsh Mariwala, Founder & Chairman, Marico; Mr. Amish Mehta, MD & CEO, CRISIL; Ms. Kirti Seth, CEO, SSC NASSCOM; Mr. Neeraj Akhoury, CEO & MD, Ambuja Cements, and Mr. Kishore Jayaraman, President (India & South Asia), Rolls-Royce graced the conclave and presented their business philosophy.



PROF. K. S. RANJANI



Summer Project Contest

In the Summer Project Contest (SPC) lies the genesis of Prerana. The event provides a platform for second-year management students to showcase their summer projects and share their internship experiences. Their presentations were judged by an elite panel of judges from the industry and faculty from NITIE. This year we received over 200 entries from students across India, and the top 6 entries were selected to present their summer projects in the four modules, i.e., Operations/SCM, Marketing, Human Resources, and IT/Analytics. The details are as follows:

Table 22. Summer Project Contest

S.No.	Event	Panellist	Winners
1	Operations and Supply Chain Management	 Mr. Sanjay Mukherjee, Senior Director of Supply Chain Management, Whirlpool Corporation Mr. Balaiyya Guglot, Head - Supply Chain Management, Lotte India Corporation Limited Mr. Saurabh Lal, Sr Director, Supply Chain, Kellogg Company Mr. Manish Gupta, Head - Supply Chain, India at Stanley Black & Decker, Inc. Prof. Rofin T M, Professor, NITIE 	Winner- NITIE Mumbai Runners Up- NITIE Mumbai
2	Marketing	 Ms. Vitasta Kaul, Associate VP, Marketing, CredR Mr. Himangshu Baruah, Director, Marketing, APAC & India, Softline Group Ms. Vini Soni, VP, Marketing, Aviva India Ms. Richa Gupta, Head of Marketing, Abbott India Prof. Neeraj Pandey, Professor, NITIE 	Winner- K J Somaiya Institute of Management Runners Up- Institute of Rural Management Anand
3	Human Resources	 Mr. Bhanukumar Parmar, HR Head, VP, UltraTech Cement Ms. Smriti Sudha, VP, HR, Wells Fargo Mr. Vamsi Dasetty, VP, HR, Airtel Prof. Sumi Jha, Professor, NITIE 	Winner- SIBM Pune Runners Up- NITIE Mumbai
4	IT/Analytics	 Mrs. Meghana Patil, PMP®, Vice President, Analytics and Innovation, LogiCloud Supply Chain Visibility Platform Mr. Kiran Diwakar, Senior Director of Product Management, ZS Mr. Rajan Vasani, Director of Technical Product Management, GE Renewable Energy Ms. Thanmathi T, Vice President, Data Analytics at Barclays Prof. Rakesh Verma, Professor, NITIE 	Winner- IIM Lucknow Runners Up- IIM Indore





Operations and Supply Chain Management

Marketing

SUMMER PROJECT CONTEST



Human Resource Management

IT/Analytics

Cita-De-La Prerana

Cita-De-La Prerana is an event where famous Bollywood celebrities share their successful) life sketches. Their stories never fail to stir that hidden spark inspiring NITIE students to live a fulfilling life. They connect the dots to enlighten many with their untold success stories.

In the past various eminent personalities, Padmashri Paresh Rawal, Mr. Rajat Kapoor, Mr. Anurag Kashyap, Ms. Gul Panag, Mr. Piyush Mishra, Ms. Divya Dutta, Ms. Sonali Kulkarni and many celebrity stars have shared their glories. This year, we were blessed to have with us, Mr. Pankaj Tripathi. The diverse experiences shared by him inspired the audience to follow their passion. Prof. Nikhil K Mehta conducted the proceedings.







International Business Conclave

Prerana went international this year with an international business conclave. The theme for discussion was 'Reshaping Strategies for Tomorrow'. Global leaders from different time zones came together on a single platform to present insights on the international business landscape. We were privileged to host:

- Mr. Willem Uijen, Executive Vice President, Supply Chain South Asia & SEAA, Unilever -Asia
- 2. Mr. Vinu Varghese, Vice President, Wipro Europe
- 3. Mr. Ashvin Vaidyanathan, Vice President, Customer Success & Insights, LinkedIn - USA

Prof. K.S. Ranjini conducted the proceedings.



Prerana Strategy Conclave

Prerana Strategy Conclave was also launched this year with a focus on the theme 'Business Agility in Volatile Time'. We invited strategy experts from major consulting firms:

- Mr. Abhishek Bhatia, MD & Partner, Boston Consulting Group (BCG)
- Mr. Hanish Yadav, Partner, McKinsey & Company
- Mr. Vijay Kasi, Partner, Kearney

The speakers enlightened the students on the interconnectedness of the business world and logistics realms, which are emerging as the central nervous system. Prof. Poonam Singh conducted the proceedings.



Prerana General Quiz

In this year's edition of the Prerana General Quiz, the students were given a chance to show their mettle and experience and have fun at the quizzing event, where the top 30 teams participated from the initial pool of around 850+ students who had registered for the quiz. The event had three exciting and fun-packed rounds, full of learning, enabling the teams to show their quizzing aptitude across all domains. As a result, a team from SSN College of Engineering, Chennai, won the first prize, and a team from NITIE won the second prize.



NITIE Finance Conclave

Team Street successfully organized the NITIE Finance Conclave to provide a platform for interaction between academia and finance industry leaders. This year's panel discussion theme was 'Rethinking the Concept of Money in Digital Era'. We had the privilege of having distinguished Guests from the industry:

 Mr. Swapnil Pawar, Director & Founder, Scient Capital/ASQI



- Mr. Emmanuel Murray, Senior Advisor, Caspian Impact Investment
- Mr. Sumit Maheshwari, Senior Vice President Finance. Odessa
- Mr. Mandar Deshpande, Founder & Director, Sociante Pvt. Ltd
- Mr. Abhisek Mohanty, Head of Model Risk Review and Insights, FAB
- Mr. Nitish Nath Shrivastav, Associate Director, KPMG India.

Some topics discussed were Digital Payments, Digital Currencies, Fintech in the digital transformation era, Digitization of tolling in India, Customer trust in digital platforms, and how an individual should think beyond money. Prof. M. Venkateswarlu conducted the proceedings.

NITIE Analytics Conclave

Analytics Conclave furnished months of research and experience power-packed in a 2-hour discussion on the theme 'Digital Transformation: A Key to Recovery Post Covid 19'. The ground-breaking session noted interesting use cases and insights from diverse domains like Fintech, Consulting, Analytics, Retail, and IT sectors.

The Business Leaders part of this year's eminent panel were:

- **Ms. Niharika Joshi**, Growth & Partnership Lead, South Asia Facebook
- **Mr. Naveen Athresh**, Senior Director of Product Management PayU
- **Mr. Varun Thamba**, Director, Data and Analytics CoE, Indian Subcontinent SAP

Prof. Ranjan Chaudhari conducted the proceedings.



NITIE Finance Conclave



NITIE Finance Conclave

Beat The Street

Beat the Street was organized to invite students across the country to take up challenges related to finance and grip over the markets. This year, the event received participation from close to 800 teams across India's top B-schools and engineering colleges. In addition, shortlisted candidates were invited to present their business overview, valuation, and financial analysis of a list of industries to a panel of esteemed industry veterans. The eminent jury members of this event were as follows:

- Mr. Abhishek Gupta, Director, Barclays Investment Bank
- Mr. Anuj Sanhgharajka, Director, Financial Advisory-Valuation & Modeling, Deloitte

The NMIMS Mumbai and IIM Calcutta teams won the first and second prizes, respectively. Prof. K. S. Ranjani coordinated the program.







The Strategy Paradox

Avartan 2021 saw the inaugural edition of 'The Strategy Paradox'. This year the competition attracted participation from 1500+ students across top B-Schools and engineering colleges of India. The Strategy Paradox is a case study simulation competition. The theme this year was 'Strategy in Public Policy Making. The participants solved a complex public policy problem balancing the country's economic growth with social and environmental goals. Participants were evaluated in three stages to test their knowledge of strategy, presence of mind, and ability to solve a real-life challenge. The eminent jury members of this event were as follows:

- Mr. Saurabh Pandey, Assistant Magistrate, West Bengal
- Mr. Atul Kumar, IRPS, East Central Railways

NITIE Mumbai won the first prize, and Welingkar Institute of Management was the runner-up. Prof. Binil Kumar Amarayil coordinated the program.

Proicere

This event provided a platform to test the participants' project management skills and gave them handson experience and a glimpse of executing a realtime industrial project. This event also helped the

participants gain knowledge and new insights into project management. The event was conducted in association with the Project Management Club of NITIE. Six teams made up to the finals based on their brilliant strategic foresight and decisionmaking abilities evaluated through a preliminary quiz and a case study submission. Six hundred fifty entries were received from various business schools and engineering colleges. Proicere comprised three rounds. Participants were provided with a case/theme containing the project details of this event. They are expected to execute the project from scratch, i.e., planning, budget requirement, resource allocation, identifying the solution, and manufacturing the final product. Eminent Jury members who were part of Proicere 2021 are as follows:

- Mr. Sandeep Muley, Founder, Bharatrath
- Bobby Menon, Founder, Metamorphosis

Prof. V.B. Khanapuri conducted the proceedings.



Proicere



Samvaad





Vivaad



Enpower

Samvaad

Samvaad is the media conclave organized by Media Relations Cell, NITIE Mumbai, inviting esteemed dignitaries from established media houses and E-Platforms to discuss the relevant issues. This season of Samvaad was graced by:

- Ms. Smriti Mehra, CEO, Business News, Network 18 Media & Investments Limited
- Mr. Suresh Vijaya Raghavan, Chief Technology Officer, The Hindu Group
- Mr. Shubham Srivastava, Chief Technology Officer, HT Digital Streams
- Mr. Sanjeev Mulchandani, Senior Vice President, Associated Broadcasting Co. Pvt Ltd (TV9)

The enthusiastic participation of the students made the event a grand success. The panel discussed Key trends in Mainstream Media Post the Advent of Social Media. The discussion was engaging, and the insights shared proved beneficial for the students.

Vivaad

Vivaad- a war of words is a prestigious debating competition. From over 200 registrations, the top 8 teams were shortlisted for the national finals, which contained a series of rapid-fire activities such as picture perception, extempore, and US presidentialstyle debate among the qualified teams. The panelist was Ms. Pragya Paramita Sahoo, Assistant Manager (HR), ITC Limited and Prof. Nikhil K Mehta, Associate Professor (Communication, OB, and HRM), NITIE Mumbai. The jury witnessed an online debate for the first time and was elated by how the competition unfolded. The participants had fruitful discussions with the jury and actively participated in a healthy exchange of opinions throughout the event. The winners of the events were NITIE Mumbai and CET Bhubaneshwar.

EnPower

EnPower was launched to understand and provide solutions to various problems related to society's bottom of the pyramid. The contest witnessed huge participation from over 500 teams, of which the top 8 teams qualified for the finals. The teams demonstrated enormous zeal and brilliance in strategies to overcome the challenges of social enterprises, which made the event a grand success. The esteemed panelist was **Mr. Abhay Pathak**, DGM - Safety, Tata Motors, and **Dr Vijay Pawar**, Head of CSR & Sustainability, Mahindra Logistics. Prof. Seema Unnikrishnan conducted the proceedings. The winner of the event was NITIE Mumbai.

Envision

NITIE forum "Sustainability and You" organized the programme Envision. This programme offered a sustainability case challenge to the students. The programme received participation from around 700 teams across top B-Schools and engineering colleges of India. The top 6 teams showcased brilliant ideas and faced the challenges of presenting their solutions on challenges and opportunities for scaling up an upcycling business. The illustrious jury members



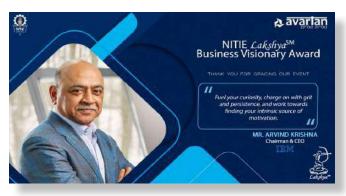


Envision

were Ms Shailaja Rangarajan, Founder and Director, Rimagined; Ms Sarita Basrur, Creative Head and COO, Rimagined; and Prof. Seema Unnikrishnan, Professor, NITIE Mumbai.

<u>LakshyaSM</u> Business Visionary Award

LakshyaSM Business Visionary Award' was initiated to recognise and appreciate the achievements of exemplary business leaders. NITIE salutes their exemplary vision & leadership. Furthermore, NITIE, with the utmost respect, felicitates the paragons of India who devoted their entire life to shaping the future of India.



The National Institute of Industrial Engineering takes immense pride in honouring Shri. Arvind Krishna – Chairman & CEO, IBM as the NITIE Lakshya Business Visionary Awardee of 2021. NITIE salutes his exemplary contribution to the global advancement of innovation and technology. Shri. Arvind Krishna shared valuable lessons and snippets of his personality that inspired many students to work towards their dreams and contribute to shaping the world.



Mr Arvind Krishna, Prof. Manoj K. Tiwari (Director NITIE Mumbai), Prof. Hema Date (Deans SA) & Student Coordinator



Mr Arvind Krishna accepting his Award

<u>LakshyaSM</u> <u>Business Conclaves</u> Industrial Engineering Conclave

The 'LakshyaSM Industrial Engineering Conclave' provides an annual platform to hold meaningful discussions among industry leaders. They discuss the latest trends and emerging technologies in the industrial engineering field. The theme for this year's discussion was "The Role of Industrial Engineering in the Digital Disruptions Era". The esteemed dignitaries for the LakshyaSM Industrial Engineering Conclave 2021 were:

- 1. Mr Avinash Kapoor, Managing Director, Helvoet Rubber & Plastic Technologies
- Mr Sukanta Padhy, Chief Information Officer, Yokohama Off-Highway Tires
- 3. Mr Amod Vijayvargiya, Vice President & Global Operating Leader, Genpact
- 4. Mr Mohd Shahid, PPC / IE and IT, Apollo Tyres Ltd $\,$





In the Glimpse: Esteemed Speakers, Prof. Hema Date, Prof. Balkrishna Narkhede & Student Coordinators

Supply Chain Management Conclave

The 'Lakshya'SM Supply Chain Conclave' brought together leaders, achievers, and change-makers related to the supply chain. Focused on Supply Chain, the event brought a valuable learning experience for young budding managers and decision-makers from various industries. The theme of the Supply Chain Management Conclave was "Post-Pandemic Era of Phygital Supply Chains". The esteemed dignitaries for the Lakshya'SM Supply Chain Management conclave were:

- Dr Ravi Prakash Mathur, Vice President of Supply Chain Management, Dr Reddy's Laboratories
- **2. Mr Viswanathan Raju,** Business Head and Sr. Vice President, Avvashya CCI Logistics (All Cargo Group)



In the Glimpse: Esteemed Speakers, Prof. Hema Date, Prof. Ravindra Gokhale & Student Coordinators

- **3. Mr Kaushlendra Mishra,** General Manager Supply Chain, Siemens
- 4. **Mr Umesh Madhyan,** VP- Logistics, Hindustan Coca-Cola Beverages Pvt Ltd

Manufacturing Conclave

The 'LakshyaSM Manufacturing Conclave' brought together globally renowned thinkers, innovators, and change-makers on a common platform to exchange ideas on "**Data-Driven Manufacturing: Are Indian Industries ready?"** The distinguished speakers for the LakshyaSM Manufacturing Conclave were:

- Mr Sanjay Kshirsagar, CPIM, Supply Chain and Manufacturing Head, Freudenberg Gala Household Product Pvt Ltd
- Mr Raju Sekhar, Vice President Manufacturing, Roquette India
- Mr Rajesh K Sharma, Director MFG Excellence, Whirlpool Corporation
- **Mr. Nair Umakanth**, Director Global Supply Chain CoE, Eaton



In the Glimpse: Esteemed Speakers, Prof. Rauf Iqbal, Prof. T M Rofin & Student Coordinators

Lakshya M On the Job Achievers' Contest (OJAC)

On the Job Achievers' Contest is an ideal platform for budding & practising managers to present their respective organisations' innovative and pathbreaking projects. The projects are judged by an elite jury panel of industry stalwarts (VPs & MDs of top-notch firms). It is a confluence of best practices, technological advancements, their implementations, and their impact on the industry, and it equips budding managers with the latest trends and advancements.



This year Lakshya SM "On the Job Achievers' Contest" had participation from the corporate sector across well-defined verticals:

Table 23. Lakshya $^{\text{SM}}$ "On the Job Achievers' Contest"

SN	Verticals	Panellist	Winners
1	Supply Chain	1. Mr. Manoj Govind Balgi, VP Procurement, Britannia Industries Ltd.	Winner- Johnson and Johnson
	Management	 Mr. Manish Garg, Head Supply Chain Practice, Thoucentric Mr. Kunal Goyal, VP, Supply Chain, Aqualite Industries 	Runner up - Mahindra and Mahindra
2	IT & Analytics	Pvt. Ltd. 4. Dr Chiranjiv Roy, Senior VP- Data Analytics, SG Analytics	Winner - Johnson and Johnson
		5. Mr. Subarna Pal, Digital Transformation Lead, Ex Tata Motors and TML Business Services Ltd.	Runner up - Lupin India Limited
3	Industrial Engineering and	6. Mr. Jagadeesh Kunchey, Executive Vice President-Supply Chain &Logistics, Engineering projects and Management Committee member, ITC Ltd.	Winner - Ashok Leyland Limited Runner up - Mahindra
	Operations Management	7. Mr. Narasimhan K., General Manager, Asian Paints	and Mahindra
	Wanagement	8. Mr. Birajeev Singh, Vice President of Global Supply Chain and Procurement at KEC International Ltd.	
		9. Prof. Priyanka Verma, Assistant Professor, NITIE Mumbai	
		10. Prof. Purnima S. Sangle, Professor, NITIE Mumbai	



In the Glimpse: Esteemed Jury Members, Dr Priyanka Verma, Participating Corporates & Student Coordinators



Lakshwiz - The Flagship Case-Coms'

Lakshwiz is a galaxy of case study competitions conceptualized to serve the country's best brains with real-time business problems/cases. The case study contest covers the verticals: **Factory**- SCM case study contest, **Bazaar** – Marketing case study contest, and **D-Street** Finance case study contest. Programme collaborators were Rebel Foods and Knowledge Partner ISCEA - International Supply Chain Education Alliance.

Table 24. Lakshwiz

SN	Event	Panellist	Winners
1	Lakshwiz- Factory	1. Mr Nikhil Neema , Senior Product Manager Rebel Foods	• Winner – Indian Institute of Management, Bangalore
		2. Mr Sandeep Alawa , Senior Management Consultant, ABB - Electrification Business	• Runner Up - NMIMS, Mumbai
		3. Dr L. Ganapathy , Professor, Industrial Engineering & Manufacturing Management, NITIE, Mumbai	
2	Lakshwiz- Bazaar	 Mr Sameer Sahay, Associate VP- Business Transformation, Reliance Nippon Life Insurance Mr Saumil Mehta, Country Manager, The Kraft Heinz Company Dr Neeraj Pandey, Associate Professor, Marketing Management, NITIE, Mumbai 	 Winner – Indian Institute of Management, Nagpur (IIM Nagpur) Runner Up – Delhi School of Economics
3	Lakshwiz D-Street'	 Mr. Siddhartha Rastogi, Managing Director & Chief Operating Officer, Ambit Capital Asset Management Prof. Venkateswarlu M, Professor, Finance & Accounting, NITIE, Mumbai 	 5. Winner – Narsee Monjee Institute of Management Studies (NMIMS) 6. Runner Up – T A Pai Management Institute, Manipal

PowerTalks

PowerTalks is delivered by well-known orators and trendsetters across India who have carved their path to success with pioneering spirit and resilience.



In the Glimpse: Elite Speaker Gen. Ved Prakash Malik, Former Chief- Indian Army (Kargil War),



In the Glimpse: Elite Speaker Gen. Ved Prakash Malik, Prof. Rauf Iqbal (Deans Placement and Branding), Prof. Hema Date (Deans SA) & Student Coordinators



We invited Gen. Ved Prakash Malik, Former Chief of- the Indian Army (Kargil War), as an elite Speaker for the 2021 edition of NITIE Lakshya PowerTalks. General VP Malik was Chief of the Army Staff of the Indian Army from 01 Oct 1997 to 30 September 2000.

General Malik took part in many wars and security operations during his long military career. In 1999, he coordinated and oversaw the planning and execution of Operation Vijay to defeat Pakistan's attempted intrusion into Kargil Sector successfully.

He was awarded the Ati Vishisht Seva Medal and Param Vishisht Seva Medal for distinguished military services. The audience was truly inspired by his motivating speech and absorbed many learnings from his experiences and journey.

Sparsha

Sparsha, a student-led initiative, provided corporates and NGOs with an avenue to present their socially impactful CSR and NGO activities in front of esteemed jury members.

Table 25. Sparsha

Activities	Objectives	Panellists	Winners
NGO	To showcase their projects in front of a corporate jury.	Ms Sunita Patnaik, Director of Corporate Affairs, Mars Wrigley, India	Winner: Vipla Foundation Runner up: Aryan Group & NIROG
CSR	To raise awareness by displaying their humanitarian and sustainability work.	 Mr Ashwin Kak, Director Procurement & Sustainability India & SEA, Ab InBev Prof. Shankar Murthy, Professor NITIE Mumbai 	Winner: Cummins India Runner up: Bharat Oman Refineries Limited & Mahindra Logistics Limited



In the Glimpse: Esteemed Jury Panel for Sparsha, Participating Teams & Student Coordinators



After the presentations, a panel discussion on the topic 'Corporate Social Responsibility Going - Beyond Compliance' was conducted. As a result, the students and participants got insights into societal issues and how companies / NGOs solve them.

Experiences & Testimonials

In this 22nd Edition of the event, we witnessed corporates visiting on virtual platforms from various organizations & sectors. This year, Team **Lakshya**SM put forward a wonderful effort to manage the grand event Avartan on the online platform looking at the COVID Scenario.

People shared their views about their experience of the event and suggestions and encouraged us to organize future editions of **Lakshya**SM in a much bigger and better way. The feedback and appreciation not only helped us in making memories but also acted as a guiding light. As we concluded Avartan this year, we are highly motivated to organize the next edition grandly and set a new benchmark.

All the events concluded with felicitation of winners. Our sincerest thanks to all the panellists.

AROHAN 2021

Ataria-Jam

'AROHAN'21', the cultural festival of NITIE, was true to its theme and began with an Open Stage Program known as **Ataria**, allowing the NITIE students to showcase their talents. The greens of NITIE Lawns were decorated beautifully, and the performances included Poetry, Dancing, Open Stage





and Singing, giving us all a feeling of early Diwali. The professors also gave us a glimpse of their talents along with the students' performances. We witnessed a rendition of Shiv Tandav Stotram by Dean Academics, Prof. Padmanav Acharya, while the Director, Prof. Manoj Tiwari, recited a paragraph from the RamCharitmanas. The Program started with a scintillating dance performance by Rishabh and Rakshita. We came towards the end of the night with the heart-touching performance of our on-campus Rockstar from the PGPEX VLFM batch-Ayush Shukla.

HeadBangerz

The much-awaited event of Arohan, **Headbangerz**-The Band Night, was held on October 24th. The bands-Musicurls Unwinded & Lunatunes had the audience captivated and grooving to the beats of the music throughout their performance. The soulful melodies had the audience forget about their worries







and dance to the universal language of music, and each one was left with a smile.

Surkshetra

Surkshetra, the singing competition, witnessed many mesmerising and soulful performances by NITIE and other B-school students. The match was on parameters of vocal technique, performance and show design. It was tough to choose winners from the performances. However, the COVID restrictions didn't deter participants from submitting their online videos.





Nrityotsav

The much-awaited dance event witnessed jaw-dropping performances by students from campuses all over India. There was something for everyone, from **pure classical** to **hip-hop** dance and everything in between. The jury was mesmerized by the unreal presentation of myriad dances presented by the students. Nonetheless, it was quite a difficult task to choose the winners from such an incredible pool of talented people.



Shutterstock

"A picture is worth a thousand words." Participants expressed numerous emotions through stills in 'Shutterstock.' The clicks narrated stories from natural beauty to city life, from child marriage to education rights. These immersive submissions made judging quite tricky for the esteemed judges.

Lite Lo

Lite Lo was an open mic-open stage competition where participants opened their souls to explore their inner creative skills, ranging from poetry









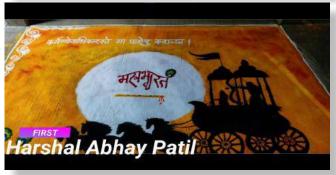
recital to mimicry. Students from various colleges participated in the event. After receiving a startling number of entries, the top 6 winners were decided and awarded cash prizes.

Rangreziyan

'Rangreziyan' is a competition of Rangolis, one of India's most beautiful and pleasing art forms. It is an expression of warm hospitality. Students presented







an extraordinary example of relentless effort and perseverance by displaying mythological scenes to historic scenes up to the present-day societal issues. So enormous were the efforts, and so has been the outcome! Not a single pair of eyes were left undazzled with the elegance of the Rangolis.

Official Freshers- Aagman'21

The cultural festival culminated with Aagman - The Official Fresher's Evening for the incoming batch. The event commenced with none other than 'Mr. Rahul Dua', the well-known Stand-up artist, made us laugh out loud with his humour and demeanour. The programme was followed by Online Mr. & Ms Freshers Competition, where 30+participants submitted their introduction videos played during their introduction, along with a live Q & A round judged by Prof. Jinil Persis and Prof. Mainak Mazumdar. In addition, there was live online voting and virtual hooting, after which Mr Krishna Kumar and Ms Vasudha Yadav crowned Mr. & Ms Fresher.

PHYSICAL FACILITIES AND INFRASTRUCTURE

- I. Library
- II. Digital Informatics Centre (DISC)
- III. Estate / Infrastructure
- IV. NITIE Dispensary
- V. Security and Transport



Annual Report 2021-2022



LIBRARY

The National Institute of Industrial Engineering (NITIE) Library has been a learning and knowledge resource centre for the academic community of NITIE since 1965. Keeping in view of the increasing collection and service of the library, in 2016 library moved into the new premises at the "Academic cum Library Building" with more space and facilities on three floors. The library's entire area (i.e., 1433.39 sq. m) is centrally air-conditioned with proper lights, adequate seating capacity, secured Wi-fi connection and other fundamental amenities. All these have made the library a happening place and comfortable for a long study.

The NITIE Library is enriched with intellectually stimulating collections of Technical Books, Reference books, Journals (including print & online), Electronic databases, Educational Software, etc., in the fields of Industrial Engineering, Management, and its allied subjects. Moreover, since the Institute has a residential campus, the library is vital in providing information to staff, officers, campus residents, and students.

Collection:

The objective of the NITIE library is to facilitate the creation of new knowledge through acquiring, organising, and disseminating knowledge resources and providing value-added services. The library's total collection is around 83832, including Technical/ Reference Books, Bound Volumes of Journals, Light Reading Books (in Hindi, English & Marathi language) and Complimentary Books. The library collection as of 31st March 2022 is as under:

SN	Books	Details
1	Technical Books	57722
2	Light Reading Books	P8041
3	Hindi Books	H3039
4	Marathi Books	M916
5	Complimentary + Free Books	C1524

SN	Books	Details
6	Technical Individual	43 (4 Online;
	Journals	12 Print +
		Online; 27
		Print)
7	Semi-Technical, Light Reading	45
	Journals and Magazines	
8	Bound Volumes	J12590

Library also has a rich coverage of 21 daily newspapers. Along with Hindi & English newspapers, it also subscribes to regional language newspapers such as Marathi, Gujarati, Tamil, Telugu, Malayalam, and Bengali.

Other Subscriptions:

NITIE library also subscribes to many important databases and educational software:

- o CMIE
- o ProwessIQ
- o Industry Outlook
- o Economic Outlook
- o States of India
- o CEIC Database
- o COURSERA: Online Certification (Launched on 07.12.2020)
- o EBSCO: Business Source Complete
- o EBSCO Discovery Services
- o Emerald Management Extra 310
- o EPWRF Time Series
- o E-view Software
- o Gartner Database
- o Grammarly Software: Writing Tool
- o HBS Cases
- o IEEE ASPP/POP & 03 Ebooks subject collections



- o IMD World Competitiveness Database
- o Indiastat.com Database
- o INFORMS Collections
- o Proquest ABI/INFO
- o RemoteXs Facility–for accessing the subscribed databases outside the campus through secured login credentials
- o SAGE Management & Organization Studies Subject Collection
- o Science Direct
 - 21.1 Business Management & Accounting
 - 21.2 Decision Science
 - 21.3 Environment Science
 - 21.4 Engineering
 - 21.5 Economics, Econometrics & Finance
- o SCOPUS Database
- o Taylor & Francis 3 Subject Collections
- o 23.1 Science & Technology
- o 23.2 Business Management & Economics
- o 23.3 Planning & Urban Environment
- o Turn-it-in: Anti-Plagiarism Software
- o Wiley Customized Collection of Journals

NITIE Library is also one of the members of "eShodhSindhu Consortium for Higher Education Electronic Resources," an initiative of the INFLIBNET, Ahmedabad, under the Centrally Funded Technical Institutes (CFTI) category. Through e-ShodhSindhu NITIE Library is getting the following e-resources:

- ASCE Journals Online
- ASME Journals Online
- Economic & Political Weekly
- Institute for Studies in Industrial Development (ISID) Database
- JGate plus (JCCC) electronic gateway to global e-journal literature

- JSTOR
- Oxford University Press
- Springer Links 1700 Collection + Nature Journal
- Web of Science Lease Access
- URKUND Plagiarism Detection Software
- World e-book library
- South Asia Archive (SAA)

Library provides $24\,x\,7$ access to all online resources, including the library catalogue, i.e., "OPAC" (Online Public Access Catalogue) within the campus.

<u>Library Management Software and Security System</u>

The NITIE Library uses "LIBSYS.10 – Web-centric Version" as library management software. In addition, the entire collection is Barcode enabled with the 3M security system for library security.

Library Services:

The following are the major services provided by the NITIE Library:

- Book Lending
- Reference Service
- Reprography Service
- Inter-library loan Service
- Overdue alert Service
- Case Studies
- Textbook (Hard copy & E Text Books) procurement & distribution to NITIE students
- Remote Access Facility
- User Awareness Programs The Library actively participates in the institute's Orientation program to benefit new students at the beginning of the academic year. Also, regularly organise webinars, Training sessions on various Library databases and services.
- Preparing and distributing "Institute cum Library ID-Cards" to Students



Library Interns/ Data Entry Operator:

Currently, the library has one library intern (on contract), and the services of the present intern have been extended since 21.06.2022 for one more year. In addition, one Data Entry Operator is also attached with the section and his contract has also been extended for one more year since 22.06.2022.

Digital Library:

One room has been identified in the NITIE Library, and 14 PCs have been installed for library users. In addition, the library has dedicated terminals for Bloomberg and GABI software.

Library Committee Meetings:

New Library Advisory Committee Chair has been nominated since 26.04.2022 was constituted vide order no. D/Office Order/2022, dated 26.04.2022. The tenure of the committee chair is valid till 25.04.2024. During the year, three library committee meetings were organized to make decisions about library development, book procurement, and subscription renewal of existing E-resources.

Library Team:

The Library is managed by a team of 3 professionals, 4 Administrative staff, 1 MTS, 1 Library Intern, 1 Data Entry Operator and 03 Casual Labours. An additional charge of the "Library and Information Officer (LIO)" of NITIE Library has been given to one of the Professors since 15.03.2022. The team handles important library activities like Collection Development, Maintenance, Circulation, Reference, and other allied service.

Library Timing:

The library runs as per below schedule:

Monday to Friday - 9.00 am to 01.00 am**

Saturday & Sunday - 11.00 am to 7.00 pm

Library Holiday - Only on Institute's Holidays.

** Library timings have been extended up to 01:00 am since 11^{th} October 2021 to benefit the students, with the approval from the Competent Authority. Earlier, the closing time of the library was up to 10:00 pm.



DIGITAL INFORMATICS CENTRE (DISC)

During the year, Digital Informatics Centre (DISC) provided:

- The state-of-the-art network, computer hardware and software facilities to meet the varied requirement of teaching training research, consultancy, and developments.
- Maintenance of the following:
 - o Networking system to support internet and E-mail services.
 - o More than 400 personal computers with a wide range of processors, hard disks, monitors, keyboards, mouse, and printers were maintained.
 - Currently, the Institute is utilizing 1 Gbps from National Knowledge Network (NKN) and 1 Gbps from M/s PowerGrid Corporation of India to provide bandwidth to the Institute. The Institute is also equipped with a Firewall of M/s Checkpoint.

MoUs

- The Institute signed an agreement with Microsoft for a Microsoft O365 subscription.
 As a result, all users at the Institute shall use licensed Microsoft products and email solutions.
- The Institute signed an MOA with M/s EdCIL, Project Management Consultant for IT services which includes:
- Review the existing network architecture and network infrastructure of the institute and propose a better architecture and solution by considering the geographical spread of the institute.
- Implementation of LAN/WIFI/IoT-based solutions in the entire campus.
- Implementation of ERP solution for the institute.
- Hiring of the Integrated Information Technology Facilities and Services Management (IITFSM).

- Development of Data Center, smart classroom, and Digital Informatics Lab.
- Annual Maintenance Contract (AMC) on IT Services/Equipment.

Work in Progress

- The review of the existing network architecture and network infrastructure of the institute is done and a better network architecture solution with LAN and WIFI implementation/ upgradation work is in progress.
- Implementation of Institute level ERP work is in progress.
- Under Integrated Information Technology Facilities and Services Management (IITFSM), manpower under facility management service is available in the institute 24 X 7 for network management and IT services.
- Institute website development work is in the final stage and shorty it will go live.
- Development of a Data Center, smart classroom, and Digital Informatics Lab is in progress.

Provisions for Faculty Members and Officers

DISC initiated the supply of various provisions to all faculty members and Officers:

- Laptops
- Multifunction Printers
- Digital pen and pad
- Pen Drives/Portable Hard disk
- Wi-Fi connection has been provided in all the Hostels, Academic cum Library Building (ALB), Administrative Buildings and Residential areas to enable all stakeholders of the institute to have the internet facility in their offices, rooms and around the Hostel.

Supporting Institutional Activities

 The online classes, webinars and events were conducted on cloud-based video conferencing



- solutions like Webex and Microsoft Teams platforms.
- The DISC facilitates the uploading of various information on the NITIE website and admission to the various Programmes through house developed Admission Portal.
- The Programme Section, Academic Section, Accounts Section, Administration Section, Placement Section and Library have largely benefited from the DISC's support.
- Maintenance of all Computer Equipment, Operating Systems and Application Software are primarily supported by DISC.
- One thousand two hundred fifty licenses of CISCO WebEx and subscription-based license of Zoom.

- CISCO/HP Switches improved the existing networking infrastructure and provided optimal internet service usage to various users.
- DISC procured the latest versions of the following software: SPSS 26.0, AMOS 26.0, MATLAB, Bloomberg, ANYLOGIC, CPLEX, Anylogistix, Nvivo, Primavera, Crystal ball and Relecura.
- Various utility software was procured for academic and official use: Quick Heal Antivirus, Adobe creative suite, and Adobe DC Pro. All the software is compatible with Windows and Redhat Linux 5 operating systems.
- Alignment for the Microsoft University Alliance Programme and SAP University Alliance Programme.



ESTATE / INFRASTRUCTURE CREATION AND MAINTENANCE

Upgradation of old campus Infrastructure and new infrastrstructure

The infrastructure requirement is aligned with the needs and goals of the Institute. Accommodation and other amenities are required to attract qualified and experienced faculty. Therefore the Institute has upgraded all of its old infrastructure (residential, offices and student hostels) including all 18 buildings, lighting, roads, boundary wall, and common areas on a war footing. We are on the verge of creating new residential buildings for students and faculty. New Infrastructure in the pipeline include Faculty and staff quarters building, New Student Activity Centre-SAC, Taylor hall hostel extension, New Executive Hostel, and Director Bungalow.

Table 26A. Works in progress

S.N.	Name of work
1	Annual operation of organic waste converter
2	Contract for "Supply of contract labour for various activities in NITIE campus."
3	Providing vertical blinds at the cabin of system designer and manager cabin (Disc) at IRC bldg.
4	Housekeeping and cleaning services on contract basis at PGP hostel at NITIE
5	Annual Maintenance contract (comprehensive) for dorma make automatic door at ALB
6	Annual operation contract for HVAC plant (High and low side) at Academic cum Library Building.
7	Comprehensive annual maintenance contract including spare parts and labour (with oil and refrigerant) HVAC plant (high and low side) at Academic cum Library Building.
8	Annual Maintenance and services contract for window & split Air-conditioners and water coolers.
9	Repairs to old steel cupboard for Kshipra Bldg.
10	AMC for lifts at Guest House MDP hostel Academic Building and Admin. Bldg.
11	Tender/Auction for sale/ disposal of wooden logs on as is where is basis at Nitie campus.
12	Repairs to godown
13	Repairs and renovation of Design Studio to convert into community centre
14	Annual maintenance and service contract for lifts at Taylor Hall
15	Non-comprehensive annual maintenance contract for fire hydrant system, sprinkler and addressable fire alarm system at Taylor Hall and ALB at NITIE
16	Internal painting including patch plastering work at Taylor Hall
17	Annual maintenance contract for 32 nos. AG-200 UV Aqua Guard water purifiers.
18	Replacement of mechanical seals bearings gasket packing and servicing of firefighting pumps at Taylor Hall at Nitie.
19	Supply and installation of passenger elevators at old Director's office Anand Vihar and Academic Building at Nitie Mumbai
20	Repairs and renovation of toilets of flat no 17,18,19,21,22 of Narmada Bldg.
21	Providing partition with door at passage of right-wing computer centre to create separate Incubation centre at IRC Bldg.
23	Replacing damaged vertical / roller blinds at Accounts Section
24.	Repairs to old steel cupboard for Kshipra Bldg.



Table 26B. Works completed

S.N.	Name of work			
1	Replacing of LPG manifold and installation of LPG Gas Detector system at Taylor Hall Hostel at NITIE			
2	Providing M S pipe railing to staircase of kshipra bldg.			
3	Replacing damaged vertical / roller blinds at Accounts Section			
4	Providing built in cupboard shelves, mirror and mirror glass shelves at Kshipra.			
5	Repair of Revolving office chairs at various sections.			
6	Valuation of scrap materials at NITIE Mumbai.			
7	Repairs to radiator canvas, silencer pipe cladding etc. for 750 KVA DG set.			
8	Lighting decoration at ALB & old Admin. Bldg. for Republic Day 2022			
9	Supply and installation of partitions and glass door shutter at Library.			
10	Inventory of tree for staff qtrs., site.			
11	Providing 12mm ply for beds at Taylor Hall (Additional)			
12	External painting of Passage wall part toilet & faculty wing walls at old Academic Bldg.			
13	Fixing paver blocks above firefighting pipelines at Various places around ALB			
14	Internal Painting at Gilbreth Hall Bldg.			
15	External Painting at Gilbreth Hall bldg.			
16	Internal painting and allied works Centre for Innovation Incubation and Entrepreneurship (CIIE)			
17	Providing steel stanchion supports at basement of Sindhu Bldg.			
18	One coat painting to flat no :8 Jhelum, flat no:3,4,6 Kaveri flat no:16 Ganga Bldg.			
19	Replacing carpet at conference room at Director office			
20.	Polishing work at old Director's office, cabins above Director's office and replacement of doors of cabins above old Director's office and classroom no. 11,12,12A, security office at new gate and flat no. 27 of Sindhu building			
21.	Wiring for computer lab in classroom no. 407 at ALB			
22.	Replacing RCC chajjas with FRP chajja at Type-IV (16-23) building			
23.	Annual maintenance contract (comprehensive) for Dorma make automatic door at ALB			
24.	Replacement of main doors of 168 rooms and repairs to door frames at Gilbreth Hall			
25.	A/A to sitting room of suite no. 12 for creation of temporary kitchen			
26.	Internal painting to 1^{st} and 2^{nd} floor rooms at Gilbreth Hall			
27.	Repairs to toilets of flat no. 21 of Type-V (17-22) Narmada building			
28.	Patch plaster repairing at flat no. 10A Transit, Type-II/13, PGPM 8, 15 $\&$ 16, server room at VSH and internal painting of flat no. 10A Transit building			
29.	Replacing flooring of kitchen at Type-V/22			
30.	Providing pedestals for water coolers at Gilbreth Hall			
31.	Fogging treatment around campus buildings			
32.	AMC for lifts at PGP hostel, Guest House, MDP Hostel, OCA building, Gilbreth Hall, Academic and administrative building			



S.N.	Name of work			
33.	Repairs and renovation of dispensary			
34.	Supply and installation of partitions and glass door shutters at library			
35.	Internal and external painting and patch plaster repairing of Godavari building			
36.	External painting to Brahmaputra, Kshipra, Saryu building, Transport Section and external and internal painting of pump house.			
37.	External painting & patch plastering of Narmada building.			
38.	Providing partition wall in front of toilets and plinth protection at Saryu building (Watchman Quarters)			
39.	Repairs to AMCE lab (Digital Manufacturing Lab)			
40.	Internal painting to library smart classroom and fellow classrooms at first floor repairs to gypsum based false ceiling and modular false ceiling and installation of sun control film on external glass.			
41.	Replacement of main door, repairs to door frame, wire mesh shutters window boxing, internal painting etc. at Vikram Sarabhai Hall for VLFM participants.			
42.	Supply and installation of 50-watt LED streetlight fittings.			
43.	Internal painting to rooms at Gilbreth Hall excluding (1^{st} & 2^{nd} floor rooms) and including Health Centre at ground floor.			
44.	Supply and installation of passenger elevators of Gilbreth Hall and Industrial Research building at NITIE Mumbai.			
45.	Providing automatic pillar taps at common toilets of office buildings as safety measure to prevent spread of "COVID 19"			
46.	Providing safety grill at basement & ground floor at Anand Vihar			
47.	Supply and installation of hot dipped galvanized poles and armoured cable for street lighting			
48.	Annual maintenance and servicing contract for 01 no. On-Line UPS			
49.	Providing aluminium openable folding doors to ground floor balconies with aluminium safety grills at Anand Vihar			
50	Creation of cloth washing & cloth drying facility at ground floor level at Anand Viha			
51	External painting to Yamuna, Ravi & Indrāvati Bldg.			
52	Internal & external painting, external plumbing and patch plaster at Ganga Bldg.			
53	Repairs of toilets at flat no 20 at Narmada Bldg.			
54	Repairs to cupboards to rooms at Gilbreth Hall			
55	Providing shower partition at suite no- 1,3 & 4 at Anand Vihar			
56	P/F waterproof tarpaulin sheet temporary sheds for 1 monsoon period on terraces of placement cell, old library & syndicate balconies $\frac{1}{2}$			
57	Replacing damaged window of flat no. 18 Narmada building			
58	Replacing damaged doors of flat no. 07 and electric godown at Kaveri, flat no. 11 & 13 Godavari, flat no. 10A of Tapti, flat no. 11 at Yamuna building and replacing and providing kitchen platform shutters at flat no. 3,6,7 at Kaveri building, flat no. 9 at Tapti building and flat no. 11,12,13 at Godavari building			
59	Internal painting to $1^{ m st}$ and $2^{ m nd}$ floor rooms at Gilbreth Hall			



S.N.	Name of work			
60	P/F waterproof tarpaulin sheet temporary sheds for 1 monsoon period on terraces of kitchen of Vikram Sarabhai Hall & for vegetable vending area			
61	External painting to right side front wall of OCA Bldg. and internal patch repairs			
62	External painting & patch plastering of Sindhu Bldg.			
63	External painting & external plumbing & patch plaster repairing of Jhelum Bldg.			
64	Supply and installation of covers & other plumbing works as per requirement of MCGM at various campus Bldg.			
65	Replacing shutters & shelves of inbuilt storages in front of Chairman's suite & at other floor passages			
66	Removing partitions in front of lift entrance, cabin of computer center (DISC), Providing partitions for creating cabin for system designer, providing false ceiling for cabins at DISC			
67	Replacing damaged treads & risers, replacing lobby flooring of $1^{\rm st}$ & $2^{\rm nd}$ floor of Industrial Research Center (OCA) Bldg.			
68	Patch painting repairs at Chairman's suite, passage $\&$ staircase and entrance area of Anand Vihar Guest house			
69	Replacing floorings of bed rooms of flat no 20 at Ganga Bldg.			
70	Repairing and repainting exhaust ducting and air blower tank of canteen kitchen at Taylor Hall			
71	Replacing damaged doors at $1^{\rm st}$ floor (ladies' washroom), $2^{\rm nd}$ floor (gents' washroom) main building			
72	Renovation of toilets at ground floor & second floor & creation of ladies toilets at ground floor & second floor of OCA Bldg.			
73	Providing roof for washing area at Anand Vihar Guest house			
74	Replacement of flooring to rooms at Gilbreth Hall			
75	Replacement of G.I. pipeline for flushing, potable and hot water at Gilbreth Hall.			
76	External painting to Kaveri and Tapti building			
77	Renovation of toilets at Gilbreth Hall			
78	Repairs of toilets at flat no. 20 Ganga building			
79	Fixing glazing in aluminium and M.S. panel including glass with EPDM rubber neoprene gasket for Taylor Hall NITIE			
80	Providing curtains at entrance of Anand Vihar (Guest House)			
81	Supply and installation of split air conditioners			
82	Repairs to parking shed			
83	Supply of 150 mm flange type foot valve			
84	Purchase of plumbing material			
85	Structural audit of distressed columns of Ravi, Narmada and Sindhu building			
86	Renovation of toilets of 12 rooms of Vikram Sarabhai Hall			
87	Plumbing and allied works related to installation of surface hydro-pneumatic system at Taylor Hall			
88	Replacement of damaged vertical and roller blinds at Director's office			
89	Repairs to lab on the right wing of computer center			



S.N.	Name of work			
90	Supply and installation of Grundfos make CRE 10-6 surface hydro-pneumatic system at Taylor Hall			
91	Providing panelled door shutter at SRIC office			
92	Providing false ceiling at toilets of ground, first and second floor of IRC building			
93	Raising the height of partition for cashier room at Accounts Section			
94	Construction of parking shed near Admin. building			
95	Repairs to broken fencing around Shiv Mandir area			
96	Removal and re-installation of 750 kVA DG Set at 22kV sub-station site			
97	Fire and safety audit of NITIE campus			
98	Providing vertical blinds at the cabin of System Designer and Manager cabin (DISC) at IRC building			
99	Repairing of meter cabin			
100	Providing wall panelling and false ceiling for entrance lobby first floor at IRC			
101	Supply and laying 3 ½ core 300 sq. mm. power cable for 750 kVA DG Set			
102	Replacing damaged water tank at Indrawati building			
103	Maintenance B check for 750 kVA DG Set			
104	Non-comprehensive annual maintenance contract for firefighting system, addressable fire alarm system and public address system at Academic cum Library Building and Taylor Hall Building.			
105	AMC for 04 nos. lifts at Taylor Hall.			
106	AMC for air conditioners and water coolers.			
107	AMC for 12 nos. Air Circuit Breakers.			
108	AMC for 16 nos. 60/80 water coolers and 01 no. AGCCP Aquaguard water purifier.			
109	Non-comprehensive AMC for hydro pneumatic system at main reservoir, Taylor Hall and ALB.			
110	Annual operation contract for HVAC plant (high & low side) at ALB.			
111	Non comprehensive operation of central HVAC plant at ALB.			
112	Comprehensive AMC including spares parts & labour with oil & refrigerant of HVAC plant at ALB.			
113	Annual operation of OWC			
114	Annual maintenance & service contract for 750 kVA D.G. Set.			
115	Supply of casual labourers for various activities in NITIE campus.			
116	Annual maintenance and service contract for lifts at ALB			
117	Annual maintenance and service contract for window and split air conditioners and water coolers.			
118	Annual maintenance contract for 28 nos. AG-200 UV Aqua Guard water purifiers			
119	Replacement of damaged rain water pipes Type-II (1-16), Type-IV (8-15), Type-V (17-22), syndicate			
120	Painting to classrooms at ALB bldg.			
121	Construction of UCR wall with chain link fencing along road side at CTS No. 67 B (newly fenced land)			
122	Internal/external painting to campus buildings of NITIE			

3) REPORT ON LAND MATTER AND ENCROACHMENT OF NITIE LAND.

Various land matters & encroachment of NITIE was brought to the notice, suitable actions are taken / in process.



NITIE DISPENSARY

The National Institute of Industrial Engineering's (NITIE's) Dispensary is well managed with well-qualified Paramedical and Medical staff members under the control and guidance of a Medical Officer.

There were stringent measures taken to avoid the spread of COVID. Nursing staff, Pharmacists and Doctors frequently visited the common places like the main gate, educating the security on taking temperature, Oxygen saturation and Mess for students, strictly asking to follow the norms.

- Wearing of mask
- Washing hands
- Maintaining social distance
- Sanitization

A total of 33 students and 67 staff infected with covid-19 were strictly quarantined and monitored. In addition, a person was trained to handle and deliver food and essentials. During this period, only one person from the staff needed hospitalization and ICU management who was fully recovered. After discharge, he was monitored as he needed an oxygen concentrator for 24hrs. In addition, an elderly lady with comorbidity was hospitalized and fully recovered. The dispensary was able to manage emergencies at any time in 24 hours with Doctors, Staff Nurses, Pharmacist and Paramedics.

OPD WORKING HOURS:-

- Monday to Friday 9:00 AM 9:00 PM
- Saturday 8: 00 AM 2:00 PM
- Sunday On-call duty

VISITING DOCTORS AND CONSULTANTS	FACILITIES AVAILABLE
Physician	Equipped with:
Gynaecologist	Dressing room
Paediatrician	Emergency room (ECG, Nebulizers, Oxygen
Orthopaedics	saturation, Glucose monitoring, Defibrillator,
• Dentist	Philips patients monitoring system, Oxygen Concentrator and Oxygen cylinders)
Homoeopath	
Physiotherapist	Nursing Station (Two Nurses)
Counsellor	Pharmacy Room (Pharmacist)



SECURITY & TRANSPORT

The security &Transport Section is under the Administration department. The superintendent (Security and Transport) is responsible for managing the Security & Transport department and reports to Registrar through Deputy Registrar (Administration). All the Security personnel are unarmed with no arrest powers. Security personnel patrolled the entire campus, General support service, and VIP/ guest movement support service.

The security personnel are always on high alert. NITIE has 63 acres of land, and its surrounding has been dwelled by encroached dwellers, which is challenging for security personnel. Time and again, the encroachers are involved in the extension of construction with the present occupied structure, which needs high vigilance and prevention. Whenever such incidents occur, security personnel deployed in NITIE premises take up the matter with BMC and Powai Police Station for the legal course.

NITIE has one security guard (Watchman); NITIE has outsourced 41 nos. security personnel from Maharashtra State Security Corporation (MSSC).

NITIE Security & Transport department has one bus that provides transport facilities to our students as and when required for Industrial visits. Currently, the bus is off road with effect from 01 May 2019, as it has been completed for 15 years. However, when the need arises, the vehicles are hired from a travel agency to provide student transport facilities.

In addition, the institute has one corolla car solely used for the official travel of the Institute's Director.

Institute has fencing with *Iron Jali* on the Campus. In addition, Institute has taken up work for the RCC wall to the fencing of the Campus, and it is in progress.

Assets in the Department:

The S&T department has one Corolla Car, purchased in 2013, solely used for the Director's official purposes.

Security & Transport Department:

Security & Transport Department has taken up the following activities for 2021-22.

• Republic Day and Independence Day Celebration

The Institute has celebrated Republic Day and Independence Day. Security personnel performed the Parade and gave a guard of honour to the National flag.

Mock drill on Fire and Fire Alarms

The Mock drill was carried out on Fire precautions and Fire alarms.

Meeting with Police

Meetings were held with local Police to seek their support in the encroachment and Security related matters.

COVID Warriors

In the leadership of Shri Ramotar Kumawat, Superintendent (Security& Transport), Security personnel have played a very important role during the COVID-19 situation. They have performed their duty sincerely and unselfishly and protected the NITIE campus from spreading COVID.

Achievements:

- Awards: Director NITIE has awarded the Security personnel as COVID Warriors who had played an important role during the corona spread to protect the campus and its residents.
- 2. **Special Appreciation awards:** Director NITIE awarded some security personnel for their vital role and timely action in catching the thieves in NITIE Powers.

Future Plans:

Scrapping out old Vehicles: - Institute have an old vehicle planned to scrap out and is in progress.



NITIE ALUMNI ASSOCIATION (NAA)

A. Annual General Body Meeting:

NITIE Alumni Association organized the 37th Annual General Body Meeting on 14th November, 2021, at NITIE, Mumbai (Online). The members discussed the activities carried out by NAA and shared their views on the same. Annual Statement of Account for the year 2020-2021 was passed by the members. Following is the list of Executive Committee Members for year 2021-2022

- President: Prof. Dr. Manoj Kumar Tiwari, Director, NITIE
- Vice-President: Prof. Shirish Sangle –
 Dean Alumni Affairs
- Chairman: Sanjay Shukla
- Hon. Secretary: Prof. Sumi Jha
- Hon. Treasurer: Prof. K.S. Ranjani
- Vice-Chairman: Mr. Mukesh Kripalani
- Member: Mr. Bijith Bhaskar
- Member: Mr. Murugan Pugalenthi

The Online Annual General Body Meeting was attended by 110 members of NAA, NITIE Faculty members and student's representatives. Sansmaran was attended by 400 members.

B. Alumni Activities:

The Alumni Committee performed multiple activities in the quarter of April 2021 to March 2022.

Abhisanskaran 2021 – The official induction of batch of 2021-2023 was graced by multiple alumni from various sectors to impart their knowledge, learning and wisdom to the upcoming batch of NITIE. Abhisanskaran was conducted on 28th June 2021 to 30th June 2021.

 The first of the Alumni talk series was delivered by Mr. Shubhrajyoti Bhattacharya & Subhrajit Mukherjee from the PGDIM batch of 2020 currently working as Management Consultants at EY and PwC respectively. The young alumni have been at the forefront of case competitions and have been the National Winners of the HUL LIME and were the India's Top 10 Competitive Leaders for 2020. They imparted their valuable knowledge about cracking case competitions.

2. The next talk was given by Mr. Kartik Vyas of the batch of 2010. Being an entrepreneur and the co-founder of Logicology, Sir gave his insights about stepping into the world of entrepreneurship.

On 30th June 2021, 3 more alumni gave talks on their journeys

- 1. Ms. Ruma Kishore
- 2. Mr. Sadanand Palnitkar
- 3. Mr. Siddharth Bhagat
 - The day was initiated by Mrs. Ruma Kishore from the batch of 1997. Being a IT Director of HUL, she shared her insights about her journey post NITIE and motivated the junior batch about the path that lies ahead.
 - The next talk was given by Mr. Sadanand Palnitkar of the batch of 1996. Currently working as Associate Vice President of Godrej Industries, he shared his insights about his career and how to live and grow professionally in your life.
 - The day ended with an exhilarating talk by Mr. Siddharth Bhagat from the batch of 2020. Being a Category Leader of Amazon, he shared his insights about the booming ecommerce industry and what lies ahead in the same.

Post the start of the college, the Alumni Committee conducted a leadership talk on 11^{th} July 2021 by



Mr. Venu Koka from the batch of 1980. Sir has been an Ex-Director - Global Resins, Ex-President & CEO of GE Plastics shared his insights to the students of NITIE of how to showcase leadership qualities and how to handle the work and pressures of being a CEO.

As per every year, the NITIE Alumni Committee initiated its Tarang Sessions for the junior batch before their SIP to impart knowledge about the different management domains. The series of sessions were initiated on 25th July 2021 by Ms. Sandesha Shinde from the batch of 2017. She is currently working as a Key Account Manager as L'Oreal and gave an insightful session about the domain of Sales and Marketing.

The Alumni Committee conducted a leadership talk on 4th August 2021 by Leadership Talk by **Mr** Vasantha Sapaliga, Head-Supply Chain at Johnson & Johnson on topic Things Nobody teaches on our journey in Corporate Life.

Next the committee conducted Leadership Talk by one of our esteemed Alumnus **Mr Ashish Joshi** of 2004 Batch on 27th August 2021. He is presently serving as Global Supply Chain Director (B2B/B2C E-Commerce) at Hindustan Unilever Limited (HUL).

Magazine Launch

Launch of 12th edition of our magazine **AlumNITI** on 13th November 2021. The theme of this year's magazine is "*Technology Post Pandemic*". It encompasses various milestones of NITIE, NITIE Alumni Association initiatives, contributions by our distinguished alumni, faculty members, and much more.

Annual General Body Meeting

NITIE Alumni Association organized Annual General Body Meeting No. 37, on $14^{\rm th}$ November 2021 at NITIE, Mumbai virtually.

SANSMARAN, 2021

 a) Distinguished Alumnus Awards were given to the outstanding alumni in the year 2021, Distinguished Alumni Award was given to Mr. Manoj Rawat, Mr. Amit Sharma, Mr. Shiva Esturi, Mr. Prashant Lokhande, Mr. Swapn Malpani, Mr. Rajeev Pathak, Mr. Vikas Sunkad, Mr. DSN Murthy, Mr. Bijith Bhaskar, Mr. Shashi Mandapaty, Mr. Diwakar Singhal, Mr. Kapil Sharma, Ms. Ruma Kishore, Mr. Abhijit Dutta, Mr. Sanjay Jain, Mr. O P Yadav

- b) **Promising Young Alumnus Award** was given to Mr. Amit Pal Chhabra, Mr. Srajan Vyas, Ms. Aarti Gandhi, Mr. Rut Patel, Mr. Ashish Joshi, Mr. Pankaj Kumar, Mr. Rahul Arora, Ms. Snehal Bogar, Ms. Meenakshi Chhajer, Mr. Piyush Agarwal, Ms. Surabhi Pokhriyal, Mr. Mrinmoy Chakraborty, Mr. Sudhendu Pandey, Ms. Anupriya Mathur, Mr. Sourjyendu Medda and Mr. Vivek Agarwal during Annual Alumni Meet Sansmaran, on 13th November 2021.
- c) Following PGP, Fellowship and MDP participants were felicitated during Sansmaran 40 years' completion- PGDIE 9th Batch
 - 1. Silver Jubilee Batch- PGDIE 25th Batch, PGDIM 3rd Batch
 - 10 years' completion- PGDIE 39th Batch, PGDIM 16th Batch, PGDISEM 9th Batch ITM 4th Batch, Fellow 2011, MDP 2011

<u>Student Scholarships were given on 13th</u> <u>November, during Sansmaran' 2021:</u>

Rangan Scholarship award sponsored by Mr. Ashwin Rangan was given to following students:

Ms. Kumari Saloni

Ms. Aayushi Kumari Yadav

Madala Scholarship award sponsored by Mr. Srini Madala was given to following students:

Mr. Mayank Johri

Mr. Chandan Singla

Singhal Scholarship award sponsored by Mr. Srini Madala was given to following students:

Mr. Krishna Puppala

Prathipati Scholarship award sponsored by Mr. Srini Madala was given to following students:

Mr. Priyam Mehrotra

Mr. Akhil Thiruvidhi



Sansmaran'21 was also highlighted by a **Panel Discussion** on the issue of **"Technology post-pandemic".** The pandemic has had an everlasting impact across various sectors and technology has been on the forefront of these changes.

NITIE Alumni Association was also proud to host Mr. Venu Koka for the keynote address as a part of Sansmaran 2021. Mr. Koka, an experienced professional with over thirty-five years of service in diverse industries, most of them at General Electric, served as CEO of several of its subsidiaries in India.

Guest sessions- PGP. DGMP

> DGMP sessions (12th February to 13th February 2022): we have conducted 2 mentorship sessions for the DGMP 1 and DGMP 2 students to help them gain more insights into corporate life. Distinguished guests shared their experiences of transitioning from defense to corporate life and shared a few tips for candidates' upcoming placements.

List of Guests for DGMP sessions:

Cdr Ajay Tiwari (Retd.)	Sr. DGM - L&T.
Wg Cdr Vidya Kant Kala (Retd.)	Managing Trustee- Indus Wellness Code trust, Entrepreneur

Leadership Talk || Ms. Pujyasri Jetty ||22nd January 2022, 11:00 am-12:30 pm || Kickstarter session on 'How to manage our Personal Finances'.

- a. Leadership Talk || Dr. Ganesh Natarajan || 7th February 2022, 7:00 PM- 8:00 PM ||
 - Accelerating Digital Success Reimagining Organizations for a Post Covid 19 World
 - 2. KT sessions- PGP (23rd January to 20th February 2022)

To gear up student's forthcoming summer internship preparations, NITIE Alumni Association hosted Pre-Internship KT sessions for the first year NITIE Students. More than 10 Alums from various domains like Banking & Finance, Consulting, FMCG, Digital Transformation, Consulting & FMCG have presented the KT sessions.

3. Winter projects- PGP (1st January to 20th February, 2022)

NITIE Alumni Association assisted in giving corporate exposure to the current batch student by assisting them in finding Winter Projects and live projects by connecting them with the Alumni. Projects were offered in the domains of Supply Chain Management, Business Development, Marketing, etc. Companies like Godrej Industries Ltd, Amazon, Jeena Global Logistics gave projects to the students. This initiative and encouragement from Alumni helped students get geared up for their Summer Internships by giving industry exposure.

4. CRP / LRP mock Interviews (1st January to 10th Jan 2022)

LRP and CRP mock interviews were being conducted for more than 150 students and alumni from across the industries (FMCG, Ecommerce, Consulting, etc.) helped the students to ace their interviews. These interviews helped the students to be industry-ready and gave them a true picture of the level of preparedness for the interviews so that they can focus on certain areas based upon the feedback received.

5. NITIE connect 3.0 Magazine launch (15th February,2022) -

NITIE Connect 3.0 magazine was published on NITIE Alumni Association's Web site in February 2022 and had an audience of over 12000+. The magazine's theme was 'Supply Chain and ESG: Opportunities and Challenges.' The magazine was divided into five sections with theme-based articles, industry stories from Alumni, rapid-fire alumni interviews, and quizzes based on the theme. Alumni contributed the magazine from the oldest batch to the newest one.



6. Alumni Engagement Sessions (21st January & 28th January,2022)

The session's agenda was to identify gaps between NITIE student skillsets and industry requirements and get guidance about the Centre of Excellence established in NITIE from the Alumni. The session was also an opportunity for our esteemed alumni to reminisce about their NITIE moments and strengthen the bond between batchmates.

7. B-Cube Alumni engagement (20th February,2022):

With coordination with NITIE Admission Committee, NITIE Alumni Association assisted in organizing an interactive session with the forthcoming aspirants for the BCube (Budding Business Brains) event. NITIE conducts Budding Business Brains, aka B-Cube, every year to help the aspirants prepare for their dream B-School. We help them prepare for GD-PI & help them improve their communication skills. The key-note speaker, Ms. Roli Sonthalia, an Alum from the PGDIM-26 batch, working as a consultant at Deloitte India, explained her journey at NITIE, industry experience, and key takeaways during NITIE days, and career prospects after pursuing management. Ms. Roli Sonthalia also explained the opportunities exposure for females at NITIE and post-MBA opportunities for them. The session was attended by over 1000+ aspirants who will pursue management courses in the coming academic year.

8. Alum Tales (March, 2022)

The IDEA is to capture the essence and personal stories of NITIE alums who make, build, and construct the glory of the college in their own unique way. The idea is to concentrate on the journey of these

individuals, showing that each alumnus is unique, inspirational, and relatable.

The aim is to bring forth the personal stories/snippets of our alums in a written form to our vast NITIE Alumni Community and thereby build a stronger personal connection within the alumni

Name of the Alum	Distinguishing Achievement
Kriti Kuksal – IM <i>-</i>	Bollywood Actress,
21 Batch	Poet
Deepanshu	Member of a
Sharma = IM - 19	famous rock band
Batch	in Bengaluru

- Involving Alumni in Institute administration as members of Board of Governor and Academic Council of NITIE.
- II. NAA organizes periodical guest lectures (Online) so alumni and interaction with students to develop their knowledge base.
- III. Institute involved various alumni to be part of admission process of PGDIE/IM/ISEM/MM/PM Course. This was initiated to get industry perspective at the time of student's admission. NAA organized alumni-student interaction through our engagement initiatives like Abhisanskaran, Tarang, Pre-placement guidance sessions amongst various others.
- IV. The New Charter was Presented.
- V. Two Month Industry Course by Prof. David Simchi Levi for young alumni.

Executive Committee Meeting:

NITIE Alumni Association organized Executive Committee Meetings No. 63^{rd} held on 3^{rd} August, 2021& 11^{th} February 2022, via Zoom Platform.

Membership Position

As on 31.3.2022: 9575

INSTITUTE EVENTS

- NITIE Concludes its XXVI Convocation Ceremony
- Inauguration of "Centre of Excellence in Logistics & Supply Chain Management"
- Official Language Implementation
- Vigilance Awareness Week
- NITIE Welfare Activities & Events



Annual Report 2021-2022



NITIE CONCLUDES ITS XXVI CONVOCATION CEREMONY

India's premier institute **National Institute of Industrial Engineering (NITIE**), Mumbai held its **XXVI Convocation Ceremony** today virtually at its campus in Mumbai, Maharashtra on 31st October 2021.

The Chief Guest for the 26th Convocation of NITIE Mumbai was Hon'ble Minister of Education, Govt. of India, Shri Dharmendra Pradhan & Guests of honour were Dr. K. Radhakrishnan, Chairman, IIT Kanpur & Dr. Anil Sahasrabudhe, Chairman, AICTE and Mr. Shashi Kiran Shetty, Chairman, NITIE Board of Governors & Allcargo Logistics, who addressed the event virtually. Over 1500 guests comprising of students, parents, alumni, faculty and staff members attended the virtual convocation.



Prof. Manoj Tiwari, Director, NITIE shared the achievements of the students and the awards won under various categories, both in academics as well as industry-collaborated projects. The break-up of students getting awarded this year are as follows:

- Fellow students: 25 (2020 & 2021)
- Industrial Engineering: 230(48th & 49th Batch)
- Industrial Management: 510 (25th & 26th Batch)
- Industrial Safety & Environment Management: 34 (18th & 19th Batch)
- Manufacturing Management: 65 (5th & 6th Batch)
- Project Management: 62 (5th & 6th Batch)
- PGPEx-VLFM: 35 (2020 & 2021)

NITIE remains committed to continuously improving and innovating, keeping pace with the changing requirements of the industry. NITIE has recently been ranked 12th in the Management category of NIRF 2021 Rankings.



INAUGURATION OF "CENTRE OF EXCELLENCE IN LOGISTICS & SUPPLY CHAIN MANAGEMENT"

NITIE wore a festive look on the occasion of launching of the Centre of Excellence in the domain of Logistics and Supply Chain Management.

The centre was inaugurated by Shri Piyush Goyal, Honourable Minister of Commerce & Industry, the function was also graced by Chairman, NITIE Board of Governor, Mr Shashi Kiran Shetty. Prof. Manoj Kumar Tiwari, Director NITIE welcomed the guests and delivered the inaugural address. Mr. Goyal focused on "nascent stage" of India in industrial engineering study and research, which is essential for creating robust supply chains during his address. Shri Shashi Kiran Shetty spoke about the need for the CoE and the role it would play in elevating NITIE's contribution towards solving global supply chain challenges.

Given the significance of Logistics and Supply Chain Management in growth and development of the nation by improving competitiveness, maximising capabilities through improved logistics infrastructure and by obtaining the advantages of globalization, India will be able to address supply chain issues more efficiently.

The Centre is thus envisaged to steer the education, training, and research in the domain of Supply Chain by means of launching of cutting-edge programs, promote Digitisation, Analytics, and IOT

Applications, decision support Systems through AI/ML applications, Digital twin and Control towers to strengthen the monitoring and analysis of complex logistics Operations. Applied and actionable research and case studies will be the regular features of the centre and it will help in policy planning and capability building to strengthen the Multi Modal logistics services, warehousing, Ports and shipping, Transportation and packaging and entities of Value Chain to help in smoothing our complete supply chain and export potential.





OFFICIAL LANGUAGE IMPLEMENTATION

OFFICIAL LANGUAGE ACTIVITIES

Hindi Fortnight Celebrations - 2021

NITIE celebrated Hindi Fortnight from 1st September to 15th September 2021. Various competitions were organised during the programme for faculty members, officers, staff and students.

- Essay writing,
- Memory Power,
- Cross Word Puzzle,
- Questionnaires (About office),
- Noting Writing,
- Hindi Stenography,
- Hindi Typing,
- Photo Story Writing,
- Self-written Poetry,
- Legible Handwriting,
- Dictation Competition

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Pledge-taking ceremony of Hindi Day by Prof. Manoj Kumar Tiwari, Director, NITIE



Pledge-taking ceremony of Hindi Day by Prof. Manoj Kumar Tiwari, Director, NITIE

Prof. Manoj Kumar Tiwari, Director, NITIE, appreciated the Officers and the staff of the Institute for using Hindi in their work and congratulated the winners of the competitions of Hindi Fortnight. The Director's message was issued on 14th September 2021 on the occasion of Hindi Day, and as per the guidelines of the Ministry of Home Affairs, Department of Official Language, the employees of the Institute took the pledge of Official Language Hindi at NITIE Lawn.

Dr Basavaraj Swamy, Registrar, NITIE, expressed his commitment to propagate the use of the Official Language, Hindi, in the Institute and congratulated all the winners. Md. Aftab Alam, Hindi Officer, conducted the programme successfully and proposed a vote of thanks.



Participants in Essay Writing Competition Participants of the Questionnaire Competition



Participants in Essay Writing Competition
Participants of the Questionnaire Competition



OFFICIAL LANGUAGE SEMINAR / HASYA KAVITA PATH AND VALEDICTORY FUNCTION OF HINDI FORTNIGHT 2021

NITIE conducted an Official Language Seminar, Hasya Kavita Patha and the valedictory function of Hindi Fortnight on 26th October 2021. The prizes and letters of appreciation to the winners of various Hindi competitions were distributed by the chief guest, Prof. Karuna Shankar Upadhyay, HOD-Hindi, Mumbai University, Prof. Padmanav Acharya, Dean (Academic) and Dr Basavaraj Swamy, Registrar of the Institute.

Prof. Karuna Shankar Upadhyay congratulated the winners of the competitions of Hindi fortnight and appreciated all for the regular use of Hindi. On this occasion, comic-satire poet and lyricist Shri Mahesh Dubey mesmerized the audience with his comic-satire poems.



Prof. Karuna Shankar Upadhyay, HOD (Hindi), University of Mumbai, addressing the occasion of the Hindi Fortnight Award Ceremony and Official Language Seminar. On the dais, Prof. Padmanav Acharya, Dean (Acad), Dr Basavaraj Swamy, Registrar, NITIE, Comedy Satire Poet/Lyricist Mr Mahesh Dubey and Aftab Alam, Hindi Officer are present.

Prof. Padmanav Acharya, Dean(Acad), NITIE, appreciated the Officers and the staff of the Institute for using Hindi in their work and congratulated the winners of the competitions of Hindi Fortnight.

Dr Basavaraj Swamy, Registrar, NITIE, expressed his commitment to propagate the use of the Official Language, Hindi, in the Institute and congratulated all the winners. Md. Aftab Alam, Hindi Officer,



Prof. Padmanav Acharya, Dean (Acad), NITIE, addressing the occasion of the Hindi Fortnight Award Ceremony and Official Language Seminar at NITIE.

conducted the programme successfully, and Dr Vishnu Patankar proposed a vote of thanks.

WORKSHOP ON "EXCELLENCE IN COMMUNICATION" @ NITIE

NITIE conducted an online workshop on "Excellence in Communication" on 21st December 2021 under Town Official Language Implementation Committee (TOLIC), Mumbai North. Prof. Manoj Kumar Tiwari, Director, NITIE, inaugurated the workshop. Dr Basavaraj Swamy, the Registrar, welcomed all the participants and appealed to take advantage of this workshop. About 65 Executives, Official Language Officers from various Government Offices & Organizations participated in it.

Prof. Manoj Kumar Tiwari, Director, NITIE, highlighted the importance of Communication Skills. He said that communication plays a very important role in one's life. "Excellence in Communication" is an endeavour that aims at working on organizational & personal communication challenges. Constant engineering of our training method has enriched the learning experiences of our participants.

On this occasion, Shri Amitabh Kumar, President, TOLIC and DG, Directorate General of Shipping, Mumbai, emphasized the importance of "Communication Skills" and requested all the participants to practice them in their homes & offices. He said this program shall help the participants strengthen their communication effectively in their personal and professional life.





A scene of Workshop on "Excellence in Communication" conducted at NITIE, Mumbai.

Prof. Nikhil Mehta, Assoc. Professor NITIE & Course leader of this workshop, delivered lectures on Communication skills, Personality Development, Understanding Self, and Understanding Others.

Mohd. Aftab Alam, Hindi Officer, conducted the workshop successfully. The workshop ended with a vote of thanks by Shri Vimlendra Pal Singh Bhadoria, Member-Secretary, TOLIC (North Mumbai).

OFFICIAL LANGUAGE IMPLEMENTATION COMMITTEE & HINDI CO-ORDINATION COMMITTEE MEETINGS:

NITIE conducted Two joint meetings of the "Official Language Implementation Committee" and "Hindi Coordination Committee" constituted for the implementation of the Official Language Hindi in the Institute on 24th August 2021 and 32nd December 2021. Prof. VB Khanapuri, Dean (SRIC) and Dr Basavaraj Swamy, Registrar, NITIE, presided over the meeting. The Committee discussed in detail in meetings, and appropriate decisions were taken regarding implementing the Official Language, Hindi, in the Institute.

HINDI WORKSHOP

A one-day Hindi Workshop was organized in NITIE on 9^{th} March 2022. Twelve Officers / Employees of the Institute participated in it. The eminent personalities working for the progress of Hindi



Dr Rakesh Kumar, Deputy Director (West), Central Hindi Training Su-Institute, Ministry of Home Affairs, Govt. of India, addressing the participants of the Hindi Workshop.

delivered lectures on various subjects, i.e. Official Language Hindi and Technical Facilities; Use of Hindi in Official Correspondence; Defined Terminology and Correct use of Grammar & Spelling in Hindi. Dr Arun Vishwakarma, Dr VA Patankar, Shri LV Varthe, Shri AP Gadikar, Mrs Reshma Kamble, Shri RH Gawas, Mrs Archana Padman, Shri SA Naik, Shri Ram Singh Rawat, Shri PB Parab, Shri M Lachiram and Shri YH Ayir were present in this workshop. Md. Aftab Alam, Hindi Officer, NITIE, conducted the programme and gave the vote of thanks.

HINDI TYPING TRAINING ON COMPUTER

Three LDC of the Institute, i.e. Shri M. Lachiram, Shri YH Ayir and Shri Syed Muqthar, have been nominated for online Hindi Typing Training on Computer from 17th February 2022 by Central Hindi Training Sub Institute, Ministry for Home Affairs, Official Language Department, Belapur CBD, Navi Mumbai.

ATTENDED CONFERENCES / MEETINGS / WORKSHOPS, ETC

Dr. Basavaraj Swamy, Registrar

(i) Participated in One-day Liaison Officers (Official Language) meeting organised by Hindi Teaching Scheme and Central Hindi Teaching Sub-Institute, Ministry of Home Affairs, Deptt of Official Language, Govt. of India at CBD Belapur, Navi Mumbai on 8th July 2021.



- (ii) Participated in half yearly online meeting organized by Town Official Language Implementation Committee (TOLIC), North Mumbai, at Directorate General of Shipping, Govt. of India, Kanjur Marg (East), Mumbai on 24th August 2021.
- (iii) Participated in Hindi Diwas and Rajbhasha Keerti Award function organized by Ministry of Home Affairs, Deptt of Official Language, Govt. of India at Vigyan Bhavan, New Delhi on 14th September 2021.
- (iv) Participated in 29th "Aashirwad Rajbhasha Award" function organized by Aashirwad Organisation at Darbar Hall, Rajbhavan, Mumbai on 29th September 2021.

Prof. Nikhil K. Mehta, Assoc. Professor

Participated in Hindi Diwas and Rajbhasha Keerti Award function organized by Ministry of Home Affairs, Deptt of Official Language, Govt. of India at Vigyan Bhavan, New Delhi on 14th September 2021.

Md. Aftab Alam, Hindi Officer

- (i) Participated in One-day Liaison Officers (Official Language) meeting organised by Hindi Teaching Scheme and Central Hindi Teaching Sub-Institute, Ministry of Home Affairs, Deptt of Official Language, Govt. of India at CBD Belapur, Navi Mumbai on 8th July 2021.
- (ii) Participated in half yearly online meeting organized by Town Official Language Implementation Committee (TOLIC), North Mumbai (Offices) at Directorate General of Shipping, Govt. of India, Kanjur Marg (East), Mumbai on 24th August 2021.
- (iii) Participated in Hindi Diwas and Rajbhasha Keerti Award function organized by Ministry of Home Affairs, Deptt of Official Language, Govt. of India at Vigyan Bhavan, New Delhi on 14th September 2021.
- (iv) Participated in 29th "Aashirwad Rajbhasha Award" function organised by Aashirwad Organisation at Darbar Hall, Rajbhavan, Mumbai on 29th September 2021.



VIGILANCE AWARENESS WEEK

The Vigilance Awareness Week was observed from 26th October 2021 to 1st November 2021 with the theme "Independent India @ 75: Self Reliance with Integrity".

The Observance of Vigilance Awareness Week (VAW) commenced with the Integrity Pledge. Prof. Manoj Kumar Tiwari, Honourable Director, NITIE, Mumbai, read the pledge at NITIE Lawns.

All the faculty members, officers, staff, and students actively participated during the event. COVID-19 guidelines issued by the Government of India. An e-integrity pledge was also taken by the students and faculty members and was publicized amongst all faculty members, staff and students to elicit wider participation.













After taking the Integrity pledge, the Director urged all the employees to adopt good practices and systemic improvements, stressing the vision of a Vigilant India that is moving towards self-reliance with integrity. The Chairman Vigilance Awareness Committee also urged the employees to adhere to the laws and regulations and maintain integrity in discharging their duties. During the observance week, the following activities were carried out:

- 1. Brief guidelines on the ethics to be followed by each employee while discharging their duties were circulated to all the Departments/Sections on the advice of the Director.
- 2. To spread awareness regarding the provisions under the PIPDI resolution as well as all related information for wider publicity, the Vigilance Awareness week Committee organized various competitions and events:
 - a. The poster displays. The theme of the poster display was "Complaints under PIDPI (Public Interest Disclosure and Protection of Informers)" and "Independent India @ 75: Self Reliance with Integrity".
 - Slogan competition amongst the employees and students of the Institute was organized on the theme "Independent India @ 75: Self Reliance with Integrity". All the employees and students actively participated in the slogan competition, and a prize of Rs.1000/- each for the best three Slogans was proclaimed in the category of employees and students, respectively.
 - c. A display of Banners and Posters in ALB Foyer, Administration & Training. Block and Book Exhibition in ALB Foyer was organized from 26.10.2021 to 01.11.2021.









- 3. Slogan competition amongst the employees and students of the Institute was organized on the theme "Independent India @ 75: Self Reliance with Integrity". All the employees and students actively participated in the slogan competition, and a prize of Rs.1000/- each for the best three Slogans was proclaimed in the category of employees and students, respectively.
- 4. The compliance guideline was circulated in the Department/Sections for the needful.



NITIE WELFARE ACTIVITIES & EVENTS

Elimination of single use of plastic- (02 April 2021)-



It's time to learn to respect our planet, and plastic is the biggest enemy in our pursuit of a sustainable planet. So. NITIE. Mumbai

organized an online pledge-taking ceremony" to ban single use of plastic in the Campus, households, etc." Subsequently, the entire Campus geared up to clean the Campus for collecting plastic from every household, hostel, etc.

International Yoga Day (21 June 2021)

NITIE, Mumbai, celebrated the 7th International Yoga Day on 21 June 2021 with Kaivalyadham Yoga Institute. Owing to the pandemic situation, NITIE organized online programs. This year the theme of the session was "**Be with Yoga, Be at Home**".

Ms Madhoo Shah, the famous Bollywood Artist, was invited as our motivational speaker. Mr Ravi Dixit, Joint Director Kaivalyadham, and Prof Manoj Kumar Tiwari, Director, NITIE, inspired all the participants with their opening remarks. To build enthusiasm, we initiated an online session on 19 June 2021 by Mr Sanjiv Dwivedi and Ms Sonal Rajput, Yoga Trainer, Kaivalyadham. In this session, participants learned general guidelines for Yoga practices to be followed at home, followed by the microcirculation training session. We had invited 1-minute videos from students, employees, and their family members. NITIE Rotaract Club and Team Dramatix coordinated the whole event.

Independence Day Celebration (15 August 2021)

To celebrate the 75th Independence Day at NITIE-Azadi Ka Amrit Mahotsav (Fit India freedom run 2.0), the National Institute of Industrial Engineering, Mumbai, organized a Campus Marathon and Relay race. The Sports Committee, NITIE, initiated the proceedings under the guidance of Prof. Nikhil







K Mehta and Prof. Vidyadhar Gedam (Sports Committee In-charge).

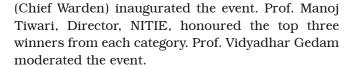
Over 100 students, faculty members, officers, staff members, and campus residents enthusiastically participated in a 3.5 km run. The relay race was also introduced this year. Prof. Hema Date (Dean, Student Affairs) and Prof. Utpal Chattopadhyay











The Institute organised cultural programs to celebrate the 75th Independence Day at NITIE-Azadi Ka Amrit Mahotsav. The Cultural Committee, NITIE, initiated the proceedings under the guidance of Prof. Utpal Chattopadhyay and Prof. Ajay Panda and Prof. Jinil Persis Devarajan (Cultural Committee In-charge).







Over 100 students, faculty members, officers, staff members, and campus residents enthusiastically participated in various cultural programs. Prof. Hema Date, Dean (SA), motivated the participants.

Prof. Manoj Tiwari, Director, NITIE, inaugurated the event. The event was moderated by student coordinators Mr Smarth Kakkar and Ms Mahima Gupta. Prize distribution was done in the gracious presence of all the deans. Prof. Nikhil K Mehta proposed the vote of thanks.



Teacher's Day (05 September 2021)

The Cultural Committee, National Institute of Industrial Engineering Mumbai, organized Teacher's Day Celebrations on 5th September 2021 to pay respect to all our faculty members for their tireless efforts on behalf of the entire NITIE Student Fraternity.

The event was organized under Prof. Ajay Kumar Panda's guidance and Prof. Jinil Persis Devarajan (Cultural Committee In-charge).







After Deep Prajjwalan, Hon'ble Director Prof. Manoj Tiwari, Dean (Academics) Prof. Padmanav Acharya, Dean (Students Affairs) Prof. Hema Date, Dean (Alumni Affairs and International Relations) Prof. Shirish Sangle and Dean (SRIC) Prof. Vivekanand Khanapuri addressed the gathering by their insightful thoughts and shared memories of their favourite teacher moment.

Engineer's Day (15 Sep 2021)

IISE-NITIE Chapter celebrated Engineer's Day on 15th September 2021 as a tribute to one of the first and finest Engineers India has produced, Bharat Ratna Sir M. Visvesvaraya. Prof. Manoj Tiwari, Director, of the National Institute of Industrial Engineering, delivered a welcome address and opening remarks. He explained the significance of Engineer's Day and the legendary contribution of Sir M. Visveswaraya. He also highlighted the various activities of the IISE-NITIE Chapter. Prof. Conrad Tucker, and Arthur Hamerschlag, Career Development Professor, Mechanical Engineering & Machine Learning, Carnegie Mellon University, Pittsburgh, USA, delivered a keynote address. He enlightened the audience on 'AI/ML for Engineering System Design and Realization.' Mr Amit Supe, Business Consultant, EY LLP, delivered a keynote address. He enlightened the audience on 'Opportunities and Challenges in Industry 4.0 implementation for enhancing Business Performance'. Prof. Bopaya Bidanda, President of the Institute of Industrial & System Engineers (IISE), and Ernest Roth, Professor & Department Chair of Industrial Engineering at the University of Pittsburgh, explained the role of an industrial & systems engineering discipline in national development. He has also narrated various activities of IISE. The talks were very innovative, research-oriented, inspiring for industrial engineers, and were well appreciated by the audience. Prof. Balkrishna Eknath Narkhede, an IISE-NITIE Chapter Coordinator, expressed the Vote of Thanks. Students, Faculty Members, Alumni, Industry Practitioners and IISE Members attended this program.





Republic Day Celebration (26 January 2022)

National Institute of Industrial Engineering (NITIE), Mumbai, celebrated the 73rd Republic Day on 26th January 2022 at NITIE Campus in a grand manner. Per the guidelines of Covid-19, preventive measures were followed during the Program, like wearing a mask, hand sanitization maintaining physical distance, etc.



The flag hoisting ceremony was done by Prof. Manoj Tiwari, Director, NITIE, at 9.00 am on the lawn facing Vihar Lake. On this occasion, a Mass singing of the National Anthem, March past, by NITIE Security personnel was conducted. Dr Basavaraj Swamy, Registrar, NITIE, led the mass reading of the preamble of the Constitution.

Prof. Manoj Kumar Tiwari, Director, NITIE, presided over the function and inspired the audience by enlightening the importance of Republic Day. He also shared his views regarding the various initiatives at NITIE during COVID-19 and how NITIE handled



the major challenges to its academic processes. The gathering was also addressed by Prof. T. Prasad, Prof. Ranjan Chaudhuri, Prof. Ranjani K.S., Dr Utpal Debnath, and Dr Vishnu Patankar. The Program was well supported by NITIE Faculty, Officers, Staff and their family members, PGP, and Fellow Students.

On this occasion, the meritorious children of NITIE employees who passed with excellent marks in classes 10th and 12th were awarded cash prizes.

Women Development Cell-International Women's Day celebration (28 Feb – 06 March 2022)

The NITIE Women Development Cell, National Institute of Industrial Engineering, Mumbai, organized and witnessed a grand week of festivities tailor-made to celebrate womanhood, educate society, and eradicate stereotypes.

The event line-up included activities ranging from wall painting to panel discussion to sapling distribution. The team ensured that no heart remained unruffled by the celebratory vibes of International Women's Day.

BreakTheBias: As we cease living up to stereotypes and #BreakTheBias, NITIE's Women Development Cell conducted the #BreakTheBias Challenge to cast light on the stories of students leaving biases with sheer delight on their journey to success.

Wall Painting: We let colours break the bias and sculpt the norm of today's sustainable, equal world. Cheered by the enthusiastic participation, we



ensured each painting adorned the walls of NITIE.

Nukkad:
The best medium of infotainment has been the performed arts, and the Nukkad



Natak performed at NITIE touched upon some critical social issues in a light-hearted drama.

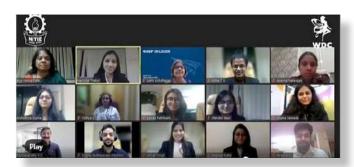


FinGyan: The event was an opportunity to reflect on the accomplishments and strive for a more incredible



momentum towards gender equality through financial literacy.

IWD Panel Discussion: NITIE's Women Development Cell was honoured to welcome a diverse panel of industry leaders who enlightened the family with their experiences & ideas on the role of women as agents of change and inspired us to make impactful decisions at the workplace.



Sapling Distribution: We at NITIE acknowledge the contribution of the entire female staff, who have always been instrumental in taking the institute to greater heights. A sapling was presented to them as a token of respect and appreciation.

As we come to a heart-warming closure to the celebrations of International Women's Day 2022, we look forward to a more promising and inspiring celebration whole throughout the year with greater zeal and a stronger resolve to appreciate and encourage the female spirit!





EK BHARAT SHRESHTA BHARAT

With the spirit of enhancing interaction & promoting mutual understanding between people of different states/UTs through the concept of state/UT pairing, NITIE, Mumbai is glad to conduct various activities under Ek Bharat Shreshta Bharat during the year 2021-22. Presently NITIE, Mumbai, is partnered with IIT, Bhubaneshwar.

Table 27. Activities under "Ek Bharat Shreshta Bharat"

Sn.	Category	Event Name	Date (From-To)
1	Azadi Ka Amrit Mahotsav Cultural Programme/Exchange	Traditional Snacks Festival	14-03-2022-14-03-2022
2	Azadi Ka Amrit Mahotsav Cultural Programme/Exchange	Interculture Event	14-03-2022-14-03-2022
3	Azadi Ka Amrit Mahotsav Cultural Programme/Exchange	Ataria Jam	27-02-2022-27-02-2022
4	Azadi Ka Amrit Mahotsav Cultural Programme/Exchange	Marathi Classes	02-03-2022-18-03-2022
5	Azadi Ka Amrit Mahotsav Others	Poster Contest-Rainwater harvesting	24-02-2022-15-03-2022
6	Azadi Ka Amrit Mahotsav Cultural Programme/Exchange	Shivaji Jayanti	19-02-2022-20-02-2022
7	Azadi Ka Amrit Mahotsav Cultural Programme/Exchange	Cultural Competition-Music & Dance	24-01-2022-31-01-2022
8	Jal Shakti Abhiyan Awareness Activities	NITIE EBSB Water Harvesting Quiz	30-01-2021-05-01-2022
9	Utsavs and Mahotsavs Festival celebration	Navratri, Dashera and Diwali celebrations	09-10-2021-09-11-2021
10	EBSB Day / EBSB Club	Poetry on Indian Culture -Hindi Diwas	14-09-2021-06-10-2021
11	Azadi Ka Amrit Mahotsav Others	Azadi Ka Amrit Mahotsav Cultural Programme/Exchange	15-08-2021-16-08-2021
12	EBSB Day / EBSB Club	NITIE Students as budding Techno-managers (in Regional Language)	15-08-2021-16-08-2021
13	EBSB Day / EBSB Club	EBSB ORIENTATION PROGRAMME FOR JUNIORS-2021	28-07-2021-28-07-2021
14	Online Interactions Online Awareness Activity	Online Multilingual Yoga Quiz	21-06-2021-21-06-2021
15	Online Interactions Online Awareness Activity	Elimination of Single-Use Plastic Pledge	02-04-2021-09-04-2021





















FIT INDIA MOVEMENT

To bring about behavioural changes and move towards a more physically active lifestyle, Fit India Team at NITIE, Mumbai, has conducted various activities during the year 2022.



















Table 28. Fit India Movement

Sn.	Category	Event Name	Date/Duration of Event
1	Fit India Initiative	Badminton Competition	12-01-2022 - 15-01-2022
2	Fit India Initiative	75 Crore Suryanamaskar	4-02-2022
3	Fit India Initiative	Volleyball Competition	16-03-2022 - 20-03-2022
4	Fit India Initiative	Yoga Day	21-06-2022
5	Fit India Initiative	Table Tennis Competition	9-07-2022 - 11-07-2022
6	Fit India Initiative	Chess Competition	6-08-2022 - 7-08-2022
7	Fit India Initiative	Carrom Competition	22-09-2022 - 24-09-2022

ANNUAL ACCOUNTS



Annual Report 2021-2022



ANNUAL ACCOUNTS

For the financial year 2021-2022, the Ministry of Education (MoE) has been sanctioned an amount of Rs. 53,40,00,000/-(Rs 5340.00 lakhs) towards Grant-in-Aid to the Institute. The details are as below:

Grant in Aid - An amount of Rs. 19,40,00,000/- (Rupees Nineteen Crore Forty Lakhs Only) under OH-31 (Non salary), Rs.1,00,00,000/- (One Crore Only) under OH-35 (Creation of Capital assets), and Rs 33,00,00,000/- (Rupees Thirty Three Crores Only) under OH-36 (Salary) was sanctioned during the Financial Year 2021-2022 by GOI, Ministry of Education (MoE) to NITIE, Mumbai.

Total Expenditure is Rs. 1,47,98,21,541/- (Under OH-31 is Rs. 99,67,54,256/-, For OH-35 is Rs. 13,72,19,695/- and OH-36 is Rs.34,58,47,590/-) Closing balance as on 31st March 2022 is Rs.(5,34,04,917/-) only.

The closing balance amount as on 31.03.2022 under OH-35 (Capital Assets) is overspent of Rs. (-) 12.72.19.695/and balance under OH-31(Non Salary) is NIL and under OH-36 (Salary) is Rs. 7.38.14.778/-

Details of Fund-Flow- Object head wise for the year 2021-22.

During the Year 2021-22, Institute has received Grant – in – Aid and the detailed fund flow statement is as follows:

Object Head	Opening Balance As on 1.4.2021 (Rs in actuals)	Grant Sanctioned / received during the year (Rs in actuals)	Internal Revenue Generated (Rs in actuals)	Total Gross (Rs in actuals)	Expenditure (Rs in actuals)	Balance as on 31.3.2022 (Rs in actuals)
OH 31 (Non Salary)	-	19,40,00,000	80,27,54,256	99,67,54,256	99,67,54,256	-
OH 35 (Creation of Capital)	(3,60,37,941)	1,00,00,000	3,60,37,941	1,00,00,000	13,72,19,695	(12,72,19,695)
OH 36 (Salary)	8,96,62,368	33,00,00,000	-	41,96,62,368	34,58,47,590	7,38,14,778
Total	5,36,24,427	53,40,00,000	83,87,92,197	1,42,64,16,624	1,47,98,21,541	(5,34,04,917)

Table 29. Details of Fund-Flow

OH - 31 (Non Salary)

Total expenditure accounted under this head is Rs. 99,67,54,256 /-, Actual expenditure of Rs. 60,26,00,152/-, An amount of Rs. 9,55,00,000/- has been transferred to building fund and Rs. 9,35,93,776/- has been transferred to contribution towards corpus / capital fund. An amount of Rs. 20,50,60,328/- earmarked towards the transfer to Endowment account from the Capital fund of Main Account. An amount of Rs 19,40,00,000/- (Grant in Aid from Ministry) is fully utilized and shown as expenditure on OH – 31 (Non Salary). The remaining expenditure amount is adjusted from Internal Revenue Generated (IRG) of the Institute and accordingly unspent balance shown is NIL.



OH - 35 (Creation of Capital Assets)

An amount of Rs 3,60,37,941/- which was overspent as on 31.3.2021 has been adjusted from the Internal Generated Revenue during the financial year 2021-2022 as per the fiscal policy of MoE vid F.No.3-6/2019/TS VIII dated 20.12.2019 and approval of BoG minutes no.155 dated 16.1.2020. During the year, the total expenditure accounted under this head is Rs 13,72,19,695/- (Please refer Schedule 4 Additions – Deletions during the year). The said amount also has been reflected under Schedule 1 towards the extent of utilized amount for Capital Expenditure during the year 2021-2022. **An amount of Rs (12,72,19,695) is reflected as overspent as on 31.3.2022 which will get adjusted during the next Financial year 2022-2023.** It is expected that certain plan component as a supplementary grant for the overspent of the previous year will be receive from Ministry.

OH - 36(Salary)

An amount of Rs 34,58,47,590/- under this head is bifurcated from Income and Expenditure as expenditure (please refer to Schedule 15). Since pension and exgratia are the component of OH 31, same has been excluded from Schedule 15 (44,51,07,376-9,89,35,997-3,23,789 = 34,58,47,590). **An amount of Rs 7,38,14,778**/- **is the unspent balance as on 31.3.2022.**

Details of Bank Accounts:

The Institute maintains separate Bank account for the funds received from government under Plan (OH-35) and Non Plan grants (OH-31& OH-36). Funds are banked at Canara Bank and State Bank of India. Details of all operating accounts are mentioned below.

Table 30. Details of Bank Accounts

Sr. No.	Name of the Account	Bank	Operational Purpose
1	NITIE Main A/c (Savings)	Canara Bank, IIT, Mumbai	For receiving grants from Ministry
2	NITIE Main A/c (Non Plan)	State Bank of India, Vihar Lake, Mumbai	Recurring Expenditure
3	NITIE Main A/c (Plan)	Canara Bank, IIT, Mumbai	Capital Expenditure
4	NITIE Avartan Account (Savings)	Canara Bank, IIT, Mumbai	Recurring expenditure – Student Activities
5	NITIE BCPAAA A/c	State Bank of India, Vihar Lake, Mumbai	Internal account for Misc. Activities.
6	NITIE DDF A/c	State Bank of India, Vihar Lake, Mumbai	Director Discretionary Fund
7	NITIE Endowment Fund A/c	State Bank of India, Vihar Lake, Mumbai	Endowment Fund through Surplus
8	NITIE Post-Retirement Medical Scheme (PRMS) A/c	State Bank of India, Vihar Lake, Mumbai	Medical Benefits to Retired Employees
9	NITIE GPF A/c	State Bank of India, Vihar Lake, Mumbai	GPF of Employees



Sr. No.	Name of the Account	Bank	Operational Purpose
10	NITIE CPF A/c	State Bank of India, Vihar Lake, Mumbai	CPF of Employees
11	NITIE TIFAC – CORE	State Bank of India, Vihar Lake, Mumbai	Project Account
12	NITIE IIPC A/c	State Bank of India, Vihar Lake, Mumbai	Project Account

The Institute has opened separate Saving Bank Account for receiving Grant-in-Aid from the Ministry, as per the instructions received from MHRD & subsequent approval of Chairman, BOG NITIE, Mumbai. Saving Account no. 2724101113266 opened in the name of "NITIE Main Account" at Canara Bank, IIT Powai, Mumbai.

As per the revised formats of Financial statement for Central Institutions, the Institutes prepares separate Financial statement of Annual Accounts for all these accounts. The Institute maintains Receipts & Payments Accounts, Income & Expenditure Accounts and Balance Sheet in respect of the following accounts.

Table 31: Institute Account

Sr. No	Name of the Account
1	NITIE Main A/c - Plan and Non-Plan Account
2	NITIE BCPAAA A/c - Boarding Charges for Participants and Aluminise Amenities Account
3	NITIE Endowment Fund Account
4	NITIE DDF A/c - Director Discretionary Fund Account

Table 32: Internal Accounts

Sr. No	Name of the Account
1	NITIE GPF A/c and CPF A/c - General Provident Fund Accounts and Contributory Provident Fund Account
2	NITIE PRMS A/c - Post Retirement Medical Scheme Account
3	NITIE Projects A/c - TIFAC CORE & IIPC Account

The financial statement of the Institute Accounts for the financial year 2021-22 is annexed herewith.

Financial Statement for the Financial Year

2021-2022

Main Account (Plan & Non-Plan)

- 1. Balance Sheet
- 2. Income & Expenditure Account
- 3. Receipts & Payments Account (With All Schedules)



NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING Vihar Lake, Mumbai – 400 087



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NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING (NITIE), MUMBAI BALANCE SHEET AS AT 31ST MARCH, 2022

(Amount in Rune

COTTD/PE OF PITAINS	Schedule	Current Year	Previous Year
SOUNCES OF FUNDS	No.	2021-2022	2020-2021
CORPUS/CAPITAL FUND	1	1,98,96,90,525	1,66,78,16,726
DESIGNATED / EARMARKED / ENDOWMENT FUNDS	2	34,70,28,816	27,91,86,173
CURRENT LIABILITIES & PROVISIONS	3	24,23,28,419	37,30,80,356
TOTAL		2,57,90,47,760	2,57,90,47,760 2,32,00,83,254

APPLICATION OF FUNDS	Schedule No.	Current Year 2021-2022	Previous Year 2020-2021
FIXED ASSETS	4		The state of the s
Tangible Assets	it.	1,10,32,17,723	97,68,54,832
Intangible Assets	***	2,63,55,850	1,36,54,506
Capital Work In Progress		7,40,33,130	16,86,30,040
INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS	5		
Long Term		t	, T
Short Term		5,53,40,091	4,79,38,825
INVESTMENTS - OTHERS	9	95,41,86,414	84,05,02,121
CURRENT ASSETS	7	16,24,44,309	14,12,18,923
LOANS, ADVANCES & DEPOSITS	∞	20,34,70,243	13,12,84,006
TOTAL		2,57,90,47,760	2,32,00,83,254

DIRECTOR

CHARTERED ACCOUNTANT

DIRECTOR

COUNTS) / DR (ACCOUNTS)

INTERNAL AUDITOR



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INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2022 NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING

Dontford	Schedule	Current Year	Previous Year
Faruculars	No.	2021-2022	2020-2021
INCOME			
Academic Receipts	6	68,04,19,770	63,46,73,634
Grants / Subsidies	10	61,36,62,368	57,97,00,000
Income From Investment	Π	5,20,18,999	4,53,03,184
Interest Earned	12	1,62,54,457	1,22,754
Other Income	13	5,40,61,031	1,22,55,536
Prior Period Income	14	1	1
TOTAL (A)		1,41,64,16,624	1,27,20,55,109
EXPENDITURE			
Staff Payments & Benefits (Establishment Expenses)	1.5	44,51,07,376	40,68,49,960
Academic Expenses	16	18,91,20,211	14,61,98,851
Administrative and General Expenses	17	6,69,89,455	5,54,29,708
Transportation Expenses	18	41,84,645	30,09,830
Repairs & Maintenance	- 19	11,10,61,741	12,02,02,443
Finance Costs	20	1,07,021	11,22,187
Depreciation	4	8,82,79,547	5,85,04,720
Other Expenses	21	4,34,53,085	6,76,71,636
Prior Period Expenses	22	1,44,660	1,66,544
Total (B)		94,84,47,742	85,91,55,878
Balance being excess of Income over Expenditure (A-B)		46,79,68,882	41,28,99,231
Transfer to / from Designated Fund			
Building Fund		9,55,00,000	9,55,00,000
Others (Contribution towards Corpus / Capital Fund)		9,35,93,776	8,25,79,846
Others (Unutilised Grant - OH-36 - Salary Component		7,38,14,778	8,96,62,368
Balance being Surplus / (Deficit) carried to Capital Fund		20.50.60.328	14.51.57,017

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NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING (NITIE), MUMBAI RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2022

32

				,	Amount in Runees
Status	Current Year	Previous Year	An APA TO NATURAL AND	Current Year	Previous Year
	2021-2022	2020-2021		2021-2022	2020-2021
1. Opening Balances			I. Expenses		
a) Cash Balances	2,31,066	1,10,159	a) Establishment Expenses	41,00,71,629	37,63,32,479
b) Bank Balance			b) Academic Expenses	26,60,51,369	23,38,34,626
ii. In Current Accounts			c) Administrative Expenses	6,03,45,791	4,79,58,486
SBI - Main Account	2,68,15,806	2,32,58,460	d) Transportation Expenses	38,59,613	24,98,701
Canara Bank - Plan Account	83,00,603	2,13,30,747	1	8,26,54,303	5,60,27,573
Canara Bank - Avartan Account	30,53,867	14,48,473	5	2,19,571	2,64,744
ii. In Deposit Accounts	,		-		
iii. Savings accounts					131
CROW A/C-3 PRINCIPA	9,55,00,000	I			
Canara Bank - GRANT RECEIVABLE ACCOU	1	3			
Canara Bank - INTEREST REPAYMENT A/C	•	E			
II. Grants Received			 Payments against Earmarked / Endowment 1 	17,84,29,323	42,18,09,000
(a) From Government of India	53,40,00,000	87,57,00,000			
b) From State Government	1				
C) From other sources	1	1			
III. Academic Receipts	75,65,08,618	74,58,42,773	III. Payments against Sponsored Projects / Schemes	27,30,020	8,64,074
IV. Receipts against Earmarked / Endowment Funds	7,48,85,652	14,46,20,885	IV. Payments against Sponsored Fellowships / Scholarships	1,02,35,808	45,77,040
V. Receipts against Sponsored Projects / Schemes	7,03,064	88,82,254	V. Investments and Deposits made	1	1
	•		a) Out of Earmarked/Endowments funds		
			 b) Out of own funds (Investments - Others) 	1,32,86,66,951	1,41,88,77,270
VI. Receipts against sponsored Fellowships and Scholarships	60,31,272	1,34,06,968	1,34,06,968 VI. Term Deposits with Scheduled Banks		
			40114		
VII. Income on Investments from		egodyten eind	VII. Expenditure on Fixed Asset and affinal		
a) Earmarked/Endowment funds			a) Fixed Assets	7.01.87.199	5 45 20 607
l		•		1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	201011111





b) Other Investments			b) Capital Works - in - Progress		-
RECEIPTS	Current Year 2021-2022	Previous Year 2020-2021	PAYMENTS	Current Year 2021-2022	Previous Year 2020-2021
VIII. Interest received on			VIII. Other Payments including statutory paymen	в,85,76,859	10,82,27,632
a) Bank Deposits	4,57,07,470	4,14,89,031	entransis entransis entransis en la companya de la companya del companya de la companya de la companya del companya de la companya del la companya de la com		
b) Loans and Advances	1,53,804	1,70,437			
c) Savings Bank Accounts	3,89,806	7,75,545			
IX. Investments encashed	1,21,45,37,658	1,06,32,99,129	IX. Refunds of Grants		
X. Term Deposits with Scheduled Banks encashed		*	X. Deposits and Advances	20,73,43,213	8,50,40,622
XI. Other income (including Prior Period Income)	1,53,72,347	1,13,12,670	XI. Other Payments	41,75,30,569	65,20,90,203
XII. Deposits and Advances	6,27,74,976	3,82,99,721	XII. Closing balances		
			a) Cash in band	35,243	2,31,066
		the state of the s	- 1		
			i. In Current Accounts	Dec 20	
			SBI - Main Account	44,13,438	2,68,15,806
			Canara Bank - Plan Account	22,51,595	83,00,603
			Canara Bank - Avartan Account	30,46,643	30,53,867
**************************************			iii. Savings accounts		
	+41100		Canara Bank - ESCROW A/C-3 PRINCIPAL R	15,10,00,000	9,55,00,000
			Canara Bank - GRANT RECEIVABLE ACCOU		1,000
			Canara Bank - INTEREST REPAYMENT A/C	4,71,367	ů.
XIII. Miscellaneous Receipts including	LEY OC FOO	212 01 01 11			
0	7,54,29,047	CI,,81,81,11			
XIV. Any Other Receipts	34,97,24,851	49,50,59,430			
TOTAL	3,28,81,20,505	3,59,68,25,397	TOTAL	3,28,81,20,505	3,59,68,25,397
And	28		The state of the s	And the second s	3
GHARPERD ACCOUNTANT	AR (FIN & ACCOUN	UNTS) / DR (ACCOUNTS)	NYS TRUE TO THE TRUE TO THE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRU		DIRECTOR
			· · · · · · · · · · · · · · · · · · ·		

Financial Statement for the Financial Year

2021-2022

BCPAAA

(Boarding Charges for Participants & Alluminies Amenities)

- 1. Balance Sheet
- 2. Income & Expenditure Account 3. Receipts & Payments Account

(With All Schedules)



NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING Vihar Lake, Mumbai – 400 087



34

NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING BALANCE SHEET AS AT 31ST MARCH, 2022

BCPAAA (BOARDING CHARGES FOR PARTICIPANTS & ALLUMINIES AMENITIES)

	THE PERSON NAMED IN		
SOURCES OF FUNDS	Schedule No,	Current year 2021-2022	Previous year 2020-2021
CORPUS / CAPITAL FUND	1	4,70,95,857	5,10,82,012
DESIGNATED / EARMARKED / ENDOWMENT FUNDS	C1	9,90,735	9,90,735
CURRENT LIABILITIES & PROVISIONS	cr;	27,48,414	28,20,668
TOTAL		5,08,35,006	5,48,93,415

The second secon		The same of the sa	And in case of the last of the
APPLICATION OF FUNDS	Schedule No.	Current year 2021-2022	Previous year 2020-2021
FIXED ASSETS			
Tangible Assets	4	43,68,291	45,62,665
Intangible Assets		ì	
Capital Work In Progress		8	
INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS	5		
Long Term		1	
Short Term		1	
INVESTMENTS - OTHERS	9	4,31,54,904	4,15,85,562
CURRENT ASSETS	7.	6,48,133	61,94,454
LOANS, ADVANCES & DEPOSITS	∞	26,63,678	25,50,734
TOTAL		5,08,35,006	5,48,93,415



DIRECTOR





HARTERED ACCOUNTANT INTERNAL AUDITOR

DIRECTOR

CHARTERED ACCOUNTANT INTERNAL AUDITOR



NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING

BCPAAA (BOARDING CHARGES FOR PARTICIPANTS & ALLUMINIES AMENITIES) INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2022

52

A TAX TO SERVICE AND A SERVICE	And the second of the second s	The second secon	(Amount in Kupees)
Particulars	Schedule No.	Current Year 2021-22	Previous Year 2020-21
INCOME			
Academic Receipts	6	ī	i
Grants / Subsidies	01		
Income From Investment	11	21,42,431	619,57,619
Interest Earned	12	The state of the s	
Other Income	13	5,73,753	12,31,768
Prior Period Income	14		8
TOTAL (A)		27,16,184	31,89,387
EXPENDITURE			
Staff Payments & Benefits (Establishment Expenses)	15	21,764	34,347
Academic Expenses	91		
Administrative and General Expenses	17	3,44,743	33,70,643
Transportation Expenses	18	t	E.
Repairs & Maintenance	10	r	6,765
Finance Costs	20		1
Depreciation	4	1,94,374	1,94,374
Other Expenses	21	ì	
Prior Period Expenses	22	61,41,458	
Total (B)		67,02,339	36,06,129
Balance being excess of Income over Expenditure(A-B)		(39,86,155)	(4,16,742)
Transfer to / from Designated Fund			
Building Fund			
Others(Specify)			1
Bance Being Surplus / (Deficit) carried to Capital Fund		(39,86,155)	(4,16,742)
The state of the s		Secretary and se	Committee of the contract of t

DIRECTOR



64

RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2022 BCPAAA (BOARDING CHARGES FOR PARTICIPANTS & ALLUMINIES AMENITIES) NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING

9.11.32,206	4.47.52.806	9 H 32 206 TOTAL	908 CZ LP P	TOTAL
		III. Savings accounts		Carry Statement and Control of the C
52,996	6,48,133			
	THE RESERVE	60		
	-	i, In Current Accounts		d) UBP Fees
		37,66,871 b) Bank balances	9,32,731	c) Others
		a)		b) Prior Period Income
		1,88,384 V. Closing Balances	8,70,992	a) Accrued Interest
3,16,108				VI. Other income
	74,499	8,38,22,376 e) Sundry Creditors	4,01,04,177	V. Investments encashed
42,632	43,704	29,15,466 d) Prior Period Expenditure	27,91,910	b) Other Investments
		ତ		a) Earmarked / Endowment funds
10,557	16,475	b) Newspaper & Magazine Expenses		1V. Income on Investments from
1,36,214	1,49,299	a) Telephone Expenses		III. Academie Receipts
The second secon		IV. Other Payments		c) From other sources
THE REAL PROPERTY.	The Manager	b) Capital Work-in-Progress		b) From State Government
		a) Fixed Assets		a) From Government of India
		Progress		11. Grants Received
8,29,79,842	4,31,54,904	b) Out of own funds (Investments - Others, Corpus fund))		iii. Savings accounts
1		a) Out of Barmarked/Endownment Fund		ii. In Deposit Accounts
	The second second	4,39,109 II. Investments and Deposits made	52,996	SBI
33,00,286	2,94,133	c) Administrative Expenses		i. In Current Accounts
PE-6342-W		b) Academic Expenses		b) Bank Balance
40,93,571	3,71,659	a) Establishment Expenses		a) Cash Balances
		1. Expenses		1. Opening Balances
2020-2021	2021-2022	Previous year 2020-2021 PAYMENTS	Current year 2021-2022	RECEIPTS

INTS) / DR (ACCOUNTED

CHARTERED ACCOUNTANT INTERNAL AUDITOR

Financial Statement for the Financial Year

2021-2022

ENDOWMENT FUND

- 1. Balance Sheet
- 2. Income & Expenditure Account
 - 3. Receipts & Payments Account



NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING Vihar Lake, Mumbai – 400 087



65

NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING (NITIE), MUMBAI BALANCE SHEET AS AT 31ST MARCH, 2022 ENDOWMENT FUND

Section of the Contract of the		COLUMN DESIGNATION OF THE PERSON NAMED IN COLUMN DESIGNATION OF THE PERS	Contraction of the Contraction o	The second secon	
Previous Year 2020-21	Liabilities	Current Year 2021-2022	Previous Year 2020-21	Assets	Current Year 2021-2022
	Corpus/ Capital Fund			Interest Accrued	
57,24,28,534	57,24,28,534 Opening Balance	57,24,28,534	10,98,84,677	10,98,84,677 Opening Balance	21,26,03,017
ī	Add/Less: During the year		10,46,91,581	10,46,91,581 Add: During the year	811,55,66,6
57,24,28,534	57,24,28,534 Closing Balance	57,24,28,534	(19,73,241)	(19,73,241) Less: Last year	(11,03,11,472)
			21,26,03,017		20,22,26,663
	Matching Grant				
9,64,81,000	9,64,81,000 Opening Balance	9,64,81,000		Investment	
1	Add/Less: During the year	1	2,09,81,04,308	2,09,81,04,308 Opening Balance	2,41,07,46,539
9,64,81,000	9.64,81,000 Closing Balance	9,64,81,000	2,28,91,00,197	2,28,91,00,197 Add: Invested during the year	1,65,46,46,000
			(1,97,64,57,966)	(1,97,64,57,966) Less: Encashed during the year	(1,39,79,35,543)
	Reserves & Surplus		2,41,07,46,539		2,66,74,56,996
1,54,18,28,380	,54,18,28,380 Opening Balance	1,95,46,47,725			
41,28,19,346	41,28,19,346 Add: Excess of Income over Expenditure	24,63,77,389		Bank Balance	
1,95,46,47,725	1,95,46,47,725 Closing Balance	2,20,10,25,114	2,07,704	SBI	2,50,990
2,62,35,57,260 TOTAL	TOTAL	2,86,99,34,649	2,62,35,57,260 TOTAL	TOTAL	2,86,99,34,649

QUNTS) / DR (ACCOUNTS)

DIRECTOR

INTERNAL AUDITOR



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INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2022 NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING (NITIE), MUMBAI ENDOWMENT FUND

And in concession for the last of the last	Company of the Compan	The same species and the same same same same same same same sam	The California of the Californ		
Previous Year 2020-2021	Expenditure	Current Year 2021-2022	Previous Year 2020-2021	Income	Current Year 2021-2022
ï	Interest Credited to Endowment	ı		Interest earned on Investment	
			3,21,40,990	3,21,40,990 Interest received during the year	14,17,55,879
	Other Expenses		10,46,91,581	10,46,91,581 Add: Interest accrued during the year	9,99,35,118
1,381	,381 Bank Charges	2,136		Add: Tax recovered on interest - Refund to be	r
			(19,73,241)	(19,73,241) Less: Interest accrued during previous year	(11,03,11,472)
			13,48,59,330		13,13,79,525
	A Control of the cont			Other Income	
			27,79,61,396	27,79,61,396 Misc. Receipts	11,50,00,000
41,28,19,346	41,28,19,346 Excess of Income over Expenditure	24,63,77,389			
41.28.20.726 TOTAL	TOTAL	24,63,79,525	41,28,20,726 TOTAL	TOTAL	24,63,79,525

DIRECTOR

AR (FIN & ACCOUNTS) / DR (ACCOUNTS)

MARKER B ACCOUNTANT INTERNAL AUDITOR



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RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2022 NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING (NITIE), MUMBAI

ENDOWMENT FUND

1,65,73,99,126	TOTAL	1,65,73,99,126 2,28,93,09,281 TOTAL	1,65,73,99,126	TOTAL	2,28,93,09,281 TOTAL
2,50,990	SBI	2,07,704	25,00,000	Transfer of Fund	,
	Closing Balance:	And the second s	11,50,00,000	Misc. Receipts	27,79,61,396
				Other Incomes	
		***************************************	14,17,55,879	3,21,40,990 Interest Received	3,21,40,990
25,00,000	Transfer of Fund	4			A Committee of the Comm
2,136	Miscellaneous Expenses	1,381	1,39,79,35,543	1,97,64,57,966 Investment Encashed	1,97,64,57,966
	Other Expenses				
		000	2,07,704	SBI	27,48,929 SBI
1,65,46,46,000	2,28,91,00,197 Investment during the year	2,28,91,00,197		Opening Balance	
Current Year 2021-2022	Payments	Previous Year 2020-2021	2021-2022	Receipts	Previous Year 2020-2021



AR (FIN & ACCOUNTS) / DR (ACCOUNTS)

DIRECTOR

CHARTERED ACCOUNTANT INTERNAL AUDITOR

Financial Statement for the Financial Year

2021-2022

DIRECTOR DISCRETIONARY FUND (DDF)

- 1. Balance Sheet
- 2. Income & Expenditure Account
 - 3. Receipts & Payments Account



NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING Vihar Lake, Mumbai – 400 087



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(Amount in Rupees)

NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING (NITIE), MUMBAI BALANCE SHEET AS AT 31ST MARCH, 2022

DIRECTOR DISCRETIONARY FUND (DDF)

2	LIABILITIES	2021-2022	2020-2021	ASSETS	2021-2022	
	Corpus Fund				Missions on Carleton Research and Control of Carleton Control of C	
1,40,82,363 Opening Balance	sening Balance	1,45,39,273		Interest Accrued		
4,56,910 Ad	4,56,910 Add: Excess of Income over Expenditure	1,12,856	4,95,177	Opening Balance	6,42,778	- 12000
97	Less: Excess of Expenditure over Income		2,44,528	2,44,528 Add: During the year	1,72,239	
1,45,39,273 Closing Balance	osing Balance	1,46,52,129	(96,927)	(96,927) Less: Last year	(2,44,528)	
	And the second s		6,42,778		5,70,489	
- 8	Reserves & Surplus					
				Investment		120041111
			1,26,35,934	,26,35,934 Opening Balance	1,35,87,866	
			2,18,18,400	2,18,18,400 Add: Invested during the year	1,36,65,000	
			(2,08,66,468)	2,08,66,468) Less: Encashed during the year	(1,38,29,806)	
			1,35,87,866		1,34,23,060	
-				Loans & Advances		
		polytime	66,500	66,500 Opening Balance	48,500	
			3,00,000	3,00,000 Add: Given during the year	5,80,000	
			(3,18,000)	(3,18,000) Less: Received back during the year	(64,500)	
			48,500		5,64,000	
				Bank Balance		
			2,60,129	SBI	94,580	
1 45,39,273 TOTAL)TAI.	1.46.52.129	1,45,39,273 TOTAL	TOTAL	1,46,52,129	





PUNTERNAL AUDITOR CHARTERED ACCOUNTANT



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INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2022 NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING (NITIE), MUMBAI

DIRECTOR DISCRETIONARY FUND (DDF)

24,81,806	6,89,473 TOTAL	6,89,473	24,81,896	TOTAL	6,89,473 TOTAL
			1,12,856	4,56,910 Excess of Income over Expenditure	4,56,910
,	Transfer of Funds	4			The second second
18,40,338	Other income	W.C. Shannandara	000,16	Transfer of runds	A CONTRACTOR OF THE PERSON NAMED IN
00000			000 10	7 99 6	
	Other Income		833	743 Misc. Expenses	743
6,41,468		6,89,473	22,34,365	2,25,925 Admn. Misc. Expenses	2,25,925
(2,44,528)	(96,927) Less: Interest accrued during previous year	(96,927)	,	Consultancy Share	-
1	Add: Tax recovered on interest - Refund to be	1	52,092	5,895 Out of Pocket Expenses	5,895
1,72,239	2,44,528 Add: Interest accrued during the year	2,44,528		Other Miscellaneous Expenses	
713757.00	5,41,872 Interest received during the year	5,41,872			And the latest designation of the latest des
	Interest earned on Investment			Interest Credited to DDF	,
Current Year 2021-2022	Ілсоте	Previous Year 2020-2021	Current Year 2021-2022	Expenditure	Previous Year 2020-2021

DIRECTOR





OACHARTERED ACCOUNTANT INTERNAL AUDITOR





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(Amount in Rupees)

RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2022 NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING (NITIE), MUMBAI DIRECTOR DISRETIONARY FUND (DDF)

Current Year 2021-2022	Previous Year 2020-2021	PAYMENTS	Current Year 2021-2022
2,60,129	2,18,18,400	2,18,18,400 Investment during the year	10 1
		Other Mise, Expenses	
 1,38,29,806	1	Refund of Loans & Advances	
	5,895	Out of Pocket Expenses	57,070
	2,25,925	Admn. Miscellaneous Expenses	22,34,365
4,69,652	743	Miscellaneous Expenses	833
2,44,105	3,00,000	Loans & Advances	5,80,000
18,40,338		Transfer of Funds	81,660
4,978			
64,500			
		Closing Balance	- Dil He
**********	2,60,129	SBI	94,580
1,67,13,508	2,26,11,092 TOTAL	TOTAL	1,67,13,508

DIRECTOR

AR (FIN. & ACCOUNTS) / DR (ACCOUNTS)

PUNE)* DYERNAL AUDITOR



FORM GFR-22



Annual Report 2021-2022



TABLE 33. INSTITUTE - EXTRACT IN FORM GFR - 22

APPENDIX TO THE Annual statement of the Accounts of the Institute - Extracts in form GFR -22 regarding assets of permanent value and machinery and equipment having a life of not less than 5 years and costing Rs. 10,000/- and above (each item)

FORM GFR - 22

Name of the Grantee Institution	: NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING
Brief Purpose of the grant	: FOR INFRASTRUCTURAL FACILITIES
Whether any condition regarding the right ownership of Government in the property other assets acquired out of the grant was o corporate in the grant in aid sanction	
Purpose for which utilized at present	: FOR ACQURING EQUIPMENT
Encumbered or not	: N. A.
Reason if encumbered	: N. A.
Reason and authority if any for disposal	: OBSOLETE

Sr.	Date	Particulars of Assets	Particular	s of supplier	Cost of the	Location of
No.			Name & Address	Bill No. and Date	Assets	Assets
			EQUIPMENT (& FILM		
1	15.4.2021	Split AC	ATS Aircon Pvt.Ltd	21-22/BKC/007 Date.7.4.2021	1618641.00	Estate (ELEC)
2	16.4.2021	Water Dispenser	JK Enterprises	JKE/21-22/19 Date.28.4.2021	20202.00	ALB
3	5.4.2021	CCTV Camera	Supreme Automation	SA/23/2021.22 Date.8.6.2021	202228.00	Registar Office
4	20.4.2021	Deep Freezer/Domestic Refrigerptor	Raunak Kitchen Equipments	66/Date.28.5.2021	138650.00	SRIC/MDPH
5	28.6.2021	Philips Respironics Everelo Oxygenerator	CR Meditech Pvt.Ltd	2021-22/123 Date.156.2021	75000.00	Dispensary
6	29.4.2021	Pump	Samson Trading Company	244 Date.16.6.2021	77000.00	Estate (ELEC)
7	15.6.2021	Water Dispenser	JK Enterprises	JKE/21-22/84 Date.17.7.2021	10100.00	SRIC/Pragati Vihar



Sr.	Date	Particulars of Assets	Particula	rs of supplier	Cost of the	Location of
No.			Name & Address	Bill No. and Date	Assets	Assets
8	28.6.2021	Water Dispenser	JK Enterprises	JKE/21-22/85 Date.17.7.2021	10100.00	AVGH
9	23.7.2021	Split AC 1.5 Ton	Manish Traders	21224 Date.2.4.2021	37999.00	CC
10	16.7.2021	CCTV Camera	Supreme Automation	SA/56/2021.22 Date.12.8.2021	132632.00	Security & Transport
11	7.7.2021	Glass Top Freezer (Capacity 535 Litters)	Raunak Kitchen Equipments	193 Date.16.8.2021	49324.00	SRIC
12	28.6.2021	Forbes Corona Guard	Unique Automation	9017 Date.28.7.2021	249570.00	Estate (ELEC)
13	7.9.2021	Hard Disk	Vgon Security & Intellignce Solutio	VSIS/21-22/1345 Date.14.9.2021	21901.00	Security & Transport
14	3.7.2021	Fire Extinguisher	Unique Automation	9023 Date.11.8.2021	445460.00	Estate (ELEC)
15	3.9.2021	CCTV Camera	Supreme Automation	SA/093/2021.22 Date.16.9.2021	244130.00	Security & Transport
16	6.10.2021	Water Dispenser	JK Enterprises	JKE/21-22/133 Date.13.10.2021	10100.00	ALB
17	27.8.2021	Open Gym	Fun Play Systems	FPSP337/21-22 Date.26.10.2021	497000.00	Estate (ELEC)
18	7.10.2021	LED Philips	Klosevn Royale	KR400 Date.23.10.2021	44789.00	Estate (ELEC)
19	1.10.2021	AC	Santosh Sales	1441/21-22 Date.22.10.2021	2739000.00	Estate (ELEC)
20	9.12.2021	CCTV Camera	Supreme Automation	SA/159/2021.22 Date.15.12.2021	27317.00	Security & Transport
21	21.10.2021	Fire Extinguisher	Securezone India Pvt Ltd	GEM 15846838 Date.30.10.2021	481722.00	Estate (ELEC)
22	22.11.2021	LED Streetlight	Klosevn Royale	KR431 Date.28.12.2021	1683000.00	Estate (ELEC)
23	22.10.2021	Printer Cum Photocopier	Unique Automation	9049 Date.9.11.2021	143835.00	Account
24	22.10.2021	Printer Cum Photocopier	Unique Automation	9050 Date.9.11.2021	132005.00	Admin
25	23.11.2021	UPS	Klosevn Royale	KR424 Date.21.12.2021	124200.00	Estate (ELEC)
26	21.10.2021	Sharp Photocopier Machine	Unique Automation	9074 Date.12.1.2022	247210.00	Acdamic



Sr.	Date	Particulars of Assets	Particular	s of supplier	Cost of the	Location of
No.			Name & Address	Bill No. and Date	Assets	Assets
27	28.12.2021	LG Refrigerator	Fair Vision	779 Date.31.12.2021	16500.00	Account
28	21.12.2021	LED light Fans & Geysers	BAG Electronice Technoloy	BAGET/21-22/093 Date.22.1.2022	146421.00	Estate (ELEC)
29	6.9.2021	Poles	Energy Green Techno	EGTPPL/21-22/096 Date.25.10.20	3559108.00	Estate (ELEC)
30	19.5.2021	TV	Mangal Trading	MTC/21-22/25	298850.00	Placement
31	5.7.2021	CCTV Camera	Supreme Automation	SA/035/21-22	94648.00	S&T
32	21.1.2021	Installation Charge	Megdhdoot Pumps and Service	460	250880.00	Estate (ELEC)
33	17.1.2022	Washing machine	Santosh Sales	2057/21-22 Date.3.2.2022	178000.00	PGPH
				TOTAL	14007522.00	
			COMPUTER PER	IPHERALS		
1	1.4.2021	Samsung Display LED	BAG Electrical Tech	BAGET/21-22/005/ Date.27.4.202	38,976	SRIC
2	27.4.2021	Printer HP	Aadinath peripherals consumables	APC/21-22/608 Date.30.4.2021	29,500	BS
3	23.4.2021	Adobe Acrobat Licenses	LDS Infotech Pvt Ltd	LDS/21-22/0276 Date.17.5.2021	1,267,202	CC
4	25.5.2021	Bloomberg Licenses	Bloomberg data services india	6750154158/ Date.16.2.2021	582,233.00	CC
5	1.6.2021	JMP Acadmic Suite	SAS Institute India Pvt Ltd	IN 10002290 Date.30.6.2021	197,650	CC
7	10.6.2021	Laptop	Maxmann Computer Industries	MCI/2106014 Date.23.6.2021	1,590,000	Admin
8	20.6.2021	Microsoft Volume Licenses Renewal	Cloudstrats Technologies	TI/21-22/21247 Date.14.7.2021	984,968.00	CC
9	29.7.2021	Bloomberg Terminal	Bloomberg Data Services	6750159277 Date.17.5.2021	592449	CC
10	29.7.2021	Relecura patent search & portfolio anal	Relecura Technologies	2020-08/001 Date.3.8.2021	147,500	CC
11	23.6.2021	Upgradation of N Vivo Licenses	Numerical analytice Insturment	NAPL/2021-22/0230 Date.30.6.20	94,756	CC
12	29.7.2021	Bloomberg Terminal	Bloomberg Data Srevices	6750164236 Date.16.8.2021	600982	CC



Sr.	Date	Particulars of Assets	Particular	rs of supplier	Cost of the	Location of
No.			Name & Address	Bill No. and Date	Assets	Assets
13	30.8.2021	Logitech web cam BCC950	Camputer center	CC/21-22/02282 Date.8.9.2021	20,060	Placement
14	29.7.2021	Bloomberg Terminal	Bloomberg Data Srevices	6750169415 Date.15.11.2021	601449	CC
15	23.11.2021	Software	Weblength Infonet (Surperset)	212201009 Date.27.5.2021	1,396,479.00	Placement
16	18.11.2021	Printer HP	Maxmann Computer Industries	MCI/2112001 Date.2.12.2021	92,040	CC
17	14.12.2021	Software	Veracitiz Solutions	265/21-22/ Date.22.12.2021	341,247	CC
18	22.12.2021	Laptop	Digitech Electronic systems	27AAFCD9548J1Z4 Date.21.1.202	578,275	Placement
19	24.12.2021	People link Icam whd 1080	D.Horizon Digital Solution	DDS/240/21-22/ Date.16.12.2021	108,265	CC
20	29.7.2021	Bloomberg Terminal	Bloomberg Data Srevices	6750174759 Date.14.2.2022	611143	CC
21	1.11.2021	Desktop Computer	Core Technologies	87 Date.4.2.2022	120,000	S & T
				TOTAL	9995174	
			FURNITURE F	IXTURE		
1	1.04.2021	Conference Table, Revolving Chair	Babla Furniture	JK/026/21-22/ Date.9.6.2021	82,265	SRIC
2	20.5.2021	Compator	Babla Furniture	JK/035/21-22/ Date.25.6.2021	475,477	Admin
3	26.8.2021	Restaurant Chairs	Khandelwal & Khandelwal	544 Date.4.9.2021	125,000	SA & P (PGP Hostel)
4	20.7.2021	Restaurant Table	Aurangabad Iron Industries	010 Date.4.10.2021	48,790	PGPH Hostel
5	27.8.2021	Revolving Chair	Trends Furniture	TF/0037/21-22 Date.23.10.2021	764,400	PGPH Hostel
6	30.9.2021	Sofa	Babla Furniture	JK/114/21-22/ Date.3.11.2021	249,127	Estate (ELEC)
7	29.10.2021	VIP Bench	Fun Play Systems	PSPIL 317/21-22 Date.20.10.2021	137,529	Estate (ELEC)
8	25.10.2021	Chairs & Table	Anu Enterprises	AE/104/21-22/ Date.9.12.2021	200,640	Account



Sr.	Date	Particulars of Assets	Particula	rs of supplier	Cost of the	Location of
No.			Name & Address	Bill No. and Date	Assets	Assets
9	25.10.2021	Table	Anu Enterprises	AE/091/21-22/ Date.18.11.2021	77,490	Account
10	25.10.2021	Chairs & Sofa	Anu Enterprises	AE/097/21-22/ Date.26.11.2021	48,814	Account
11	25.10.2021	Table	Anu Enterprises	AE/111/21-22/ Date.17.12.2021	23,050	Account
12	25.10.2021	Chairs	Anu Enterprises	AE/100/21-22/ Date.1.12.2021	48,380	Account
13	25.10.2021	Table	Anu Enterprises	AE/119/21-22/ Date.24.12.2021	521,325	Account
14	23.2.2022	Godrej Steel Almirah	Babla Furniture	JK/213/21-22/ Date.14.3.2022	18083	Stores
15	12.3.2022	Nilkamal Chairs	JK Enterprises	JKE/21-22/275 Date.23.3.2022	32,650	Canteen
				TOTAL	2853020	
			ERGONOMIC	S LAB		
1	22.12.2021	Three wheeler Auto Driving	Tecknotrove system	TTS/21-22/067 Date.17.2.22	377,600	Ergonomice Lab
				TOTAL	377,600	
			SRIC EQUIP	MENT		
1	1.4.2021	AV Devices Auditorium	Swara Lahari	T-21220228 Date.24.6.2021	62,925	SRIC
				TOTAL	62,925	

ANNEXURES



Annual Report 2021-2022



ANNEXURES

ANNEXURE I: PROFORMA FOR FURNISHING THE INFORMATION RELATING TO NO. OF CIVILIAN POSTS, THEIR DESIGNATION AND SCALES OF PAY, ETC. IN RESPECT OF CIVILIAN EMPLOYEES OF THE **AUTONOMOUS BODIES AS ON 31-03-2022**

No.of Number of sanctioned Employees Posts in Position Group-D Unclassified Group of Group-A Group-B Group-C Post Supernumerary Gazetted Regular Temporary Status of Post /Non-Gaz Special Pay NPA Central to the post; attached Deput. Allow if any etc. Level (Min. - Max.) 7 CPC Pay Sr. Designation
No. of the Post in Full

AC/	ACADEMIC									
П	DIRECTOR	225000 Fixed	17	*N.G.	1	0	0	A	1	1
2	PROFESSOR	159100-220200 **AM	14A	*N.G.	27	0	0	А		27
က	ASSOCIATE PROFESSOR	139600-211300 **AM	13A2	*N.G.	16	0	0	А		16
4	ASSISTANT PROFESSOR GR. I	101500-167400 **AM	12	*N.G.		0	0	А	84	
5	ASSISTANT PROFESSOR GR. II	84800-117200 **AM	11	*N.G.	9	0	0	А		9
9	ASSISTANT PROFESSOR GR. II	70900-98200 **AM	10	*N.G.		0	0	А		
7	MANAGER, COMPUTER CENTRE	78800-209200	12	*N.G.	0	0	0	A	1	0
8	LIBRARY & INFO. OFFICER	67700-208700	11	*N.G.	0	0	0	A	1	0
6	SYSTEMS DESIGNER	67700-208700	11	*N.G.	1	0	0	A	2	1
10	SENIOR PROGRAMMER	67700-208700	11	*N.G.	1	0	0	A	2	1
11	PROGRAMMER	44900-142400	7	*N.G.	2	0	0	В	4	2

* Non-Gazetted

^{**} Academic Pay



AANNEXURE II: PROFORMA FOR FURNISHING THE INFORMATION RELATING TO NO. OF CIVILIAN POSTS, THEIR DESIGNATION AND SCALES OF PAY, ETC. IN RESPECT OF CIVILIAN EMPLOYEES OF THE AUTONOMOUS BODIES AS ON 31-03-2022

Sr.	Sr. Designation	7 CPC Pay	Level			Status of Post	f Post		Group of	No.of	Number of
Š	of the Post in Full	(Min Max.)		NPA Central Deput. Allow etc. attached to the post; if any	Gazetted /Non-Gaz	Regular Tempo-rary	rary	Super- numer- ary	Post Group-A Group-B Group-C Group-D Unclassified	sanctioned Posts	Employees in Position
NON	NON-ACADEMIC										
1	REGISTRAR	144200-218200	14		*N.G.	1	0	0	A	1	1
2	C.O.E.	78800-209200	12		*N.G.	1	0	0	A	1	1
3	DEPUTY REGISTRAR	67700-208700	12		*N.G.	0	0	0	A	3	0
4	MEDICAL OFFICER	56100-177500	10	#	*N.G.	1	0	0	A	1	1
5	ASSISTANT REGISTRAR	56100-177500	10		*N.G.	4	0	0	A	4	4
9	ACCOUNTS OFFICER	44900-142400	8		*N.G.	0	0	0	В	1	0
7	HINDI OFFICER	44900-142400	2		*N.G.	1	0	0	В	1	1
8	SECRETARY TO DIRECTOR	44900-142400	2		*N.G.	0	0	0	В	1	0
6	SR. SUPERINTENDENT	44900-142400	7		*N.G.	2	0	0	В	4	3
10	ASST.LIB. &INFO.OFFICER	44900-142400	2		*N.G.	1	0	0	В	1	1
11	SUPERINTENDENT	35400-112400	9		*N.G.	2	0	0	В	13	8
12	HINDI TRANSLATOR (SR.)	44900-142400	7		*N.G.	0	0	0	В	1	0
13	SR.LIB.&INFO.ASSISTANT	35400-112400	9		*N.G.	2	0	0	В	2	2
14	ASSISTANT	35400-112400	9		*N.G.	2	0	0	В	12	7
15	NURSE	35400-112400	9		*N.G.	1	0	0	В	1	1
16	SR. STENOGRAPHER	35400-112400	9		*N.G.	1	0	0	В	11	1
17	LIB. & INFO. ASSISTANT	35400-112400	9		*N.G.	0	0	0	В	2	0
18	JR. HINDI TRANSLATOR	35400-112400	9		*N.G.	1	0	0	В	1	1
19	HOSTEL MANAGER	29200-92300	2		*N.G.	0	0	0	С	1	0
20	CASHIER	29200-92300	2		*N.G.	1	0	0	C	1	1



Sr.	Sr. Designation	7 CPC Pay	Level	Special Pay		Status of Post	f Post		Group of	No.of	Number of
o.	of the Post in Full	(Min Max.)		NPA Central Deput. Allow etc. attached to the post; if any	Gazetted /Non-Gaz	Regular Tempo-rary	Tempo- rary	Super- numer- ary	Fost Group-A Group-C Group-C Group-D	Sanctioned Posts	Employees in Position
NO	NON-ACADEMIC										
21	COMPOUNDER	29200-92300	വ		*N.G.	1	0	0	C	2	1
22	T.O.C.R.	25500-81100	4		*N.G.	2	0	0	C	2	2
23	JR. STENOGRAPHER	25500-81100	4		*N.G.	-	0	0	C	2	0
24	U. D. C.	25500-81100	4		*N.G.	6	0	0	C	13	9
25	L. D. C.	19900-63200	2		*N.G.	14	0	1	C	26	12
26	LIBRARY CLERK	19900-63200	2		*N.G.	-	0	0	C	4	1
27	DESPATCH RIDER	19900-63200	2		*N.G.	0	0	0	C	1	0
28	TELEPHONE OPERATOR	19900-63200	2		*N.G.	4	0	0	С	9	4
29	MISTRY	18000-56900	1		*N.G.	0	0	0	D	2	0
30	DAFTARY	18000-56900	1		*N.G.	2	0	0	D	3	2
31	LIB. ATTENDANT	18000-56900	1		*N.G.	0	0	0	D	4	0
32	BEARER	18000-56900	1		*N.G.	1	0	3	D	7	0
33	HOSTEL ATTENDANT	18000-56900	1		*N.G.	0	0	0	D	7	0
34	PEON	18000-56900	1		*N.G.	5	0	0	D	20	5
35	WATCHMAN	18000-56900	1		*N.G.	2	0	0	D	12	1
36	SWEEPER	18000-56900	1		*N.G.	2	0	0	D	12	5
37	MALI	18000-56900	1		*N.G.	0	0	0	D	2	0
38	ATTENDANT	18000-56900	1		*N.G.	8	0	0	D	18	8

A OTTA



Min. Max, Allow etc. Allo	Sr	Sr. Designation	7 CPC Pay	Level			Status of Post	f Post		Group of	No.of	Number of
INGERIALER GT700-208700 11 "N.G. 1 0 0 A A SOCESSING ASST.GR.B 44900-112400 6 "N.G. 0 0 0 0 B B CAL ASST.GR.B 44900-142400 7 "N.G. 0 0 0 0 B B CAL ASST.GR.B 35400-112400 6 "N.G. 0 0 0 0 B B CAL ASST.GR.B 35400-112400 6 "N.G. 0 0 0 0 0 B B CAL ASST.GR.B 29200-92300 5 "N.G. 0 0 0 0 C C C C C C C C C C C C C C C	o Z	of the Post in Full	(Min Max.)		NPA Central Deput. Allow etc. attached to the post; if any	Gazetted /Non-Gaz	Regular	Tempo- rary	Super- numer- ary	Post Group-A Group-C Group-C Group-D	sanctioned Posts	Employees in Position
EXECUTIVE ENGINEER 6 7700-208700 11 *N.G. 1 0 A VIDEO CAMERAMAN 35400-112400 6 *N.G. 0 0 0 B DATA PROCESSING ASSTIGRB 44900-142400 7 *N.G. 0 0 0 B TECHNICAL ASSTIGR) 35400-112400 6 *N.G. 1 0 0 B B JR. ENGINEER 35400-112400 6 *N.G. 0 0 0 B B 1 0 0 0 B B T 1 0 0 B B B D 0 0 D 0 0 D 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0<	TEC	CHNICAL										
VIDEO CAMERAMAN 35400-112400 6 *N.G. 0 0 B B DATA PROCESSING ASST,GRB 44900-142400 7 *N.G. 0 0 0 B TECHNICAL ASST,(SR) 35400-112400 6 *N.G. 1 0 0 B B JR. ENGINEER 35400-112400 6 *N.G. 2 0 0 0 B JR. ENGINEER 25200-92300 5 *N.G. 0 0 0 0 0 0 D 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	П	EXECUTIVE ENGINEER	67700-208700	11		*N.G.	1	0	0	A	1	1
DATA PROCESSING ASSTIGRB 44900-142400 7 *N.G. 0 0 B TECHNICAL ASSTI(SR) TECHNICAL ASSTI(SR) 35400-112400 6 *N.G. 1 0 0 B TECHNICAL ASSTICANT TECHNICAL ASSTICANT 35400-112400 6 *N.G. 0 0 0 B B TECH. ASSISTANT 29200-92300 5 *N.G. 0 0 0 C D DATA ENTRY OPR.GRB 29200-92300 5 *N.G. 0 0 0 C C D C D C D C D C D C D C C D C C C D C C C C C D C D C D C D C C D C D C D C D C D C D D C D C D <t< td=""><td>2</td><td>VIDEO CAMERAMAN</td><td>35400-112400</td><td>9</td><td></td><td>*N.G.</td><td>0</td><td>0</td><td>0</td><td>В</td><td>1</td><td>0</td></t<>	2	VIDEO CAMERAMAN	35400-112400	9		*N.G.	0	0	0	В	1	0
TECHNICAL ASSTISRI) 35400-112400 6 *N.G. 1 0 0 B TECHNICAL ASSTISRIANT 35400-112400 6 *N.G. 2 0 0 0 B TECH. ASSISTANT 35400-112400 6 *N.G. 1 0 0 0 B B TECH. ASSISTANT 35400-112400 6 *N.G. 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <	3	DATA PROCESSING ASST.GR.B	44900-142400	7		*N.G.	0	0	0	В	2	0
JR. ENGINEER 35400-112400 6 +N.G. 2 0 D B TECH. ASSISTANT 29200-92300 5 +N.G. 0 0 0 C DATA ENTRY OPR.GR-B 35400-112400 6 +N.G. 1 0 0 C C DATA ENTRY OPR.GR-B 25500-81100 4 +N.G. 0 0 0 C C DRAUGHTSMAN 25500-81100 4 +N.G. 0 0 0 C C C C C D C C D C C D C C C C C C C C C C C C C C C C C C C C C C C C C C D C C C C C C C C C C C C C C C <td< td=""><td>4</td><td>TECHNICAL ASST.(SR)</td><td>35400-112400</td><td>9</td><td></td><td>*N.G.</td><td>1</td><td>0</td><td>0</td><td>В</td><td>2</td><td>1</td></td<>	4	TECHNICAL ASST.(SR)	35400-112400	9		*N.G.	1	0	0	В	2	1
TECH. ASSISTANT 29200-92300 5 *N.G. 0 0 C DATA ENTRY OPR.GR-C 35400-112400 6 *N.G. 1 0 0 B DATA ENTRY OPR.GR-C 25500-81100 4 *N.G. 0 0 0 C DATA ENTRY OPR.GR-A 25500-81100 4 *N.G. 0 0 0 C DATA ENTRY OPR. GR-A 25500-81100 4 *N.G. 0 0 C C DATA ENTRY OPR. GR-A 25500-81100 4 *N.G. 0 0 C C MECH. B 25500-81100 4 *N.G. 0 0 C C DELVINER 19900-63200 2 *N.G. 0 0 C C DUPLICATING OPERATOR 19900-63200 2 *N.G. 1 0 C C BUS ATTENDANT 18000-56900 1 *N.G. 0 0 D C BUS ATTENDANT 18000-5690	2	JR. ENGINEER	35400-112400	9		*N.G.	2	0	0	В	8	2
DATA ENTRY OPR, GR.C 35400-112400 6 *N.G. 1 0 0 B DATA ENTRY OPR, GR.B 29200-92300 5 *N.G. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <td< td=""><td>9</td><td>TECH. ASSISTANT</td><td>29200-92300</td><td>5</td><td></td><td>*N.G.</td><td>0</td><td>0</td><td>0</td><td>С</td><td>2</td><td>0</td></td<>	9	TECH. ASSISTANT	29200-92300	5		*N.G.	0	0	0	С	2	0
DATA ENTRY OPR.GR-B 29200-92300 5 *N.G. 0 0 C MECH. 'A 25500-81100 4 *N.G. 0 0 0 C DATA ENTRY OPR GR-A 25500-81100 4 *N.G. 0 0 C C MECH. 'B 25500-81100 4 *N.G. 0 0 C C MECH. 'B 25500-81100 4 *N.G. 0 0 C C DRIVER 19900-63200 2 *N.G. 2 0 C C PLUMBER 19900-63200 2 *N.G. 4 0 0 C C DUPLICATING OPERATOR 19900-63200 2 *N.G. 1 0 C C DUPLICATING OPERATOR 18000-56900 1 *N.G. 1 0 0 D WOTOR CLEANER 18000-56900 1 *N.G. 1 0 0 D D D MOTOR CLEANER <td>7</td> <td>DATA ENTRY OPR.GR-C</td> <td>35400-112400</td> <td>9</td> <td></td> <td>*N.G.</td> <td>1</td> <td>0</td> <td>0</td> <td>В</td> <td>2</td> <td>0</td>	7	DATA ENTRY OPR.GR-C	35400-112400	9		*N.G.	1	0	0	В	2	0
MECH. 'A' 4 *N.G. 0 0 C DRAUGHTSMAN 25500-81100 4 *N.G. 0 0 0 C DATA ENTRY OPR GR-A 25500-81100 4 *N.G. 0 0 C C MECH. 'B' 25500-81100 4 *N.G. 0 0 C C DRIVER 19900-63200 2 *N.G. 2 0 C C PLUMBER 19900-63200 2 *N.G. 4 O C C MECH. 'C' 19900-63200 2 *N.G. 4 O C C DUPLICATING OPERATOR 19900-63200 2 *N.G. 1 O C C BUS ATTENDANT 18000-56900 1 *N.G. 1 O O D WORKSHOP ATTENDANT 18000-56900 1 *N.G. 0 O O D	∞	DATA ENTRY OPR.GR-B	29200-92300	5		*N.G.	0	0	0	C	4	0
DRAUGHTSMAN 25500-81100 4 *N.G. 0 0 C MECH. 'B' 25500-81100 4 *N.G. 0 0 0 C MECH. 'B' 25500-81100 4 *N.G. 0 0 C C DRIVER 19900-63200 2 *N.G. 2 0 0 C C PLUMBER 19900-63200 2 *N.G. 4 0 0 C C MCH. 'C' 19900-63200 2 *N.G. 4 0 0 C C DUPLICATING OPERATOR 19900-63200 2 *N.G. 1 0 0 C C PUMP ATTENDANT 18000-56900 1 *N.G. 1 0 0 D D MOTOR CLEANER 18000-56900 1 *N.G. 0 0 0 D D	6	MECH. 'A'		4		*N.G.	0	0	0	C	2	0
DATA ENTRY OPR GR-A 25500-81100 4 *N.G. 0 0 C C MECH. 'B' 25500-81100 4 *N.G. 0 0 0 C C DRIVER 19900-63200 2 *N.G. 2 0 0 C C PLUMBER 19900-63200 2 *N.G. 0 0 0 C C MECH. 'C' 19900-63200 2 *N.G. 4 0 0 C C DUPLICATING OPERATOR 19900-63200 2 *N.G. 1 0 C C DUPLICATING OPERATOR 18000-56900 1 *N.G. 1 0 C C BUS ATTENDANT 18000-56900 1 *N.G. 1 0 0 D D WORKSHOP ATTENDANT 18000-56900 1 *N.G. 0 0 0 D D D D D D D D D D <td< td=""><td>10</td><td></td><td>25500-81100</td><td>4</td><td></td><td>*N.G.</td><td>0</td><td>0</td><td>0</td><td>C</td><td>1</td><td>0</td></td<>	10		25500-81100	4		*N.G.	0	0	0	C	1	0
MECH. 'B' \$15500-81100 4 *N.G. 0 0 C DRIVER 19900-63200 2 *N.G. 2 0 0 C C PLUMBER 19900-63200 2 *N.G. 4 0 0 C C MECH. 'C' 19900-63200 2 *N.G. 4 0 0 C C DUPLICATING OPERATOR 19900-63200 2 *N.G. 1 0 C C C C C C D C D C C D C D C C C C C D C D C D C D C C D C D C D C D C D D C D C D D C D D D D D D D D D D D D D	11		25500-81100	4		*N.G.	0	0	0	C	8	0
DRIVER *N.G. 2 *N.G. 2 0 0 C PLUMBER 19900-63200 2 *N.G. 0 0 0 C MECH. 'C' 19900-63200 2 *N.G. 4 0 0 C C DUPLICATING OPERATOR 19900-63200 2 *N.G. 1 0 0 C C PUMP ATTENDANT 18000-56900 1 *N.G. 1 0 0 D D MOTOR CLEANER 18000-56900 1 *N.G. 1 0 0 D D WORKSHOP ATTENDANT 18000-56900 1 *N.G. 0 0 0 D D	12		25500-81100	4		*N.G.	0	0	0	C	2	1
PLUMBER *N.G. *N.G. 0 0 C MECH. C' 19900-63200 2 *N.G. 4 0 0 C DUPLICATING OPERATOR 19900-63200 2 *N.G. 1 0 0 C C PUMP ATTENDANT 18000-56900 1 *N.G. 0 0 0 D D MOTOR CLEANER 18000-56900 1 *N.G. 1 0 0 D D WORKSHOP ATTENDANT 18000-56900 1 *N.G. 1 0 0 D D	13		19900-63200	2		*N.G.	2	0	0	C	6	1
MECH. 'C' MECH. 'C' *N.G. 4 0 0 C DUPLICATING OPERATOR 19900-63200 2 *N.G. 1 0 0 C C PUMP ATTENDANT 18000-56900 1 *N.G. 0 0 0 D D MOTOR CLEANER 18000-56900 1 *N.G. 1 0 0 D D WORKSHOP ATTENDANT 18000-56900 1 *N.G. 0 0 0 D D	14		19900-63200	2		*N.G.	0	0	0	C	2	0
DUPLICATING OPERATOR 19900-63200 2 *N.G. 1 0 0 C PUMP ATTENDANT 18000-56900 1 *N.G. 0 0 0 D MOTOR CLEANER 18000-56900 1 *N.G. 1 0 0 D WORKSHOP ATTENDANT 18000-56900 1 *N.G. 0 0 0 D	15	_	19900-63200	2		*N.G.	4	0	0	С	80	2
PUMP ATTENDANT 18000-56900 1 *N.G. 0 0 0 D BUS ATTENDANT 18000-56900 1 *N.G. 1 0 0 D MOTOR CLEANER 18000-56900 1 *N.G. 1 0 0 D WORKSHOP ATTENDANT 18000-56900 1 *N.G. 0 0 0 D	16		19900-63200	2		*N.G.	1	0	0	C	2	1
BUS ATTENDANT 18000-56900 1 *N.G. 1 0 0 D MOTOR CLEANER 18000-56900 1 *N.G. 1 0 0 D WORKSHOP ATTENDANT 18000-56900 1 *N.G. 0 0 0 D	17		18000-56900	1		*N.G.	0	0	0	D	3	0
MOTOR CLEANER 18000-56900 1 *N.G. 1 0 0 D WORKSHOP ATTENDANT 18000-56900 1 *N.G. 0 0 0 D	18		18000-56900	1		*N.G.	1	0	0	D	2	1
WORKSHOP ATTENDANT 18000-56900 1 *N.G. 0 0 D D	19		18000-56900	1		*N.G.	1	0	0	D	2	1
	20		18000-56900	1		*N.G.	0	0	0	D	1	0



ANNEXURE IV: SUMMARY OF NO.OF SANCTIONED POSTS AND NO. IN POSITION - GROUPWISE

GROUP OF POST	SANCTIONED POST	EMPLOYEES IN POSITION (R+T+S)			
ACADEMIC					
A	91	52			
В	4	2			
С	0	0			
D	0	0			
SUB-TOTAL	95	54			
	NON-ACADEMIC				
A	10	7			
В	51	25			
С	58	27			
D	90	21			
SUB-TOTAL	209	80			
TECHNICAL					
A	1	1			
В	10	3			
С	38	5			
D	8	2			
SUB-TOTAL	57	11			
TOTAL	361	145			

R - Regular

T - Temporary

S - Supernumerary

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