

CHAPTER 1

INTRODUCTION

1.1 Vision

- To serve the societal needs of the country in particular and the world in general through achieving excellence in innovative scientific and technical education and cutting-edge research.

1.2 Mission

- To impart and enhance quality technical and scientific education to young men and women.
- To promote research in both fundamental and applied knowledge for the betterment of the society.

1.3 Objectives

- To offer modern Under Graduate (UG) programmes in various branches of Engineering, viz., Civil Engineering, Mechanical Engineering, Electrical & Electronics Engineering, Electronics & Communication Engineering, Computer Science & Engineering, etc.
- To initiate new Post Graduate (PG) programmes in Civil Engineering, Mechanical Engineering, Electrical & Electronics Engineering, Electronics & Communication Engineering, Computer Science & Engineering, Mathematics, Physics, Chemistry, Humanities and Social Sciences, Management, etc.
- To provide facilities for research in all Engineering departments, Basic and Applied Sciences, Humanities and Social Sciences and Management leading to doctoral degree.

1.4 Education System

Education means overall development of an individual. An education system should attempt to provide the teaching and training of an individual in order to induce professional competence and ability, personality development, provide leadership to team work, concern for human values towards colleagues and subordinates, respect for superior, behave in a

disciplined way and exercise the habits of punctuality, sincerity, devotion, hard work, integrity, honesty and concern for the people, society and nation.

The education system in National Institute of Technology Mizoram envisages achieving the above mentioned qualities by undertaking an integrated and balanced blend of curricular, co-curricular and extra-curricular activities among students, teachers and supporting staff and by creating congenial and close relations among all.

National Institute of Technology Mizoram, at present, offers (a) UG courses leading to B. Tech. degree in 5 (five) branches of Engineering, viz., Electrical & Electronics Engineering, Electronics & Communication Engineering, Computer Science & Engineering, Mechanical Engineering and Civil Engineering, (b) PG courses leading to M. Tech. degree in 4 (four) branches of engineering, viz., Electrical & Electronics Engineering, Electronics & Communication Engineering, Computer Science and Engineering and Mechanical Engineering and (c) PG courses leading to Ph. D. degree in 5 (five) branches of engineering, viz., Electrical & Electronics Engineering, Electronics & Communication Engineering, Computer Science & Engineering, Mechanical Engineering, Civil Engineering and Physics, Chemistry, Mathematics and Humanities and Social Sciences. The Institute follows a credit based system for academic evaluation. It offers industrial training and project as a part of the education system.



CHAPTER 2

AN OVERVIEW

2.1 Historical Background

National Institute of Technology Mizoram is one of the 11 (eleven) new NITs set up by the Government of India in 2009 to meet the demand for technical and scientific education and to ensure every state in India having its own NIT. NIT Mizoram was established vide Ministry of Human Resource Development, Govt. of India order no. F-23-13/2009/TS-III dated 30th October, 2009. The Institute started functioning from the camp Nagpur under the mentorship of VNIT Nagpur and the academic activities started w.e.f. July 2010 with a total of 63 students in three branches of engineering, viz., Electrical & Electronics Engineering, Electronics & Communication Engineering and Computer Science & Engineering.

NIT Mizoram started functioning from its Mizoram campus from July 2011. VNIT Nagpur was the mentor institute till 1st December, 2011.

The Institute is now governed by the National Institute of Technology (Amendment) Act, 2012, No. 28 of 2012 (An Act to Amend the National Institute of Technology, 2007) and henceforth designated as an Institute of National Importance.

2.2 Location

NIT Mizoram is, at present, situated at Chaltlang, Aizawl. Aizawl is the capital city of Mizoram. Mizoram is situated at 23° 30" N latitude and 20° 52" E longitude. Mizoram has a mild and pleasant climate. The temperature varies from a minimum 7°C in the winter season to 29°C in the summer season. The area has an approximate annual rainfall of 254 cm (100 in) per annum.

2.3 Campus

The Institute is, at present, functioning from temporarily hired buildings at Chaltlang, Aizawl. The permanent campus of the Institute is coming up at Lengpui, Aizawl, near airport. At present, 8 (eight) buildings are on hire at Chaltlang and its vicinity for accommodating 1 (one) Administrative Block and 7 (seven) Academic Blocks for conducting classes and laboratories. Another 4 (four) buildings are on hire for 3 (three) boys hostel and 1 (one) girls hostel.

2.4 Administration

The Institute is being administered by the Director of the Institute with direct supervision of the Board of Governors (BOG) headed by Chairman. The Director of the Institute is ex-officio Member of the BOG.

2.5 Academic Programmes

The Institute, at present, offers UG programmes leading to the degree of Bachelor of Technology (B. Tech.) in Electrical and Electronics Engineering, Electronics and Communication Engineering, Computer Science & Engineering, Mechanical Engineering and Civil Engineering and PG programmes leading to M. Tech. degree in Electrical and Electronics Engineering, Electronics and Communication Engineering, Computer Science and Engineering and Mechanical Engineering. The Institute also offers PG programmes leading to Ph. D. degree in 5 (five) branches of engineering, viz., Electrical & Electronics Engineering, Electronics & Communication Engineering, Computer Science & Engineering, Mechanical Engineering and Civil Engineering and Basic Sciences and Humanities and Social Sciences (BS & HSS) (Physics, Chemistry, Mathematics, English and Economics).

2.6 Courses Offered

(a) Currently the Institute offers courses in 5 (five) branches of engineering leading to B. Tech. Degree of 4 – years duration, viz.,

- Electrical & Electronics Engineering (EEE)
- Electronics & Communication Engineering (ECE)
- Computer Science & Engineering (CSE)
- Mechanical Engineering (ME)
- Civil Engineering (CE)

(b) PG courses leading to M. Tech. degree of 2 – years duration in

- Electrical & Electronics Engineering (EEE)
- Electronics & Communication Engineering (ECE)
- Computer Science and Engineering (CSE)
- Mechanical Engineering (ME)

(c) PG courses leading to Ph. D. degree in Departments, viz.,

- Electrical & Electronics Engineering (EEE)
- Electronics & Communication Engineering (ECE)
- Computer Science & Engineering (CSE)
- Mechanical Engineering (ME)
- Civil Engineering (CE)
- Basic Sciences and Humanities and Social Sciences (BS & HSS) (Physics, Chemistry, Mathematics, English and Economics).

2.7 Admission Procedure

The admission to 1st year B. Tech. course is made through the Joint Entrance Examination (JEE) Main conducted by Central Seat Allocation Board (CSAB)/ Joint Seat Allocation Authority (JoSAA) and as per the guidelines of the Ministry of Human Resource Development, Govt. of India.

The admission to 1st year M. Tech. course is made through the Centralised Counselling for M. Tech./M. Arch./M. Plan. Admissions, CCMT.

The Institute acts as one of the Counselling and Help centres both for B. Tech. and M. Tech. admissions.

2.8 Students

The intake of the Institute for the B. Tech. course is, at present, 30 seats per branch. Out of the total intake, 50 percent of the seats are reserved for the host state and the rest 50 percent is open to students from all parts of the country. For the M. Tech. course, the intake is 10 seats per branch. Reservation of seats for Scheduled Caste (SC), Scheduled Tribe (ST), Other Backward Class (OBC) and Persons with Disability (PWD) candidates are as per Government of India norms.

2.9 Examination and Evaluation

Since the beginning, the Institute has been conducting examinations for the UG and PG courses. The Examination Section centrally conducts Mid-semester and End-semester examination in respect of theory components of the subjects unless otherwise permitted. The results are declared in terms of Semester Grade Point Average (SGPA) and Cumulative

Grade Point Average (CGPA) on 10 (ten) point scale. As per national standard, results are declared after one week of the completion of the examination.

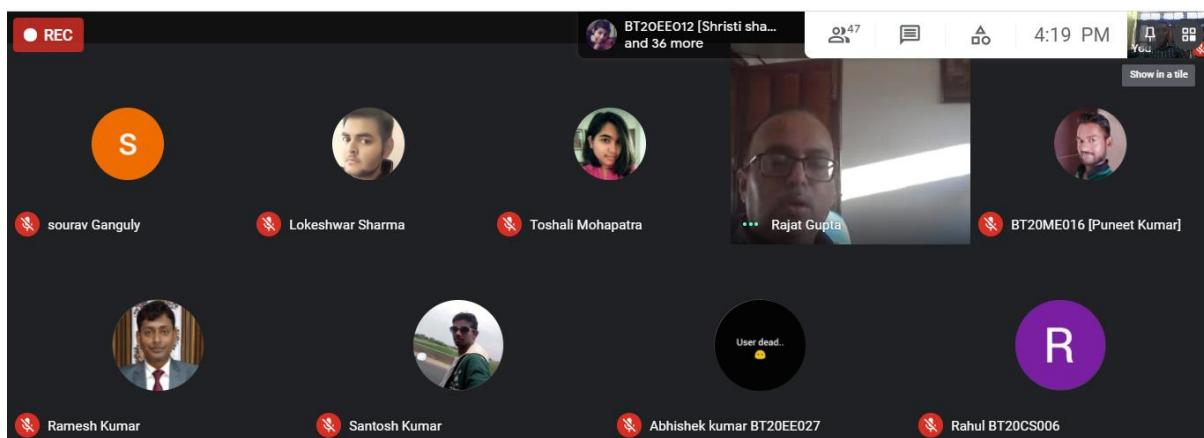
There is a continuous assessment of the students' performance throughout the semester and grades are awarded by the concerned teacher. In case of theoretical subjects, the evaluation is based on class assessment (attendance, class tests, assignments, quizzes, etc.), mid-semester examination and end-semester examination. The respective weightage for these subcomponents are as below:

Sl. No.	Subcomponent	Weightage
1.	Class Assessment	20 %
2.	Mid-semester Examination	30 %
3.	End-semester Examination	50 %

In case of sessional subjects (Laboratory, Design, Practical, Workshop, etc.), the evaluation is based on the basis of attendance, assessment of tasks assigned and the end-semester test/viva.

2.10 Games and Sports

The students of the Institute actively participate in Games and Sports, Cultural and Technical Fests, Quizzes, Debates and other co-curricular and extra-curricular activities. Sports is a compulsory subject for all the first year students.



2.11 Conduct of Online Classes

On account of Covid 19 pandemic, all academic activities have been conducted in online mode to ensure safety for the student community as decided by the 12th meeting of Senate on 24th July, 2020.

CHAPTER 3

STAFF POSITION

3.1 Academic Staff (Teaching)

Sl. No.	Post	Sanctioned Strength	In Position
1.	Professor	5	1
2.	Associate Professor	11	3
3.	Assistant Professor	22	16 Regular, 5 Contractual, 4 Adhoc, 10 Temporary
4.	Trainee Teacher		03

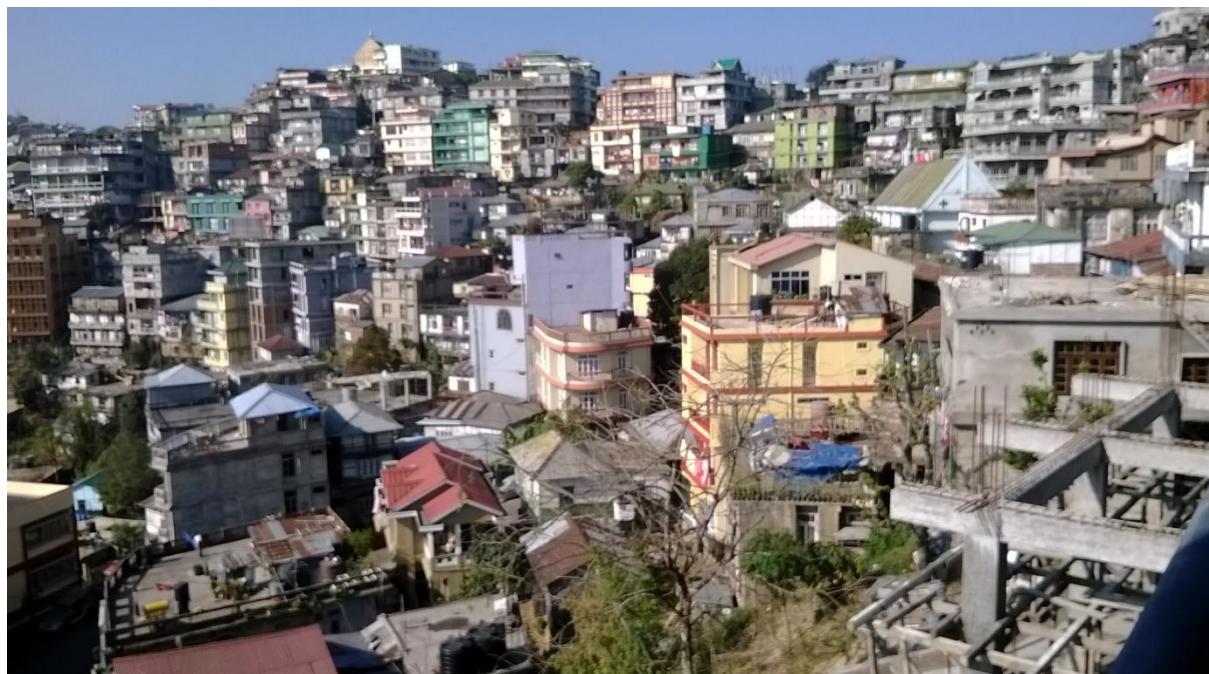
***Out of 16 Asst. Professors (regular) one is on Lien to NIT Calicut**

3.2 Non-Academic Staff (Non-Teaching)

Sl. No.	Post	Sanctioned Strength	In Position
1.	Registrar	1	1
2.	Deputy Registrar (F&A)	-	1 (Adjusted against the post of Asst. Registrar)
3.	Assistant Registrar	1	
4.	Sports Officer	1	Nil
5.	Executive Engineer	1	1 – E.E (Civil)
6.	Dy./ Asst. Librarian	1	1
7.	Superintendent/ Accountant	3	2 – Superintendent 1 – Accountant (Adhoc)
8.	Technical Assistant	3	3 – Regular 4 – Adhoc
9.	Junior Engineer	1	1 – J.E (Civil)
10.	Stenographer	1	Nil
11.	Technician/Lab Assistant/Instructor	5	4 – Regular
12.	Junior Assistant	4	4 – Regular 1 - Casual
13.	Multi Tasking Staff	2	1 – Regular 2 - Casual

3.3 Training Status

NIT Mizoram encourages its faculty members to actively participate and present their research papers/findings in International and National Seminars/Conferences. A separate fund is allocated for this purpose under Professional Development Allowance (PDA) to all the faculty members as per the norms approved by BOG.



CHAPTER 4

DEPARTMENTS: ACADEMIC STAFF AND FACILITIES

4.1 Department of Electrical and Electronics Engineering

Designation	Name	Qualifications
Professor	Prof. Saibal Chatterjee	Ph. D.
Associate Professor	-	-
Assistant Professor (Regular)	Dr. Pabitra Kumar Biswas	Ph. D.
Assistant Professor (Contractual) against Regular posts	Dr. Suman Majumder	Ph. D.
	Dr. Krishnarti De	Ph. D.
	Dr. Ramesh Kumar	Ph. D.
	Mr. Anagha Bhattacharya	M. Tech
Assistant Professor (Adhoc)	Mr. Sukanta Debnath	M. Tech
	Ms. Upama Das	M. Tech

4.1.1 Laboratories/ Workshops

- a. Basic Electrical Engineering Lab
- b. Electrical & Electronics Measurement lab
- c. Electrical Machines Lab
- d. Power Electronics and Drives Lab
- e. Control Systems Lab
- f. Power System Simulation Lab
- g. Instrumentation Lab
- h. Switch Gear and Protection Lab

4.2 Department of Electronics and Communication Engineering

Designation	Name	Qualifications
Professor	-	-
Associate Professor	-	-
Assistant Professor (Regular)	Dr. Rudra Sankar Dhar	Ph. D.
	Dr. Chaitali Koley	Ph. D.
	Dr. Anumoy Ghosh	Ph. D.
Assistant Professor (Adhoc)	Mr. Pragati Singh	M. Tech
	Ms. Remika Ngangbam	M. Tech
Trainee Teacher	Mr. Sushanta Borodoloi	M. Tech

4.2.1 Laboratories/ Workshops

- a. Digital Circuits Lab
- b. Analog Circuits Lab
- c. Microprocessors & Microcontrollers Lab
- d. Analog Communication Lab
- e. Digital Communication Lab
- f. DSP Lab
- g. VLSI Lab
- h. Embedded Systems Lab

4.3 Department of Computer Science and Engineering

Designation	Name	Qualifications
Professor	-	-
Associate Professor	-	-
Assistant Professor (Regular)	Dr. Ranjita Das	Ph. D.
Assistant Professor (Contractual)	Dr. Sandeep Kumar Dash	Ph. D.
Temporary Faculty	Dr. NgangbamHerojit Singh	Ph. D.
	Mr. Amit Kumar Roy	M. Tech.
	Ms. BollapalliSneha	M. Tech.
Trainee Teacher	Mr. Lenin Laitonjam	M. Tech.

4.3.1 Laboratories/ Workshops

- a. Programming & Network Lab.
- b. Programming & Database Lab.

4.4 Department of Civil Engineering

Designation	Name	Qualifications
Professor	-	-
Associate Professor	-	-
Assistant Professor (Regular)	Dr. Bijayananda Mohanty	Ph. D.
	Dr. Ricky Lalthazuala	Ph. D.
	Dr. Sanasam Vipej Devi	Ph. D.
Temporary Faculty	Ms. Esther Vanlalmawii	M. Tech.
	Dr. Sulaem Musaddiq Laskar	Ph. D.
	Dr. Abhinaba Paul	Ph. D.

4.4.1 Laboratories/ Workshops

- a. Surveying Lab.
- b. Concrete Technology Lab.
- c. Hydraulics Lab.

4.5 Department of Mechanical Engineering

Designation	Name	Qualifications
Professor	-	-
Associate Professor	-	-
Assistant Professor (Regular)	Dr. Bidesh Roy	Ph. D.
	Dr. Bachu Deb	Ph. D.
	Dr. H. Lalhmingsanga	Ph. D.
	Dr. Basil Kuriachen*	Ph. D.
	Dr. Abhijit Sinha	Ph. D.
Trainee Teacher	Mr. Saurav Suman	M. Tech.

*On Lien to NIT Calicut

4.5.1 Laboratories/ Workshops

- a. Engineering Mechanics Lab.
- b. Mechanical Workshop
- c. Fluid Mechanics Lab. I & II
- d. Dynamics of Machinery Lab. I & II
- e. Strength of Materials Lab.
- f. Manufacturing Lab. I, II & III
- g. Thermal Lab. I, II & III

4.6 Department of BS &HSS (Physics)

Designation	Name	Qualifications
Professor	-	-
Associate Professor	Dr. Alok Shukla	Ph. D.
Assistant Professor		

4.6.1 Laboratories/ Workshops

- Physics Lab.

4.7 Department of BS & HSS (Chemistry)

Designation	Name	Qualifications
Professor	-	-
Associate Professor	Dr. Ajmal Koya Pulikkal	Ph. D.
Assistant Professor		

4.7.1 Laboratories/ Workshops

- Chemistry Lab.

4.8 Department of BS & HSS (Mathematics)

Designation	Name	Qualifications
Professor	-	-
Associate Professor	-	-
Assistant Professor (Regular)	Dr. Vinay Singh	Ph. D.
	Dr. SurenderOntela	Ph. D.

4.9 Department of BS & HSS (Economics and English)

Designation	Name	Qualifications
Professor	-	-
Associate Professor (Economics)	Dr. Konthoujam Gyanendra Singh	Ph. D.
Assistant Professor (English) (Regular)	Dr. Shuchi	Ph. D.

4.9.1 Laboratories/ Workshops

- Language Lab.

CHAPTER 5

TEACHING PROGRAMMES

5.1 Courses Offered

(a) The Institute offers 4 – years B. Tech. degree courses, viz.,

- Electrical & Electronics Engineering (EEE)
- Electronics & Communication Engineering (ECE)
- Computer Science & Engineering (CSE)
- Mechanical Engineering (ME)
- Civil Engineering (CE)

(b) PG courses leading to M. Tech. degree of 2 – years duration in

- Electrical & Electronics Engineering (EEE)
- Electronics & Communication Engineering (ECE)
- Computer Science & Engineering (CSE)
- Mechanical Engineering (ME)

(c) PG courses leading to Ph. D. degree in departments, viz.,

- Electrical & Electronics Engineering (EEE)
- Electronics & Communication Engineering (ECE)
- Computer Science & Engineering (CSE)
- Mechanical Engineering (ME)
- Civil Engineering (CE)
- Basic Sciences and Humanities and Social Sciences (BS & HSS) (Physics, Chemistry, Mathematics, English and Economics).

5.2 Course Wise Enrolment by Sex and Category

The following table shows the B. Tech. course wise enrolment by sex and category:

Semester (Batch)	Branch	Open		OBC		SC		ST		PWD		Total
		Boys	Girls									
1st & 2nd (2020-21) Batch (Fresh Admission)	CE	5	3	5	3	3	0	9	1	0	0	29
	CSE	6	0	5	3	4	1	7	3	1	0	30
	ECE	8	2	1	1	4	1	4	3	1	0	25
	EEE	2	3	6	0	3	2	10	2	0	0	28
	ME	11	1	3	2	4	1	5	1	0	0	28

Sub-Total		32	9	20	9	18	5	35	10	2	0	140
Year Back Student	CSE	0	0	0	0	0	0	2	0	1	0	3
	ECE	0	0	0	0	0	0	1	0	0	0	1
Sub-Total		0	0	0	0	0	0	3	0	1	0	4
G. Total (Fresh+Y. Back)		32	9	20	9	18	5	38	10	3	0	144

5.3 Admission Statistics

The B. Tech. course wise total enrolment of the students in NIT Mizoram is given below:

Sl. No.	Branch	No. of Student (UG) (including 4 year back students)
1	CE	29
2	*CSE	33
3	*ECE	26
4	EEE	28
5	ME	28
Total		144

The M. Tech. and Ph. D. course wise total enrolment of the students in NIT Mizoram for 2020-21 is given below:

M.Tech (Fresh Admission)			
Dept.	Female	Male	Total
CSE	3	3	6
ECE	2	2	4
EEE	3	8	11
ME	1	6	7
Total	9	19	28

*Total M.Tech Strength during 2020-21 = 37

Ph.D (Fresh Admission)			
Dept.	Female	Male	Total
BS & HSS	8	24	32
CE	1	12	13
CSE	2	4	6
ECE	6	16	22
EEE	0	6	6
ME	0	0	0
Total	17	62	79

*Total Ph.D. Strength during 2020-21= 163

The state wise enrolment of B. Tech. students in NIT Mizoram is given below:

Sl. No.	State	No. of students for 2020-21 Batch (Fresh admission) excluding year back students
1	ANDHRA PRADESH	25
2	ASSAM	0
3	BIHAR	16
4	CHHATTISGARH	1
5	DELHI	0
6	GUJARAT	1
7	JHARKHAND	5
8	KERALA	1
9	MADHYA PRADESH	3
10	MAHARASTRA	1
11	MIZORAM	59
12	MEGHALAYA	1
13	NAGALAND	1
14	ODISHA	1
15	RAJASTHAN	8
16	TELANGANA	5
17	TAMIL NADU	1
18	UTTAR PRADESH	9
19	UTTARAKHAND	0
20	WEST BENGAL	2
TOTAL		140

5.4 Students' Total Strength

The total strength of the B. Tech. students in NIT Mizoram is given below:

Sl. No.	Course Year	No. of Students (UG)
1	First Year (2020) (including 4 year back students)	144
2	Second year (2019)	112
3	Third year (2018)	123
4	Fourth year (2017)	107
Total		486

5.5 Hostels

At present there are 4 (four) Boys' Hostels and 1 (one) Girls' Hostel which accommodate approximately 284 students (252 boys and 34 girls). The Hostels are located at Tanhril and Durtlang, which are about 10 – 15 kms. away from the academic buildings. The Institute has hired 7 (seven) buses for free transportation of the students to and fro from hostels to academic buildings.

5.6 Scholarships/ Assistantships

The students of this Institute are awarded various types of scholarships by various agencies and central and state governments. The details are given below:

S L .N o.	NAME OF STUDENT	ENR OLL. No.	AMO UNT RECE IVED	CATE GORY	MINIST RY LETTE R No.	LET TER DAT E	AS PER THE INSTIT UTE BANK STATE MENT DATE	REFUND STATUS		
								BI LL No .·	DAT E	AMOU NT SANCTI ONED
1	TELAGATHO TI GIFTY ABHISHEK	BT19E C021	4,900.0 0	SC	11017/40/ 2019-20- SCD-I	18-05- 2020	28-05- 2020	289	04- 08- 2020	4,900.00
2	ATHYALA JOHN PRAVEEN KUMAR	BT19 ME007	4,900.0 0							4,900.00
3	HINA CHANDRA	BT19C S011	4,900.0 0							4,900.00
4	NAGISETTY ANIL KUMAR	BT19E E012	4,900.0 0							4,900.00
5	BITU RAJAK KUMAR	BT19 ME009	4,900.0 0							4,900.00
6	SUNNY KUMAR	BT18C S020	6,650.0 0							6,650.00
7	RAMU GOKULA KRISHNA	BT18E E017	6,350.0 0							6,350.00
8	SAURABH KUMAR	BT18E E019	6,650.0 0							6,650.00
9	LIPA ROY	BT17E C004	6,650.0 0							6,650.00
0	SANJIT KUMAR RAJAK	BT17 ME002	6,650.0 0							6,650.00
TOTAL				57,450 .00						57,450.0 0
1	GUGULOTH POOJA BANSI	BT19E C008	4,900.0 0	ST	11021/03/ 2020- SCH	01-07- 2020	14-07- 2020	228	04- 08- 2020	4,900.00
2	VANLALHLLI MPUII	BT18C E020	6,650.0 0							6,650.00
3	P.T. ZODINPUII	BT18E E027	6,650.0 0							6,650.00

4	LALFAKZUA LI	BT16C E008	6,650.00							6,650.00
5	MALSAWMZ UALI	BT18C E019	6,650.00							6,650.00
6	LALDUHAW MI ROKHUM	BT17C S025	6,650.00							6,650.00
7	C. VANLALTHL ANGI	BT18C S021	6,650.00							6,650.00
8	GRACE LALREMRUA TI	BT16C E012	6,650.00							6,650.00
9	T. LALNUNFELI	BT18C E015	6,650.00							6,650.00
TOTAL			58,100.00							58,100.00
1	SONU KUMAR MEENA	BT16C E006	6,650.00		ST 11021/0 1/2020- SCH	22.06. 2020	29-06- 2020	46 6	26- 10- 2020	6,650.00
2	PRADEEP KUMAR MEENA	BT16 ME005	6,650.00							6,650.00
3	LALHMINGM AWIA	BT16C S009	6,650.00							6,650.00
4	LALROPUIA	BT16E E003	6,350.00							6,350.00
5	LALMALSAW MA	BT17C E011	6,650.00							6,650.00
6	IMANUEL LALHRAUATL UANGA	BT17C E001	6,650.00							6,650.00
7	BISHU KOL	BT16C S005	6,650.00							6,650.00
8	MALSAWMD AWNGZELI	BT16C E013	6,650.00							6,650.00
9	VANLALRUA TFELI	BT16E E002	6,650.00							6,650.00
0	BIAKSIAMA	BT17C E015	6,650.00							6,650.00
1	LALHRIATZU ALA	BT17C E020	6,650.00							6,650.00
2	C. VANLALHRU AII	BT17E E002	6,650.00							6,650.00
3	VANLALDIN GNGHETA VARTE	BT16C S010	6,650.00							6,650.00
4	JEEVAN LAL	BT17E E001	6,650.00							6,650.00
5	GOGULOTHU GANESH	BT18E E021	6,650.00							6,650.00
6	SABAVATH HANMANTHU CHOWHAN	BT18 ME021	6,650.00							6,650.00
7	RIGZIN ANGCHOK	BT17C E005	6,650.00							6,650.00
TOTAL			112,750.00							112,750.00
1	ATUL GAUTAM	BT15C E011	80,950.00		SC 11017/45/ 2017- SCD-I	28.12. 2020	01.01.202 1	939	24.03. 2021	80,950.00
2	PRADEEP KUMAR	BT15 ME009	80,950.00							80,950.00
3	MEKALA VINAY	BT15 ME013	80,950.00							80,950.00

4	KRISHNA KUMAR BHARGAV	BT15E C020	76,650.00							76,650.00
5	AJUPA DAS	BT15E C004	76,650.00							76,650.00
6	PAPU BHAGAT	BT15E E001	80,950.00							80,950.00
7	PANGKU BHAGAT	BT15C E001	80,950.00							80,950.00
8	VINAY KUMAR SHAKYAWAR	BT15C E007	80,950.00							80,950.00
9	AMAR KUMAR SAFI	BT15E C001	76,650.00							76,650.00
0	GAURAB SINGH	BT15 MR002	76,650.00							76,650.00
1	SOURAV KUMAR MAJI	BT15C E003	76,650.00							76,650.00
1	GOVINDA NAMO SUDRO	BT15C S002	80,950.00							80,950.00
TOTAL			949,900.00							949,900.00

State government scholarships received:

Sl. No.	Name of the Student	Name of the Agency	Amount of Scholarship (Rs.)
1.			
2.			

5.7 Games and Sports

Every year the Institute organises games and sports under the banner ‘*Shaurya*’. The following sports are generally to be organised every year during sports week:

- Cricket
- Football
- Table Tennis
- Volleyball
- Carom
- Chess
- Sprint/ Race
- Computer games

There sports week were not organised during the academic year 2020-21 due to COVID-19 pandemic.

Beside games and sports the Institute also organizes Cultural and Technical cum-Fresher's Social annually under the banner '**Anunaad**' for the students, but these were also not organised due to COVID-19 pandemic.

5.8 Examination Details

The Examination Section centrally conducts Mid-semester and End-semester examination in respect of theory components of the subjects unless otherwise permitted. The results are declared in terms of Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA) on 10 (ten) point scale. As per national standard, results are declared after one week of the completion of the examination. There is a continuous assessment of the students' performance throughout the semester and grades are awarded by the concerned teacher. In case of theoretical subjects, the evaluation is based on class assessment (attendance, class tests, assignments, quizzes, etc.), mid-semester examination and end-semester examination. The respective weightage for these subcomponents are as below. In case of sessional subjects (Laboratory, Design, Practical, Workshop, etc.), the evaluation is based on the basis of attendance, assessment of tasks assigned and the end-semester test/viva.

Sl. No.	Subcomponent	Weightage
1.	Class Assessment	20 %
2.	Mid-semester Examination	30 %
3.	End-semester Examination	50 %

Results of the Undergraduate Examination:**Degree: Bachelor of Technology**

Dept.	Semester	Total No. Of Students	Total Pass Students After Re-Exam	Total Students Fail	Pass %
CE	I	3	3	0	100.00
	II	29	29	0	100.00
	III	3	3	0	100.00
	IV	22	22	0	100.00
	V	1	1	0	100.00
	VI	19	19	0	100.00
	VIII	24	24	0	100.00
CSE	II	36	35	1	97.22
	III	1	1	0	100.00
	IV	28	26	2	92.86
	V	5	5	0	100.00
	VI	31	31	0	100.00
	VIII	26	26	0	100.00
ECE	I	2	2	0	100.00
	II	30	28	2	93.33
	IV	23	20	3	86.96
	V	3	1	2	33.33
	VI	27	26	1	96.30
	VII	1	1	0	100.00
	VIII	19	19	0	100.00
EEE	II	28	26	2	92.86
	III	7	2	5	28.57
	IV	18	18	0	100.00
	V	2	1	1	50.00
	VI	28	27	1	96.43
	VIII	18	18	0	100.00
ME	II	25	23	2	92.00
	III	1	1	0	100.00
	IV	23	21	2	91.30
	V	1	0	1	0.00
	VI	20	20	0	100.00
	VIII	18	18	0	100.00

Degree: Master of Technology

Dept.	Semester	Total No. Of Students	Total Pass Students After Re-Exam	Total Students Fail	Pass %
CSE	II	6	6	0	100.00
	IV	4	4	0	100.00
ECE	II	3	3	0	100.00
	IV	1	1	0	100.00
EEE	II	11	11	0	100.00
	IV	4	4	0	100.00
ME	II	7	7	0	100.00

5.9 Training and Placement

It is mandatory for the students of NIT Mizoram to undergo industrial training after their 5th semester. The Training and Placement section of the Institute arranges for such training and the students are sent to various firms/industries. Some of the names of the firms/industries where the Students were sent are NDPL Corporate Office, New Delhi; Steel Authority of India Limited, Jharkhand; Jindal, New Delhi; Defence and Development Organisation, Hyderabad; Bharat Heavy Electricals Limited, Noida and Bhopal; Oil India Limited, Duliajan; Indian Institute of Technology Guwahati; National Institute of Technology Silchar; National Institute of Electronics and Information Technology, Aizawl.

The placement cell of the Institute is very active. The overall picture of B. Tech batch 2017-2021 is given in the tables below:

SL. NO.	NAME	GENDER	ENROLL.NO.	CGPA	NAME OF THE COMPANY	PACKAGE CTC (APPROX)
1	Runson Pandey	Male	BT17CS026	9.25	TCS	9LPA
2	Chiluka Naga Chaitanya Kumar	Male	BT17CS018	6.65	ACCENTURE	6.5LPA
3	Amar Pratik	Male	BT17CS021	8.52	Deloitte	7.6LPA
4	Abhinav Anand Singh	Male	BT17CS016	8.24	APTEAN	10.26LPA
					TCS	9LPA
5	Mukesh Kumar Dadarwal	Male	BT17CS005	8.5	ALEPO	6.51LPA
6	Ankur Vishwakarma	Male	BT17CS017	9.79	PUBLICIS SAPIENT	9LPA
					LEMNISK	11.5LPA
					APTEAN	10.26LPA
					MUVIN	12LPA
					TEXAS INSTRUMENTS	21.5LPA
					DEVREV	28LPA+STOCKS

					GAMEKRAFT	32LPA
7	Deepak Kumar Ram	Male	BT17CS008	7.17	CAVISSON	5LPA
8	Preeti Mishra	Female	BT17CS012	7.13	PIE INFOCOMM	3.5LPA
9	Avnish Jha	Male	BT17CS006	9.01	APTEAN	10.26LPA
10	Kudupudi Nithin	Male	BT17CS020	7.36	TCS	9LPA
11	Mrinmoyee Ray	Female	BT17CS001	8.47	DELOITTE	7.6LPA
12	Priyanshu Pathak	Male	BT17CS010	7.54	RELIANCE JIO	3.5LPA
13	Neerajkumar Verma	Male	BT17CE022	7.6	KEC INTERNATIONAL	4.75LPA
14	Sanjit Kumar Rajak	Male	BT17ME002	6.84	VEDANTA	7.95LPA
15	Ajit Kumar Singh	Male	BT17ME016	8.6	VEDANTA	7.95LPA
16	Neha Kumari	Female	BT17CE014	7.8	PLANET SPARK	6.5LPA
17	Lipa Roy	Female	BT17EC004	6.54	VEDANTA	7.95LPA
18	Piyush Priyadarshi	Male	BT17EC006	8.03	TCS	9LPA
19	Piyush Kumar	Male	BT17EC016	7.98	TCS	9LPA
					TCS	3.96LPA
20	Rahul Kumar Kamal	Male	BT17EE022	7.45	KEC INTERNATIONAL	3.5LPA
21	Nitesh Gupta	Male	BT17CE024	7.58	CGI	6.8LPA
22	Nitish Kumar	Male	BT16EC005	6	ACCENTURE	4.5LPA
23	Aditya Raj	Male	BT17EC007	6.91	WIPRO	3.5LPA
					ALEPO	6.5LPA
24	Surya Vootla	Male	BT17EC010	6.66	ACCENTURE	4.5LPA
25	Rohit Sonker	Male	BT17CS024	6.7	MASTROLINKS	7LPA
26	Ayush Srivastava	Male	BT17EC005	8.99	PERFECTVIPS	3.6LPA
27	Shivam Raj	Male	BT17ME010	8.52	ALSTOM	6.5LPA
28	Sushobhit Saurabh	Male	BT17EC008	7.6	PLANET SPARK	6.5LPA
29	Saroj Kumar Singh	Male	BT17CS003	7.92	CGI	6.8LPA
					INTELLECT DESIGN ARENA	5LPA
					ACCENTURE	4.5LPA
30	Sudeep Singh	Male	BT17CS027	8.62	CAVISSION	4.5LPA
					SAGACIOUS	4.2LPA

The overall placements for 2021 pass out batch:

Total no of students	Total eligible students	Total student placed	Average Salary Package (CTC)
107	88	30	9.48 LPA
1. Total Placed Percentage ECE= 57.14%			
2. Total Placed Percentage EEE= 14.28%			
3. Total Placed Percentage CSE= 71.42%			
4. Total Placed Percentage ME= 40.00%			
5. Total Placed Percentage CE = 12.5%			
Overall Placed Percentage = 34.09%			

CHAPTER 6

RESEARCH AND DEVELOPMENT

6.1 Ph. D. Programmes

NIT Mizoram provides Ph.D. in the departments of Computer science and Engineering, Electrical and Electronics Engineering, Electronics and Communication Engineering, Civil Engineering, Mechanical Engineering, Physics, Chemistry and Humanities and Social Sciences.

6.2 Research Projects

Research projects details of the Institute:

Sponsored Research Projects Completed (during the financial year):

Sl. No .	Name of Principal Investigator	Title of Project	Sponsore d By	Amount Sanctioned (Rs.)	Date of		Duratio n
					Start	Completi on	
1.	Dr. Pabitra Kumar Biswas	Analysis, Design and Control of Active Magnetic Bearing for High Speed Application .	DST-SERB	15,72,800.0 0	17/03/201 7	April,2020 (Closure date 12 th Jan, 2021)	03

6.3 Sponsored Research Projects Ongoing:

Sl. N. o.	Name of Principal Investigator	Title of Project	Sponsored By	Amount Sanctioned (Rs.)	Date of		Duration
					Start	End	
1	Dr. Ranjita Das Department of Computer Science & Engg.	Integrated Software for Analyzing Single-Cell RNA sequencing	DBT-NECBH	11,74,000.00	2019	2021	2
2		Identification and Characterization Of Glioblastoma Tumour Cell From The Single- Cell RNA-Seq Data Using Machine Learning Approaches	DST-SERB	20,76,000.00	2020	2023	3
3	Dr. Chaitali Koley Department of Electronics & Communication Engineering	An FPGA Based Adaptive Feedback Based Reversible Watermarking-Direct Project Cluster Project- Development Of Air Quality Monitoring System	MeiTY (Ministry of Electronics and Information Technology, Government of India)	100,00,000.00	01/12/2015	30/11/2021	5

CHAPTER 7

THE COUNCIL AND BOG

7.1 Board of Governors

The following are the members of the Board of Governors (BOG) of NIT Mizoram:

Sl. No.	Name and Designation	Will serve as
1.	Prof. Rajat Gupta, Director, NIT Mizoram	Chairperson
2.	Prof. Rajat Gupta, Director, NIT Mizoram	Member (Ex-Officio)
3.	Additional Secretary or Joint Secretary (Technical) Department of Higher Education Ministry of Human Resource Development, Govt. of India	Member
4.	Financial Advisor Department of Higher Education Ministry of Human Resource Development, Govt. of India	Member
5.	Mr. Manoj Saraf Managing Director M/s Brahmaputra Udyog Pvt. Ltd. Guwahati, Assam	Member
6.	Er. Vanlallianzuala, Chief Engineer (Retd.) Khatla South, Aizawl, Mizoram	Member
7.	Prof. Gopal Das Dean (R & D), IIT Guwahati	Member
8.	Dr. P. K. Ray Professor, Department of Industrial & System Engg. IIT Kharagpur	Member
9.	Prof. Memcha Laitongbam Director, Manipur Institute of Management Studies Manipur University, Imphal	
10.	Dr. Ranjita Das Assistant Professor, Department of CSE, NIT Mizoram	Member
11.	Dr. Lalthanchami Sailo, Registrar, NIT Mizoram	Secretary

7.2 Finance Committee

The following are the members of the Finance Committee of NIT Mizoram:

Sl. No.	Name and Designation	Will serve as
1.	Prof. Rajat Gupta, Director, NIT Mizoram	Chairman & Member (Ex-Officio)
2.	Joint Secretary or his nominee Dept. of Higher Education, MHRD, Govt. of India	Member
3.	Financial Advisor or his nominee Department of Higher Education, MHRD, Govt. of India	Member
4.	Dr. P. K. Ray, Professor Department of Industrial & System Engg., IIT Kharagpur	Member
5.	Dr. Lalthanchami Sailo, Registrar, NIT Mizoram	Member Secretary

7.3 Building and Works Committee

The following are the members of the Building & Works Committee of NIT Mizoram:

Sl. No.	Name and Designation	Will serve as
1.	Prof. Rajat Gupta, Director, NIT Mizoram	Chairman & Member (Ex-Officio)
2.	Director (TE) Dept. of Higher Education, MHRD, GoI	Member
3.	Director (IFD), Dept. of Higher Education, MHRD, GoI	Member
4.	Prof. Anjan Dutta, Professor, Department of Civil Engineering, IIT Guwahati	Member (BOG Nominee)
5.	Prof. P. S. Choudhury Department of Civil Engineering, NIT Silchar	Member (BOG Nominee)
6.	Dr. J. H. Ansari, Former Director, SPA, New Delhi	Member (BOG Nominee)
7.	Shri C. H. Lalnunchama, Executive Engineer (Electrical), PWD Govt. of Mizoram	Member
8.	Prof. Saibal Chatterjee Department of Electrical and Electronics Engineering NIT Mizoram and Dean (P & D)	Member
9.	Dr. Lalthanchami Sailo, Registrar, NIT Mizoram	Member Secretary

7.4 Senate

The following are the members of the Senate of NIT Mizoram:

Sl. No.	Name and Designation	Will serve as
1.	Prof. Rajat Gupta, Director, NIT Mizoram	Ex-Officio Chairman
2.	Prof. A. T. Khan, Dept. Of Chemistry, IIT Guwahati	Member
3.	Prof. Sukumar Nandi Department of Computer Science & Engineering IIT Guwahati	Member
4.	Prof. Sudeshna Purkayastha Department of History Assam University, Silchar	Member
5.	Prof. Biswajit Mahanty Department of I & S Engineering IIT Kharagpur	Special Invitee
6.	Prof. Saibal Chatterjee Department of Electrical and Electronics Engineering NIT Mizoram	Member
7.	Dr. Lalthanchami Sailo, Registrar, NIT Mizoram	Secretary

CHAPTER 8

CONCESSION FOR SC, ST, OBC AND PERSONS WITH DISABILITY

8.1 Concession for Students

Admission to 1st year of B. Tech. Course is made through JEE Main conducted by CSAB and reservation of seats for SC, ST, OBC and Physically Handicapped (PH) category of candidates is followed as per the guidelines framed by Ministry of Human Resource Development, Govt. of India, Department of Higher Education.

The reservation of seats is as follows:

Course	Type of Concessions	Category of Students	Magnitude
B. Tech.	Reservation at admission stage	SC	15 %
		ST	7.5 %
		OBC	27 %
		PWD	3 %

8.2 Concession for Staff

The Institute also follows reservations in appointment at entry level to SC, ST, OBC and PWD category of candidates as per Government of India rule. Concession in application fee is also applicable as the rule of the Government of India.

CHAPTER 9

FINANCIAL STATUS

9.1 Analysis of Plan, Non-Plan and OSC Grants

(Figures in Rs. Lakhs)

Sl. No.	Year	Grants-in-aid from MHRD, Govt. of India				IRG	Total		
		Plan	Non-plan	Plan (OSC)					
				Recurring	Non-recurring				
1.	2009-10	140.00	-	140.00	-	-	140.00		
2.	2010-11	250.00	-	-	250.00	20.89	270.89		
3.	2011-12	500.00	-	500.00	-	66.18	566.18		
4.	2012-13	1500.00	-	1100.00	400.00	140.81	1640.81		
5.	2013-14	1500.00	-	200.00	1300.00	155.78	1655.78		
6.	2014-15	5300.00	-	897.32	4402.68	204.65	5504.65		
7.	2015-16	6594.65	-	830.40	5764.25	237.01	6831.66		
8.	2016-17	5500.00	-	413.00	5087.00	261.04	5761.04		
9.	2017-18	7316.00	-	2600.00	4716.00	454.80	7770.08		
10.	2018-19	2050.00	-	2050.00	-	320.89	2370.89		
11.	2019-20	-	-	-	-	241.87	241.87		
12	2020-21	1964.00	-	864.00	1100.00	223.55	2187.55		
Total		32614.65	-	9594.72	23019.93	2327.47	34942.12		

9.2 Sources of Fund

The Ministry of Human Resource Development, Government of India is source for providing funds to this Institute.

9.3 Expenditure Position

The expenditure position is given in the Annexure in the Audit Report.

CHAPTER 10

CENTRAL FACILITIES AND SERVICES

10.1 Library

The Institute has a Central Library which approximately consists of 14,200 books. Out of this about 13,400 books belong to general textbooks for use in regular classes and about 800 books are for reference section.

Apart from this, the Library also has 5438 titles of E-books from Elsevier, Tata McGraw, Springer Nature belonging to various departments of the Institute. Besides a good number of journals like IEEE, Springer Link (1400+ eJournals), Science Direct and JSTOR, reports, magazines and national and regional newspapers are stacked in the Institute Library. The Institute has also purchased anti-plagiarism software viz, Turnitin for the fraternity of the Institute. The central library is functional with LIBMAN library management software.

10.2 Workshops

The Institute has one central workshop with good number of machines and instruments. The various shops available are Carpentry, Fitting, Welding and Machine shop.

10.3 Internet Service

The Institute buildings are well connected with both wired and wireless internet connection. The Institute has 1Gbps internet connectivity (24X7) under National Knowledge Network (NKN), Govt. of India, connected through redundant fiber cables. Apart from this, the institute is also having a 2Mbps leased line internet connection from BSNL as redundant connectivity. As a whole the institute is connected and properly networked via cisco router and switches.

10.4 Laboratories

Each department in the Institute has various laboratories with well-equipped instruments and machines.

CHAPTER 11

TECHNICAL QUALITY IMPROVEMENT PROGRAMME (TEQIP)

PHASE -III

11.1 TEQIP

NIT Mizoram has been selected for TEQIP-III under Subcomponent 1.1 with objectives to bridge the gap of the Institutions in the Central, eastern and north-eastern region and hill states with specific interventions. Under TEQIP Phase III, Sub-Component 1.1 (For strengthening institutions to improve learning outcomes and employability of graduates) IIT Kharagpur is the mentor institute of NIT Mizoram. NIT Mizoram has received Rs. 15 Crore divided under the following subheads:

a) Procurement of Goods: 9 Crore, b) Academic Process: 4.5 Crore, c) Operating Cost: 1.5 Crore.

After TEQIP-III is implemented, a number of conferences, research works, internship and many other benefits were funded by TEQIP-III for the faculty, staff and students of NIT Mizoram.

The details are as follows:

For students:

- National Institute of Technology Mizoram being a new Institution, the adequate facilities and equipments for research work are not available and most of the PhD students from the Department of Mechanical Engineering, ECE & CE had carried out their research related work in reputed Institutions such as CSIR-CMERI, Durgapur, IIT Guwahati, CSIR-Pilani, IIT Bhubaneswar etc. through TEQIP-III Fund.
- Due to less number of faculty members, 12 external faculties for various departments- CSE, EEE, ECE& CE were engaged under TEQIP-III Fund for the completion of B.Tech&M.Tech courses in these respective departments. Further, Remedial classes for B.Tech students in basic sciences subjects such as Mathematics, Physics & Chemistry as well as English were also taken for the weaker students.
- The B.Tech, M.Tech & PhD students presented their research papers and attended International and National Conferences in different parts of India by utilizing TEQIP-III Funds. They had also attended Short Term Course, Workshop, Hands-On training etc. which is funded by TEQIP-III.

- B.Tech & M.Tech Students from all the engineering branches had undergone Internship in various reputed Institutions & Industries such as Naresh Technologies, Hyderabad/Eastern Coalfields Limited, Kolkata/Equifin United Technologies, Gurugram/ IIT BHU, Varanasi/ONGC, New Delhi/PWD/BSRDCL, WB/RCD Bihar/Gawar construction Ltd, Haryana/IOCL, Bihar/Power & Electricity Dept, Mizoram/Cochin Shipyard Limited/ BEL/ HCFAB/IIT Patna/IIT Bombay/ Makxenia Engineering resource Pvt. Ltd/HMT Machine Tools Ltd/NFC/ MSME Tool Room, Kolkata/NEEPCO, Tuirial/CETPA, Noida & Lucknow/DUCAT, Noida/Jadavpur University, Kolkata, etc .
- One B.Tech students have been selected for Internship MITACS Globallink Internship Programme (R&D of TEQIP-III), Canada for 12 weeks.
- Research Assistantship for 16 regular PhD students is being provided through TEQIP-III Fund.
- B.Tech, M.Tech & Ph.D students had applied and gave their NPTEL Online courses exam, where registration fee are reimbursed through TEQIP-III. Likewise, for B.Tech students who appear for their GATE exam, their registration fee is reimbursed through TEQIP after GATE result is declared.
- Induction Programme for the 1st Year B.Tech for 21 days was also organized which is mandatory under TEQIP-III.

For Faculties:

- National Level Seminars, Short Term Course, Faculty Development Programme were conducted for the students & Faculty of NIT Mizoram. Further, Workshops on Good Governance and Workshop under AICTE ATAL Program for the Faculty & Staff of NIT Mizoram were also conducted.
- Professional Development Training Programme & Stress Management Training has been attended by Faculties.
- Industry Consultation Committee has also been constituted for the first time at NIT Mizoram for all the five engineering branches of engineering.
- The Faculty & Staff of NIT Mizoram had also attended International & National Conferences and presented their research papers, further, they had also attended Workshops, Short Term Courses, FDP, training on Pedagogy etc. through online mode under TEQIP-III.

Procurement:

- **Project Duration** : 3 years (April, 2017 to Sept, 2020 extended till March, 2021, further extended till January, 2022)
- **Total Sanction Amount** : Rs. 15 crore (Procurement: 9 crore, Academic: 4.5 crore, Operating Cost: 1.5 crore)
- **Utilized Amount** : Rs. 12,52,41,952.00 (Upto March 2021)
- **Details of Procurement made till March, 2021 is mentioned below:**

Sl. No.	Name of Procured Equipment/learning resources	Procurement Status	Amount (INR)
1	UPS	Procured	19,90,826.00
2	Microsoft Campus Agreement License	Procured	14,74,301.00
3	Science Direct e-Journal	Procured	62,32,790.00
4	e-Journal3 (Springer Link)	Procured	11,70,045.00
5	e-Journal4 (IEEE-IEL)	Procured	30,83,308.00
6	e-Journal5 (Jstor)	Procured	3,10,555.00
7	EEE-Soft (PSCAD Software)	Procured	12,56,700.00
8	Gen3 (Wolfram Mathematica)	Procured	4,04,250.00
9	CSE (Microprocessor Lab.)	Procured	1,65,606.00
10	FPGA	Procured	8,42,520.00
11	e-book (Springer)	Procured	60,59,466.00
12	Laptop	Procured	2,99,399.00
13	Generator	Procured	25,00,180.00
14	TV	Procured	1,70,240.00
15	Abacus	Procured	8,08,770.9
16	STAAD	Procured	24,78,000.00
17	Projector	Procured	4,46,409.6
18	Silvaco	Procured	17,70,000.00
19	ECE1B (ECE Lab Equip.)	Procured	4,36,878.75
20	ECE1A (ECE Lab Equip.)	Procured	32,43,450.00
21	Civil2 (Civil Lab Equip.)	Procured	2,69,220.00

22.	Xerox Machine (TEQIP Cell & Examination Cell)	Procured	1,41,613.00
23.	Printer (Admin block & TEQIP Cell)	Procured	1,64,800.00
24.	BLDC motor drives (EEE)	Procured	16,80,000.00
25.	Revolving Chair (TEQIP Cell)	Procured	69,990.00
26.	3D Printer (ME lab Equipment)	Procured	14,70,000.00
27.	ME lab Equipments (Forced convective dryer, Electric Discharge machine, biomass gassifiier and submerge arc welding machine)	Procured	1,02,51,150.00
28.	Computer Table (TEQIP Cell)	Procured	38,849.00
29.	Desktop Computer(TEQIP Cell, CSE, ECE and CE department)	Procured	66,20,940.00
30.	LCR Meter (BS & HSS)	Procured	9,91,095.00
31.	Lingo Software (BS & HSS)	Procured	2,97,493.00
32.	Red hat Software (ECE)	Procured	1,54,350.00
33.	SPSS Software (BS & HSS)	Procured	10,95,582.00
34.	Origin (BS&HSS)	Procured	2,99,250.00
TOTAL			5,86,88,027.25

CHAPTER 12

EVENTS AT NIT MIZORAM

12.1 INTERNATIONAL YOGA DAY (21ST JUNE 2020)

Game and sports society organized international yoga day on 21st June 2020 in virtual mode. All faculty members, students and staff enthusiastically participated in the event and uploaded their photos and videos on the institute platform. The collage of few selected photos is shown below.



12.2 CLEANLINESS DRIVE (2ND OCTOBER 2020)

On the occasion of 151st birth anniversary of Mahatma Gandhi, Game and sports society organized Cleanliness Drive (2nd October 2020). Director, NIT Mizoram, Deans, Faculty in charge - Sports and other faculty members participated in cleaning the campus and take an oath for cleanliness.



12.3 LANDSLIDE MITIGATION & DETAILED PROJECT REPORT (DPR) PREPARATION

During the prevalent Covid-19 Pandemic, on behalf of the Dept. of Civil Engineering, NIT Mizoram, two 'On-line Training Programme' has been organized and conducted successfully by Dr. Bijayananda Mohanty as a Course Coordinator/Nodal Officer. The program was sponsored by the National Disaster Management Authority (NDMA), Ministry of Home Affairs, Govt. of India, New Delhi, on the theme "Landslide Mitigation & Detailed Project Report (DPR) Preparation", for the budding professionals working in Public Works Department, Department of Geology and Minerals, State Disaster Management Authority, Geological Survey of India, Border Roads Organisation, National Highway Authority of India, etc. in the landslide affected area, for the duration October 19th – 23rd, 2020, and March 15th – 19th, 2021.



12.4 VIGILANCE AWARENESS WEEK 2020

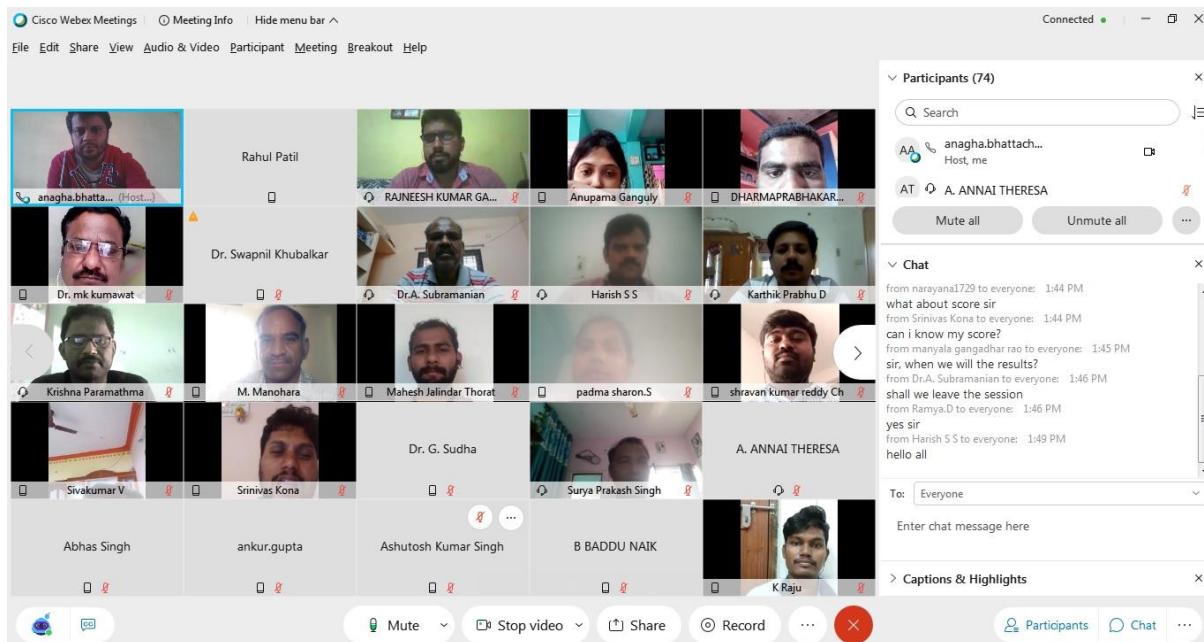
The vigilance awareness week has been observed in NIT Mizoram during 27th October to 2nd November 2020 under the chairmanship of Dr. Konthoujam Gyanendra Singh, Dean (FW). Mr. Ramesh Kumar, Asst. Prof, Electrical and Electronics Engineering and Mr. Saurav Suman, Trainee Teacher, Mechanical Engineering were the organizing members of the programme. Essay writing competition and poster competition have been organized on this occasion. The themes of the essay writing competition was “Role of vigilance in nation building”, and the theme of poster competition was “Vigilance India prosperous India”. The prizes were distributed to the 1st three winners in each competition.



12.5 ATAL FDP ON ‘ELECTRIC VEHICLE’

ATAL FDP was conducted by EEE Department on Electric Vehicle from 10th to 14th of November 2020. The coordinator was Anagha Bhattacharya (AP,EEE). 120 participants outside the institute have registered for the program. The speakers were

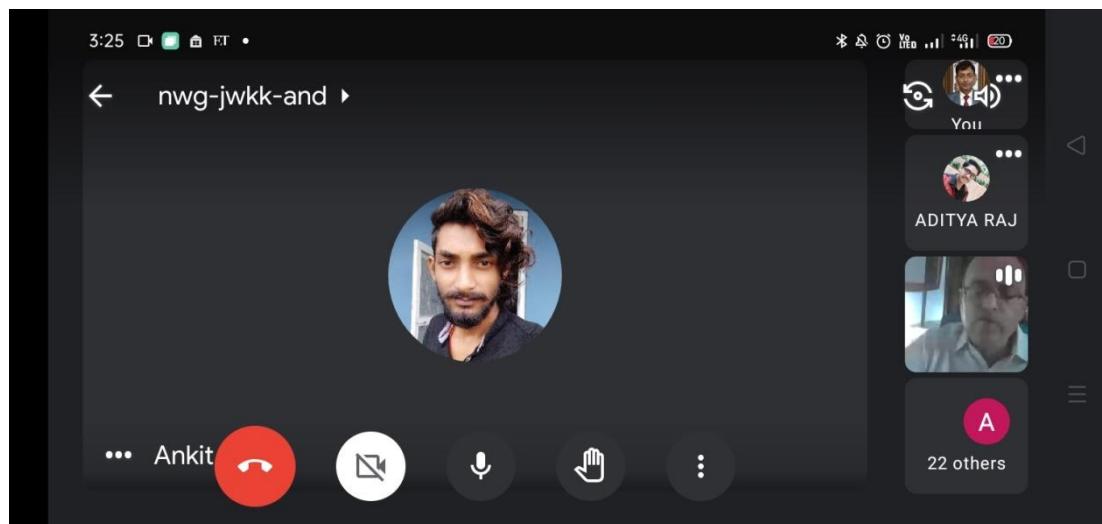
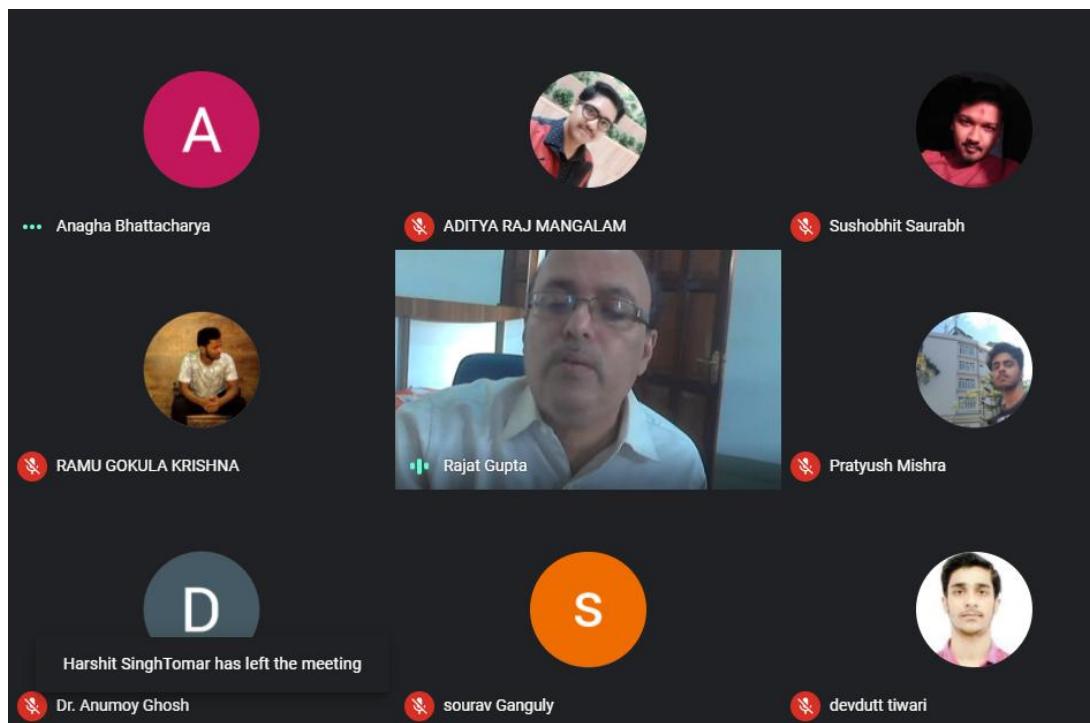
1. Prof Bhim Singh, IIT Delhi
2. Prof. Amit Jain, IIT Delhi
3. Prof. L. Kannan IIT madras
4. Dr. Bishakhamajumder, IIM Vishakhapatnam
5. Dr. Arun Kumar, MNIT Jaipur
6. Dr. Kaushal Kumar Jha, Industry Expert
7. Dr. P.K. Biswas, NIT Mizoram
8. Dr. Anumoy Ghosh, NIT Mizoram



12.6 CONSTITUTION DAY 2020

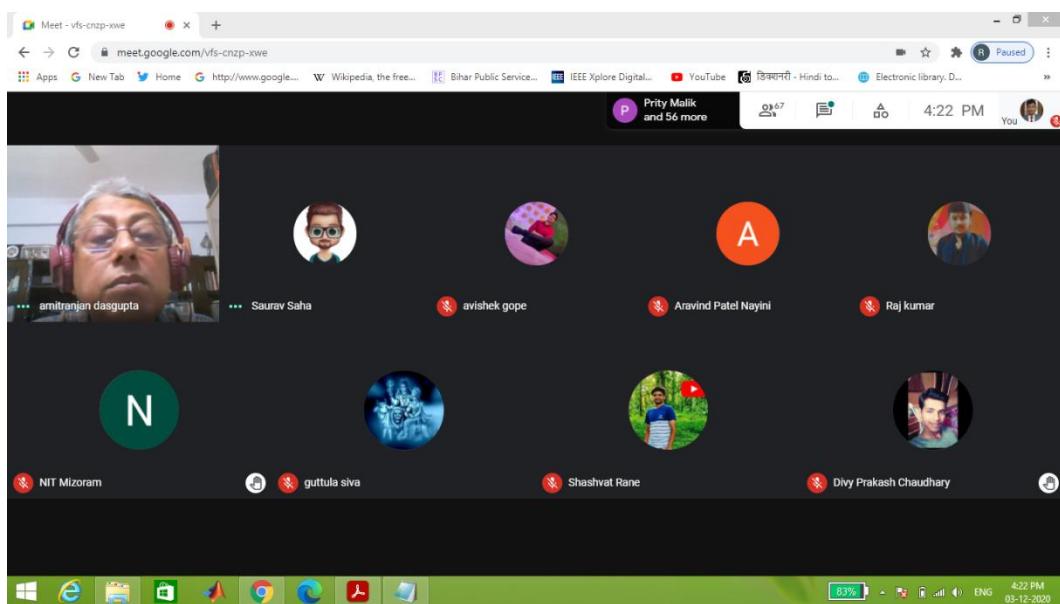
The Constitution Day observed at NIT Mizoram in virtual mode on 26th November 2020. The Preamble of the constitution of India has been read by Prof. Rajat Gupta, Director, NIT Mizoram and followed by the students, faculties and staffs of the institute. An

extempore/speech competition for the students of NIT Mizoram has been organized on this occasion. The theme of the competition was “Constitution of India”. Mr. Ramesh Kumar, Asst. Professor, Electrical and Electronics Engineering, Mr. Anagha Bhattacharya, Asst. Professor and Head, Electrical and Electronics Engineering, and Dr. Anumoy Ghosh were the organizing members of the event.



12.7 ORIENTATION & INDUCTION PROGRAMME

The orientation programme started with the Inaugural ceremony of Orientation cum Induction Programme on 2nd December 2020. This programme was for welcoming the newly admitted UG, PG, and Ph.D. students at NIT Mizoram. Prof. T. G. Sitharam, Director, IIT Guwahati graced the inaugural ceremony as the chief guest. The other guests invited for the ceremony were **Prof. Gautam Sutradhar**, Director, NIT Manipur; **Prof. Pinakeswar Mahanta**, Director, Arunachal Pradesh; **Prof. H. K. Sharma**, Director, NIT Agartala; **Prof. Sivaji Bandyopadhyay**, Director, NIT Silchar; **Prof. Bibhuti Bhusan Biswal**, Director, NIT Meghalaya; **Prof. S Venu Gopal**, Director, NIT Nagaland; **Prof. Mahesh Chandra Govil**, Director, NIT Sikkim; **Prof. P. K. Ray**, IIT Kharagpur, BOG Member; **Prof. Gopal Das**, IIT Guwahati, BOG Member; **Prof. Sudeshna Purakayastha**, Assam University, Senate Member; **Prof. A. T. Khan**, IIT Guwahati, Senate Member; **Prof. Biswajit Mahanti**, IIT Kharagpur, Senate Member; and **Prof. Sukumar Nandi**, IIT Guwahati, Senate Member. **Prof. Rajat Gupta**, Director, NIT Mizoram acted as a host director. Most of students and their parents participated in the ceremony. The Inaugural Programme started with the introductory speech by Prof. Saibal Chatterjee. All the guests blessed the students and wished them a happy academic life at NIT Mizoram and great carrier ahead. Prof. Rajat Gupta welcomed all the newly admitted students at NIT Mizoram. The inaugural ceremony ended with the vote of thanks by Dr. Alok Shukla. The Orientation programme was addressed by the Director, NIT Mizoram; Prof. Dr. Saibal Chatterjee, Dean (Acad and P&D); Assoc. Prof. Dr. Alok Shukla, Dean (SW); Assoc. Prof. Dr. Ajmal Koya Pulikkal, Dean (R&C); Assoc. Prof. Dr. K. Gyanendra Singh, Dean (FW); Asst. Prof. Dr. Surendra Ontela (Examination I/C), Wardens of the hostels, and other speakers. The induction programme for the newly admitted students was scheduled for 21 days starting from 2nd December to 22nd December 2020. Many internal and external expert talks on various topics including academic, industry, innovation and start-ups have been conducted. A programme of Gurudev Sri Ravi Shankar was also conducted under the induction programme which was telecasted for students of many NITs. An art of living session has also been conducted for two days under this programme. **Mr. Ramesh Kumar**, Asst. Professor, EEE and **Mr. Suman Majumder**, Asst. Professor, EEE were the organizing members of this 21 days programme.

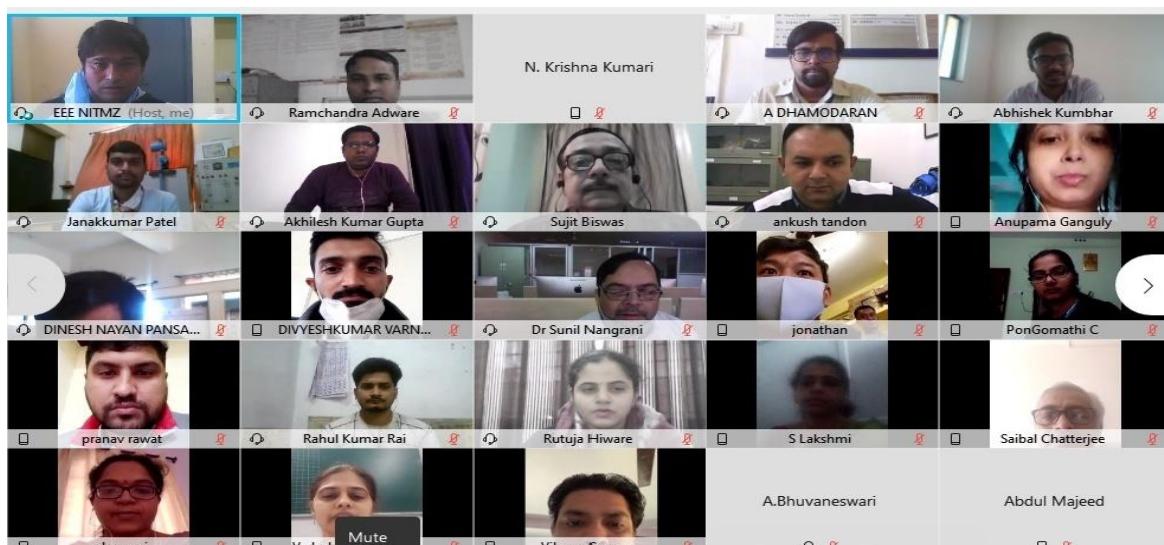




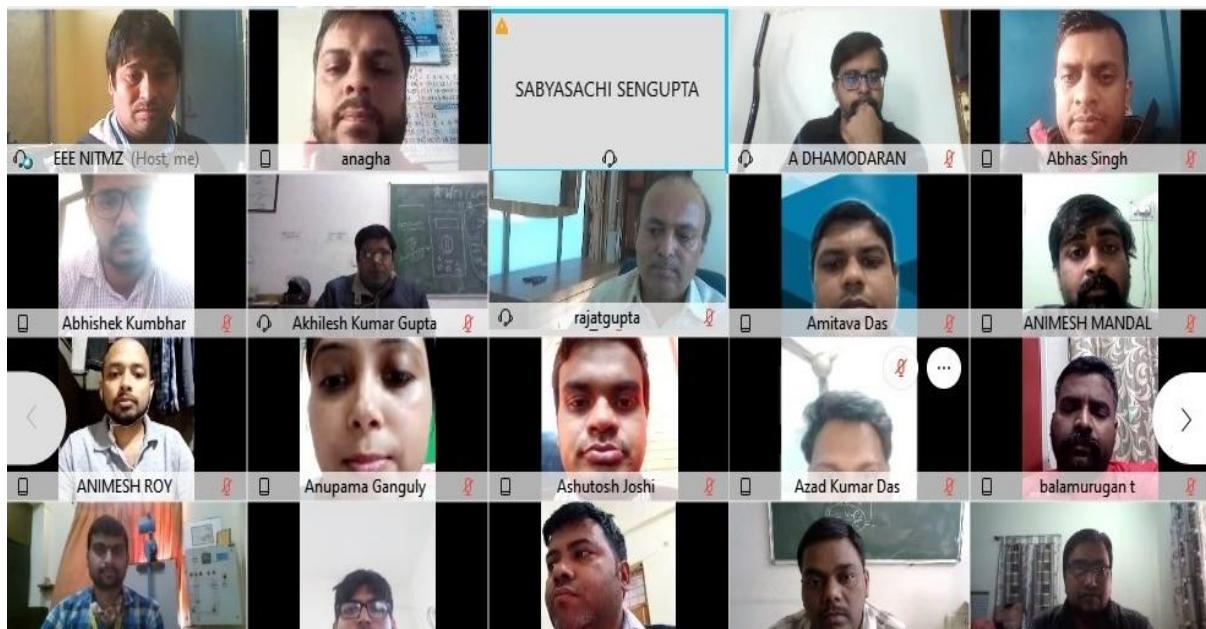
**Plantation by the Director and UG 1st year students of NIT Mizoram
(Induction Programme, December 2020)**

12.8 ATAL FDP ON ‘POWER ELECTRONICS APPLICATION IN MACHINE DRIVES AND POWER SYSTEM’

A Faculty Development Programme (FDP) on “**Power Electronics application in Machine Drives and Power system**” from **1-5 December, 2020** organized by the Department of Electrical & Electronics Engineering, National Institute of Technology Mizoram (N.I.T., Mizoram) under the aegis of AICTE Training and Learning (ATAL). Dr. P.K. Biswas, Assistant Professor, Department of Electrical & Electronics Engineering, N.I.T., Mizoram coordinated this event. A total of two hundred (200) participants registered but 131 participants attended the FDP. The inaugural function started with the welcome address by the co-coordinator Assistant Professor, EEE Department, NIT Mizoram and further, an overview of the course was given by him. Inaugural speech was given by Mr. Anagha Bhattacharya, HOD, EEE Department, NIT Mizoram. Following the presidential address, the Chief Guest of the inaugural ceremony Prof. Sujit Kumar Biswas, Former Professor, Jadavpur University, Kolkata inaugurated the session. Prof. Saibal Chatterjee, Dean (Academic), NIT Mizoram was the Guest of Honour of the inaugural function. The inaugural session was concluded with a vote of thanks by Dr. P.K. Biswas, Course Coordinator.



In the valedictory session, Mr. Anagha Bhattacharya, HOD, EEE Department gave a brief report about the five days program. Prof. Sabyasachi Sengupta, Former Professor, Department of Electrical Engineering, IIT Kharagpur also explained about the five days course and its importance of the program. Prof. Rajat Gupta, Director, NIT Mizoram in his presidential address, emphasized the importance of forming working groups in the area of power electronics and Machine Drives. Dr. P.K. Biswas, course coordinator, conveyed the vote of thanks to the attending participants.

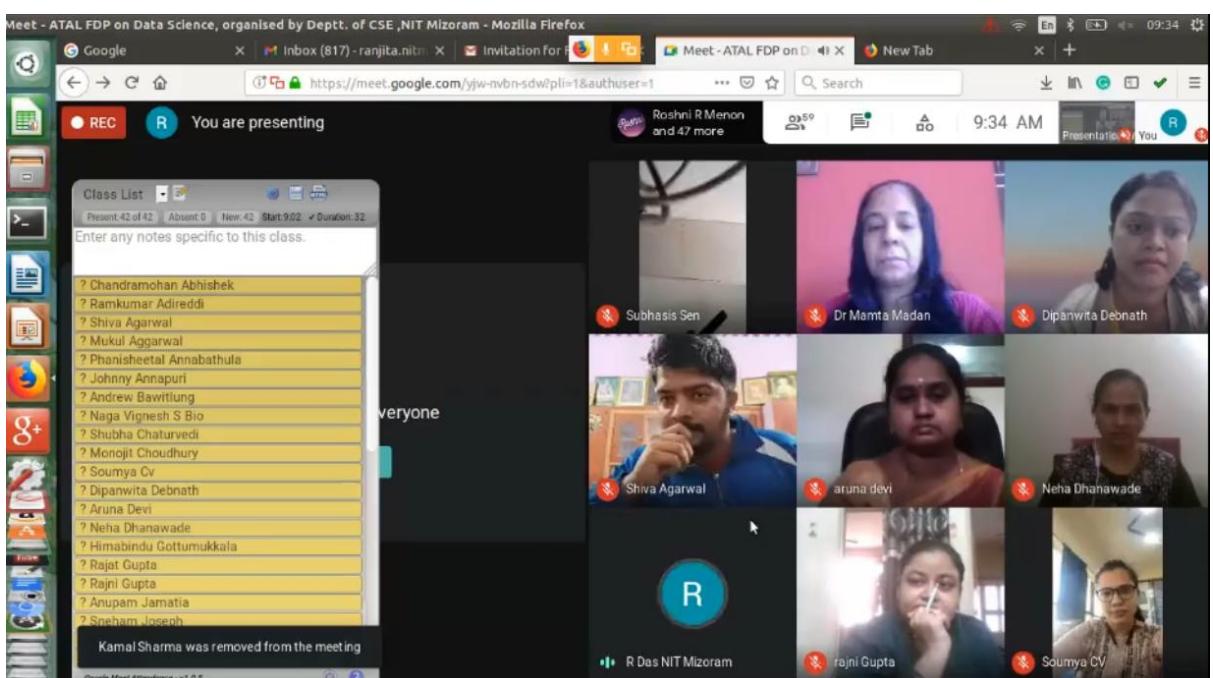


12.9 ATAL FDP ON 'DATA SCIENCE'

Data Sciences 5-Days AICTE sponsored workshop was conducted from 15th to 19th December 2019 in which around 190 participants from different parts of the country registered the course. Out of these 190 participants, 150 participants actively participated into the workshop. The programme covers various technical, non-technical and yoga aspect from various field of study. It also lays the foundation of mathematical concept and foundation.

The inauguration was held on 15th December 2020 online at 9: 30 am. Chief Patron of the program was Prof. Rajat Gupta, Director, NIT Mizoram. Dr. Ajmal Koya Pulikkal, Dean (Research and Consultancy) gave the inaugural speech and open the program. Prof. Saibal Chatterjee, Dean (Academic and Planning & Development), Dr. Ranjita Das, Asst. Profesor & HoD, Deptt. of CSE, NIT Mizoram chaired the program. Also, expert speakers from different Institute and Industry were also present with the participants.

The program is closed by Our Honourable Director, Prof. Rajat Gupta, followed by a speech from Prof. Saibal Chatterjee, Dean (Academic). The program is concluded with a vote of Thanks from the program coordinator, Dr. Ranjita Das.



12.10 ATAL FDP ON ‘GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS)’

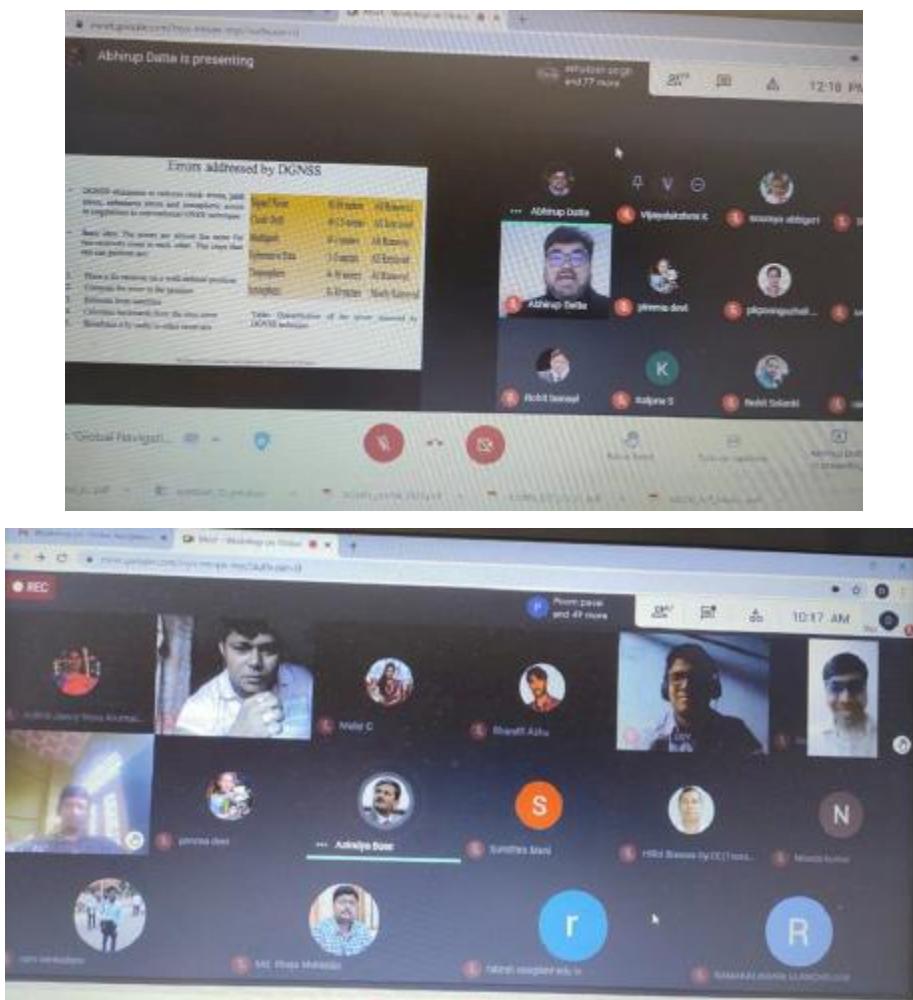
5-Days AICTE sponsored workshop on Global Navigation Satellite System (GNSS) was conducted by All India Council of Technical Education and APJ Abdul Kalam Technological University organized by Department of ECE, NIT Mizoram dated from 18th Dec. 2020 to 22nd Dec. 2020 full day in which around 200 participants across India participated for the same.

The inauguration was chaired by Prof. Rajat Gupta, Director, National Institute of Technology Mizoram, Dr. Anindya Bose, Senior Scientific Officer, Burdwan University, Dr. P. Banerjee, Former scientist of National Physical Laboratory, New Delhi, India, Dr. Ajmal

Koya Pulikkal, Dean (R & C), NIT Mizoram, Dr. Anumoy Ghosh, HoD of ECE Department, NIT Mizoram, and Dr. Chaitali Koley, Coordinator, Assistant Professor, Dept. of ECE, NIT Mizoram. The welcome address was given by Dr. Chaitali Koley, Assistant Professor, Dept. of ECE, NIT Mizoram. The 5- days AICTE Workshop on “Global Navigation Satellite System (GNSS)” was inaugurated by Prof. Rajat Gupta, Director, National Institute of Technology Mizoram.

The valedictory function was chaired by Dr. Saibal Chatterjee, Dean (Acad), NIT Mizoram, Dr. Anumoy Ghosh, HoD of ECE Department of ECE, National Institute of Technology Mizoram, and Coordinator Dr. Chaitali Koley, Assistant Professor, Dept. of ECE, NIT Mizoram. A feedback session was also arranged.

The workshop was a success as all the participants were successfully able to build their concept on Global Navigation Satellite System (GNSS) applications at the end of the workshop. The response from the participants about the workshop is tremendously good and positive and as per the feedbacks they would want to attend such more hands-on workshops further in future.



12.11 FDP ON ‘FRUGAL INNOVATIONS AND SOCIAL ENTREPRENEURSHIP’

Innovation and Entrepreneurship Development Centre of NIT Mizoram has conducted FDP on Frugal Innovations and Social Entrepreneurship from 25th January to 30th January 2021. The Co-ordinators were Mr. Ramesh Kumar and Mr. Anagha Bhattacharya. The FDP program was sponsored by AICTE. Around 80 participants had participated and they were enlightened by the program. The speakers of the program were as follows: Prof Anil Gupta, Padmashree Awardee, Pioneer of Grassroot Innovation in India, Retd. Prof. IIM Ahmedabad; Dr. Vipin Kumar, Director National Innovation Foundation; Dr. Udbhab Kumar Bharali, Padmashree Awardee, Innovator; Dr. Nitin Maurya, National innovation Foundation, TEDx Speaker; Prof. K. Kannan, Entrepreneur, Prof. IIT Madras; Mr. Madhusudhan Ray, Entrepreneur, Chartered Engineer, fellow of Institute of Engineers; Dr. Saroj Kumar Pani, Associate Professor, IIM Vishakhapatnam; Dr. Shad Pervez, Faculty, NIT Srinagar; Mr. Aaquib Hussain, Entrepreneur, TEDx Speaker; Mr. Sabyasachi Mukherjee, Entrepreneur, TEDx Speaker; Prof. Rajat Gupta, Director, NIT Mizoram; Mr. Anagha Bhattacharya, Coordinator, Innovation and Entrepreneurship Development Centre; Mr. Ramesh Kumar, CoCoordinator, Innovation and Entrepreneurship Development Centre; and Dr. Anumoy Ghosh, HOD ECE, NIT Mizoram.

**National Institute of Technology
Mizoram**

PRESENTS

Five Day FDP on

FRUGAL INNOVATIONS & SOCIAL ENTREPRENEURSHIP

From
25 - 30 January, 2021

Meet our Guests

Padma Shri Awardee Prof. Anil Gupta	Padma Shri Awardee Dr Uddhab Bharali	Mr. Aaquib Hussain Director I&WeC Minds	Dr. Vipin Kumar Director NIF-India
Dr. Saad Parvez Associate Professor NIT Srinagar	Dr. Nitin Maurya Scientist & Coordinator NIF Guwahati Cell	Dr. Saroj Kumar Pani Associate Professor IIM-V	

For Registration fill in the details :
<https://forms.gle/udzzfC6stk2BKs4p7>

12.12 FDP ON 'EXAMINATION REFORMS'

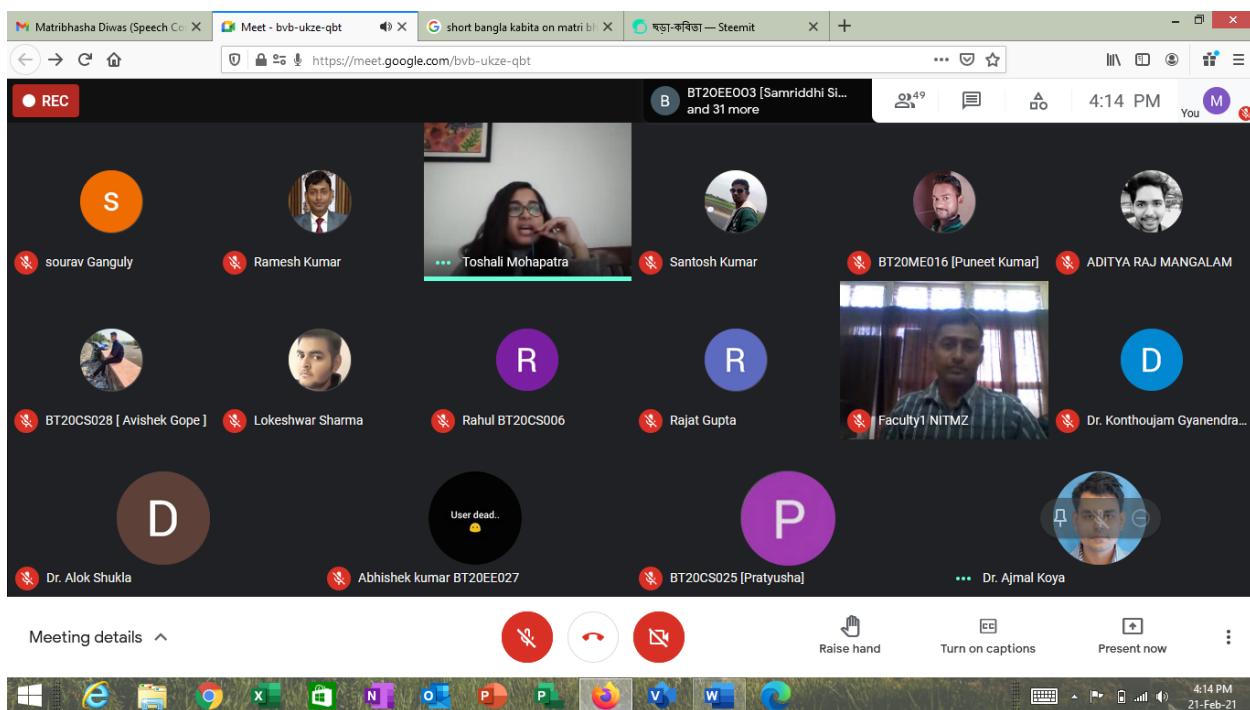
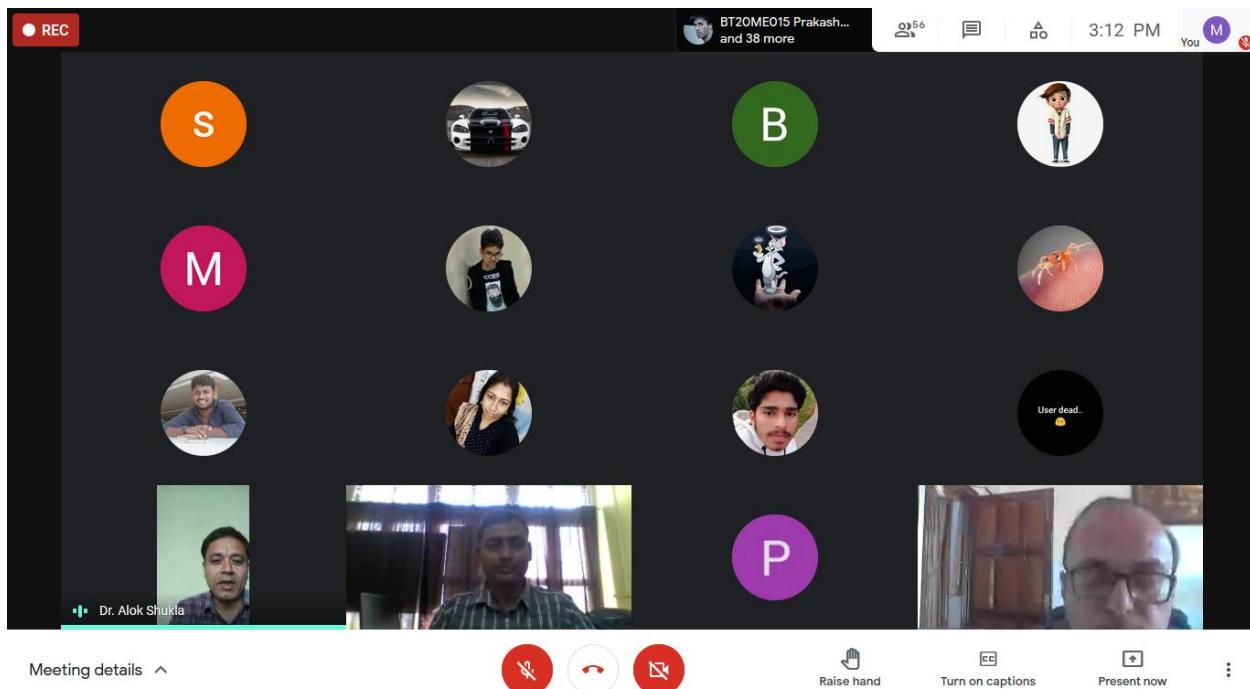
AICTE sponsored 5-Day Faculty Development Program on **Examination Reforms** was organized by **National Institute of Technology Mizoram** from **February 15-19, 2021**. A total of 287 participants have registered for the FDP from various institutions across the country. The program was started on 15th February 2021 with formal inaugural ceremony. Prof. Parthasarathi Chakrabarti, Director, IEST Shibpur has graced the ceremony and enlightened the participants about the importance of examination reforms in higher education.

Col. (Mr.) Venkat, Director, Faculty Development Cell, AICTE has also graced the occasion as Guest of Honor and shared his thoughts on the theme of the FDP. Prof. Rajat Gupta, Director, NIT Mizoram motivated the participants emphasizing the importance of the FDP and advised the participants to benefit from the proceedings of FDP.

The participants have actively participated in all the sessions and interacted with the speakers. On all five days of FDP, day-wise feedback was also collected from all the participants. An Online quiz test also conducted on the topics covered in this FDP. The overall response was overwhelming. The weeklong FDP on Examination Reforms was concluded with a formal valedictory function on 19th February 2021 from 4:15 PM onwards. Prof. Rajive Kumar, Member Secretary, AICTE has graced the occasion and expressed his views on the importance of examination reforms. Prof. Rajat Gupta, Director, NIT Mizoram addressed the august gathering and thanked all the participants for their interest and active participation. He also extended his invitation to all the participants to visit NIT Mizoram whenever possible and to work in collaboration.

12.13 MATRIBHASHA DIWAS 2021

Matribhasha Diwas was organized on 21st February 2021 on the occasion of International Mother Language Day. The programme was conducted in online mode due to COVID-19 pandemic, and Mr. Ramesh Kumar was the Co-ordinator of it. The programme started with a welcome speech by Mr. Ramesh Kumar, Asst. Professor, Electrical and Electronics Engineering Department. Prof. Rajat Gupta, Director, NIT Mizoram, Prof. Saibal Chatterjee, Dean (Academic), Dr. Alok Shukla, Dean (Students welfare), Dr. Ajmal Koya Pulikkal, Dean (Research and Consultancy), and Dr. Konthoujam Gyanendra Singh, Dean (Faculty welfare) have addressed to the gathering. A speech competition with the theme “Fostering Multilingualism for inclusion in education and society” has also been organized for the students of NIT Mizoram. Three prizes were distributed for the winners and consolation prizes to the other participants. The programme ended with a vote of thanks by Mrs. Krishnatri De, Asst. Professor, Electrical and Electronics Engineering Department followed by national anthem.

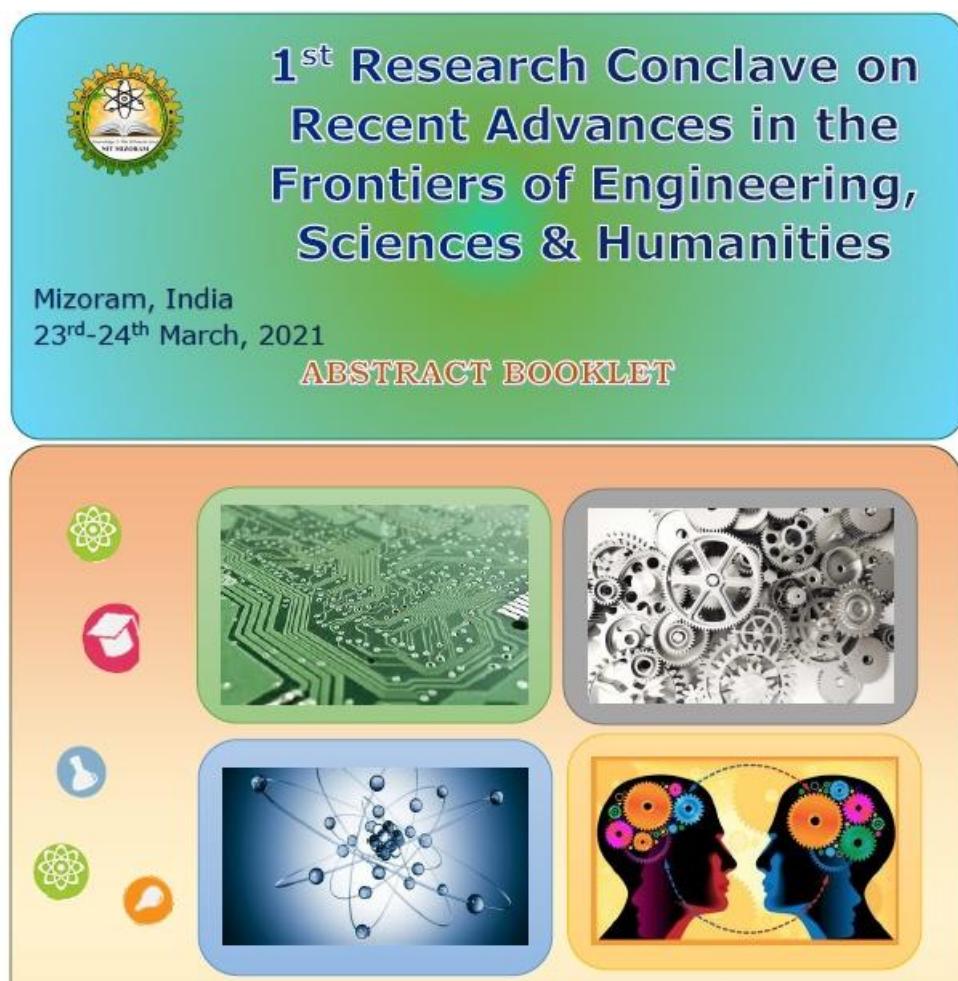


12.14 1ST RESEARCH CONCLAVE ON ‘RECENT ADVANCES IN THE FRONTIERS OF ENGINEERING, SCIENCES & HUMANITIES’

NIT Mizoram organised 1st Research Conclave on ‘Recent Advances in the Frontiers of Engineering, Sciences & Humanities’ on 23-24 March 2021. Dr. Ajmal Koya Pulikkal and

Dr. Anumoy Ghosh were the Chairman and Secretary of the Conclave which was held online. The program was organized for the benefit of faculty members and research scholars of the Institute as well as other Institutes/Universities. The research conclave provided a forum to identify multi-disciplinary problems and encouraged the scholars to be passionate about their research and bring out quality research outputs. The conclave has also provided an opportunity to the scholars of various institutes to share ideas in diversified topics related to current trends and future advances in various domain areas in engineering, sciences and humanities.

The plenary lecture of the 1st Research Conclave on ‘Recent Advances in the Frontiers of Engineering, Sciences & Humanities, was delivered by Prof. Gautam Biswas, former Director of IIT Guwahati. The organizing committee composed the program schedule such that it addresses all major areas. Four tracks viz. Engineering 1 (Circuits & Devices), Engineering 2 (Non Circuits), Sciences and Humanities were scheduled. In addition to the plenary lecture, keynote lectures each one on all the 4 tracks were also arranged.

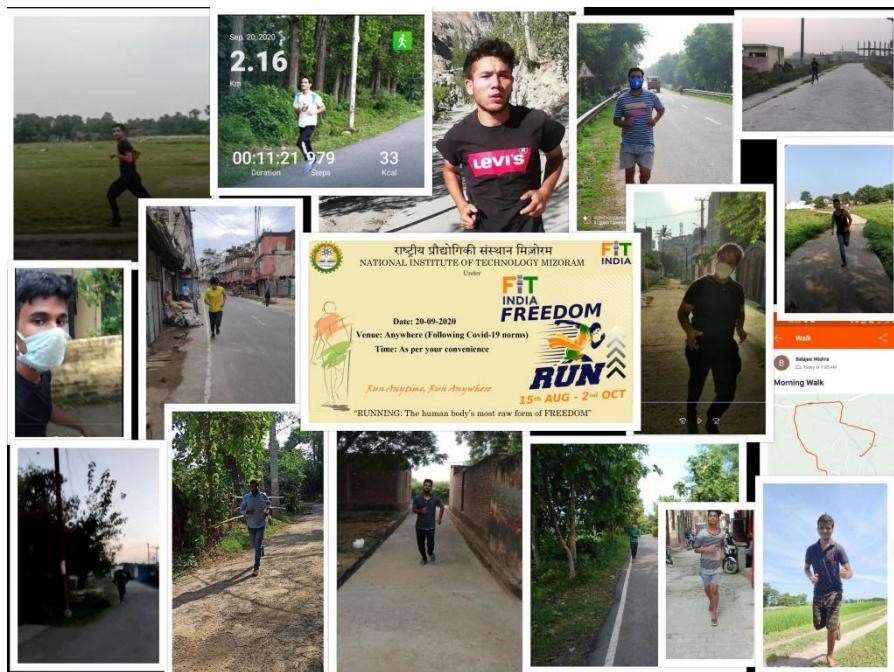


12.15 FIT INDIA FREEDOM RUN

On the first anniversary of FIT India Movement launched by honorable Prime Minister Shri Narendra Modi, FIT India freedom run was organized for a week (23rd - 29th December, 2020). All faculty members, staff and students were encouraged to do the following.

- Run a route of your choice, at a time that suits you.
- Run your own race at your pace.
- Track your kms manually or by using any tracking app or GPS watch.
- Post or share it on social media with #sports_society_nitmizoram.

You tube channel, Facebook and Instagram pages of Sports Society, NIT Mizoram were also launched on this occasion.



CHAPTER 13

FACULTY CONTRIBUTIONS AND ACHIEVEMENTS

13.1 Chapters Contributed in Edited Books (International)

<i>Department of Civil Engg.</i>							
Name of Faculty	Title of Chapter	Name of Book	Vol.	No.	Year	Page Nos.	ISBN/doi
Dr.Bijayananda Mohanty	Less Polluted Flue Gases obtained with Green Technology during Precious Metals Recovery from Unwanted and Discarded Electrical and Electronics Components	Intelligent Computing and Applications	1172	1 st Edition	2020	715-720	10.1007/978-981-15-5566-4_63
<i>Department of Computer Science & Engg.</i>							
Name of Faculty	Title of Chapter	Name of Book	Vol.	No.	Year	Page Nos.	ISBN/doi
Dr.Ranjita Das	Clustering of Single-Cell Transcriptome Data Based on Evolutionary Algorithm in Assimilation with Fuzzy C-Means	Intelligent Computing and Communication Systems	54	01	2021	227-235	https://doi.org/10.1007/978-981-16-1295-4
Dr.Ranjita Das	Detection of COVID-19 Using ResNet on CT Scan Image	Lecture Notes on Data Engineering and Communications Technologies	62	01	2021	289-298	ISBN 978-981-33-4967-4
Dr.Ranjita Das	Interpretable Semantic Textual Similarity of Sentences using Alignment of Chunks with Classification and Regression	Applied Intelligence	-	-	2021	1-28	10.1007/s10489-020-02144-x
Dr.Sandeep Kumar	Multimodal Learning Based Spatial	Computación y	24	3	2020	1327-	https://doi.org/10.13

Dash	Relation Identification	Sistemas				1335	053/cys-24-3-3773
	Topic based Image Caption	Arabian Journal for Science and Engineering	45	-	2020	3025-3034	10.1007/s13369-019-04262-2

Department of Electronics & Communication Engg.

Name of Faculty	Title of Chapter	Name of Book	Vol.	No.	Year	Page Nos.	ISBN/doi
Dr.ChaitaliKoley	Data Hiding based on Adaptive Threshold Technique	Intelligent Techniques and Applications in Science and Technology, Springer	-	-	2020	354–363	Print ISBN: 978-3-030-42362-9, eBook ISBN 978-3-030-42363-6, 2020.
Dr.ChaitaliKoley	Design of a Novel Wideband Dipole Antenna for mm-Wave Frequencies	Smart Innovation, Systems and Technologies, Springer Nature	182	-	2020	start-end	ISBN: 978-981-15-5223-6, 495053_1_En, (Chapter 23)

Department of Electrical & Electronics Engg.

Name of Faculty	Title of Chapter	Name of Book	Vol.	No.	Year	Page Nos.	ISBN/doi
Dr. P.K. Biswas	A Review Note on Some Optimization Techniques Used in Active Magnetic Bearing System for Electric Vehicles	Artificial Intelligent Techniques for Electric and Hybrid Electric Vehicles	-	-	2020	207-217	978-1-119-68190-8
	A Noble Control Approach for Brushless Direct Current Motor Drive Using Artificial Intelligence for Optimum Operation of the Electric Vehicle	Artificial Intelligent Techniques for Electric and Hybrid Electric Vehicles	-	-	2020	17-47	978-1-119-68190-8
	A Comprehensive Study on Various Topologies of Permanent Magnet Motor Drives for Electric Vehicles	Artificial Intelligent Techniques for Electric and Hybrid	-	-	2020	49-75	978-1-119-68190-8

	Application	Electric Vehicles					
Dr. Upama Das	A Noble Control Approach for Brushless Direct Current Motor Drive Using Artificial Intelligence for Optimum Operation of The Electric Vehicle	Artificial Intelligent Techniques for Electric and Hybrid Electric Vehicles	-	-	2020	17-47	978-1-119-68190-8
<i>Department of Mechanical Engg.</i>							
Name of Faculty	Title of Chapter	Name of Book	Vol.	No.	Year	Page Nos.	ISBN/doi
Mr. Saurav Suman	Computational Modelling of In-Process Mitigation Technique to Control Residual Stress in Thick Plate Welding.	Next Generation Materials and Processing Technologies. Springer Proceedings in Materials,	9	-	2021	334-341	https://doi.org/10.1007/978-981-16-0182-8_25

13.2 Publication in International Journals

<i>Department of Basic Sciences & HSS</i>							
Name of Faculty	Title of the Paper	Journal	Vol.	No.	Year	Page Nos.	ISSN/doi
Dr. Alok Shukla	Structural, dielectric and electrical characteristics of lead-free ceramic systems: $\text{BiFe}_x\text{La}_{1-x}\text{O}_3$ ($x = 0.4$ and 0.6)	Journal of Electroceramics	44	-	2020	203-214	doi.org/10.1007/s10832-020-00211-w
	Studies of structural, dielectric and electrical characteristics of $\text{Bi}(\text{Fe}_{0.85}\text{Y}_{0.15})\text{O}_3$ ceramics	Phase Transitions	94	1	2021	47-61	doi.org/10.1080/01411594.2021.1876234
	Studies of structural, electrical and ferroelectric characteristics of	Materials Chemistry and Physics	263	-	2021	124359	doi.org/10.1016/j.matchemphys.2021.124359

	gadolinium and yttrium modified bismuth ferrite						59
	Studies of structural, ferroelectric, magnetic and electrical characteristics of $\text{Bi}(\text{Fe}_{1-x}\text{Nd}_x)\text{O}_3$ ($x = 0.05, 0.10, 0.15$) multiferroics	Journal of Materials Science: Materials in Electronics	-	-	2021	start-end	doi.org/10.1007/s10854-021-05308-8
Dr. Ajmal Koya Pulikkal	Amphiphilic drug-additive systems in aqueous and organic solvent–water mixed media: A comprehensive account on physicochemical properties	Journal of Molecular Liquids	318	-	2020	114221-114241	https://doi.org/10.1016/j.molliq.2020.114221
	Micellar solution behaviour of cetylpyridinium surfactants in 2-propanol–water mixed media at different temperatures	Journal of Chemical & Engineering Data	66	-	2021	368-378	https://dx.doi.org/10.1021/acs.jced.0c00734
Dr. Surender Ontela	Mixed convection nanofluid flow in a non-Darcy porous medium with variable permeability: entropy generation analysis	Indian Journal of Physics	-	-	2020	start-end	https://doi.org/10.1007/s12648-020-01856-7
	Non-Darcian effects on nanoliquid flow past a stretching sheet with temperature jump condition and thermal radiation	Journal of Applied Nonlinear Dynamics	9	4	2020	643-654	DOI:10.5890/JAND.2020.12.008
Dr. Shuchi	A study of the micro narratives of gender in Afghanistan.	Rupkatha Journal on Interdisciplinary Studies in Humanities	12	05	2020	1-6	0975-2935
	Hair in exile: Manifestations of displacement, difference, and belongingness through hair in Chimamanda Ngozi Adichie's. Americanah.	Rupkatha Journal on Interdisciplinary Studies in Humanities	12	06	2020	start-end	0975-2935

Department of Civil Engg.							
Name of Faculty	Title of the Paper	Journal	Vol.	No.	Year	Page Nos.	ISSN/doi
Dr. Bijayananda Mohanty	Properties and assessment of applications of red mud (bauxite residue): Current status and research needs	Waste and Biomass Valorization	12	3	2021	1185-1217	10.1007/s12649-020-01089-z
Dr. Sulaem Musaddiq Laskar	Behaviour of RC beam repaired using alkali activated slag-based agent under static and cyclic loading	Structures	31	-	2021	761-768	https://doi.org/10.1016/j.istruc.2021.02.039
Department of Electronics & Communication Engg.							
Name of Faculty	Title of the Paper	Journal	Vol.	No.	Year	Page Nos.	ISSN/doi
Dr. Anumoy Ghosh	Meander-line-loaded circularly polarized square-slot antenna with inverted-L-shaped feed line for C-band applications	IET Microwaves, Antennas & Propagation	15	-	2021	start-end	DOI: 10.1049/mia2.12125
	A wideband compact antenna with quad-circular polarized bands in its operating regions	International Journal of RF & Microwave Computer-Aided Engineering [SCI]	30	11	2020	e22405	DOI: 10.1002/mmce.22405
Dr. Chaitali Koley	Inverted E shaped dipole antenna with corrugated substrate for mm-wave applications	Frequenz	75	-	2020	19-26	DOI: https://doi.org/10.1515/freq-2020-0042
	Design of Folded Cascode Amplifier for SCL 180 nm Technology Node for Low Power Application	Journal of Network Security	8	1	2020	22-31	eISSN: 2395-6739, ISSN: 2321-8517
Mr. Pragati Singh	Physics &Modeling of Ambipolar Snapback Behavior in NMOS	Silicon journal of Springer	-	-	April 2021	start-end	https://doi.org/10.1007/s12633-021-01086-4
	Bipolar effects in snapback	Journal of Physics	4	6	June	start-end	https://doi.org/10.1088/1361-6404/ab9a20

	mechanism in advanced n-FET transistors under high current stress conditions	Communications (IOPSCIENCE)			2020		8/2399-6528/ab9954
<i>Department of Electrical & Electronics Engg.</i>							
Name of Faculty	Title of the Paper	Journal	Vol.	No.	Year	Page Nos.	ISSN/doi
Prof. Saibal Chatterjee	Partial discharge detection in an oil-filled power transformer using fiberbragg grating sensors: A review	IEEE Sensors Journal	21	9	2021	10304-10316	10.1109/JSEN.2021.3059931
	State of research on effects of cloud to ground lightning transients on high voltage polymeric insulated power cables	Electrica	21	1	2021	58-65	10.5152/ELECTRIC A.2020.20037
	An intelligent programmed genetic algorithm with advanced deterministic diversity creating operator using objective surface visualization	Evolutionary Intelligence	13	4	2020	705-723	10.1007/s12065-020-00385-w
	Potential of coconut oil as a dielectric liquid in distribution transformers	IEEE Electrical Insulation Magazine	36	6	2020	36-46	10.1109/MEI.2020.9222633
	FEM based 3D modelling of partial discharge detection and localization in an oil-filled power transformer using piezoelectric acoustic sensor	TechnischesMessen	87	9	2020	586-596	10.1515/teme-2019-0159
	Optimal GENCO's bidding strategy in a power exchange facilitating combined power and emission trading using intelligent programmed genetic algorithm	International Transactions on Electrical Energy Systems	30	8	2020	start-end	10.1002/2050-7038.12463
	A comprehensive review on day-	International	30	7	2020	start-end	10.1002/2050-

	ahead electricity market and important features of world's major electric power exchanges	Transactions on Electrical Energy Systems					7038.12360
	Dynamic simulation of eastern regional grid of India using power system simulator for engineering PSS®E	International Journal of Emerging Electric Power Systems	21	3	2020	start-end	10.1515/ijeps-2019-0209
Dr.P.K.Biswas	Design, analysis and testing of I-type electromagnetic actuator used in single coil active magnetic bearing	Electrical Engineering Journal	24	-	2020	183-194	10.1007/s00202-020-01071-x
	Performance optimization for closed loop control strategies towards simplified model of a permanent magnet synchronous motor drive by comparing with different classical and fuzzy intelligent controllers	International Journal of Automation and Control	14	4	2020	469-493	10.1504/IJAAC.2020.1002085
	Updated PSO optimized fuzzy-pi controlled buck type multi-phase inverter based PMSM drive with an over-current protection scheme	IET Electric Power Applications	14	12	2020	2331-2339	10.1049/iet-epa.2020.0165
	Comparative magnetic analysis of I-type actuator based active magnetic bearing system	Journal of Power Technologies	100	3	2020	211-222	2083-4195
	Analysis, simulation and hardware implementation of single switch power amplifier for active magnetic bearing (AMB) system	Journal of Power Technologies	100	4	2020	308-314	2083-4195
	Closed loop speed control of BLDC motor drive by using	Journal of Power Technologies	100	2	2020	161-170	2083-4187

	classical controllers with genetic algorithm						
	Feasibility analysis of super capacitor for lightning energy conversion system	International Journal of Innovative Technology and Exploring Engineering	9	10	2020	126-133	10.35940/ijitee.J7415.0891020
	An improved low voltage ride-through (LVRT) strategy for PV-based grid connected inverter using instantaneous power theory	IET Generation, Transmission & Distribution	15	5	2020	883-893	10.1049/gtd2.12066
	Techno-commercial analysis of sustainable E-bus-based public transit systems: An Indian case study	Renewable and Sustainable Energy Reviews	144	-	2021	1-13	https://doi.org/10.1016/j.rser.2021.111033 .
Mr. Kumar Ramesh	Voltage control of solar dish-stirling with PMDC generator based autonomous DC microgrid using FOPID-controller and grey wolf optimizer	International Journal of Sustainable Energy	40	5	2020	412-429	https://doi.org/10.1080/14786451.2020.1806843
Dr. Majumder Suman	Techno-commercial analysis of sustainable E-bus-based public transit systems: An Indian case study	Renewable and Sustainable Energy Reviews	144	-	2021	1-13	https://doi.org/10.1016/j.rser.2021.111033 .
	A technically sustainable E-bus based transit system for Indian cities	IET Electrical Systems in Transportation	11	1	2021	2-24	https://doi.org/10.1049/els2.12001 .
	Is E-mobility a panacea for emission mitigation? A case study of an Indian city	Environmental Progress & Sustainable Energy	40	2	2021	1-13	https://doi.org/10.1002/ep.13500 .
Dr. Krishnarti De	Is E-mobility a panacea for emission mitigation? A case study of an Indian city	Environmental Progress & Sustainable Energy	40	2	2021	1-13	https://doi.org/10.1002/ep.13500 .

	Techno-commercial analysis of sustainable E-bus-based public transit systems: An Indian case study	Renewable and Sustainable Energy Reviews	144	-	2021	1-13	https://doi.org/10.1016/j.rser.2021.111033
	A technically sustainable E-bus based transit system for Indian cities	IET Electrical Systems in Transportation	11	1	2021	2-24	https://doi.org/10.1049/els2.12001
Dr. Upama Das	Closed loop speed control of BLDC motor drive by using classical controllers with genetic algorithm	Journal of Power Technologies	100	2	2020	161–170	2083-4187
Mr. Sukanta Debnath	Design, analysis and testing of I-type electromagnetic actuator used in single coil active magnetic bearing	Electrical Engineering Journal	103	-	2020	183-194	10.1007/s00202-020-01071-x
	Comparative magnetic analysis of I-type actuator based active magnetic bearing system	Journal of Power Technologies	100	3	2020	211-222	2083-4195
	Analysis, simulation and hardware implementation of single switch power amplifier for active magnetic bearing (AMB) system	Journal of Power Technologies	100	4	2020	308-314	2083-4195

Department of Mechanical Engg.

Name of Faculty	Title of the Paper	Journal	Vol.	No.	Year	Page Nos.	ISSN/doi
Mr. Saurav Suman	Microstructure evolution and mechanical behaviour of saw weldments of CSEF steel on preheating and PWHT.	Trans. of Indian Inst. Metals	73	5	2020	1185-1197	-
	Finite element modelling of side heating for mitigation of residual stress and distortion in SAW	Materials today proceedings	28	-	2020	2511-2520	-

	welded P91 steel weld						
	CFD modelling of temperature distribution and material flow investigation during FSW of DH36 shipbuilding grade steel	Transactions of the Indian Institute of Metals	73	9	2020	2291-2307	-
	Finite element analysis of thermal-induced stresses in submerged arc welded chromium-molybdenum steel and their mitigation through heat treatment	Journal of Materials Eng and Performance	29	-	2020	8271–8285	-
	Effect of plasma preheating on weld quality and tool life during friction stir welding of DH36 steel	Proceedings of Institute of Mechanical Engineers, Part C: Journal of Engineering Manufacture	235	9	2021	1458-1472	-
Dr. H. Lalhmingsanga	Selection criteria of appropriate bamboo based biomass for thermochemical conversion process	Biomass Conversion and Biorefinery	10	2	2020	401-407	-
	Application of MLP-ANN models for estimating the higher heating value of bamboo biomass	Biomass Conversion and Biorefinery	-	-	2020	1-10	https://doi.org/10.1007/s13399-020-00685-2
	Selection criteria of municipal solid wastes for thermo-chemical conversion processes by using proximate and ultimate analysis	International Journal of Global Warming	24	1	2021	1-13	-
	Feasibility study of biomass gasification for power generation in Northeast India	Biomass Conversion and Biorefinery	-	-	2021	1-13	https://doi.org/10.1007/s13399-021-01419-8

13.3 Seminars/ Conferences organized

<i>Department of Basic Sciences & HSS</i>							
Name of Faculty	Role	Name of Seminar/ Conference	Sponsored by/ Support received from	Venue	From	To	Duration
Dr. Ajmal Koya Pulikkal	Chairman	1 st Research Conclave on 'Recent Advances in the Frontiers of Engineering, Sciences & Humanities'	TEQIP-III (NIT Mizoram)	NIT Mizoram (Online)	23/03/2021	24/03/2021	2 Days
<i>Department of Electronics & Communication Engg.</i>							
Name of Faculty	Role	Name of Seminar/ Conference	Sponsored by/ Support received from	Venue	From	To	Duration
Dr. Anumoy Ghosh	Coordinator	North-East Green Summit	VIBGYOR North-East Foundation	NIT Mizoram (Online)	16/11/2020	18/11/2020	3 Days
	Secretary	1 st Research Conclave on 'Recent Advances in the Frontiers of Engineering, Sciences & Humanities'	TEQIP-III (NIT Mizoram)	NIT Mizoram (Online)	22/03/2021	23/03/2021	2 Days
Dr. Chaitali Koley	Coordinator	Workshop on Global Navigation Satellite System (GNSS)	All India Council of Technical Education and	NIT Mizoram (Online)	18/12/2020	22/12/2020	5 Days

			APJ Abdul Kalam Technological University				
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13.4 Workshops/STTP/FDP organized

<i>Department of Basic Sciences & HSS</i>							
Name of Faculty	Role	Title of FDP/STTP/Workshop	Sponsored by/ Support Received from	Venue	From	To	Duration
Dr. Alok Shukla	Coordinator (with Dr. K Gyanendra Singh)	Five Day Faculty Development Program on 'Model Curriculum'	AICTE	NIT Mizoram (Online)	15/03/2021	19/03/2021	5 Days
Dr. Ajmal Koya Pulikkal	Coordinator (with Prof. Saibal Chatterjee)	Five Day Faculty Development Program on 'NBA and the processes'	AICTE	NIT Mizoram (Online)	01/02/2021	05/02/2021	5 Days
Dr. Surender Ontela	Coordinator	Five Day Faculty Development Program on 'Examination Reforms'	AICTE	NIT Mizoram (Online)	15/02/2021	19/02/2021	5 Days
<i>Department of Civil Engg.</i>							
Name of Faculty	Role	Title of FDP/STTP/Workshop	Sponsored by/ Support Received from	Venue	From	To	Duration
Dr. Bijayananda Mohanty	Coordinator	Landslide	National	NIT	19/10/2020	23/10/2020	5 Half

		Mitigation & Detailed Project Report (DPR) Preparation	Disaster Management Authority (NDMA)	Mizoram (Online)			Days (Online, 9:30AM to 1:30PM)
Dr. Bijayananda Mohanty	Coordinator	Landslide Mitigation & Detailed Project Report (DPR) Preparation	National Disaster Management Authority (NDMA)	NIT Mizoram (Online)	15/03/2021	19/03/2021	5 Half Days (Online, 9:30AM to 1:30PM)
<i>Department of Computer Science & Engg.</i>							
Name of Faculty	Role	Title of FDP/STTP/ Workshop	Sponsored by/ Support Received from	Venue	From	To	Duration
Dr. Ranjita Das	Coordinator	FDP on Data Sciences	AICTE	NIT Mizoram (Online)	15/12/2020	19/12/2020	5 Days
<i>Department of Electrical & Electronics Engg.</i>							
Name of Faculty	Role	Title of FDP/STTP/ Workshop	Sponsored by/ Support Received from	Venue	From	To	Duration
Prof. Saibal Chatterjee	Coordinator (with Dr. AjmalKoyaPulikkal)	Five Day Faculty Development Program on 'NBA and the processes'	AICTE	NIT Mizoram (Online)	01/02/2021	05/02/2021	5 Days
Dr. P.K. Biswas	Coordinator	Faculty Development Program on 'Power Electronics Application in	AICTE	NIT Mizoram (Online)	01/12/2020	05/12/2020	5 Days

		Machine Drives and Power System'					
Dr. Krishnarti De	Coordinator	Popular Lecture Series	NIT Mizoram	NIT Mizoram (Online)	March 2021	Till date	1 Day Every Month
Mr. Anagha Bhattacharya	Coordinator	Faculty Development Program on 'Electric Vehicle'	AICTE	NIT Mizoram (Online)	10/11/2020	14/11/2020	5 Days
	Coordinator	FDP on 'Frugal Innovations and Social Entrepreneurship'	AICTE	NIT Mizoram	25/01/2021	30/01/2021	5 Days

13.5 Seminars/ Conferences attended or participated

<i>Department of Basic Sciences & HSS</i>							
Name of Faculty	Title of Paper presented	Title of Seminar/ Conference	Organized by	From	To	Venue/Place	Details of Publication, if any
Dr. Ajmal Koya Pulikkal	Nil	International Conference of Science, Technology, and Administration (ICTSA-2021)	Taiz University, Yemen	22/03/2021	24/03/2021	Yemen (Online)	-
<i>Department of Computer Science & Engg.</i>							
Name of	Title of Paper presented	Title of	Organized	From	To	Venue/Plac	Details of

Faculty		Seminar/Conference	by			e	Publication, if any
Dr. Ranjita Das	Extractive Single Document Summarization Using an Archive-Based Micro Genetic-2	7 th International Conference on Soft Computing & Machine Intelligence (ISCFI)	IEEE computational Intelligent Society	14/11/2020	15/11/2020	Stockholm, Sweden	IEEE; pp. 244-248, doi: 10.1109/ISC MI51676.202 0.9311571.

Department of Electronics & Communication Engg.

Name of Faculty	Title of Paper presented	Title of Seminar/Conference	Organized by	From	To	Venue/Place	Details of Publication, if any
Dr. Anumoy Ghosh	Quad Elements Dual Band MIMO Antenna for Advanced 5G Technology	IEEE 4 th Conference on Information & Communication Technology (CICT)	IITDM Kancheepuram & IEEE Chennai section	03/12/2020	05/12/2020	Online	DOI: 10.1109/CIC T51604.2020. 9312060
	A Wideband Folded Dipole RFID Tag with Improved Impedance Matching Technique	IEEE 4th Conference on Information & Communication Technology (CICT)	IITDM Kancheepuram & IEEE Chennai section	03/12/2020	05/12/2020	Online	DOI: 10.1109/CIC T51604.2020. 9312071
	Co-Planar Waveguide Fed Dual Band Circular Polarized Slot Antenna	Third International Conference	JNN College of Engg.,	11/12/2020	12/12/2020	Online	DOI: 10.1109/MPC IT51588.2020

		on Multimedia Processing, Communication & Information Technology	Shivamogga & IEEE Bangalore Section				.9350469
	Slits and Slots Loaded Dual Band Circularly Polarized Patch Antenna for WLAN/WiMAX Communications	4th Biennial International Conference on Nascent Technologies in Engineering	F.C. Rodrigues Institute of Technology , Navi Mumbai & IEEE Mumbai Section	15/01/2021	16/01/2021	Online	DOI: 10.1109/ICN TE51185.202 1.9487764
Dr. Chaitali Koley	Design of Radial Reentrant Cavity for V-band Vacuum Microwave Devices	International conference on Microelectronics Computing & Communication Systems MCCS-2020	IETE Ranchi	11/07/2020	12/07/2020	Ranchi	-
	Design of a Novel Wide Band Antenna with Defected Ground Structure for mm- wave System On Chip Applications	International conference on Microelectronics Computing & Communication Systems	IETE Ranchi	11/07/2020	12/07/2020	Ranchi	-
	Multi-Constellation GNSS	International	Sikkim	19/12/2020	20/12/2020	SikkimMani	-

	Performance Study under Indian Forest Canopy	conference on Communication, Devices & Networking ICCDN-2020	Manipal Institute of Technology			pal Institute of Technology	
Mr. Pragati Singh	Comparison of Snapback Phenomenon and Physics in Bottom and Top Body Contact NMOS	Micro2021: 8 th International Conference on Microelectronics, Circuits & Systems	Applied Computer Technology , Kolkata	08/05/2021	09/05/2021	Kolkata	-
	Features of Snapback in Compact Memory Devices For High Performance Integrated Circuits	4 th International Conference "2021 Devices for Integrated Circuit (DevIC)	IEEE Jointly organised by Kalyani Govt. Engg. College, Nadia, West Bengal	19/05/2021	20/05/2021	Kalyani, West Bengal	10.1109/DevI C50843.2021.9455880

Department of Electrical & Electronics Engg.

Name of Faculty	Title of Paper presented	Title of Seminar/Conference	Organized by	From	To	Venue/Place	Details of Publication, if any
Mr. Ramesh Kumar	Real Power Rescheduling of Generator for Transmission Line Congestion Management using Atom Search Algorithm	2020 IEEE International Conference for Convergence	Netaji Subhash Engineering College	05/09/2020	06/09/2020	NetajiSubhash Engineering College, Kolkata	-

		in Engineering					
	Demand Side Power Management and Voltage Stability of an Autonomous Microgrid Using Atom Search Optimization	4 th Biennial International Conference on Nascent Technologies in Engineering 2021	Fr. C. Rodrigues Institute of Technology , Vashi	15/01/2021	16/01/2021	Fr. C. Rodrigues Institute of Technology, Vashi, Navi Mumbai	-

13.6 Workshops/STTP/FDP attended or participated

<i>Department of Basic Sciences & HSS</i>						
Name of the Faculty	Title of FDP/STTP/ Workshop	Organized by	Venue	From	To	Duration
Dr. Ajmal Koya Pulikkal	Testing & Purification of Drinking Water and Health	NITTR Kolkata	NITTR Kolkata (Online Mode)	11/05/2020	22/05/2020	12 Days
Dr. Shuchi	STTP on Soft Skills and Personality Development	NIT Uttarakhand	Online mode (Google Meet)	17/09/2020	21/09/2020	05 Days
	FDP on Outcome based Engineering Education and Accreditation	NIT Meghalaya	Online mode (Google Meet)	21/09/2020	23/09/2020	03 Days
<i>Department of Civil Engg.</i>						
Name of the Faculty	Title of FDP/STTP/Workshop	Organized by	Venue	From	To	Duration

Dr. Bijayananda Mohanty	Challenges and Opportunities in Solid and Liquid Waste Management	Centre for Rural Technology, IIT Guwahati	IIT Guwahati	02/11/2020	06/11/2020	5 Days
Dr. Bijayananda Mohanty	Recent Advances in Geotechnical and Geoenvironmental Engineering	Dept. of Civil Engg., IIT Guwahati	Dept. of Civil Engg., IIT Guwahati	17/12/2020	23/12/2020	5 Days (Excluding Saturday, and Sunday: December 19 th & 20 th , 2020)
Dr. Sulaem Musaddiq Laskar	Sustainable Environmental Engineering Practices (SEEP 2020)	NIT Rourkela	NIT Rourkela (Online Mode)	21/09/2020	25/09/2020	5 Days
Dr. Sulaem Musaddiq Laskar	Structural Audit for Earthquake Safety	National Institute of Disaster Management and Delhi Technological University	National Institute of Disaster Management and Delhi Technological University (Online Mode)	24/11/2020	28/11/2020	5 Days
Dr. Sulaem Musaddiq Laskar	FDP on 'NBA and the processes'	NIT Mizoram	NIT Mizoram (Online Mode)	01/02/2021	05/02/2021	5 Days
Dr. Sulaem Musaddiq Laskar	FDP on 'Examination Reforms'	NIT Mizoram	NIT Mizoram (Online)	15/02/2021	19/02/2021	5 Days

Department of Computer Science & Engg.

Name of the Faculty	Title of FDP/STTP/Workshop	Organized by	Venue	From	To	Duration
Dr. Ranjita Das	ATAL FDP on Machine Learning and	ABV - Indian Institute of	ABV - Indian Institute of	23/11/2020	27/11/2020	5 Days

	Applications	Information Technology and Management Gwalior	Information Technology and Management Gwalior(Online)			
	TEQIP III sponsored Faculty Training on Future Skill Technologies on “Artificial Intelligence and Machine Learning	IIT Indore	IIT Indore (Online)	14/12/2020	24/12/2020	10 Days
<i>Department of Electronics & Communication Engg.</i>						
Name of the Faculty	Title of FDP/STTP/Workshop	Organized by	Venue	From	To	Duration
Mr. Ramesh Kumar	Learn To Design Your Solar Home Systems	Energy Swaraj Foundation and Mizoram University	Mizoram University	10/08/2020	14/08/2020	5 Days
	FDP on ‘NBA and Processes’	NIT Mizoram	NIT Mizoram(Online)	01/02/2021	05/02/2021	5 Days
Dr. P.K. Biswas	FDP on ‘NBA and Processes’	NIT Mizoram	NIT Mizoram(Online)	01/02/2021	05/02/2021	5 Days
Dr. Suman Majumder	FDP on ‘NBA and Processes’	NIT Mizoram	NIT Mizoram(Online)	01/02/2021	05/02/2021	5 Days
Dr. Krishnarti De	FDP on ‘NBA and Processes’	NIT Mizoram	NIT Mizoram(Online)	01/02/2021	05/02/2021	5 Days

13.7 Consultancy Projects:

Sl. No.	Name of the Faculty	Name of the work and the year	Agency	Consultancy amount in Lakhs
1	Dr. Ricky Lalthazuala Department of Civil Engg.	Independent Third-Party Investigation for RCC Box Culvert near Zokhawthar Showing Structural Distress, Mizoram	Project Implementation Unit (PIU), Public Works Department (Roads), Mizoram	2.33
	Dr. Sulaem Musaddiq Laskar Department of Civil Engg.			

13.8 Any other achievements of the Department:

Sl. No.	Name of Faculty	Achievement
1.	Dr. Ajmal Koya Pulikkal Department of Basic Sciences & HSS	Delivered a keynote speech (online) in International Conference of Science, Technology, and Administration (ICTSA-2021) (Track: Applied and Medical Sciences) organized by Taiz University, Yemen.
2.	Dr. Anumoy Ghosh Department of Electronics & Communication Engg.	Selected as Executive Committee member of NIELIT Aizawl, under Govt. of India.
3.	Prof. Saibal Chatterjee Department of Electrical & Electronics Engg.	Invitation for a talk titled, 'RF and Optical Sensor based Condition Monitoring of Power Transformer" in the FDP titled "Recent Advances in Condition Monitoring of Power Equipment' organized by the Department of Electrical Engineering, NIT Calicut on 28 January, 2021.
		Invitation for a talk on 'Market design for power trading in electric power exchange' in Interdisciplinary Refresher course on Engineering and Technology organized by UGC HRDC Mizoram University (1 st -14 th December 2020).
4.	Dr. Pabitra Kumar Biswas Department of Electrical &	Invitation for an expert lecture in Webinar on 'Recent Trends In DC To DC Converters', F.X Engineering College, 10/07/2020.

	Electronics Engg.	
5.	Mr. Saurav Suman Department of Mechanical Engg.	Filed patent- Smart portable sanitizer cum sterilization device (Filling date- 01-07-2020)