

Annual Report & Annual Accounts

Financial Year 2023-24



(Authenticated)

Minister of State in the Ministry of Education
Government of India
New Delhi

Dated:

National Institute of Technology
Andhra Pradesh - 534101



Smt. Draupadi Murmu Garu
Hon'ble President of India
Government of India



Shri. Narendra Modi Garu
Hon'ble Prime Minister
Government of India



Shri. Dharmendra Pradhan
Garu
Hon'ble Education Minister

Vision

To nurture and produce highly competent engineers, scientists and entrepreneurs committed towards catering to futuristic societal challenges through holistic education synergetic with innovations and vibrant research eco-system.

Mission

- To implement best practices in teaching-learning methodologies for establishing dynamic knowledge-connected society.
- To create a conducive environment for carrying out research in multi-disciplinary areas and thereby nurturing novel thinking capabilities.
- To strengthen industry-institute interface to inculcate entrepreneurship abilities.
- To address all technological needs of the Nation for self-sustenance.

From the Director's Desk

I am delighted to present the Annual Report 2023-24 of NIT Andhra Pradesh. I am happy to announce that the institute has established eighteen labs with an expenditure of Rs. 5 Cr during the financial year. We take immense pride in our institute's commitment to implementing the guidelines of NEP 2020 with multiple exit points.

I am glad that NIT Andhra Pradesh has achieved tremendous strides in terms of research. In the academic year 2023-24, faculty members have published 104 research articles in international journals and presented 109 papers at various conferences. Besides, the members of the faculty have contributed 18 chapters to edited volumes. In the AY 2023-24, seven faculty development programmes/workshops have been conducted by our faculty. Sponsored research projects, worth Rs. 4.25 Cr have been received from national funding agencies such as DSIR, ARCI-DST, SERB, DRDO MTRDC, LinkedIn and IHub - IIIT Hyderabad. Consultancy projects worth Rs. 46 lakhs have been undertaken by our faculty. Recently, our faculty members have got 3 patents sanctioned and more than two patents have been filed. It is remarkable that two MoUs have been signed since the last convocation.

I am delighted to share with you that NIT Andhra Pradesh has secured a State Energy Conservation Award (SECA-2023 (Silver award in the Engineering colleges Category) by Andhra Pradesh State Energy Conservation Mission (APSECM), Energy Department. A faculty member of the Department of CSE is selected as one of the 25 Engineering faculty members across India for the INAE Fellowship mentoring Programme-2024. The Department of CSE's research work on "Quantum probabilistic graphical models" is selected as one of the two best projects by MEITY and Amazon-2023. A faculty member of Department of MME received the Corrosion Awareness Award-2023 from the Association of Materials Protection and Performance (AMPP) India chapter under the category of distinction in corrosion science and technology.

Despite the challenging market conditions, the Training and Placement cell has achieved notable success by facilitating placements for 240 out of 391 interested students. The cell attracted 141 companies to the campus, with the highest package of 44 lakhs and an average package of 7.24 lakhs per annum. Placement season is in progress till December 2024 for the graduating batch. 74 students of 2023-24 graduating batch have opted for higher studies.

Students of the Department of Mechanical Engineering designed an electric bike (Flex fold) under the guidance of their department faculty. It can travel 25 km at a speed of 18-20 kmph bearing 150-200 kg weight. This bike is intended for elderly people with limited mobility at low budget of

Rs. 25,000. It is aimed for locations where regular bikes are not permitted. It can be folded and carried easily. Students have actively participated in the technical fest TechKriya and cultural fest Vulcanzy with 106 events from 24 clubs of the institute. Members of Prayatnam club have collected and distributed dresses to the students of government schools in and around Tadepalligudem. Several events were conducted under the Institute Innovation Council (IIC) in coordination with the Innovation and Entrepreneurship cell of our institute. Startup Expo and Ideathon are the two major events that were conducted for the engineering colleges in and around West Godavari region. IIC computer lab was also established the AY 2023-24.

I am delighted to share with you that our institute is recognised as one of the top hundred local chapters of NPTEL and is recognised as an active local chapter. A total of 5,920 members of the student community enrolled in NPTEL courses in the last academic year. Ms. Navaya Sree, an alumna of the institute, has qualified UPSC Civil Services examination 2024 securing 995 rank. She is the first student from NIT Andhra Pradesh to achieve this feat. During the academic year 2023-24, the Central Library achieved several milestones. The Central Library has implemented advanced RFID technology along with a face recognition system and self-service kiosks, for hassle free issuance and return of library materials. The library has expanded its print book collection of 20,000 books with an additional 2,500 books, thereby providing a broader range of resources to support academic and research activities. To strengthen research efforts, NIT Andhra Pradesh has renewed access to premium journals and e-databases from leading publishers, including Elsevier – Science Direct, IEEE, ASME, ASCE, and more. Additionally, to enhance research integrity, the library has integrated Turnitin with AI check capabilities this year.

The Institute is committed to deliver skilled manpower for growth of the nation and update the curriculum to match the needs of the nation and industry.

Jai Hind!!

Prof. N V Ramana Rao,

Officiating Director,

NIT Andhra Pradesh.

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1 BOARD OF GOVERNORS

CHAIRPERSON	DIRECTOR NIT ANDHRA PRADESH
EX-OFFICIO MEMBER	Director, NIT Andhra Pradesh
MEMBER	Joint Secretary, Higher Education Ministry of Education Government of India
	Joint Secretary & Financial Advisor, Ministry of Education, Government of India
	Dean (P & D), NIT Andhra Pradesh
	Director, IIT Tirupati, Andhra Pradesh OR his/ her Nominee
MEMBER & SECRETARY	I/c Registrar, NIT Andhra Pradesh

2 Committees

2.1 Finance Committee

Chairperson	Director, NIT Andhra Pradesh
Ex-Officio member	Director, NIT Andhra Pradesh, Tadepalligudem
Members	<ol style="list-style-type: none"> 1. Joint Secretary (NITs), Dept. of Higher Education, Ministry of Education, Government of India OR his/ her nominee 2. Joint Secretary & Financial Advisor, Ministry of Education, Government of India OR his/ her nominee 3. Director, IIT Tirupati & Member, BOG, NIT Andhra Pradesh 4. One more person to be nominated by the Board from amongst its members 5. Dean, Planning & Development, NIT Andhra Pradesh
Ex-Officio member, Secretary	I/c Registrar, NIT Andhra Pradesh, Tadepalligudem

2.2 Buildings and Works Committee

<p>Ex-Officio-Chairman</p>	<p>1. Director, NIT Andhra Pradesh, Tadepalligudem</p>
<p>Members</p>	<p>2. Director or Deputy Secretary or his nominee dealing with the NITs in the Ministry</p> <p>3. Director or Deputy Secretary or his nominee dealing with the Finance of NITs in the Ministry</p> <p>4. Assistant Professor, Department Of Electrical and Electronics Engineering NIT Andhra Pradesh</p> <p>5. I/c Registrar, NIT Andhra Pradesh</p> <p>6. Dean, Planning & Development, NIT Andhra Pradesh</p> <p>7. Executive Engineer (Civil), CPWD, Rajamahendravaram</p> <p>8. Executive Engineer (Electrical), CPWD, Vijayawada</p> <p>9. Associate Dean, P&D, NIT Andhra Pradesh dealing with Estate Civil Affairs</p> <p>10. Associate Dean, P&D, NIT Andhra Pradesh dealing with Estate Electrical Affairs</p> <p>11. Executive Engineer, NIT Andhra Pradesh</p>

2.3 Senate

Ex-Officio Chairman	1. Director (I/c), NIT Andhra Pradesh
Members	2. All Professors of NIT Andhra Pradesh
Invitees	3. All Deans/ Associate Deans of NIT Andhra Pradesh (Who are not Professors)
	4. All Heads of the Departments/Schools of NIT Andhra Pradesh (Who are not Professors)
Member & Secretary	5. I/c Registrar, NIT Andhra Pradesh, Tadepalligudem

3.1 Administration

ACADEMIC AFFAIRS	DEAN Dr. Kurmayya Tamminana Associate Professor School of Sciences (Mathematics)	ASSOCIATE DEAN ACADEMIC & EXAMINATIONS (U.G) DR. NAGESH BHATTU SRISTY Assistant Professor Department of Computer Science and Engineering
		ASSOCIATE DEAN ACADEMIC & EXAMINATIONS (P.G & Ph. D) DR. RAMUDU MACHAVARAPU Assistant Professor (Physics) School Of Sciences
		ASSOCIATE DEAN ADMISSIONS, SCHOLARSHIPS & Liaison Officer (OBC cell) DR. TAPAS PARAMANIK Assistant Professor (Physics) School Of Sciences

FACULTY AFFAIRS	DEAN & REGISTRAR (I/C) DR. DINESH P. SANKAR REDDY Associate Professor Department of Chemical Engineering	ASSOCIATE DEAN PROFESSIONAL DEVELOPMENT & RECRUITMENT CELL DR. KRISHNA CHAITANYA. A Assistant Professor Department Of Electronics and Communication Engineering
		ASSOCIATE DEAN INSTITUTE HEALTH CENTER AFFAIRS DR. SURENDRA H M Assistant Professor Chemistry School Of Scienc

**PLANNING AND
DEVELOPMENT****DEAN**

DR. JAYARAM N.
Assistant Professor
Department of Electrical and
Electronics Engineering

ASSOCIATE DEAN
ESTATE ELECTRICAL AFFAIRS
DR. TEJAVATHU RAMESH
Assistant Professor
Department Of Electrical and
Electronics Engineering

ASSOCIATE DEAN
ESTATE CIVIL AFFAIRS
DR. JAYANTHI N. V.
PRATHYUSHA
Assistant Professor
Department Of Civil Engineering

ASSOCIATE DEAN
MATERIAL MANAGEMENT AND
BUYER, GOVERNMENT E-
MARKETING
DR. R. SUNIL KUMAR
Assistant Professor
Department Of Material and
Metallurgy Engineering

ASSOCIATE DEAN
WEB, NETWORK, TELESERVICES
& CCTV MAINTENANCE
DR. SRI PHANI KRISHNA KARRI
Assistant Professor
Department Of Electrical and
Electronics Engineering

**RESEARCH &
CONSULTANCY**

DEAN

DR. G. RAVI KIRAN SASTRY
Professor
Department of
Mechanical Engineering

**ASSOCIATE DEAN
RESEARCH & INDUSTRIAL
CONSULTANCY**

DR. SANKAR PEDDAPATI
Assistant Professor
Department Of Electrical and
Electronics Engineering

**ASSOCIATE DEAN
INDUSTRIAL COLLABORATIONS &
MoUs**

DR. V. SANDEEP
Assistant Professor
Department Of Electrical and
Electronics Engineering

**ASSOCIATE DEAN
INNOVATION, INCUBATION & START-
UP POLICY AND AFFAIRS**

DR. V. SUDARSHANA DEEPA
Assistant Professor
Department Of Bio-Technology
Engineering

**STUDENT
CAREER,
ALUMNI &
INTERNATIONAL
RELATIONS**

DEAN

DR. KARTHICK. S
Assistant Professor
Department of Computer
Science and
Engineering

**ASSOCIATE DEAN
TRAINING & PLACEMENT AND ACTIVITIES**

DR. T. KARTHIKEYA SHARMA
Assistant Professor
Department Of Mechanical Engineering

**ASSOCIATE DEAN
ALUMNI, INTERNSHIPS & INTERNATIONAL
RELATIONS**

DR. SANTHOSH KUMAR GUGULOTHU
Assistant Professor
Department of Mechanical Engineering

STUDENT WELFARE	DEAN DR. VEERESH KUMAR G. B. Assistant Professor Department of Mechanical Engineering	ASSOCIATE DEAN PHYSICAL EDUCATION & SPORTS ACTIVITIES DR. KIRAN TEEPARTHI Assistant Professor Department Of Electrical and Electronics Engineering
		ASSOCIATE DEAN STUDENT DISCIPLINE, CLUBS & ACTIVITIES DR. TALARI RESHMA Assistant Professor Department Of Civil Engineering

3.2 Heads of Department (HoDs)

DEPARTMENT	HEAD OF THE DEPARTMENT
Bio-Technology Engineering	DR. V. SUDARSHANA DEEPA Assistant Professor
Chemical Engineering	DR. VINOTH KUMAR RAJA Assistant Professor
Civil Engineering	Dr. TALARI RESHMA Assistant Professor
Computer Science and Engineering	DR. K. HIMABINDU Assistant Professor
Electrical And Electronics Engineering	Dr. S. YUVARAJ Assistant Professor
Electronics And Communication Engineering	Dr. TEJAVATHU RAMESH Assistant Professor
Mechanical Engineering	DR. THELLA BABU RAO Assistant Professor
Material And Metallurgy Engineering	Dr. RAFFI MOHAMMED Assistant Professor
School Of Sciences	DR. ARUN KUMAR R. Assistant Professor (Physics)
School Of Humanities & Management	DR. SOUMYA JOSE Assistant Professor (English)

4 ACADEMIC PROGRAMMES

NIT Andhra Pradesh is offering various academic programs at undergraduate level and graduate level. The Institute offers B.Tech. program in eight engineering branches, Bio-Technology, Chemical Engineering, Civil Engineering, Computer Science & Engineering, Electrical Engineering, Electronics & Communication Engineering, Mechanical Engineering, and Metallurgical & Materials Engineering. The Institute also offers M.S. (by Research) and Ph.D. (in Full-time, Part-time and Project modes) programme in all engineering branches along and Ph.D from Schools of Sciences, Humanities and Management.

The Institute has several committees at the institute level and department level for smooth completion of academic activities at undergraduate and graduate programmes

4.1 Academic committees

- Departmental Academic Committee (UG/PG - DAC)
- Class Review Committee (CRC)
- Departmental Academic Appeals Committee (DAAC)
- Departmental Board of Studies (BoS)
- Doctoral scrutiny committee (DSC)
- Institute academic committee (IAC)
- Scrutinizing the fee remission application committee

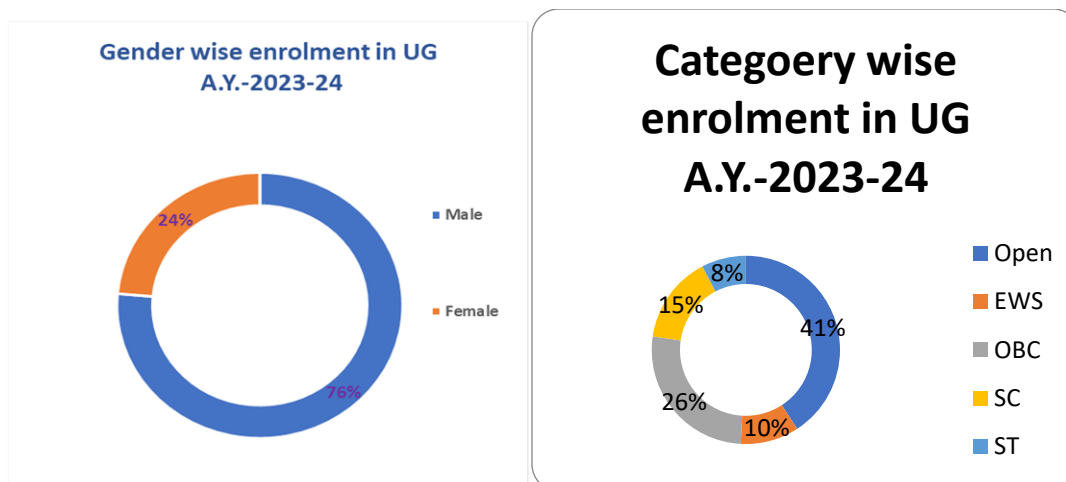
4.1.1 UNDERGRADUATE PROGRAMMES

NIT Andhra Pradesh has been sanctioned with a total of 480 seats for the academic year 2023-24. Out of these, 240 seats will be filled by the candidates from the state of Andhra Pradesh under Home State (HS) quota and the remaining 240 seats will be filled by the candidates from all other states under Other State (OS) quota. All the seats will be filled based on the All-India Rank (AIR) obtained in the JEE (Mains). In each branch, 50% of the seats will be filled under HS quota and remaining 50% of the seats will be filled under OS quota. The seat occupancy matrix of B. Tech in the eight engineering branches at NIT Andhra Pradesh for the academic year 2023-24 is provided in Table 1. A total of 458 students have been enrolled against the 480 allocated seats. A total of 236 students have enrolled under HS quota and a total of 222 students have enrolled under OS quota. Please note that the total enrolments in HS quota is 49.16% of the

sanctioned strength and OS quota is 46.25% of the sanctioned strength. There are a total of 4 vacant seats across all branches under the HS quota, whereas there are 18 vacant seats across all branches under the OS quota.

Table 1: Seat Allocation Matrix

B.Tech. A.Y. 2023-24													
S. No	Department	Intake Capacity 2023-24	Actual Enrolment 2023-24					TOTAL	Home State Quota	Other State Quota	Male	Female	PwD
			Open	EWS	OBC	SC	ST						
1	Bio Technology	30	12	2	6	4	2	26	14	12	22	4	0
2	Chemical Engineering	30	12	3	8	4	2	29	15	14	21	8	1
3	Civil Engineering	60	21	5	14	8	4	52	28	24	41	11	1
4	Computer Science and Engineering	90	35	9	24	14	7	89	45	44	65	24	5
5	Electrical and Electronics Engineering	90	35	8	24	14	7	88	45	43	67	21	4
6	Electronics and Communication Engineering	90	37	9	24	12	7	89	45	44	66	23	5
7	Mechanical Engineering	60	24	7	14	9	4	58	30	28	48	10	1
8	Metallurgical and Materials Engineering	30	11	3	7	4	2	27	14	13	20	7	1
	Total	480	187	46	121	69	35	458	236	222	350	108	18



4.1.2 Study in India (SII) and DASA Programme

Admission to Foreign Nationals/Persons of Indian Origin/ Non-Resident Indians/Overseas Citizen of India to undergraduate programmes in various Institutes in India. NIT Andhra Pradesh is participating in DASA programme in five disciplines and a total of 6 students have enrolled in B. Tech programme.

B. Tech.(UG) Programme (Through SII/DASA programmes) A.Y. 2023-24		
S. No	Department	I B.Tech. A.Y.-2023-24 Admitted students
1	Civil Engg	0
2	CSE	3
3	EEE	0
4	ECE	2
5	Mechanical Engg	1
Total		6

4.2 Postgraduate Programmes

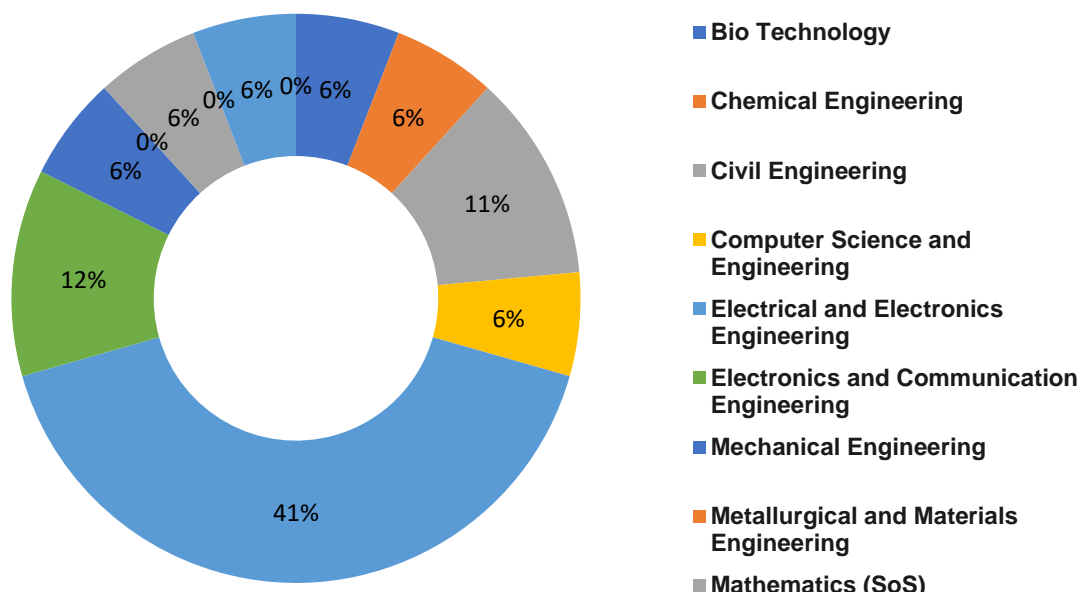
4.2.1 Ph.D./M.S. (By Research) Programme

NIT Andhra Pradesh has started Master of Science (by Research) and Doctor of Philosophy (PhD) programmes from the academic year 2019-2020. The institute is offering PhD programmes in full-time and part-time modes. The full-time PhD students of the institute will receive institute fellowship/stipend as per the guidelines of the Ministry of HRD. Admission to MS and PhD programmes is conducted in two sessions in the academic year, one in the beginning of each semester. The department-wise distribution of admissions is presented in the table below

Ph.D./M.S(By Research) Programme A.Y. 2023-24														
S. No	Department	Actual Enrolment Ph.D.(Full-Time) Programme 2023-24					TOTAL	Ph. D. (Full-Time)	Ph. D. (Part-Time)	Ph.D.(under Project category)	MS(by Research)	Male	Female	PwD
		Open	EW S	OB C	SC	ST								
1	Bio Technology	0	0	0	1	0	1	1	0	0	2	0	0	
2	Chemical Engineering	1	0	0	0	0	1	1	0	0	2	0	0	
3	Civil Engineering	0	1	1	0	0	2	2	0	1	3	0	0	
4	Computer Science and Engineering	0	0	0	1	0	1	1	0	0	1	0	0	

5	Electrical and Electronics Engineering	3	0	2	2	0	7	7	0	2	0	8	1	0
6	Electronics and Communication Engineering	0	0	1	1	0	2	2	0	0	0	0	2	0
7	Mechanical Engineering	1	0	0	0	0	1	1	0	0	0	1	0	0
8	Metallurgical and Materials Engineering	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Mathematics (SoS)	1	0	0	0	0	1	1	0	0	0	0	1	0
10	Physics (SoS)	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Chemistry (SoS)	1	0	0	0	0	1	1	0	0	0	0	1	0
12	English(SHM)	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		7	1	4	5	0	17	17	2	3	0	17	5	0

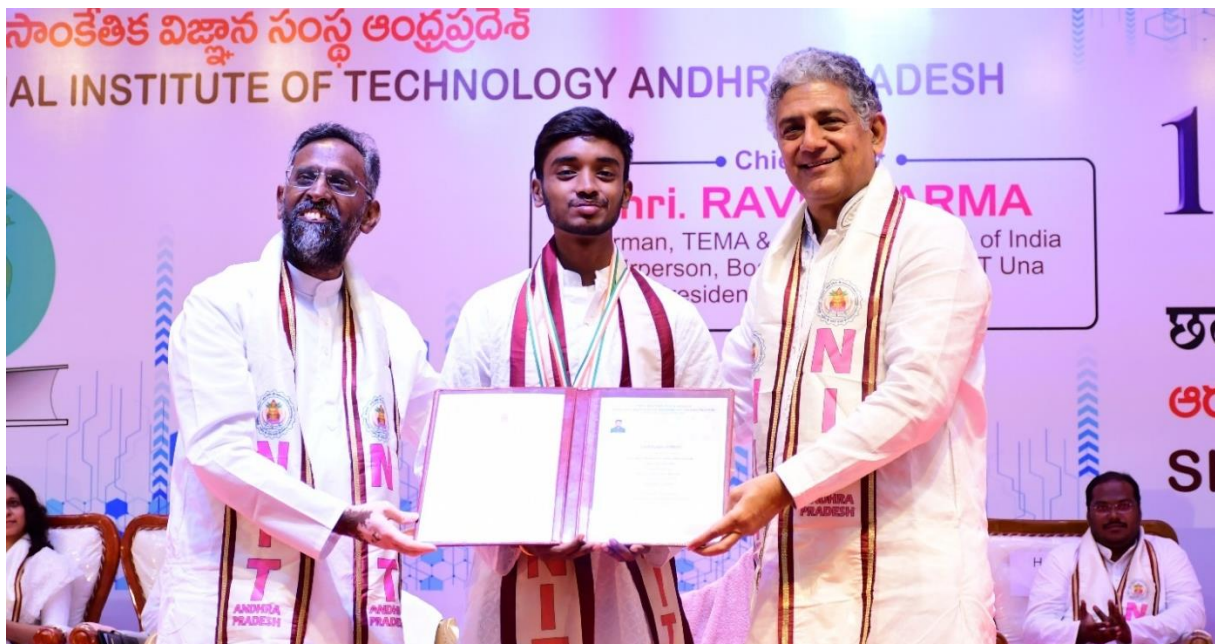
Department wise Enrollment of Ph.D. Programme



Cumulative Students' Strength A.Y. -2023-24				
S. No	Branch	B. Tech (UG)	Ph.D.	M.Tech. (PG)
1	Bio Technology	100	8	3
2	Chemical Engineering	116	6	0
3	Civil Engineering	282	12	3
4	Computer Science and Engineering	482	17	5
5	Electrical and Electronics Engineering	434	48	1
6	Electronics and Communication Engineering	481	33	0
7	Mechanical Engineering	333	39	2
8	Metallurgical and Materials Engineering	93	9	0
9	School of Sciences	0	30	0
10	School of Management	0	10	0
Total		2321	212	14

4.3 Sixth Convocation

The Sixth convocation of the Institute happened on 17-08-2024. Mr. Ravi Sharma, Chairman, BoG of IIIT Una, is the chief guest for the event. In this convocation, there are 527 graduands in B.Tech degree, 15 in M.Tech, and 25 in PhD.



Examination results for the B. Tech batch 2020-24 (6th Convocation)

S.No	Branch	No.of Students appeared	First Class with Distinction	First Class	Second Class	Total	Percentage of pass
1	Biotechnology	26	4	20	2	26	100
2	Chemical Engineering	33	7	22	2	31	93.94
3	Civil Engineering	64	15	32	16	63	98.44
4	Computer Science & Engineering	108	34	54	18	106	98.15
5	Electrical & Electronics Engineering	111	33	68	9	110	99.1
6	Electronics & Communication Engineering	109	39	60	5	104	95.41
7	Mechanical Engineering	69	17	38	6	61	88.41
8	Metallurgical and Materials Engineering	26	7	17	2	26	100
Total		546	156	311	60	527	96.52

Degree awarded in Sixth Convocation

S.No	Branch	Total
1	Biotechnology	26
2	Chemical Engineering	31
3	Civil Engineering	63
4	Computer Science & Engineering	106
5	Electrical & Electronics Engineering	110
6	Electronics & Communication Engineering	104
7	Mechanical Engineering	61
8	Metallurgical and Materials Engineering	26

5 Student career, Alumni & International relations

The office of Dean (SCAIR) takes care of central library of the Institute, training and placement cell, Alumni relations etc.

5.1 Training and placement Cell

The training and placement cell has conducted several training activities to help students increase their skills and thereby increase the chances of finding a better job. The activities by the training and placement cell conducted during the year 2023-24 and placement statistics are presented next.

Placement Statistics

S. No	Department	Total Strength	Undergraduate students opted For Job	No. of Students Placed	placement %	Average package (Lacs/Annum)	Highest package (Lacs/Annum)
1	Biotechnology	26	16	13	81.25	6.24	10
2	Chemical	33	18	18	100.00	5.81	10
3	Civil	67	43	35	81.40	5.43	6.57
4	CSE	110	73	57	78.08	11.99	44.1
5	ECE	109	92	31	33.70	8.66	44.1
6	EEE	109	89	56	62.92	6.5	15
7	Mechanical	70	44	25	56.82	6.11	10
8	MME	28	16	5	31.25	7.18	11.89
	Total	552	391	240	61.38	7.24	

Table 13: Department-wise UG Placement details

Training Activities

S. No.	Activity
1.	Facilitated the Accenture innovation challenge 2024 to UG and PG students
2.	Webinar How to crack GATE in 6 months Associated with IMS GATE Academy on 5 th August 2023
3.	Facilitated the TCS CodeVita Season XI contest
4.	Facilitated the online Olympiad GRE & TOEFL in collaboration with ETS India
5.	A session on "An Awareness session on overseas education" was organized in the T&P section.
6.	KIMO's "Edge 23 Tech Competition was conducted during Sep 2023
7.	Expert talk by Mr. Sampatkumar Aratti (Vice President & Head of HR for APAC @ LAPP ASIA, Singapore) on Self-management skills on 18 th Oct 2023
8.	An Awareness seminar on overseas education and Study in USA was organized by the T&P section on 1 st Nov 2023.

9.	A session on “Spot Assessment event for admissions into Illinois Institute, USA” was organized by the T&P section on 10 th Jan 2024
10.	A session on “Specialized post-graduate Program in Management for B.Tech and M.Tech students without appearing for the CAT Exam” was conducted by IIM Visakhapatnam in collaboration with NIT Andhra Pradesh on 25 th Jan 2024
11.	A coding contest by CodingNinjas was organized on 11 th Jan 2024.
12.	Workshop for people with Disabilities entitled “Building AI chatbots from scratch” was organized on 24 th Feb 2024.
13.	A programming contest entitled “Code Gladiators 2024” was organized by the T&P section.

The following training events were organized by the AlmaConnect (a cell maintaining Alumni relations) team:

Alma Connect-Career Insight Series	16/9/2023	10am to 1pm
Alma Connect-Women in Edu-Org	23/9/2023	10am to 1pm
Alma Connect-Corporate Souls	30/9/2023	10am to 1pm
Alma Connect-The pursuit of Happiness	29/10/2023	10am to 1pm

The following placement training sessions were organized for the B.Tech. final semester students throughout the even semester of the AY 2023-24 on a one session per week basis:

S.No	Event
1	Resume writing-Goal Setting-Staying Positive-Personality Traits
2	Group Discussion-How to start a group discussion- Effectives ways to start-How to
3	Enter when others are speaking in GD-How to conclude
4	Effective Communication Skills- Self-awareness- Self motivation- Body Language
5	Leadership Skills-Team Building
6	Presentation Skills-Time management & Adaptability
7	Cross culture communication and corporate culture
8	Negotiating skills-Conflict resolution
9	Mock Interviews

The following placement training sessions were organized for the B.Tech. III year students throughout the even semester of the AY 2023-24 on a one session per week basis:

S.No	Event
1	Communication – significance and barriers, Non-Verbal Communication importance (Public Speaking, body language, staying positive, Human relation skills)

2	Resume writing, Team building
3	Personality Development, self-management skills, Time management
4	GD/Interview and Presentation skills
5	Leadership skills, Goal setting, Personal Grooming,
6	Opportunities for higher studies
7	Professional Etiquette, Internship do's and don'ts, Life principles (using stories of Panchatantra, Sundarakand etc.)
8	Conflict Management, Companies interview process (taking few significant companies)
9	Activities (related to communication, image interpretation, patience etc.)
10	Aptitude Practices



Alumni, Internships & International Relations

- Students pursuing higher studies: 106
- Summer and winter Internships facilitated in the year 2023-24: 203

International Relations:

S. No.	Name Of Faculty	International Expert	Activity
1.	Dr. J Krishnamurthy, Physics, Asst. Prof. NIT ANP	Prof. H D Yang, PI, Professor, National Sun Yat-Sen University, Kaohsiung, Taiwan. Dr. Devi Chandrasekhar Kakarla, Adjunct Professor, National Sun Yat-Sen University, Kaohsiung, Taiwan.	Bilateral international India-Taiwan cooperation project
2.	Dr. Karthick Seshadri, Asst. Prof., DCSE, NIT ANP	Prof. Tingting Liu and Prof. Fan Zhang of Griffith University, Australia	(i) Collaborative Research work and joint Q1 publication on developing explainable semi-supervised AI models for green performance evaluation of airports. (ii) Collaborative Research work and a publication on AI models for Indoor Environmental Quality analysis.

5.2 Dr. B.R. Ambedkar Central Library



The Dr.B.R. Ambedkar Central Library as one of the important central facilities of the Institute supports the study, teaching, research, and development programmes of the Institute. The Central Library is an integral part of academic and research activities of NIT- Andhra Pradesh. It was

setup in September, 2015-2016 academic year with an emphasis on development print resources and online resources which are required for the curriculum and research activities of the Institute. It has been growing and expanding in the aspect of collections both in the print and digital form since its inception and provide services to the academic fraternity of NIT Andhra Pradesh to meet their teaching, research, and consulting, training and learning requirements.

During the year 2019-2020, the library was shifted from temporary campus library to permanent campus. The computer terminals provisioned at the circulation counter near the entrance and can be used to gain information regarding status of any document and other particulars of any book/collection. The central library activities have been computerized using the **KOHA Library Management Software** with Barcode system for the efficient book issue and return process.

Working Hours:

- The library is open on all days of the year except public holidays.
- The circulation counter functions from 9.00 AM to 9.00 PM on all working days.

Membership:

Membership of the institute library is open to the students, faculty members, research scholars, and non-teaching staff of the institute.

The following table reflects the growth of library users for the AY 2023-24.

Sl. No	User Category	No. s
1	Faculty (Regular& Ad hoc)	145
2	PhD	228
2	Mtech	35
3	Btech	2130
4	Non-Teaching staff	68
Total		2606

Collection building is one of the important functions of the library, which supports academic and research activities of the students, faculties, staff and other users. Collection of central library consists of printed books, CDs, printed journals, e-journals/databases, e-books, dissertations, reports, standards, and other reading materials covering the areas of science, engineering and technology, humanities, social sciences and management.

Sl. No	Print collection	No. s
1	Books	20500
2	Print Journals & Magazines (National & International)	65
3	Project Reports and Dissertations	652
4	News Papers (English & Telugu)	10
5	CD RoMs	1870
6	SC-ST Book Bank Books	680

E-resources:

The Central library has subscribed/renewed the following e-journals/ databases for the Academic Year 2023-24.

Sl. No	e-Journal /Database
1.	ASME Journal
2.	ASCE Journal
3.	ACM Digital Library
4.	JSTOR full text Database
5.	Springer Nature 1700 collection
6.	Oxford Academic Journal
7.	IEEE Xplore Digital Library
8.	Science Direct journals (Two subject collection)
9.	Turnitin anti-plagiarism software with Turnitin originality (AI content Checking tool)

Services provided by the library:

- Open Access shelving System.
- New arrivals list.
- Newspaper clipping display.
- Selective dissemination of information and current awareness service (SDI and CAS).
- SC-ST Book-Bank facility.
- On-line public access catalogues (OPAC).
- CD-ROMs.

- E-journals through E-sodhsindhu Consortium.
- Plagiarism Detect software TURNITIN.
- Article request (ILL)

Activities of Library:

- Conducted User Awareness programme on Turnitin Plagiarism checker in the year 2023.



6 SC/ST cell

The SC/ST cell of NIT Andhra Pradesh was established on 25th September, 2018. Dr. Vinoth Kumar Raja, was appointed as a coordinator/Liaison Officer of the cell by the director

- Since 2018, the SC/ST cell has been providing a “Free GATE coaching” to the aspirants of NIT Andhra Pradesh and non – NITAP (students studying at private engineering colleges in West Godavari District)
- In addition to the SC/ST cell has been providing coaching materials on free of cost to SC/ST students.

- More than 200 students enrolled in Gate Coaching. From this AIR All India 20th Rank in IIIrd year Bio-technology student Mr. Jayanth Haridas. 5 pupils got below 100 rank and 18 pupils got below 1000 rank and more than 198 pupils are Qualified in the GATE Examination held in 2023.
- In addition to this B. tech students utilized Gate Application in mobile phones which was developed by Electrical Engineering Department from NIT Andhra pradesh.
- SC/ST cell conducted Birth Anniversary of Dr. B. R. Ambedkar & Constitution Day as well.



7 Departments

7.1 Bio-Technology Engineering

The Department of Biotechnology at the National Institute of Technology Andhra Pradesh was established in the year 2015. Currently, we are offering undergraduate B. Tech, M. Tech, M.S (by Research) (Part-time) and Ph.D. (Part-time and Full time) programs. The department is committed to impart quality education and offer an excellent research environment to its ongoing programs to motivate budding engineers, scientists and entrepreneurs to enhance their problem-solving skills for societal benefits. The department has faculty members from diverse specializations from reputed national and international institutes. Our laboratories are well equipped with modern infrastructure to meet the requirements of academic programs. The research area of our faculty members includes Microbial Biotechnology, Bioprocess Engineering, Downstream processing, Modelling and Simulation of Bioprocesses, Prebiotics, Probiotics, Bioinformatics, Plant Biotechnology, Drug Delivery, Phytopharmacology, Environmental Biotechnology, and Nano-biotechnology. The departmental activities are supported by non-teaching staff. The aim of the department is to inculcate the knowledge of Biotechnology to the young minds who can contribute towards the development of the society.

VISION:

To nurture competent biotechnologists who will disseminate their knowledge for the development of sustainable technologies with their innovative approaches.

MISSION:

- Maintaining high academic standards by adopting effective pedagogy, and continuously upgrading the program curriculum to meet the current needs.
- Providing a flexible environment for faculty and students to flourish in teaching, research and entrepreneurship.
- Creating Institute-Industry interface by inculcating skills and knowledge through training programs to address the socio-economic issues.

LABS/WORKSTATIONS:

- Microbiology,
- Biochemistry,
- Cell and Molecular Biology,

- Transport Phenomena in Bioprocess systems,
- Bioprocess Engineering,
- Genetic Engineering,
- Downstream processing,
- Bioinformatics.

Faculty



**DR. V. SUDARSHANA
DEEPA**
Assistant Professor
(Head of the Department)

AREAS OF INTEREST:

- Plant Biotechnology.
- Environmental Biotechnology.
- Drug Delivery.
- Nanotechnology.
- Phytopharmacology



DR. A. SEENIVASAN
Assistant Professor

AREAS OF INTEREST:

- Applied Microbiology and Biotechnology, Biochemical Engineering.
- System Biology.
- Nanobiotechnology.
- Depolymerization of copolymers



**DR. RAJESWARA
REDDY ERVA**
Assistant Professor

AREAS OF INTEREST

- Microbial Biotechnology, Bioinformatics,
- Modelling, simulation and Optimization of Bioprocesses



DR. TINGIRIKARI JAGAN MOHAN RAO
Assistant Professor

AREAS OF INTEREST:

- Synthesis of Biopolymers,
- Functional health drinks,
- Development of Probiotics,
- Prebiotics,
- Bio flocculants, and
- In vitro Gut Model Studies

Research Scholars:

DR. V. SUDARSHANA DEEPA	Mayank Roy Chowdary (Full time)	Computational approach to discover natural products-based drugs for treating Alzheimer's disease using traditional plants as lead
	E. Balaji (Part-time)	Simultaneous phycoremediation of food industry waste water and enhance the production of beta carotene from macro algae
	K Vinith Kumar (Full time)	Novel functional biomaterial and pharmacognosy as therapeutic wound dressing for dermal burns and chronic diabetic ulcers.

DR. A. SEENIVASAN	Digvijay (Full time)	Bioprocess Development for the production of chitinases
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DR. E. RAJESWARA REDDY	Dherendra Kumar Suman (Full time)	Development, Characterization and Application of Oleogel, Emulgel and Bigel in Nutraceutical Industry”
	Kakara Divya (Part time)	Bioprocess Optimization and enhanced production of L-Lysine from Corynebacterium glutamicum

DR. T. JAGAN MOHAN RAO	Abhishek Kumar (Part time)	Investigate the molecular mechanisms of Nitrilase-mediated reactions and its potential applications in bioremediation
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7.2 CHEMICAL ENGINEERING

The Department of Chemical Engineering at NIT Andhra Pradesh was established in 2015-16, with a mission to impart high-quality engineering education and mould the students to meet the ever-growing demand for technical human resources in Chemical Engineering.

The Department currently offers B.Tech., M.Tech., and Ph.D. programmes in Chemical Engineering. We have revised our academic curriculum to be in tune with the current developments in the field while retaining the core concepts from the discipline. In addition, faculty introduced new electives related to their research, and these are pretty well subscribed.

Our students are highly encouraged to participate in national and international conferences, seminars, workshops, and symposia. The last few years have seen a dramatic increase in industrial associations, research projects, publications, and faculty awards.

VISION:

To offer academic and research programs that prepare students to address a global society's challenges and needs by solving complex problems associated with Chemical and Allied Engineering.

MISSION:

To deliver high-quality technical education that enables the students to lead productive careers in the chemical and allied industries.

- To develop a state-of-the-art infrastructure that promotes internationally recognized research, creativity, and entrepreneurial culture.
- To offer credible solutions to problems prevalent in the Chemical and allied industries by building a robust interface.
- To make students contribute to the nation's sustainable development through leadership in professionalism, education, research, and public services.

LABS/WORKSTATIONS:

- Fluid Mechanics Lab
- Mechanical Operations Lab
- Heat Transfer Lab
- Chemical Reaction Engineering Lab
- Mass Transfer Lab

- Process Control Lab
- Computational Design and Simulation Lab
- Research Lab-I
- Research Lab-II
- Analytical Lab

Faculty:



DR. VINOTH KUMAR RAJA
Assistant Professor
(Head of the Department)

AREAS OF INTEREST:

- Membrane Processes;
- Wastewater Treatment;
- Micropollutants Removal;
- Biofuels;
- Polymer Nanocomposites



DR. PUCHALAPALLI DINESHSANKAR REDDY
Associate Professor

AREAS OF INTEREST:

- Interfacial Science,
- Thin Films,
- Nanotechnology,
- Fluid Mechanics,
- Environmental Engineering.

RESEARCH SCHOLARS

DR. VINOTH KUMAR RAJA	SATISH KUMAR KOLLURU	Microplastic removal by membrane technology
	MADDALA SRIKANTH	Ceramic Membranes
	A SASIKALA	Waste water treatment. Removal of heavy metals by green liquid emulsion membrane
DR. PUCHALAPALLI DINESH SANKAR REDDY	SATHIEESH S	Studies on esterase enzyme
	AJMEERA RAMESH	Biodiesel production from waste vegetable edible oil by using eucalyptus green synthesis nanocatalyst

PhD Completed

Scholar name	Research topic	Supervisor
Dr. Kokkirapati V V Satyanarayana	Indigenous Bentonite-based Tubular Ceramic Microfiltration Membrane: Elaboration, Characterization and application in clarifying Citrus Fruit juices	DR. VINOTH KUMAR RAJA
Dr. Suthapalli Lakshmi Sandhya Rani	Fabrication, Characterization, and Evaluation of Fuller's Earth Clay Ceramic Membrane in Treating Industrial Wastewater	

Analytical Instruments Procured

1. UV-Visible Spectrophotometer
2. Mill Q Water Purification
3. Fourier Transform Infrared Spectroscopy
4. Particle Size and Zeta Potential Analyzer

Industrial Visit

S. No	Title	Co-ordinator	Place and Date	Sponsored
1	Industrial Visit to Nagarjuna Fertilizers & Chemicals Limited (NFCL) Kakinada	Dr. Vinoth Kumar Raja Dr. Dinesh P Sankar Reddy	Nagarjuna Fertilizers & Chemicals Limited (NFCL) Kakinada; 14.03.2024	Institute

7.3 CIVIL ENGINEERING

The Civil Engineering Department offers B.Tech., M.Tech. (Geotechnical Engineering), M.S. (by Research) and Ph.D. Programmes. The department was incepted in the year 2015 with a sanctioned intake of 60 students for the B.Tech. (Civil) programme, M.Tech., (2021) and Ph.D. Programmes (2019). The Department is actively involved in basic and applied research in the field of Structural Engineering, Geotechnical Engineering, Water Resources Engineering and Environmental Engineering. Broad area of the current research focus of the Department includes Earthquake Engineering, Environmental Geotechnology, Structural Health Monitoring, Wastewater Treatment, GIS-based Hydrological Modelling, and Integrated Watershed Management.

Vision

To lead the global community by producing outstanding Civil Engineers through quality technical education, research and build the legacy of entrepreneurship who can serve for industry and society through their innovative thinking.

Mission

- To design a curriculum which caters the present and future challenges and establish a Centre of Excellency in Civil Engineering.
- To carry out novel research, on problems prevalent in society and provide sustainable solutions in various disciplines of Civil Engineering.
- To have industry connect for combating the multi-dimensional problems through collaborations.
- To promote innovative ideas among the students to excel as a future entrepreneur.

Labs/Workstation:

- Concrete Technology Laboratory
- Hydraulic Engineering Laboratory
- Geotechnical Engineering Laboratory
- Environmental Engineering Laboratory
- Surveying Laboratory
- Highway Engineering Laboratory
- Strength Of Materials Laboratory

Faculty



DR. TALARI RESHMA
Assistant professor
(Head of the Department)

AREAS OF INTEREST:

- GIS-based hydrological modelling,
- Soft Computing Techniques,
- Watershed Modelling,
- Remote Sensing and GIS



DR. S. BARANIDHARAN
Assistant Professor

AREAS OF INTEREST:

- Water & Wastewater Treatment Process
- Fate and Transport of Emerging
- Contaminants & Monitoring Emerging
- Contaminants & Toxicity Studies Risk
- Life Cycle Assessment Bio-char for Contaminant Removal



DR. JAYANTHI N. V. PRATHYUSHA
Assistant Professor

AREAS OF INTEREST:

- Geotechnical Engineering;
- Environmental Geotechnology;
- Advanced Geomaterial Characterization;
- Sustainable geomaterials;
- Climate change and its impact on Geomaterials



DR. SHAIK MAHABU SUBHANI
Assistant Professor

AREAS OF INTEREST:

- Smart materials and composites.
- Constitutive modelling.
- Concrete technology.
- Structural Health Monitoring

Research Scholars

DR. T RESHMA	Chirasmayee S (Project mode)	Monitoring and Analysis of non-point source pollutants for an agricultural watershed
	Shiva Chandra V (Part time)	Improving Runoff Predictions in Urbanized Catchments with Pixel based Estimates of Impervious Surface Cover.
DR. SHAIK MAHABU SUBHANI	Gedela Santhosh Kumar (Full time)	Performance Evaluation of POFA and SCBA in producing alkali activated binder and blended concrete systems
	Asim Rifaur Rahman (Full time)	Performance Evaluation of POFA and Marble dust in producing alkali activated binder and blended concrete systems

	Shaik Subhani (Full time)	Study agricultural waste as a sustainable construction material
	Mehar Sai (Part Time)	Performance Evaluation of Recycled fine aggregates and POFA in producing blended concrete systems
	Venugopal Swamy (Part Time)	Performance Evaluation of Slag sand and SCBA in producing blended concrete systems
	Naga Sruthi (Part Time)	Performance of Agro Waste Ashes in Concrete Technology

DR. SHAIK MAHABU SUBHANI & DR. BARANIDHARAN S	Kunchala Ashok (Part Time)	Performance Evaluation of Recycled fine aggregates and SCBA in producing blended concrete systems.
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DR. BARANIDHARAN S	Shilpa Mishra (Part Time)	CaTiO ₃ Nanoparticle for Landfill Leachate Treatment.
	Mr. Rathna Kumar Vakkalagadda (Part Time)	Runoff Modelling
	Ms. Sheha Shaji (Full time)	Understanding the Behavior of Microplastics and Co-Contaminants in Soil
	Mr. Vijaykumar S (Project)	Understanding the Interaction between Microplastics and Heavy Metals in Wastewater – Distribution, Adsorption, and Risk Assessment

DR. JNV PRATHYUSHA	Dinesh Srirama (Full time)	Stabilization of expansive soil using eggshell lime
	K VeeraSwamy	Establishing the Thermal Properties of Soil and Geomaterial Composites

7.4 COMPUTER SCIENCE AND ENGINEERING

The Department of Computer Science and Engineering at NIT Andhra Pradesh, offers a B.Tech. Undergraduate programme in Computer Science and Engineering, M.Tech. in Computer Science and Data Analytics, M.S. (by research) and Ph.D. programmes. The department was incepted in the year 2015, the current sanctioned intake is 90 students for the B.Tech. (CSE) programme. The B.Tech. curriculum offered by the department comprises of core courses that provide a sound theoretical foundation which is supplemented through industry relevant elective courses and a project component. The department hosts an M.Tech. programme in Computer Science and Data Analytics with an intake of 15 students, from the Academic Year 2020-21 onwards. The M.Tech. curriculum is designed in such way to provide a sound theoretical and practical foundation for conducting high-quality research in the thrust sub-domains of Data Analytics.

Vision:

To strive for excellence in academics, research and technological service to the society, with an intent to nurture the stakeholders and produce Computer Scientists, technologists and Engineers who are globally competent and nationally relevant.

Mission:

- To adopt a teaching-learning process that imparts technical skills and state-of-the-art knowledge with a well-blended and balanced mix of theory and practice.
- To create functional centers of excellence that promote research and consultancy in the thrust sub-domains of theoretical computer science, systems and technology.
- To collaborate with industry and higher learning institutes of national/international repute and solve socially relevant problems.

Labs/Workstations:

S. No	Name of the Lab	Details of the Equipment Available (Quantity and Brief Specification)	Details of the Software Available
1	HiPC Lab	The cluster of 5 Rack Servers (HPE ProLiant ML350 GEN10) Spec: Intel Xeon 7210, upto 1.50	TensorFlow, Hadoop, Message Passing Interface (MPI), Apache Spark Cluster Computing

		GHz, 64 core, 256 Threads, 160 GB RAM, 48 GB GPU, 256 GB SSD.	Framework.
2	AI Lab	No. of Workstations: 80 Spec: Intel(R) Core (TM) i7-8TH GEN ,16 GB RAM, Hard disk 1TB, Operating system -Linux, Cores: 6	IDEs for C/C++/Java/Python, AI Frameworks like TensorFlow and Theano
3	Enterprise App Development Lab	No. of Workstations: 36 Spec: Intel(R) Core (TM) i7-8TH GEN ,16 GB RAM, Hard disk 1TB, Operating system -Linux, CORES 6 No. of Workstations: 44 Spec: Intel i7 9th gen, 8 GB RAM, Linux, hard disk 2 TB, cores 8	My SQL, Umbrella, AutoCAD, IDE for Java and Python
4	Data Analytics Lab	No. of Workstations: 40 Spec: Intel(R) Core (TM) i7-8TH GEN ,16 GB RAM, Hard disk 1TB, Operating system -Linux, CORES 6 No. of Workstations: 40 Spec: Intel i7 9th gen, 8 GB RAM, Linux, hard disk 2 TB, cores 8	Open-Source Frameworks for Data Analytics, Tensor Flow.
5	Systems Programming Lab	No. of Workstations: 80 Spec: Intel i7 9th gen, 8 GB RAM, Linux, hard disk 2 TB, cores 8	IDEs required for Systems Programming and Analysis.
6	Network Lab	No. of Workstations: 39 Spec: Intel(R) Core (TM) i7-8TH GEN ,16 GB RAM, Hard disk 1TB, Operating system -Linux, CORES 6 No. of Workstations: 13 Spec: Intel i7 9th gen, 8 GB RAM, Linux, hard disk 2 TB, cores 8	

Faculty



**DR. HIMABINDU
KOMMANTI**
Assistant Professor
(Head of the Department)

AREAS OF INTEREST:

- Web Mining,
- Machine Learning,
- Big data,
- Educational Data Mining



DR. KARTHICK. S
Assistant Professor

AREAS OF INTEREST:

- Algorithms (Randomized, Approximation, Parallel),
- Machine Learning,
- Data Analytics,
- Web/Text Mining, Performance Modelling



**DR. NAGESH BHATTU
SRISTY**
Assistant Professor

AREAS OF INTEREST:

- Machine Learning,
- Database Systems,
- Distributed Computing



**DR. SRILATHA
CHEBROLU**
Assistant Professor

AREAS OF INTEREST:

- Attribute reduction using Rough Sets,
- Boolean Reasoning and
- Evolutionary Algorithms

RESEARCH SCHOLARS

DR. HIMA BINDU K	Mr. Dinesh Didla (Full time)	Explainable AI
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	Venkata Ramana Battula (Part time)	Machine Reading Comprehension
	Krishna Kumar Singh (Part time)	Few-shot Learning
	Srichandana Abbineni (Part time)	Entity Linking for EHR
	Samineni Bhavani (Part time)	Stance Detection

DR. NAGESH BHATTU S	B S S Mounica (Part time)	Privacy and Fairness in Social Network Analytics
	Nishita T (Part time)	Rate Control Algorithms
	Ms. Ila Chandana Kumari P (Part time)	Machine Learning

DR. NAGESH BHATTU S (Main supervisor) DR. SRI PHANI KRISHNA (co-supervisor)	Y Gireesh (Full time)	Weakly Supervised Video Classification
DR. NAGESH BHATTU S (Main Supervisor) DR. SRI PHANI KRISHNA (Co-Supervisor)	Shashanka B N (Full time)	Hand Written Text Recognition
	Mandala Sookshma (Full time)	Sparsity Representation Learning
DR. KARTHICK SESHADRI (Main Supervisor) DR. NAGESH BHATTU S (Co-supervisor)	Samriddhee Ghosh (Full time)	Characterization and resource provisioning models for Elastic Cloud Computing
	Sindhu Korrapati (Full time)	Characterization and resource provisioning models for Elastic Cloud Computing
	Sastry Y VRPS (UGC-NET) (Full time)	Causality-aware sentiment analysis

	Upendar Rao Rayala (Part time)	Knowledge graphs and Sentiment analysis of code-mixed scripts
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DR. KARTHICK SESHADRI	Kumar Anurupam(Part time)	Probabilistic graphical modeling for attack inference
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DR. SRILATHA CH.	Hanuman Turaga (Full time)	Parallel and distributed attribute reduction of large data sets based on rough set theory and evolutionary algorithms
	M A Praveen (Full time)	Deep Learning models on Brain Tumor classification and segmentation
	Siva Rama Sastry Gumma(Part time)	Telugu historic documents (Palm Leafs)

Thesis submitted

S. No	Name	Topic	Supervisor
1.	Dr. Kiran Babu N (Full-Time)	Design and Evaluation of Multi-task Learning Models for Toxicity Detection and Rationale Extraction	Dr. Hima Bindu K

7.5 ELECTRONICS AND COMMUNICATION ENGINEERING

The Electronics and Communication Engineering (ECE) Department was established in the year 2015. The department offers Undergraduate (UG), Post Graduate (PG), M.S. (By Research) and Ph.D. degree programs that provide students with the knowledge and tools they need to succeed in the Electronics and Communication Engineering. Research in the department focuses on high-impact various disciplines such as: Communication systems, Wireless networks, Internet of Things, Signal and Image Processing, Biomedical Signal Processing, RF MEMS, Microwave antennas, Optical communication and Photonics, and future prospective of VLSI technologies. Currently the department offers four-year B.Tech course with student intake of 120 and M.Tech course with intake of 10 students. The department of ECE is one of the established and largest departments in NIT-Andhra Pradesh. Our faculty brings state-of-the-art research, development, and design experience into the classroom, ensuring that our students and alumni are able to apply for registration as professional engineers in all part of global engineering and

the scientific community. In all courses the Department has built an excellent reputation for its graduates in terms of placements.

The department has mission to educate the students with the state of art technologies to meet the growing challenges of the industry, to carry out research through constant interaction with research organizations and industry, and to equip the students with strong foundations to enable them for continuing education. So, the vision is to excel in education and research in Electronics and Communication Engineering.

Vision:

To be recognized as a center of academic and research excellence in the field of Electronics and Communication Engineering that endeavors to create globally competent, innovative Engineers with entrepreneurial skills, capable of addressing the industry and societal demands.

Mission:

- To provide conducive environment for the students to become technically competent in the upfront technologies of Electronics and Communications.
- To inspire students and teachers towards innovative and collaborative research leading to the establishment of centers of excellence.
- To stimulate the stakeholders of the department towards the entrepreneurial activity.
- Inculcate human values and professional ethics to students and faculty members and make them philosophical towards the societal issues.

LABS / WORKSHOPS:

S. No	Name of the Lab	Details of the Equipment Available (Quantity and Brief Specification)
1	EDC LAB	<ul style="list-style-type: none"> ▪ Dual DC Regulated Power Supply (0-30V, 2A) ▪ Function Pulse Generator (10MHz-40MHz) ▪ Analog- Digital Circuits Development Platform ▪ Multi Output DC Regulated Power Supply (0-5V,1A) ▪ Function Pulse Generator (1mHz-20MHz) ▪ Analog Dual Trace Oscilloscope (30 MHz)
2	COMMUNICATION SYSTEMS LAB	<ul style="list-style-type: none"> ▪ Digital Storage Oscilloscope 70MHz ▪ Analog Dual Trace Oscilloscope (20 MHz) ▪ 25MHz Digital Function/ Arbitrary Waveform

		<p>Generator.</p> <ul style="list-style-type: none"> ▪ Hand Held 50KHz Digital Multi Meters ▪ Dual DC Regulated Power Supply (0-30V, 2A) ▪ Communication Kits
3	LICA LAB	<ul style="list-style-type: none"> ▪ Function Generator (10 MHz) ▪ Dual Channel Analog Oscilloscope (30 MHz) ▪ Dual Channel Digital Oscilloscope (50 MHz) ▪ Dual Channel Regulated Power Supply (0-30V,2A) ▪ DC Regulated Fixed Power Supply (+12V/15V, -12V/-15V, +5V) ▪ Multi Output Power Supply (0-30V,2A), (+12V/15V, -12V/-15V, +5V) ▪ Digital IC Trainer Kits ▪ Digital multi-meters
4	MICROCONTROLLERS & DIGITAL SIGNAL PROCESSING LAB	<ul style="list-style-type: none"> ▪ Modular Embedded Development Platform ▪ ARM Cortex M4 STM32F407 Development Board ▪ 8051 Processor Universal Embedded Board ▪ Arduino Development Board ▪ DSP (C6748LCDK) Kits ▪ Desktop Computers
5	MICROWAVE AND LIGHT WAVE TECHNOLOGIES LAB	<ul style="list-style-type: none"> ▪ Vector Network Analyzer (500KHz - 6.5GHz) ▪ Spectrum Analyzer with Tracking Generator (9KHz - 7.5GHz) ▪ Digital Storage Oscilloscope 1GHz ▪ Arbitrary Function Generator/ RF Signal Generator (9KHz - 3GHz) ▪ Noise Source ▪ Power Meter ▪ Wide Horn Antenna (700MHz - 18GHz) ▪ Tx20 & Rx20 Antenna (62- 69 GHz) ▪ Klystron Based Test Bench(X-Band) ▪ GUNN Based Test Bench ▪ Antenna Radiation Pattern measurement set up ▪ Digital Storage Oscilloscope(200Mhz) ▪ Handheld Fiber Optic Power Source ▪ Optical Fiber Trainer ▪ 2MHZ Plastic fiber Analog link with power supply ▪ 2Mbps Multimode glass fiber digital link with power supply

Faculty:

DR. S. YUVARAJ
Assistant Professor
(Head of the Department)

AREAS OF INTEREST:

- RF and Microwave Engineering
- Microwave Sources and allied components (Especially Vacuum Electron Devices),
- Microwave Passive devices



**DR. KRISHNA
CHAITANYA A**
Assistant Professor

AREAS OF INTEREST:

- Resource allocation in Wireless Networks.
- Information Theory.
- Coding Theory



**DR. NARASIMHA RAO
BANAVATHU**
Assistant Professor

AREAS OF INTEREST:

- Cooperative Communications.
- Spectrum Sensing.
- Cognitive Radio.
- Optimization.
- Internet of Things (IoT);
- Unmanned Aerial Vehicles (UAVs);
- Signal Processing for Communications.
- Distributed Sensor Networks and
- Decision/Data Fusion.



**DR. KIRAN KUMAR
GURRALA**
Assistant Professor

AREAS OF INTEREST:

- Cooperative Communication in Wireless Networks.
- Physical Layer Security



DR. PULI KISHORE KUMAR
Assistant Professor

AREAS OF INTEREST:

- Radar signal processing
- Image Processing
- Wireless Communications

Research Scholars

- Mr. L NAGARAJU (PF061902) under the guidance of Dr. Puli Kishore Kumar has awarded degree on 18.04.2024.
- Mr. M VENKATESWARARAO (PF062004) under the guidance of Dr. Yuvaraj S has thesis submitted on 04.03.2024.
- Mr. Grandhi Challa Ram (PP061957) under the guidance of Dr. Yuvaraj S has thesis submitted on 03.06.2024.

DR. PULI KISHORE KUMAR	Pamu Harika (Full-Time)	VLSI
	Lokesh Dharmatheja Ch (Full-Time)	Antenna Array Processing
	Lanka Sree Lakshmi Sowjanya (Full-Time)	UWB SAR Imaging
	Alladi Praveen Kumar (Part-Time)	Embedded System
	V H Prasad (Part-Time)	Signal Processing
	G Krishnaveni (Part-Time)	VLSI
	Sumathi Jyothi (Part-Time)	VLSI
	G Ramya (Part-Time)	WIRELESS COMMUNICATION
Parri Srinivasulu (Part-Time)	VLSI signal Processing	

DR. YUAVRAJ S	RVNR Suneel Krishna (Full-Time)	Microwave Filters
	Syed Imran Basha (Full-Time)	Microwave Sensors
	D Poojitha	RF& Microwave
	Makkapati Himaja (Part-Time)	Antennas
	Qurratul Ayn (Part-Time)	Antennas
	S V Ravi Kumar (Part-Time)	Microwave absorbers

DR. NARASIMHA RAO B	K. Beulah Sujana (Full-Time)	Wireless Communications
	K. Sarath Babu (Full-Time)	Wireless Communications
	P Naveen Kumar Reddy (Full-Time)	Wireless Communications
	S Sreelekha (Full-Time)	Wireless Communications
	S Ramajaneya (Full-Time)	Wireless Communications
	N Lalitha (Part-Time)	Wireless Communications

DR. KRISHNA CHAITANYA A	Mr. Ananda Kumar Karem (Full-Time)	Power allocation and subcarrier allocation for NOMA-IBFD systems
	Pagadala Usha (Full-Time)	Automatic Speech Recognition
	M Venkata Srinu (Full-Time)	Resource allocation for IBFD systems
	Gaddam Samatha (Part-Time)	Image Processing
	Sangeetha K(Part-Time)	Wireless Communications

DR. KIRAN KUMAR GURRALA	Uma Maheswara Rao Ukyam(Full-Time)	RIS aided next generation wireless network
	L. Tejaswini	Wireless Communication
	Purna Chandra Reddy V(Part-Time)	Joint DR-DME classification using deep learning-
	Pramodkumar Aylapogu(Part-Time)	Index modulation for next generation networks
	Rallapati Aditya (Part-Time)	VLSI for cooperative communication

7.6 ELECTRICAL AND ELECTRONICS ENGINEERING

The Department of Electrical Engineering at National Institute of Technology (NIT), Andhra Pradesh offers B. Tech, M. Tech and Ph. D programs which keenly emphasize global learning. The main theme of the department is to create a platform for knowledge assimilation, dissemination and generation. It is committed to work in emerging areas and develop sustainable technologies & innovations in the electrical engineering field. The students and faculty are encouraged to work in interdisciplinary projects with a stimulating and wonderful learning experience.

Currently, the faculty are engaged actively in following research areas: Power Electronics, Electric Drives, Design of Electric Machines, Renewable Energy and Microgrids, Hybrid and Electric Vehicles, Electric Vehicle Charging Infrastructure, Smart Grid Technologies and Integration, AI & ML Applications in Power and Energy Systems, DSP / FPGA based Real –Time Embedded Systems and Assistive Technologies. The department encourages continuous learning process through internship programs, IEEE activities and industry interaction sessions.

Vision:

Aiming to nurture globally competent electrical engineers in research and innovation through quality education and develop cutting edge technologies for the betterment of society.

Mission:

- Effective Technology adoption into teaching and learning Strategies by faculty that result in observable student's achievement.
- Create an open platform for innovative research work in sustainable electrical power systems.
- Nurture creative thinking with understanding engineering principles and develop real-time solutions for global problems with industry collaboration.
- Deploy energy efficient and green energy technologies to address social, environmental, and economical effects.

Labs / Workstations:

- Analog and Digital Electronic Circuits Lab
- Measurements and Instrumentation Laboratory
- Control Systems Laboratory
- Numerical Methods and Programming Analytical Lab
- Power Electronics Lab
- DC Machines and Transformers Lab
- AC Rotating Machines Lab
- Power Systems & Renewable Energy Laboratory
- EV Battery Charging Systems Lab
- EV Propulsion Systems Lab
- Power Electronics & DC Drives Laboratory
- AC Drives Laboratory
- Kalam Open Innovation Laboratory

Faculty:

**DR. TEJAVATHU
RAMESH**
Assistant Professor
(Head of the Department)

AREAS OF INTEREST:

- Power Electronics and Drives,
- Electrical machines,
- Special Machines,
- Sensor less Drives,
- Multi-level Inverters,
- Hybrid Renewable Energy Systems,
- Electric Vehicles,
- Artificial Intelligence Application in Power Electronics and Drives.



DR. V. SANDEEP
Assistant Professor

AREAS OF INTEREST:

- Microgrids, Smart Grids,
- Electric Vehicles,
- Power Electronics and Drives,
- Computer -Aided Design of Electric Machines,
- Energy Conversion,
- Energy Management
- Machine Learning (ML) and Artificial Intelligence (AI) in Power & Energy Systems



**DR. SANKAR
PEDDAPATI**
Assistant Professor

AREAS OF INTEREST:

- Reliability Aspects of Power Electronics Converters,
- Optimization Techniques, Assistive Technology



DR. JAYARAM NAKKA
Assistant Professor

AREAS OF INTEREST:

- Power Electronics and Drives - High Power Factor Converters,
- Multilevel Converters/ Inverters (MLI/Cs),
- MLI/Cs applications in Renewable Energy Systems,
- Grid connected Renewable Energy Conversion Systems,
- AC/DC converters,
- Power Quality using STATCOM Technologies



DR. KIRAN TEEPARTHI
Assistant Professor

AREAS OF INTEREST:

- Power System Security and Stability.
- Power System Operation and Control.
- Renewable Energy integration issues.
- Power System Optimization.
- Artificial Intelligence (AI) applications to Power Systems



DR. SRI PHANI KRISHNA KARRI
Assistant Professor

AREAS OF INTEREST:

- Digital signal processing.
- Embedded systems.
- Machine learning.
- Electrical Machines

RESEARCH SCHOLARS

DR. TEJAVATHU RAMESH	P. Rama krishna (Full-Time)	Investigations on Multi-Level Inverter fed Sensorless Permanent Magnet Synchronous Motor Drive using Direct Torque and Flux Control based Space Vector Modulation Technique
	P.Dharmendra kumar(Full-Time)	Development of modified Predictive torque control for multilevel inverter fed sensorless PMS Motor drive
	A.Chandra Sekhar (Full-Time)	Design and development of Solar PV Configuration under partial shaded conditions and its applications to water pumping
	A. Mastanaiah(Full-Time)	ML based Electric Drives
	Tangirala Isradani (Full-Time)	Model free control of Multi level inverter fed Permanent magnet synchronous motor drive
	Malla Mohan (Full-Time)	Design and development of Direct torque control SVM on five phase PMSM
	Davu Srinivasa Rao(part-Time)	Renewable Energy
	K. Rajani(part-Time)	Maximum power enhancement of PV array configurations under partial
DR. V. SANDEEP	B.Amruth Raju(Full-Time)	Energy Management in Micro Grid
	P. Krishna Mohan Reddy (Full-Time)	Energy management in a Microgrid
	G. Babu (Full-Time)	Optimal Energy Management in DC Microgrid

	K.Narendra Babu(Full-Time)	Hybrid Micro Grid
	Satyavani Yadlapalli (Part Time)	Design and Development of Wireless Power Transfer Charging for UAVs
	Ropesh Rayalu Onteru(Part-Time)	Effective energy management strategies in commercial & Residential microgrids using machine learning techniques
	Pagidipala Sravanthi (Part-Time)	Optimal Techno-Economic Operation of Power Systems with Renewable Energy Sources and Electric Vehicles

DR. NAKKA JAYARAM	P.S.V. Kishore (Full-Time)	Design of switched capacitor based single phase multilevel inverters for Renewable energy conversion system
	Gaurav (Full-Time)	Design and Analysis of Non-isolated DC-to-DC converter for renewable energy application
	A. Vamshi (Full-Time)	Electric vehicles
	Arandhakar Sairaj (Full-Time)	Emerging Intelligent Bidirectional Charging Strategy Based on Recurrent Neural Network Accounting EMI and Temperature Effects for Electric Vehicle
	D Aasha Vardhini (part-Time)	Energy Management in Microgrid.
	Vanapalli Naga Venkata Vamsi Kumar(part-Time)	Design and development of novel multilevel inverters with switched capacitors technique
	Katta Suresh(part-Time)	Fault Tolerant Multi –Level Inverters
	M Sri Suresh(part-Time)	Modelling and coordination of interconnected hybrid micro grids

DR. SANKAR PEDDAPATI	SVK Naresh (Full-Time)	Investigation on design and analysis of Non isolated quadratic DC-DC Converters with reliability Assesment for micro grid applications
	A. Rajamallaiah(Full-Time)	Optimal control of Power converters using Deep Reinforcement Learning controller
	Balaram Kumar (Full-Time)	Fault tolerant Multilevel Inverter
	R.Vikash Kumar Full-Time)	Grid Integration
	Kallelapu Rambabu Full-Time)	Bidirectional DC-DC Converters

	K.V.S. Prasada Rao(part-Time)	design and development of fault tolerant MLI Topologies with reduced device count
	V. Sree Vidhya(part-Time)	Design of multi-output wide-input Reconfigurable series Loaded Resonant Converters
	Mahendra Chand Bade(part-Time)	Design and development of current source multilevel Transformer-less photovoltaic inverter systems

DR. S.P.K. KARRI	L N Sastry Varanasi (Full-Time)	Non- Intrusive Load Monitoring using Machine Learning Algorithms
	S.Raja Sekhar(Full-Time)	Deep Learning in Image Processing
	Jeweliddin shaik(part-Time)	Based Energy management Strategy for Hybrid Electric Vehicles
	Santhosh Karra(part-Time)	Deep Learning based Image Analysis
	Gunda Narasimharao(part-Time)	Real time energy management of a micro grid using Deep Reinforcement learning
	Shravani Kanaka Kumari Palla(part-Time)	Deep Reinforcement Learning Applications to Electric Vehicles

7.7 Mechanical Engineering

The Department of Mechanical Engineering at NIT Andhra Pradesh offers a B.Tech. undergraduate programme in Mechanical Engineering, M.Tech. in Manufacturing Engineering and Thermal Engineering, M.S. (by research), and Ph.D. programmes. The department was incepted in the year 2015 with a current sanctioned intake of 120 students for the B.Tech. programme.

The B.Tech. curriculum offered by the department comprises core courses that provide a sound theoretical foundation which is supplemented through industry-relevant elective courses and a project component. The department hosts M.Tech. programmes in Manufacturing Engineering and Thermal Engineering each with an intake of 15 students, from the Academic Year 2020-21 onwards. The M.Tech. curriculum is designed in such a way as to provide a sound theoretical and practical foundation for conducting high-quality research in the thrust sub-domains of the respective specializations.

Regular faculty in the department are experienced and possess degrees from reputed institutions. Faculty members in the department work on research domains including but not limited to IC engine combustion, Biodiesel and other biofuels, Regulated and unregulated emissions, Refrigeration and Air Conditioning, Energy Efficient Thermal Systems, Computational Fluid Dynamics, Cavitation, Heat Transfer in Space Applications, Micro-scale flows and Biological application of Ultrasound, Material Science and Metallurgy, Composite Materials, Manufacturing Technology, Artificial Neural Networks, Additive Manufacturing - Artificial Intelligence Applications in Manufacturing - Weld and Laser-Based Depositions - FEA of metal-deposition Processes - Metal Matrix Composite Materials - CNC Machining, Optimization of Scheduling and Inventory Problems, Soft Computing Techniques, Manufacturing Processes.

The department has vibrant and dynamic professional societies that nurture the technical/soft skills of students. The effectiveness of the strong curriculum and faculty in the Department is attested by the student achievements including but not limited to the number of students placed in core companies and the number of students enrolling for higher studies in institutions of national and international repute.

Within a short span of its inception, the Department boasts of around 150 plus publications in extremely high-impact journals and conferences. Faculty in the department are very active in authoring Books and Book chapters and in disseminating best practices in research through Faculty Development Programmes.

The Department has conducted eleven faculty development programs within the past three academic years and has conducted four Faculty Development Programs (FDP) sponsored by AICTE, Govt. of India. The Department is currently handling 50 Lakhs worth of research projects sponsored by DST.

The Department of Mechanical Engineering has the following five laboratories with the relevant Manufacturing and thermal Engineering Laboratories to support the undergraduate, postgraduate laboratories and research work of the doctoral students. The Department currently hosts 8 full-time and 35 part-time research scholars working towards solving open contemporary research problems in mechanical engineering domains.

Vision

To impart professional education in mechanical engineering to become successful entrepreneurs capable of developing innovative, interdisciplinary, and sustainable globally competitive technologies and nurture the students as responsible citizens service to the society.

Mission

- To impart mechanical engineering education with the latest teaching-learning processes.
- To equip the students with the advanced tools to make them suitable for global employment and societal requirements.
- To train the students to solve engineering problems in multi-disciplinary areas.
- To inculcate professional ethics and human values.

Labs / Workstations

- Manufacturing lab with CNC Turning and Milling Centres,
- Advanced Welding Laboratory
- Foundry Technology Laboratory
- CAD/CAM/CAE Laboratory
- Machine Shop,
- Workshops and Drawing Halls
- Mechatronics Laboratory

Faculty:



DR. THELLA BABU RAO
Assistant Professor
(Head of the Department)

AREAS OF INTEREST:

- Metal Matrix Composites,
- Manufacturing Engineering,
- Modeling and Optimization of Manufacturing Processes,
- Bulk metal removal from hard-to-cut materials



**DR. VEERESH KUMAR
G. B**
Assistant Professor

AREAS OF INTEREST:

- Material Science and Metallurgy,
- Composite Materials,
- Manufacturing Technology,
- Artificial Neural Networks



**DR. G. RAVI KIRAN
SASTRY**
Professor

AREAS OF INTEREST:

- IC engine combustion,
- Biodiesel and other biofuels,
- Regulated and unregulated emissions



**Dr. SANTHOSH
KUMAR GUGULOTHU**
Assistant Professor

AREAS OF INTEREST:

- Cavitation,
- Heat Transfer in Space Applications,
- IC engines,
- Energy Efficient Thermal Systems,
- Computational Fluid Dynamics,
- Micro-scale flows and biological application of Ultrasound.



**DR. T. KARTHIKEYA
SHARMA**
Assistant Professor

AREAS OF INTEREST:

- IC engines,
- Refrigeration and Air Conditioning,
- Energy Efficient Thermal Systems,



**DR. HYMAVATHI
MADIVADA**
Assistant Professor

AREAS OF INTEREST

- Optimization of Scheduling and Inventory Problems,
- Soft Computing Techniques,
- Manufacturing Processes

Research Scholars:

PROF G RAVI KIRAN SASTRY	Basa Sairam Prasad (Full Time)	Numerical Investigations on studies of water entry bodies
	Vidya Chaparala (Part Time)	Performance evaluation of automobile generator with green nano-fluids
	L B Bharath Raju (Part Time)	Numerical analysis on solar air heater using triangular curved duct with roughened surfaces
	K S Lalitha Soujanya (Part Time)	Exergy analysis of a cogeneration system consisting of molten carbonate fuel cell/solid oxide fuel cell using re-heat and re-generative braysson cycle and steam generator
	Kayyala Venkateswarlu (Part Time)	Investigation of influence of various operating parameters in WAAM using ER4043 aluminium alloy
	Boda Geetha Chandra Sekhar (Part Time)	Performance evaluation of miniature loop heat pipes with hybrid nanofluids and composite wicks

DR. G. B. VEERESH KUMAR	S R Viswanath Mantha (Full Time)	Fabrication and characterization of self-healing aluminum metal matrix composites
	Sridhar (Full Time)	Microstructural and mechanical characterization of super duplex and austenitic steels joined by key hole TIG welding process
	Suresh Babu Utlala (Part Time)	Studies on aging behaviour of solid propellant materials using low frequency ultrasonic methods and comparison with conventional, mechanical test findings
	Ajay Kumar Singh (Part Time)	Studies on correlations of interface aging in solid rocket motors with non-destructive evaluation methods
	K C S Vyasa Krishnaji (Part Time)	Ecofriendly synthesis of carbon from waste plastic bottles to reduce the pollution and impact on environment
	Krishna Kanth (Part Time)	Fabrication and characterization of Al7075-Si ₃ N ₄ composited metal foam
	V V Phani Babu (Part Time)	Experimental investigation and analysis of dimensional accuracy surface roughness of 3D metal printed SS316L by direct metal laser sintering technique
	R Jyothi Babu (Part Time)	Casting

	R Jayachandra (Part Time)	Investigations on adaptability of magnesium alloys in biomedical applications
	D Srnivas Rao (Part Time)	Development of low elastic modulus titanium bio medical alloy, effect of alloying and processing techniques on elastic modulus
	Chintada Pollaya (Part Time)	Assessment of mechanical and tribological properties of aluminium-lithium 2099 reinforced with X wt.% of graphene nanoparticles

DR. T. KARTHIKEYA SHARMA	A Navanth (Full Time)	Studies on Diesel Engine in HCCI mode
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DR. THELLA BABU RAO	Mondi Rama Karthik (Full Time)	Numerical modeling of laser assisted machining of difficult-to-cut Inconel 625 superalloy
	B. Lakshmi Manasa (Part Time)	Development of wear and corrosion-resistant metal matrix surface coatings by laser cladding process.
	B. Subba Rao (Part Time)	Studies on microstructure, mechanical, and tribological properties of Nickel-based superalloys manufactured through selective laser melting process.
	Subramanyam Burlakanti (Part Time)	An experimental approach for evaluation of wear characterization of components manufactured by selective laser melting
	R Bhaskara Reddy (Part Time)	Wire arc additive manufacturing of SS308L using GMAW

DR. G. SANTHOSH KUMAR	S.Md. Shehabaz (Full Time)	Battery thermal management system by phase change material
	Madduri Rajkumar Reddy (Part Time)	Aluminium alloy-based metal matrix composites
	Shajahan S (Part Time)	Numerical investigations on the influence of ethylene injection strategies on the performance and combustion characteristics of the scram jet combustor
	Naresh Kumar Goud Ranga (Part Time)	Impact of innovative pin design on PCM melting for thermal energy storage system

DR. M. HYMAVATHI	Grandhi Prasanth (Full Time)	Wire arc additive manufacturing of duplex stainless steel
	B Venkata Ramaiah (Full Time)	Modeling and simulation of BIOS eco dryer by considering thermal and structural loads
	Bammidi Roopsandeeep (Part Time)	Integration of grapheme in micro-swimmers and micro-fluidics
	Muddada Venkatesh (Part Time)	Experimental investigation and microstructural study of plasma coated WC and Cr ₃ C ₂ of additively manufactured SS316L
	Taj (Part Time)	Mechanical and Surface characterization of Laser cutting of Inconel 718 assisted with nitrogen gas
	Shaik Saleem (Part Time)	Investigation of machinability in hard-to-cut materials through laser assisted machining
	V V Nagaraju J (Part Time)	Structural analysis of composite materials for telecom towers using weight reduction

7.8 Metallurgical and Materials Engineering

The Department of Metallurgical and Materials Engineering is progressing rapidly with development in infrastructure and academic programmes. The department has highly qualified faculty members with research interests in the following areas: Extractive Metallurgy, Metallurgical Waste Utilization, Welding Metallurgy, High-Temperature Corrosion, Additive Manufacturing, Powder Metallurgy, Materials Characterization, and energy, Bio, and Nano Materials. The department offers B. Tech, M.S. (by Research), and PhD programmes (Full-Time/Part-Time).

Vision:

The department's vision is to be a recognized centre of knowledge, experience, ingenuity, research, education, and leadership that is unique in scope and unsurpassed in dedication to its students and the nation.

Mission:

- To provide high-quality education and training in Metallurgy and Materials Science & Technology and to prepare graduates for productive careers in engineering and allied fields.
- To motivate the graduates to discover and disseminate new knowledge through creative research activity.
- To engage in collaborative research with academia, R&D, and industry partners and extend our expertise as and when needed for testing, consultancy, and solving solution-oriented industrial problems.
- To provide service to the state, nation, and world by advancing the frontiers of science and engineering of materials, and, through these efforts, to enhance the human condition

Labs / Workshops:

- Physical Metallurgy
- Extractive Metallurgy
- Powder Metallurgy
- Materials Testing
- Materials Forming
- Foundry and Casting
- Corrosion Engineering
- Heat Treatment

Faculty:

DR. RAFFI MOHAMMED
Assistant Professor
(Head of the Department)

AREAS OF INTEREST:

- Welding Metallurgy,
- Corrosion of Welds,
- High Temperature Corrosion



DR. R. SUNIL KUMAR
Assistant Professor
(Head of the Department)

AREAS OF INTEREST:

- Powder Metallurgy,
- High Temperature Materials,
- ODS Steels,
- Powder Processing,
- Additive Manufacturing

RESEARCH SCHOLARS

DR. RAFFI MOHAMMED	Sheik Surjan (FullTime)	Structure-Property Correlation of Ni based and Ni free Austenitic Stainless Steels
	T Atmaramudu(FullTime)	Studies on Arc Welding of Low Ni/ Ni free Austenitic Stainless Steels
	GArun Kumar (FullTime)	Studies on Friction Stir Welding of Ni Free Austenitic Stainless Steels
	P Raghuram (part Time)	Studies on Heat Treatment and Surface Hardening Aspects on Leaf Spring Steels for Automotive Applications
	K.Ramasamy(part Time)	Studies on Bimetallic (Ti/CS) and Trimetallic (Zr/Ti/SS) Explosive Clads
	V Shashikanth (part Time)	Studies on CRA Weld-Overlays on Steel Substrate for Wear and Corrosion Resistance

DR. R. SUNIL KUMAR	S.Subhramanyam (FullTime)	Investigation of Mechanical and Corrosion Properties of Low Temperature Salt Bath Nitrided Ferritic Stainless Steels.
	R. Parthasaradi(FullTime)	Effect of Active Element Addition in High Temperature Oxidation Behavior of High Entropy Alloys
	B. Venkateswarlu (part Time)	Developing MgZnRE-Hydroxyapatite Composites for Biomedical Applications: Evaluating Microstructure, Mechanical Properties and Corrosion Behavior

7.9 School of Sciences

The School of Sciences, National Institute of Technology Andhra Pradesh, was initiated in the same year of establishment of the institute. The School of Sciences encompasses the basic departments in Sciences – Mathematics, Physics and Chemistry. Presently, the School offers all the basic science courses to the Under-graduate engineering students of the institute. Since, science courses form the basis for all the engineering disciplines, syllabus pertaining to Mathematics, Physics and Chemistry are meticulously planned to provide updated information to the students. The courses being taught are not restricted to first year alone, since the School offers elective courses for the higher semesters as well.

The Department is equipped with good number of faculty who have obtained Ph.D. degrees from internationally reputed institutes. The Department is strengthened with the services of faculty members having rich expertise in the areas of Differential equations, Linear Algebra, Functional Analysis, Mathematical Physics, magnetic materials, photonic materials, shape memory alloys, nano materials, energy materials, synthetic methods for biologically active molecules, peptide chemistry, molecular self-assembly, glyconanoparticles, click chemistry, corannulene chemistry and antibacterial materials. The faculty of the department are highly motivated with a strong commitment to teaching and research. Faculty members involve in the execution of sponsored research projects funded by SERB, UGC, UGC DAE CSR, IUAC, and etc. Also, faculty have been taking active part in the development of the institute.

Department has already established physics and chemistry laboratories for the Under-graduate students. These labs are equipped with latest experiments and are periodically upgraded. The faculty members are committed to establish the research laboratory with the aim of performing cutting-edge research in the areas of physical and chemical science through collaboration with leading institutions. Efforts are being undertaken to initiate Centres of Excellence in Materials Development and build a state-of-the art characterization facility to cater to the needs of researchers working in the areas of Materials research.

Text books and reference materials suggested by the faculty members to the students are of international standards. The Laboratory course materials are substantiated with video demonstrations and efforts to develop Virtual laboratories have commenced recently. This facilitates the teaching-learning process, and helps the students to be well-prepared and face the real-time laboratory sessions with confidence.

Memorandum of Understanding (MoU) with leading international and national research institutes and organizations are in the pipeline. It is proposed to undertake post-graduate students for research internships during summer and winter sessions every year.

Programmes such as Faculty Development Programmes, Conferences, quizzes and Webinars, are being organized in a phased manner. This helps the members of faculty to stay abreast with the latest developments in their areas of expertise and build strong collaborations with leading scientists and researchers.

The number of research scholars pursuing their Ph.D. degree in the School shows a constant progress. Faculty members also publish research articles in highly reputed international journals. Filing patents is also encouraged by the institute.

Overall, the academic, and research activities of the School is aimed to provide a vibrant, all-inclusive and progressive environment for all the individual faculty members and the students involved and the team together.

Vision:

To offer quality education in the significant domains of basic and applied sciences by developing vibrant academic and research eco-system capable of nurturing and producing competent engineers and scientists.

Mission

- Expose students to the key areas of basic sciences by developing a conducive and progressive teaching-learning ambience augmented with research insights.
- To inculcate and nurture innovative capabilities in students by offering project-based learning and internship practices.
- To undertake active multi-disciplinary research projects with industry through consultancy and collaborative initiatives in the areas of expertise.
- Encourage students to enhance scientific potential for catering to societal needs.

Labs/Workstations

- UG Chemistry laboratory
- UG Physics laboratory
- Optical Materials Group Laboratory – Coordinator: Dr. R. Arun Kumar
- Functional Materials Laboratory - Coordinator: Dr. Tapas Paramanik

- Magnetic and Optoelectronic Materials Laboratory - Coordinator: Dr. M. Ramudu
- Multi-Functional Materials Physics Laboratory - Coordinator: Dr. J. Krishnamurthy

FACULTY



DR. ARUN KUMAR. R
Assistant Professor
(Head of the Department)

AREAS OF INTEREST:

- Experimental Solid-State Physics.
- Optical materials (Bulk and Nanoscale);
- Single crystals; Luminescent glasses.
- Dosimeter materials; Nano materials



**DR. KURMAYYA
TAMMINANA**
Associate Professor

AREAS OF INTEREST:

- Linear Algebra,
- Functional Analysis



DR. SUDARSHAN DHUA
Assistant Professor

AREAS OF INTEREST:

- Theoretical Seismology,
- Electrodynamics,
- Solid Mechanics,
- Crack Propagation



DR. SHARAD DWIVEDI
Assistant Professor

AREAS OF INTEREST:

- Differential Equations
- Mathematical Physics (Magnetization dynamics, Spintronics).



**DR. RAMUDU
MACHAVARAPU**
Assistant Professor

AREAS OF INTEREST:

- Spintronic Materials,
- Thermal / Ferromagnetic shape memory alloys and thin films,
- Magnetic Sensors,
- Magnetocaloric Materials,
- Rare-earth and rare-earth free based permanent magnetic materials.



DR. TAPAS PARAMANIK
Assistant Professor

AREAS OF INTEREST:

- Experimental Condensed Matter Physics & Material Science



DR. J. KRISHNAMURTHY
Assistant Professor

AREAS OF INTEREST:

- Multiferroics,
- strongly correlated systems,
- Magnetism at the nanoscale,
- Multifunctional properties of magnetic oxides,
- Low temperature physics,
- Growth and characterization of semiconductor hetero structures



**DR. AMARENDAR
REDDY. M**
Assistant Professor

AREAS OF INTEREST:

- Peptide and polysaccharide based nanostructured materials,
- Synthesis of novel antimicrobial agents



**DR. SURENDRA H.
MAHADEVEGOWDA**
Assistant Professor

AREAS OF INTEREST:

- Synthetic Organic Chemistry.
- Materials Chemistry.
- Corannulene Chemistry.
- Molecular Self-Assembly.
- Biomaterials

Research Scholars

DR. R. ARUN KUMAR	Rajashree Panda	Development of calcium aluminate-based phosphors for fabricating luminescent devices
	Mitrabhanu Behera	Development of phosphor-in-glass materials for efficient white light generation
	M. Siva Kumar	Up-conversion phosphor materials for enhancing device performance of solar cells
	Sushree Bedamati	Light-conversion phosphors for enhanced light harvesting in solar cells
	Mahesha K.Hegde	Fabrication of dosimeter single crystals
	Rahul Awasthi	Development of Novel nanomaterials and Investigations on Their Response to C and Ag ions irradiation

DR. T. KURMAYYA	CH.M. Verriyya	Generalized Inverses
	Manish	Linear Algebra
DR. T. KURMAYYA & DR. NAGESH BHATTU	K. Chandra Mouli	Applied Linear Algebra

DR. SUDARSHAN DHUA	Arindam Nath	Elastodynamics
	Arpita Maji	Elastodynamics
	Subrata Mondal	Impact of Surface/interface theory and nonlocal theory on the wave propagation in smart composite structures
	Anapagaddi Sudhir Kumar	Fuzzy theory on Partial Differential Equation
	Rakesh Kumar	Neural network on Partial Differential Equation
	Maram Anasuya kumari	Peridynamic theory in Anisotropic materials

DR. TAPAS PARAMANIK	Mr. Shuvendu Ghosh	Studies of magnetic and magnetocaloric properties in Gd-based intermetallic compounds
	Mr. Manikantha Panda	Studies of topological behavior in intermetallic and chalcogen-based compounds

DR J KRISHNAMURTHY	Mr CH Prasanth	Magnetic multiferroics
	Mr Abhijit Nayak	Exchange bias effect
	Ms. Debasmita Bala	Low-temperature magnetism
	Ms. P Athira	Solid-state refrigeration

	Mr Karumuri Venkanna	Physical properties of Heusler alloys
DR. M. RAMUDU	Mr. Vygith K V	Metamagnetic shape memory materials
	Mr. Kuri Manjunatha	Development of materials for Photodiode applications
DR. AMARENDAR REDDY M	Punam Salaria	Identifying the potential phytochemicals for epilepsy treatment
	Desu Gayathri Niharika	Identifying the potential phytochemicals for epilepsy treatment
DR. SHARAD DWIVEDI	Mr. Sumit Maity	Mathematical analysis of ferromagnetic nanostructures
	Mr. Sarabindu Dolui	Ultrafast magnetization dynamics in ferromagnetic nanostructures
	Ms. Ambalika Halder	Domain wall motion in multilayer ferromagnetic heterostructures
DR. SURENDRA H. M	Raghvendra	Multicomponent reactions and development of Fluorescent chemosensors
	G Durga Prasad	Synthesis of coumarin and pyrene based fluorescent sensors and heterocyclic compound derivatives

7.10 School of Humanities and Management

School of Humanities and Management came into existence in August 2018. School houses two departments, that is, Department of Humanities and Department of Management. The school offers core and elective courses for B. Tech degree program and an audit course for PhD program. The school has eight part-time and three full-time research scholars.

Vision:

To edify the young minds and enable them achieve intellectual excellence and personal refinement by fine-tuning their linguistic and managerial skills

Mission:

To stimulate critical thinking and creativity in students through pedagogic innovations and cutting-edge research, and thereby develop School of Humanities and Management as a centre of academic excellence that meets global standards

Faculty:



DR. SOUMYA JOSE
Assistant Professor
(Head Of The
Department)

AREAS OF INTEREST

- African American Theatre,
- First Nations Theatre,
- Diaspora Studies, and
- Gender Studies

RESEARCH SCHOLARS

DR. SOUMYA JOSE (ENGLISH)	Krishna Ja T. S	Nuns in the American Theatre, Post Vatican II
	Samikhya Dash	Rape Trauma Syndrome and Imperceptible Disability: A Study of Select Hindi Films, 2000-2023
	Arya Ann Johns	Indian Writing in English
	Sruthi Madhu	African American Women Theatre

MANAGEMENT	Prabhavathi K.	Green Practices in the Universities: Research for Sustainability
	Satya Swaroop Roy Medapati	Human Resource (Servant Leadership)
	Pebhi Priyadarsini P	Human Resource Analytics
	Udayagirish Jandhyala	Competence Mapping & Strategy
	Ravikanth B. K	Impact of covid 19 on different sectors contributing to Indian GDP
	Shafeequ Rehman K. V	Healthcare Management (Assessing the Quality of Pandemic COVID 19 care in Kerala)
	S. Sandhya	HR Analytics
	Sunkara Sai Arun Karthik	Entrepreneurship
	Ambotula Venkata Rajesh	Fraud Detection In Banking Domain Using Machinelearning.

8 RESEARCH AND DEVELOPMENT

8.1 Publications

International Journals

1. Kumar V, **JMR Tingirikari** (2024). Degree of methylation: A key to the functional properties of low methylated pectin derived from pectin rich agrowaste. *Food Bioscience*, 103386.
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73. R Pramod, **Veeresh Kumar G B**, “Investigation of the Thermal and Mechanical Properties of ABS / Epoxy Blended Polymer Composite”, International Conference on Eco-Friendly Fibers and Polymeric Materials (EFPM’24) - February 19-20, 2024, held at King Mongkut’s University of Technology North Bangkok, Thailand.
74. Surjan Sheik and **Raffi Mohammed**, Effect of high temperature ageing on sensitization and pitting corrosion behaviour of nickel-free high nitrogen austenitic stainless steel, 29th International Conference & Expo on Corrosion (CORCON 2023), organised by AMPP INDIA Chapter (Formerly NACE International India Section) during 25 - 28 October 2023 at Sahara Star, Mumbai, (Paper ID: CMT31).
75. Atmaramudu Tirumala and **Raffi Mohammed**, Localized corrosion and cyclic oxidation behaviour of low nickel-based austenitic stainless-steel GTA welds, 29th International Conference & Expo on Corrosion (CORCON 2023), organised by AMPP INDIA Chapter (Formerly NACE International India Section) during 25 - 28 October 2023 at Sahara Star, Mumbai, (Paper ID: CMT33).
76. Makerreddi Ravi, Surjan Sheik Nagumalla Rushyanth Kumar, Reddi Praveen and **Raffi Mohammed**, Effect of filler metal on microstructure-mechanical-localized corrosion properties of 316L stainless-steel gas tungsten arc welds, 29th International Conference & Expo on Corrosion (CORCON 2023), organised by AMPP INDIA Chapter (Formerly NACE International India Section) during 25 - 28 October 2023 at Sahara Star, Mumbai, (Paper ID: CMT42).
77. Arun Kumar Gurralla and **Raffi Mohammed**, Effect of friction stir welding on microstructure, mechanical and pitting corrosion behavior of 304L austenitic stainless steel, 29th International Conference & Expo on Corrosion (CORCON 2023), organised by AMPP INDIA Chapter (Formerly NACE International India Section) during 25 - 28 October 2023 at Sahara Star, Mumbai, (Paper ID: CMT44).
78. **Raffi Mohammed** and Arun Kumar Gurralla, Effect of post weld heat treatment on microstructure and pitting corrosion behaviour of 2205 duplex stainless steel flux assisted TIG welds, 29th International Conference & Expo on Corrosion (CORCON 2023), organised by AMPP INDIA Chapter (Formerly NACE International India Section) during 25 - 28 October 2023 at Sahara Star, Mumbai (Paper ID: YSF34).
79. **Raffi Mohammed**, Chloride-Induced Pitting and Stress Corrosion Cracking of Welded Nickel Free High Nitrogen Austenitic Stainless Steel, 3rd International Conference on Recent Advances in Materials and Manufacturing Technologies (IMMT 2023), organised by BITS Pilani, Dubai during 20 - 23 November 2023 at Dubai, UAE.
80. Kannan Ramasamy, **Raffi Mohammed**, Studies on microstructure and mechanical behavior of explosive welded zirconium-titanium-stainless steel, 3rd International Conference on

Recent Advances in Materials and Manufacturing Technologies (IMMT 2023), organised by BITS Pilani, Dubai during 20 - 23 November 2023 at Dubai, UAE.

81. Dr. R. Arun Kumar and Mitrabhanu Behera, " Novel borate-based crystalline materials for efficient generation of red light" at the International Conference on Crystal Growth and Epitaxy (ICCGE-2023), 30th July – 4th August 2023, organized by Salvatore Amoruso, University of Naples Federico II, Naples, and INFN, Naples, Italy.

82. Dr. R. Arun Kumar and Mitrabhanu Behera, "Synthesis and study of novel dysprosium doped yttrium calcium borate (Dy: Y₂CaB₁₀O₁₉) crystalline materials for white LED applications" at the International Conference on Crystal Growth and Epitaxi (ICCGE-2023), 30th July – 4th August 2023, organized by Salvatore Amoruso, University of Naples Federico II, Naples, and INFN, Naples, Italy.

83. Dr. Sudarshan Dhua, "Stoneley wave propagation at the interface between two initially stressed medium with interface energy" at the 10th International Congress on Industrial and Applied Mathematics, 20-25th August 2023 organized by Waseda University, Tokyo, Japan.

84. Dr. Sudarshan Dhua, "Torsional wave propagation in functionally graded solids with surface/interface energy" in SIAM Conference on Mathematical & Computational Issues in the Geosciences (GS23), 19-22nd June 2023 organized by the University of Bergen, Norway.

85. Dr. Sudarshan Dhua, "Transference of shear wave generated due to an impulsive source in a piezoelectric fiber reinforced composite layer bonded to functionally graded substrate: Green's functions technique" at the International Conference on Differential Equations and Control Problems (ICDECP23), 15-17th June 2023 organized by School of Mathematical & Statistical Sciences, IIT Mandi, Himachal Pradesh, India.

86. Dr. Sudarshan Dhua, "Analysis of Lamb wave propagation in an orthotropic piezo-electric plate with nonlocal theory" at the International Conference on Differential Equations and Control Problems (ICDECP23), 15-17th June 2023 organized by School of Mathematical & Statistical Sciences, IIT Mandi, Himachal Pradesh, India.

87. Dr. Sudarshan Dhua, "Propagation of torsional surface wave in layered piezoelectric fiber reinforced composite structure within surface/interface theory of elasticity" at the International Conference on Differential Equations and Control Problems (ICDECP23), 15-17th June 2023 organized by School of Mathematical & Statistical Sciences, IIT Mandi, Himachal Pradesh, India.

88. Dr. Sudarshan Dhua, "Analysis of wave scattering at the common interface of piezoelectric media half-spaces under surface/interface elasticity theory" at the Proceedings of 68th International Congress of ISTAM, 7-9th December 2023 organized by Department of Mathematics, National Institute of Technology Warangal, Telangana, India.

89. Dr. Sudarshan Dhua, "Analysis of Surface effect on Shear wave propagation at cylindrical bi-layer with imperfect interface" at the Proceedings of 68th International Congress of ISTAM, 7-9th December 2023 organized by Department of Mathematics, National Institute of Technology Warangal, Telangana, India.

90. Dr. Sudarshan Dhua, "Surface effects on dispersion behaviors of SH waves in piezoelectric-piezomagnetic bilayer plates under external magnetic field using nonlocal theory of elasticity" at the Proceedings of 68th International Congress of ISTAM, 7-9th December 2023 organized by Department of Mathematics, National Institute of Technology Warangal, Telangana, India.

91. **Dr. Sudarshan Dhua**, "Uncertain Dynamic Response Analysis of Fractionally Damped Beams Subjected to Various External Loads using Fuzzy Laplace Homotopy Perturbation Analysis" at the Proceedings of 68th International Congress of ISTAM, 7-9th December, 2023 organized by Department of Mathematics, National Institute of Technology Warangal, Telangana, India.
92. **Dr. Sudarshan Dhua**, "A Novel Solution for Fuzzy Wave Equation" at 12th International Conference on Soft Computing for Problem Solving 2023, 11-13th August, 2023 at IIT Roorkee, Uttarakhand, India.
93. **Dr. J. Krishnamurthy**, International Conference on Carbon Neutral Technology for Sustainable Development & 2023 Taiwan-India Exchange Workshop on Sustainable Renewable Energy and Smart Energy Storage Technology on 4-6th September, 2023 at IIT-Delhi, India.
94. **Dr. Surendra H. M.**, "Glycan-functionalized nanomaterials to combat bacterial infections" at the International Conference on Organic & Medicinal Chemistry (ICOMC-2023), 28-30th June, 2023 at National Institute of Technology Warangal, Telangana, India.
95. **Dr. Sudarshan Dhua**, "An investigation of wave characteristics in Peridynamic media using Nonlocal Helmholtz decomposition" at the 94th meeting of the International Association of Applied Mathematics and Mechanics (GAMM24), 18-22nd March 2024, organized by Otto von Guericke University, Magdeburg, Germany.
96. **Dr. Sudarshan Dhua**, "Artificial neural network based dynamical analysis to solve a bio-mathematical model of drug diffusion through the compartments of blood and tissue medium" at the Latest advances in computation and applied mathematics (2024), 21-24th February, 2024 hosted by school of mathematics, IISER Trivandrum, Kerala, India.
97. **Dr. J. Krishnamurthy**, "Electromagnetic materials for the solid-state refrigeration technology" at the International Conference on Non-linear Analysis (LACANA) 2024, 13-16th March, 2024 at Gayatri Vidya Parishad, Visakhapatnam, Andhra Pradesh, India.
98. **Dr. Sharad Dwivedi**, 5th International Conference on Mathematical Techniques and Applications (ICMTA2024), 2-4th January, 2024 at SRM-IST Chennai, Tamilnadu, India
99. **Dr. Sharad Dwivedi**, 94th Annual Meeting of the International Association of Applied Mathematics and Mechanics (GAMM-2024), 18-22nd March, 2024 at Otto von Guericke University Magdeburg in Cooperation with Max Planck Institute Magdeburg, Germany.
100. **Dr. Soumya Jose** presented a paper titled "Enhancing Writing Skills in English via Newspaper Articles: An Evaluative Study on Engineering Students" at the 7th International Conference on New Trends in Teaching and Education, Berlin, 7-9 Dec, 2023.
101. **Sruthi Madhu and Soumya Jose** Presented a Paper Titled "Embodied Vulnerabilities: Occupational Lead Inhalation and Slow Violence in Kia Corthron's Splash Hatch on the E Going Down" at the 14th Annual AAAD Interdisciplinary Conference hosted by James Madison University in Washington. DC, USA on 7-10 Feb 2024.

BOOK

1. **JMR Tingirikari**, RK Kesharwani, RK Keservani, AK Sharma. Formulations, Regulations, and Challenges of Nutraceuticals CRC Press, Taylor and Francis Group. 2024, ISBN No: 9781003412496.

BOOK-CHAPTER

1. S.L.S. Rani, G. Pugazhenthii, **R. Vinoth Kumar***, Application of Low-Cost Ceramic Membranes in the Food Processing Industries, Wastewater Treatment Application of Low-Cost Ceramic Membranes in Wastewater Treatment, Springer Publishers [In Press], 2024.
2. K.V.V. Satyannarayana, S.L.S. Rani, C.B. Mathaji, **R. Vinoth Kumar***, Fouling Mechanisms in Nanofiltration Membranes Nanofiltration Membrane for Water Purification, Springer Publishers, DOI: 10.1007/978-981-19-5315-6_11, 2023.
3. Chudalmanikanta Bolisetty, Chirasmayee Savitha, **Reshma Talari** (2024) Spatial-Temporal Analysis of CHIRPS satellite precipitation estimates over a Small Agricultural Watershed in India, 28th International Conference on Hydraulics, Water Resources and River Engineering to be held on December 21-23, 2023 Organized by Department of Civil Engineering, National Institute of Technology Warangal in association with Indian Society for Hydraulics. (Accepted).
4. Mahendra Patel, Tarun Kumar Jami, **Reshma Talari**, Chirasmayee Savitha (2024) Soil Moisture Analysis of Agricultural Watershed in India Using Google Earth Engine and SMAP, 28th International Conference on Hydraulics, Water Resources and River Engineering to be held on December 21-23, 2023 Organized by Department of Civil Engineering, National Institute of Technology Warangal in association with Indian Society for Hydraulics. (Accepted).
5. Savitha, C., **Reshma, T.** (2024). Performance Evaluation of Support Vector Machine and Random Forest Techniques for Land Use-Land Cover Classification—A Case Study on a Mili Scale Agricultural Watershed, Tadepalligudem, India. In: Mesapam, S., Ohri, A., Sridhar, V., Tripathi, N.K. (eds) Developments and Applications of Geomatics. DEVA 2022. Lecture Notes in Civil Engineering, vol 450. Springer, Singapore. https://doi.org/10.1007/978-981-99-8568-5_28.
6. Kumar, S., **Reshma, T.**, Chirasmayee, S., Priyanka, K., Priyanka, K., Ram, G. (2024). Flood Hazard Mapping for Amaravati Region Using Geospatial Techniques. In: Mesapam, S., Ohri, A., Sridhar, V., Tripathi, N.K. (eds) Developments and Applications of Geomatics. DEVA 2022. Lecture Notes in Civil Engineering, vol 450. Springer, Singapore. https://doi.org/10.1007/978-981-99-8568-5_19.
7. Tammiseti, Rajkumar & **Reshma, Talari** & Savitha, Chirasmayee. (2023). Spatiotemporal Variation of Interception in an Agriculture Watershed—Tadepalligudem, West Godavari, India. https://doi.org/10.1007/978-981-19-9147-9_33.
8. Nur Izyan Wan Azelee, Aishah Rosli, **Seenivasan Ayothiraman**, Shilpa Mishra, **Baranidharan S**, Rangabhashiyam Selvasembian (2023) "Nanoparticles for the adsorptive removal of heavy metals from wastewater" Adsorption through Advanced Nanoscale Materials: Applications in Environmental Remediation, Chandrabhan Verma, Jeenat Aslam, Mohammad Ehtisham Khan (Eds.) Pages 409-428 (Elsevier) ISBN: 9780443184567 (<https://doi.org/10.1016/B978-0-443-18456-7.00018-3>)
9. Nagireddi Jagadeesh, **Baranidharan S** and B K Dubey (2023) "Toxicity Assessment of Microconstituents in the Environment" Microconstituents in the Environment: Occurrence, Fate, Removal and Management, Rao Surampalli, Tian Zhang, Chih-Ming Kao, Makarand

- Ghangrekar, Puspendu Bhunia, Manaswini Behera, Prangya Rout (Eds.) (John Wiley & Sons) ISBN: 978-1-119-82525-8 (<https://doi.org/10.1002/9781119825289.ch4>)
10. Sudpita Sarkar, **Baranidharan S** and B K Dubey (2023) "LCA of an Algal Biomass Plant: Microalgae to Bio-Oil through Hydro Thermal Liquefaction" Biofuels: Technologies, Policies, and Opportunities, Rena, & Kumar, S. (Eds.) (Taylor and Francis Group) ISBN 9781032054827 (<https://doi.org/10.1201/9781003197737>)
 11. Sairaj Arandhakar, **Nakka Jayaram**, "A review of cutting-edge technologies of Battery Energy Storage Systems for Electric vehicle applications" (Under review)
 12. Sastry, L. N., and **Sri Phani Krishna Karri**. "Smart Home Energy Management Using Non-Intrusive Load Monitoring: A Deep Learning Perspective." Sustainable Energy Solutions with Artificial Intelligence, Blockchain Technology, and Internet of Things. CRC Press, 2023. 67-96.
 13. Dey, S., Das, P.K., Deb, M., **Sastry, G.R.K.** (2024). Green Ammonia: An Alternative Sustainable Energy Source for Clean Combustion. In: Kumar, S., Agarwal, A.K., Khandelwal, B., Singh, P. (eds) Ammonia and Hydrogen for Green Energy Transition. Energy, Environment, and Sustainability. Springer, Singapore. https://doi.org/10.1007/978-981-97-0507-8_2
 14. **Sudarshan Dhua**, Arpita Maji, Subrata Mondal. "The influence of imperfect interface of shear wave propagation on layered bio-based plate material: Computational study of bio-based systems". Sustainable bio-based Materials: Biomedical and Engineering applications (De Gruyter press, Germany), (Accepted).
 15. **Sudarshan Dhua**, Arindam Nath. "Analysis of the surface acoustic wave in a polymer-coated piezo-electro-magnetic structure with micro-inertia effect". Sustainable bio-based Materials: Biomedical and Engineering applications (De Gruyter press, Germany), (Accepted).
 16. S. Dolui and **Sharad Dwivedi**. "Strain-controlled magnetic domain wall motion in multiferroic devices induced by current and traveling wave magnetic field". Central West Publishing, Australia, (2023), (Accepted).
 17. Nazeer Abdul Azeez, Sapna Pahil, **Surendra H. M.** and **Sudarshana Deepa Vijaykumar**. "Metal-Organic Frameworks (MOFs) for the Antimicrobial Applications". Recent Trends and The Future of Antimicrobial Agents - Part 2, Tilak Saha, Manab Deb Adhikari, Bipranch Kumar Tiwary, Bentham Science Publishers (2023), 124-141 (18). DOI: 10.2174/9789815123975123010009
 18. Samikhya Das and **Soumya Jose**. "An Indo-German Case Study of Scarred Bodies: Regaining Agency Through Fashion and Arts" in the Book Diachronic Dimensions of German Language, Literature and Culture

8.2 R & D PROJECTS (Ongoing and Sanctioned projects):

S. No	Project Instructor	Department	Title and Scope of Project	Sponsoring Agency	Estimated value
01	Dr. Seenivasan Ayothiraman	Biotechnology Engineering	Upstream and Downstream Bio-processing of Commercially Important Enzymes and Scale-Up Studies	ANSF Vritika	Rs 1,50,000
02	Dr. Baranidharan S	Civil Engineering	Understanding the Interaction between Microplastics and Heavy Metals in Wastewater – Distribution, Adsorption, and Risk Assessment.	DST-SERB	Rs.24,31,120
03	Dr. Talari Reshma		Monitoring and Analysis of non-point source pollutants in an agricultural watershed	DST-SERB	Rs. 31,88,220
04	Dr. Karthick Seshadri (PI) Dr. Nagesh Bhattu S (Co-PI)	Computer science engineering & EEE	A scalable resource requirement characterization and provisioning framework for elastic cloud	LinkedIn	Rs. 30 Lakhs
05	Dr. Karthick Seshadri (PI) Dr. Himabindu K (Co-PI) Dr. Nagesh Bhattu S (Co-PI)		Leveraging Quantum Computing for efficient learning and inference in probabilistic graphical models.	Ministry of Electronics and IT	Rs. 15 Lakhs
06	Dr. Nagesh Bhattu S (PI) Dr. K. Sri phani Krishna (Co-PI) Dr. P. Radha Krishna (Co-PI).		Drone Enabled Deep Learning Analytics for Monitoring and Yield Assessment of Commercial Crops	I-Hub-Data IIIT Hyderabad	Rs. 14.75 Lakhs
07	Dr. Kiran Kumar Gurrala (Chief Investigator)	Electronics and Communication Engineering	Energy Efficient mesh Architecture based Indigenous Neuromorphic	MEITY (C2S Scheme)	Rs 287.99 Lakhs

	Dr. Puli Kishore Kumar (Co- Chief Investigator)		Processor for Extreme Edge IoT Applications	Collaborative Institutes: IIT Bhubaneswar (Nodal Institute), NIT Andhra Pradesh and IIIT Bhubaneswar	
08	Dr. Narasimha Rao Banavathu		Efficient Deployment of Unmanned Aerial Vehicles for Wireless Networks	Science and Engineering Research Board, Govt. of India. (SERB-DST)	Rs. 20.14 Lakhs (Completed on Dec- 2023)
09	Dr. Tejavathu Ramesh	Electrical Engineering	Design and Development of Multi-level Inverter Fed Multi-Phase Sensor less Permanent Magnet Synchronous Motor Drive for Hybrid Electric Vehicle Applications with Reduced Torque and Flux Ripples."	Science and Engineering Research Board (SERB), New Delhi	Rs.55.00 Lakhs (On-going)
10	Dr. Sri Phani Krishna Karri		Edge Device Deployable Deep Learning Model for Screening of Diabetic Retinopathy and Glaucoma in Rural India with High F-score	Science and Engineering Research Board, Govt. of India. (SERB-DST)	Rs. 30.01 Lakhs (Completed on Jan -2024)
11	Dr. V. Sandeep and Dr. P. Sankar (Project Managers)		Common Research and Technology Development Hub (CRTDH) in the Renewable Energy sector	Department of Scientific and Industrial Research (DSIR), Ministry of Science & Technology, Gol	Rs. 715 Lakhs (On-going)

12	Dr. Thella Babu Rao	Mechanical Engineering	Analytical modeling of laser assisted milling and turning	Science and Engineering Research Board, Govt. of India. (SERB-DST)	Rs.11.232 Lakhs
			Artificial intelligence with a multi-sensor system for intelligent process monitoring and characterization of defects in laser cladding of multi-layer metal matrix composites	Science and Engineering Research Board, Govt. of India. (SERB-DST)	Rs.37.97 Lakhs (On-going)
13	Dr. T. Karthikeya Sharma		Numerical Analysis of High Area Ratio Liquid Bi Propellant Thruster at Higher Altitudes	ASL, DRDL, Hyderabad	Rs 9.65 Lakhs (completed on 2023)
14	Dr. Taps Paramanik	School of Sciences	Studies on the magnetic and electronic properties in ternary pnictides RTX_2 (R= Rare-earth, T= Transition metals, X= Pnictogens)	SERB, India under Core Research Grant (CRG) scheme	Rs.31.40 Lakhs
			To study structural, electronic and magnetic properties of half- metallic spintronics materials: Fe-based quaternary Heusler alloys	Collaborative Research Scheme (CRS) Project of UGC-DAE CSR	Rs. 6.84 Lakhs
15	Dr. J. Krishna Murthy		Unveil the multifunctional Properties of Multiferroic $DYVO_3$ and $HOVO_3$ epitaxial Structures and Explore the Possible RVO_3 (R-rare -earth) Spintronic devices	Science and Engineering Research Board, Govt. of India. (SERB-DST-CRG)	Rs.27.4 Lakhs

			Multiferroic Materials for Future Electromagnetic based Solid-State Refrigeration Technology	INDIA-TAIWAN, sponsored by GITA, DST	Rs. 42.22 Lakhs
16	Dr. R. Arun Kumar		Development of Novel Thermoluminescent and Photoluminescent nanomaterials and Investigations on Their Response to C and Ag ions irradiation	Inter-University Accelerator Centre, New Delhi	Rs.10.11 Lakhs
			Development of phosphor-in-glass materials for efficient white light generation	SERB, India under Core Research Grant (CRG) scheme	Rs. 30.43 Lakhs
17	Dr. Sharad Dwivedi		Investigation of ultrafast magnetization dynamics in a network of ferromagnetic nanostructures	Science and Engineering Research Board, Govt. of India. (SERB-DST)	Rs.20.01 Lakhs

8.3 Workshops/seminars/FDPS/Symposium:

S. No	Title	Department	Co-Ordinator	Place and Date	Sponsored
01	In-house Practical Workshop on "Microbial Insights: Integrating Basic Microbiology and Biochemical Techniques for Research"	Biotechnology	Dr. Sudarshana Deepa, Dr. T. Jagan Mohan Rao, Dr. E. Rajeswara Reddy & A. Seenivasan	NIT-AP and 07-09-2023 to 09-09-2023	DBTH, NIT-Andhra Pradesh
02	Aspen Plus and its Significance	Chemical Engineering	Dr. Vinoth Kumar Raja Dr. Dinesh P Sankar Reddy	NIT Andhra Pradesh 14,15 April 2023	DCHE, NIT-Andhra Pradesh
03	Utilizing LaTeX for academic and professional documents		Dr. Vinoth Kumar Raja Dr. Dinesh P Sankar Reddy	NIT Andhra Pradesh October 13, 2023	
04	Current and Future Prospects of Modern Construction Materials and Practices	Civil Engineering	Dr Shaik Mahabu Subhani	one-week high-end workshop (Karyashala) on July 2023	DST-SERB
05	A workshop on Reactive Programming by Dr. Sambath Narayanan Parthasarathy	Computer Science and Engineering	Dr. K. Hima Bindu, Dr. Karthick Seshadri	NIT Andhra Pradesh, 27 Oct 2023	DCSE, NIT, Andhra Pradesh
06	Seminar on Abroad Careers & Masters Expo by Mr. Manmohan, from Ireland		Dr. K. Hima Bindu, Dr. Karthick Seshadri	NIT Andhra Pradesh, 6-Mar-2024	CSEA, NIT Andhra Pradesh

07	AR VR MR workshop by Mr. Visweswaran, Manager, ARK Info Solutions		Dr. K. Hima Bindu	NIT Andhra Pradesh, 14-Mar-2024	DCSE, NIT, Andhra Pradesh
08	Tech-talk on Hackathons, Placements and Internships by Ms. Riti Kumari, Walmart		Dr. K. Hima Bindu, Dr. Karthick Seshadri	NIT Andhra Pradesh, 27 March 2024	CSEA, NIT, Andhra Pradesh
09	Intelligent Reflecting Surface Aided 6G Communication System	Electronics and Communication Engineering	Dr. Yuvaraj S	Offline, NIT ANP 21/03/2024	NIT Andhra Pradesh
10	Overview of active power decoupling with application to switched boost inverter	Electrical Engineering	Dr. Sankar Peddapati	NIT Andhra Pradesh, SRK Block 9th Feb 2024	NIT Andhra Pradesh

Collaboration With International Experts

S. No.	Name Of Faculty	International Expert	Activity
1	Dr. Vinoth Kumar Raja	Prof. C. Suryanarayana Department of Mechanical and Aerospace Engineering, University of Central Florida, Orlando, USA.	GIAN Course (Approved)
		Prof. Adrian MT Silva Laboratory of Separation and Reaction Engineering, Department of Chemical Engineering, Faculty of Engineering, University of Porto, R. Dr. Roberto Frias, 4200-465, Porto, Portugal.	Carrying out collaborative research works and publishing research papers jointly
		Dr. Sergio Morales-Torres Carbon Materials Research Group, Department of Inorganic Chemistry, Faculty of Sciences, University of Granada, Campus Fuentenueva s/n, Granada 18071, Spain.	Carrying out collaborative research works and publishing research papers jointly

S. No.	Name Of Faculty	International Expert	Activity
		Dr. Arivalagan Pugazhendhi Innovative Green Product Synthesis and Renewable Environment Development Research Group, Faculty of Environment and Labour Safety, Ton Duc Thang University, Ho Chi Minh City, Vietnam.	Carrying out collaborative research works and publishing research papers jointly
		Dr. Najat Marraiki Department of Botany and Microbiology, College of Science, King Saud University, P.O. Box 2455, Riyadh 11451, Saudi Arabia.	Carrying out collaborative research works and publishing research papers jointly
3.	Dr. Sri Phani Krishna Karri	Collaboration with Dr. Sri Rajsekhar from Penn State University in the area of Medical Imaging	Carrying out collaborative research works and publishing research papers jointly
4.	Dr. Sankar. P	Brij N. Singh, Technical Fellow, One John Deere Place Moline, IL 61265, Power Electronics Engineering in John Deere USA.	Collaboration initiated in the area of “Reliability aspects on distribution edge power converters enabling higher penetration of rooftop photovoltaics
5.	Dr. V. Sandeep	Dr. S Surender Reddy, Department of Railway and Electrical Engineering, Woosong University, Daejeon, Korea in the area of Microgrids.	Carrying out collaborative research works and publishing research papers jointly

AWARDS & ACHIEVEMENTS

By Faculty

1. Dr. Karthick Seshadri's project on “Leveraging quantum computing efficient learning of and inference in probabilistic graphical models” sponsored by MEITY and Amazon was selected as the best project under the MEITY's QCAL Scheme to be showcased before national media during the Amazon AWS Conclave held on 22.09.2023, New Delhi.
2. Dr. Karthick Seshadri received the Engineering Excellence Award conferred by Lions Club Tadepalligudem for the year 2023-24.

3. Dr. Karthick Seshadri's and Dr. Tingting Liu's joint PhD candidate Mr. Jegan Ramakrishnan graduated from Griffith University, Australia during AY 2023-24.
4. Dr. Raffi Mohammed received the AMPP CORROSION AWARENESS AWARD 2023 for Distinction in Corrosion Science and Technology in Research and Education by the Association of Materials Protection and Performance (AMPP) India Chapter on 26th October 2023 with a cash award of Rs. 25,000/-.
5. Accelerate Vigyan (AV): As Event Organizer (EO), secured funding of 1,50,000 /- INR from the Anusandhan National Research Foundation (ANRF) for the "VRITIKA" Program (2023 Winter Call) - Physical Mode

By Students

- Pardhasaradhi R received the Best Paper Award titled "Mechanical Alloying of CoCrFeCuNi High Entropy Alloys" at the International Conference on Powder Metallurgy & Particulate Materials + Exhibition held at Hotel Hyatt Regency, Pune from 25th – 28th February 2024

Patents

S. No.	Faculty Name	Titled of the Patent	Patent No.	Status
1	Shaik Mahabu Subhani	An Apparatus and Method for Measuring Air Permeability of Concrete Specimen	202311078557	Filed
		Apparatus And Method of Determining in Concrete Sample Weight Loss Due to Water Bleeding	202311048296	Filed
2	Karthick S	A parallel Web directory constructor (PWDC) for automatically creating Web directories	202022100124	Granted
4	Karthick S, Suresh K, Viswa K	System and Method for Computer Vision Based Remote Patient Monitoring	202341039746	Filed
5	Dr. Veeresh Kumar GB	Single Fuel Filter Media to Meet Particle and Water Separation Efficiency	India	Patent Sanctioned
		A Circular Scissor for Jute Branches Cutting	India	Patent Sanctioned
		Integrated High Pressure Water Jet Cleaning Apparatus in Automobile	India	Patent Sanctioned

MOUs

S.No.	Firm Name	Date Of Mou and Period	Field
1	Inflibnet Center	15-06-2023 Three Years	Academia & Collaborative Research
2	Vyomik Innovations Private Limited, Hyderabad (Drones)	12-08-2023 Three Years	Drones

8.4 Innovation, Incubation & Startups

Centre for Research Innovation Incubation & Consultancy (CRIIC) of NIT Andhra Pradesh with the verticals Research & Consultancy and Innovation Incubation & Entrepreneurship aims to strengthen the research profile of the institute and acts as an interface for all the research projects and consultancy works.

S.No	Name of the Students	Name of the Company	Date of Registration	Registered Address	Major Operations	Capital Amount
1	Ravi Krishna Varanasi Lakshmi Narasimha Sastry Varanasi	Radhanu Technologies Private Limited	01-05-2023	C/O 6-139, Kukunuru,Gajjaram,Tallapudi Mandalam,West Godavari- 534341,Andhra Pradesh	Manufacturing and design of electronic components and systems for home Automation, renewable energy, and IoT	5,00,000
2	Sundaram Bhupathi, SM Masood Jishnu Rajesh Kumar, Raju Yadav	Pranetra Research Private Limited	23-09-2023	11-32-1, Veena Building,Tadepalligudem, West Godavari Dist, Andhra Pradesh- 534102	Developed prototype to monitor an area closely working, design of drone and each part of frame, increased the pay load to 10kgs	1,00,000
3	Sonu Kumar Sah Somesh Shankar Avdhut	Call V Cal Technology Private Limited	21-07-2022	C/O Mallika Ezaz Sultana, D No: 18-18-87/2 Mufti Street, Chinna Bazar, Lala Peta Guntur Guntur AP 522003	The major operation of Callvcal Technology is to provide an innovative platform in the vehicle rental industry,	10,00,000
4	Yasaswini Kasa Vuddanti Sandeep Adwaith Satheeshkumar	Ndeep Connect Pvt.Ltd	25 -04- 2023	C/O 3-3-173, Vinayaka Nagar, Bandlaguda Rajendranagar Telangana - 500086 India	Manufacturing (Metals & Chemicals and their products)	1,00,000
5	Bhimanadam Vani and Venkata Bhimanadam Ramaiah.	Bios Eco Feeds Pvt. Ltd	21-07-2022	C/O Bios Eco Feeds Pvt. Ltd D No: 8-155, Sivalayam Street, Veeravasaram, West Godavari Dist, Andhra Pradesh, India- 534201	Growing of crops; market gardening; horticulture	1,00,000

Startups in NIT Andhra Pradesh

Institute Innovation Council's (IIC) Activities:

The center aims to strengthen the Institute Innovation-entrepreneurship eco-system. The following events are organized by IIC in the year 2023-24.

S.No	Faculty	Activity	Date(s)
1.	Dr. V. Sudarshana Deepa	Session on Innovation/Prototype Validation – Converting Innovation into a Start-up or Session on Achieving “Value Proposition Fit” & “Business Fit”	09-05-2023 3.00 (PM) to 5.00 (PM)
2.	Dr. V. Sudarshana Deepa Dr. Sri Phani Krishna Karri	Session on Angel Investment/VC Funding Opportunity for Early-Stage Entrepreneurs	31-07-2023 11.00 AM to 12.30 PM
3.	Dr. V. Sudarshana Deepa Dr. P. Shankar	Session on Accelerators/Incubation - Opportunities for Students & Faculties - Early-Stage Entrepreneurs	12-08-2023 11.00 AM to 12.00 PM
4.	Dr. V. Sudarshana Deepa	Session on “Lean Start-up & Minimum Viable Product/Business”- Boot Camp (or) Mentoring Session	24-08-2023 5:00 PM to 6:30 PM
5	Dr. V Sudarshana Deepa Dr Yuvaraj Dr.GRK Sastry	Organize an Inter/Intra Institutional Idea Competition/Challenge /Hackathon and Reward Best Ideas	Date: 26-09-2023 Time: 5.00 PM TO 8.00 PM
6	Dr. P Sankar Dr. Sri Phani Krishna Karri	Exposure and field visit for problem identification on Dr YSRHU College of Horticulture University	Date: 18-11-2023 Time: 10.00 AM to 06:00 PM
7	Dr. V Sudarshana Deepa & Dr.GRK Sastry	Workshop on “Entrepreneurship and Innovation” as a Career Opportunity By Dr.K.Venkata Krishna	Date: 23-11-2023 Time: 5.00 PM to 6.00 PM
8	Dr. V Sudarshana Deepa	Demo Day/Exhibition/Poster Presentation of Ideas/PoC & linkage with Innovation Ambassadors/Experts for Mentorship Support.	Date: 21-12 -2023 Time: 9.00 AM to 6.00 PM
9	Dr. V. Sudarshana Deepa	Workshop on Entrepreneurship Skill, Attitude, and Behavior Development	Date: 30-01-2024 Time: 5.00 PM to 6.00 PM

10	Dr. S Yuvaraj Dr. Shaik Mahabu Subhani	Workshop on “Challenges & Innovation in Antennas for Wireless Connectivity”	Date: 05-02-2024 Time: 5.00 PM to 7.00 PM
11	Dr. GRK Sastry	Workshop on “Attitude & Behaviour Development”	Date: 04-03-2024
12	Dr V Sudarshana Deepa, Dr.GRK Sastry	Ideathon	Date: 13-03-2024 14-03-2024

8.5 Common Research and Technology Development Hub (CRDTH)

A new CRTDH has been set up at NIT, AP based on the identified unmet R & D & Technology development needs of the clusters in AP region. This CRTDH is focused to support MSE's research pursuits towards ideation, evaluation, design, development and testing of innovative products/process in the sector electronic and renewable energy with following objectives -

- To help in expanding/ starting of new MSE's/startups in developing products/software in renewable energy sector.
- To help MSEs' in adapting Internet of Things (IoT), edge computing, artificial intelligence (AI) driven for increase in productivity or better service or improved security or enhanced reliability or reduced cost in smart integration of renewable systems.
- To improve skill sets of MSE's towards knowledge/application of best technology in product manufacturing process/ product/ service by conducting workshops, certification course/ short term programs.
- To facilitate on-demand learning facilities to institutes/researchers interested to work in Electronics/Renewable energy sector and encouraging collaborative
- To develop/design power converter topologies of renewable power generation.

The current state of the art facility at this CRTDH includes - Micro Grid setup consisting of solar, wind and energy storage technologies, Power stacks for developing energy converter configurations, FPGA based hardware in loop real time digital controllers for rapid prototyping, Solar and Wind energy emulators, Programmable high precision AC/DC power sources, Programmable AC/DC electronic loads / Bus, Three phase power quality analyzer and insulation testing equipment, Battery Emulator, Grid Simulator, PCB prototype machine, Smart Single board computers, Computed aided design tools for simulation of renewable energy, Electric Vehicle Charging setup etc.

Technical Progress:

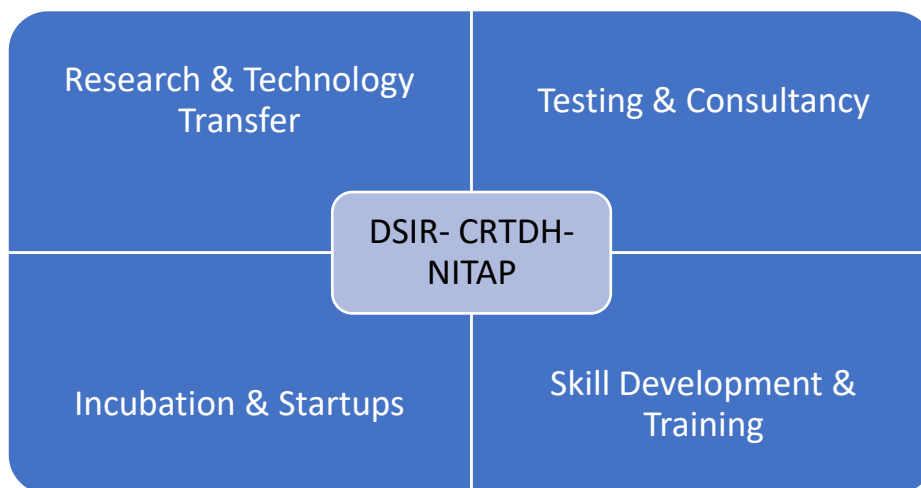
- Micro-Grid setup consisting of solar, wind and energy storage is established to operate in off-grid and grid connected modes.
- Built rapid prototyping systems based on FPGA based hardware in loop real time digital controllers.
- Analyzed the performance of Solar and Wind energy emulators for real-time experiments.
- Tested the performance of microgrid under dynamic conditions at source side and load side using programmable high precision AC/DC power sources and programmable AC/DC electronic loads / Bus respectively.
- Built power stacks for developing different energy converter configurations.
- Improved the power converters' efficiency and reliability by developing loss models and mission profile parameters for the selection of suitable power converters in solar based renewable systems.
- Bi-directional converters are being tested for V2G and G2V operation.
- Installed PCB design machine for supporting MSMEs in developing and testing new converter ideas.
- To minimize the sensors dependency in MPPT, a modified MPPT technique is developed for solar grid integration.
- Fault-tolerant converters are being developed to support the EV in emergency conditions.
- Working on computer aided design tools for simulation of renewable energy.
- Working on electric Vehicle Charging setup with real time conditions.
- Working on the development of optimal control strategies for solar and wind energy systems are in progress.
- Under development of simulation & design tools and optimal & control strategies for Renewable energy systems
- Developing the intelligent algorithms for energy management for EV battery systems.
- Working on solutions to MSME's following problems are in progress
 - Optimal design of DC – DC power electronic converters for solar energy systems.
 - Electrical Supply system design for Data Centre at Low cost.
 - Efficient hybrid energy generation using small scale solar and wind systems.
 - Data analytics on energy management in smart grids.
 - Intelligent EV Battery management system.

Following services will be offered to MSMEs -

- Delivery of first-hand R & D technological solutions to the MSEs' in Renewable Energy sector including testing services.

- Development of data driven simulation and design tools for assessment of renewable resource potential, cost estimation, operation & maintenance planning and asset management through testing and characterizing of renewable resources.
- Design and development of solutions to the decentralized power generation and to increase the penetration of renewable energies to the grid.
- Development of optimal sizing and power control strategies for hybrid renewable systems consisting of photovoltaic, wind, hydro, fuel cells including battery management.
- Analyzing the power converters efficiency and reliability by developing loss models and mission profile parameters taken at MSE's location towards selection of suitable power converters in renewable systems.
- Support to MSEs in technological solutions towards Power quality enhancement in off-grid
- Skill development of manpower of MSEs through training and capacity building programs.
- Repository of knowledge sheets in renewable energy sector and made available for quick adaptation of recent technologies Incubation of Startups/MSEs in the renewable sector.

Key Activities of DSIR – CRTDH - NITAP:



EXPERIMENT AND TESTING SETUP FACILITIES AT DSIR – NITAP- CRTDH:

Programmable supply and loads

- 36V 3A, 108 W Programmable High precision DC power supply (GW Instek PPX- 3603)
- 375 W, 3 Channel Linear DC Power Supply (GW Instek GPC - 6030D)
- 180 W, 2 Channel Programmable Linear Power Supply (GW Instek GPD 2303S)
- 1500 W, Programmable Switching DC Power Supply (GW Instek PSU 300-5)

- 1kVA Programmable AC, DC power source (GW Instek ASR-2100)
- 350 V, 18A, 1875W AC, DC Electronic Load (GW Instek AEL 5002-350-18.75)

Analyzer and Testers

- Yokogawa precision power analyzer WT1804E
- Fluke Norma 6004+/ APC Power Quality Analyzer
- Fluke 1550C FC Insulation tester

Microgrid Setup with WAVET Controller:

- Solar Emulator System with Software
- Wind energy system 2500W
- Three phase isolation transformers 2KVA and 12 KVA
- Solar Energy Setup 2500W
- Load Banks
- Lead Acid battery bank
- EV Charging Setup
- Capacitors inductors filters auto transformers and other accessories
- IGBT based power converters
- Microgrid Controller and Software

Rapid prototyping

- OPAL-RT Real Time Simulator HIL model no: OP4512

Software

- Altair
- MATLAB

CALIBRATION EQUIPMENT

- AC Calibrator (YOKOGAWA LS3300-B-AC)
- DC Calibrator (YOKOGAWA 2560-VA-UF-B)
- Differential Probes (YOKOGAWA 701978)
- Probe Power Supply (YOKOGAWA 701978)
- Current Probes (YOKOGAWA 701933)

POWER CONVERTER STACKS FOR CONVERTER DESIGN

- 4 Channel Hall Effect Voltage and Current Sensors
- Smart Half Bridge IGBT/MOSFET Gate Driver
- Bidirectional Dc-Dc Converter Along with Driver Circuit and Sensor module
- TMS320F28379D Launchpad Development Kit-SiC Voltage Source Inverters
- 3 Phase DC-AC 4 Leg Inverter
- Dual Active Bridge Converter
- Controller for Pulse Generation for Converter Application

PCB MACHINE FOR CONVERTER DESIGN



Participation at DSIR-CRTDH CONCLAVE 2023



Website: <https://nitandhra.ac.in/main/crtdh>

Activity Progress in 2023:

- Participated in “**AP Global Investors Summit 2023**” held at Vishakhapatnam on 3 & 4 March 2023 and created awareness on CRTDH, NIT Andhra Pradesh to MSMEs.
- Conducted “**Awareness session on Collaborations and Opportunities for MSMEs in Renewable Energy Sector**” on 27 April 2023 for MSMEs in Collaboration with (i) DSIR New Delhi, (ii) National Institute for Micro, Small & Medium Enterprises, Hyderabad, (iii) MSME Development and Facilitation Office (MSME-DFO), Visakhapatnam and (iv) MSME Technology Centre, Visakhapatnam.

- Networking meeting with MSME Development and Facilitation Office (MSME-DFO) Visakhapatnam on 03 May 2023
- Networking meeting with MSME Technology Centre, Visakhapatnam on 04 May 2023
- Proposal on “Solar Entrepreneurship Training Program” submitted to CHANDRADEEP SOLAR RESEARCH INSTITUTE (CDSRI) registered under NITI Aayog, Govt. of India on 21 May 2023.
- Conducted “**Brainstorming Session on Innovation & Technologies in Energy Sector**” for INSPIRE Awards-MANAK Mentorship students on 11 & 12 May 2023
- **No. of startups incubated: 03**
 - **Radhanu Technologies Pvt. Ltd.** (CIN: U26104AP2023PTC111007)
 - **Pranetra Research Pvt. Ltd.** (CIN: U29190AP2022PTC122856)
 - **NDeep Connect Pvt. Ltd.** (CIN: U27400TS2023PTC172324)

Project Managers : Dr. V. Sandeep & Dr. P. Sankar, DSIR – CRTDH, NIT Andhra Pradesh

Email: sandeep@nitandhra.ac.in, sankarp@nitandhra.ac.in.

9 Events

The events and celebrations at the institute level are organized by Center for Physical Education and Sports (CPES) and Dean (Student welfare). The main aim of physical education and sports is to develop students’ competence and confidence to take part in a range of physical activities that become a central part of their lives, both in and out of college. It helps the students to develop holistic health, fitness, motor skills, social skills, and confidence needed to begin and maintain a healthy physically active lifestyle for the rest of their life. It is said that “Intelligence and skill can only function at the peak of their capacity when the body is healthy and strong”. In order to develop physical health and thereby overall development and well-being of the students, the CPES provides various opportunities in the form of yoga and various recreational activities such as sports and games.

Ambedkar Jayanthi

On the occasion of Ambedkar Jayanthi on 14th April we have done the garlanding ceremony to the Ambedkar. We have recollected the works of Dr. B R Ambedkar on this day.



9th International Day of Yoga

The **International Day of Yoga (IDY)** is celebrated every year on 21st June. It has been a worldwide celebration for the past 8 years and has effectively facilitated the global dissemination of the significance of practicing yoga for overall health and well-being and enduring sustainable lifestyle. The thrust of the International Day of Yoga (IDY) observation this year is "Harmonious Mass Yoga Demonstrations" and the theme for this year is "Yoga for Vasudhaiva Kutumbaam".



Yoga is a trend that has been flourishing over the years, rather, it has become a trendsetter in maintaining Physical and Mental Well-being. Each yogic activity is a key to improving flexibility, strength, balance and harmony. Now finally, NIT Andhra Pradesh strongly believe that Regular practicing of Yoga, a numerous use of physically fit, physiologically effective function, mentally stable, socially adjustable and Peace of Mind.



In this programme, participated Dr.P. Dinesh Shankar Reddy, Registrar (I/C), he did lighten of the lamp then did Yoga Protocol in the duration of 45minites by the demonstrated Ms. T. Sandhya Rani, SAS Assistant. Dr. Veeresh Kumar G B, Dean - Student Welfare, Dr. T. Kiran Teeparthi, AD, SW (PE&SA), HoDs, All Faculty and Staff and Students attended.

5th Convocation



The fifth convocation of the institute is organized on 13-08-2023. In this convocation, the students graduated in the year 2023 have been awarded degrees. In this convocation a total of 458 undergraduate students have been awarded B.Tech degree, and a total of 50 M.Tech degrees have been awarded.



Independence Day -2023



In the 77th Independence Day, all the Teaching, Non-Teaching, staff and students were assembled at the portico, Sardar Vallabhbhai Patel Central Vista and Security Personnel was given guard of honor to the Chief Guest of Prof. G. Ravi Kiran Sastry, Dean, R&C then he hoisted the Indian National Flag and he addressed. Prizes were distributed by the Chief Guest to the winners in the Javelin throw event. After that, sweets were distributed and vote of thanks given by Dr. Veeresh Kumar, G.B, Dean Student Welfare. In this celebration all the Teaching, Non-Teaching, staff and students were joined.

Sarvepalli Radha Krishnan Jayanthi & Teacher's Day

On the occasion of Sarvepalli Radha Krishnan Jayanthi and teacher's day on 5th September we have arranged an event by placing a Photo frame of DR. Sarvepalli Radha Krishnan and have done the garlanding ceremony. The guests present for this function are DR. G RavikiranShastry, prof and Dr. Kurmayya tamminana. DR. Veeresh kumar GB, Dean SW and DR. Kiranteeparthi, Associate dean SW were also present for the function. The event was conducted by KVV Sairama prasad, SAS Asst. The venue for the event is Central Vista. We provided some refreshments at the end of the event to all the members.

NATIONAL ENGINEER'S DAY & MOKSHAGUNDAMVISVESVARAYA JAYANTHI

On the occasion of national engineer's day and Mokshagundam Visvesvaraya jayanthi on 15th September we have arranged an event by placing a Photo frame of DR. Sarvepalli RadhaKrishnan and have done the garlanding ceremony. The guests present for this function are DR. Talari Reshma, Asst prof and Dr. Kurmayya tamminana, Dean Academics. DR. M Ramudu, Asst prof, DR. Amarendar reddy M, Asst Prof and DR. Kiran teeparthi, Associate dean SW were also present for the function.

MAHATMA GANDHI JAYANTHI

On the occasion of Mahatma Gandhi Jayanthi on 2nd October we have done the garlanding ceremony to the MahatmaGandhi statue. The guests present for this function are DR. G Ravikiran Shastri, prof. DR. Kiran teeparthi, Associate dean SW,Dr.M Ramudu, Asst. Prof. Dr. Krishnamurthy, Asst. Prof. were also present for the function. The event was conducted by KVV Sairama prasad, SAS Asst. The venue for the event is Mahatma Gandhi statue near main gate. The members present for the function are SAS department, staff and students. We provided some refreshments at the end of the event to all the members.



RASHTRIYA EKTADIWAS

We conducted a run for unity on 31 oct, 2023 in the name of rashtriyaehta diwas which was celebrated on the occasion of sardar vallabhbhai patel Jayanti. We started with garland ceremony to the photoframe of sardar Vallabhbhai patel. Later we took a pledge and started the run for unity which starts from central vista and ends at main gate. The chief guest for the occasion is Dr. Dinesh shankar reddy. The event was conducted by KVV Sairama prasad and the faculty members who were part of the occasion are Dr. Veeresh kumar GB, Dr. Kiran Teeparthi, Dr. Krishna Murthy, Dr. M Ramudu, SAS Department and staff. Around 130 students participated in

this event. We have provided snacks for the staff and participants after the completion of the run as the event was conducted in an orderly manner.

REPUBLIC DAY – JANUARY 26 2024

Republic Day in India is celebrated every year on the 26th of January. It was on this day that the constitution of India came into being, replacing the Government of India Act 1935 and making India a Republic Nation.

To commemorate this day, NIT Andhra Pradesh celebrated the 75th Republic Day on January 26, 2024 Friday at Sardar Vallabhbhai Patel Central Vista from 8.30 am to 9.30 am. The security department and Centre for Physical Education and Sports section started the celebration by conducting guard of honor to the chief guest by the security team. A total number of 1000 students participated in these celebrations. The students, faculties and staff of NIT Andhra Pradesh participated in the programme. The National Flag was hoisted by the chief guest Prof. G R K



Sastry Dean of Research and Consultancy NIT Andhra Pradesh. The chief guest gave a speech on how Republic Day is important to the younger generation. gave a brief speech about the Indian Constitution as well as the history of Republic Day. The students also sang a few patriotic songs.

After that the vote of thanks was given by Dr. Veeresh Kumar GB. The program concluded with National Anthem and Distributing the sweets to all the participants

FIT INDIA WEEK

This year, the Fit India Mission has decided to expand the outreach of the Fit India School Week to include colleges, universities and higher education institutions. Therefore, the 5th edition of Fit India School Week has been named as 'Fit India Week' for Schools and Universities and will be observed from 15th November to 15th December 2023. Fit India Week -2023 has celebrated in third week of November at **NIT Andhra Pradesh** under FIT INDIA MOVEMENT from 15 Nov 2023 to 15 Dec 2023 which is initiated by the Ministry of Education Government of India. wherein

various activities were conducted like poster making, fitness activities, fitness assessment, yoga, athletics Indigenous games & sports etc.

Student Activities and Sports Department of Physical Education has conducted fitness assessment for all the I B. Tech Students for the academic year 2023-24 under the FIT INDIA WEEK 2023. Also conducted yoga classes, aerobic activities for all the students as part of Fit India Week celebrations 2023.

The Physical Education Club of NIT Andhra Pradesh organized “**The General Championship**”, as a part of Fit India Week 2023 which focused on conducting various fitness classes, yoga and sport events such as Cricket, Badminton, Kabaddi, Throwball, Athletics, Volleyball, Table Tennis, Chess for both Men and Women. The event was open to all the B. Tech, M. Tech, and PhD. Scholars whoever stayed in the NIT Andhra Pradesh hostels. **Overall, a total of 750 students participated in the event from all the hostel blocks, both boys and girls.** For the first time, all the students were divided into various hostels, and inter-hostel sports events were organized to promote friendly competition and team spirit.

Finally, well organized the General Championship **Award Ceremony at NIT Andhra Pradesh.** In this award-winning ceremony, the final winners, and the runners up for the cricket, badminton, throwball, kabaddi, chess and volleyball events were awarded with Trophies. For the athletics, the first three winners for each of the athletic events were awarded prizes.

The General Championship Event provided a platform for athletes to showcase their talents, breaking barriers and inspiring many. The event transcended competition, fostering a sense of championship among the participants. It will also inspire more students to take part in such events which will be held in the future

10 Photo Gallery

National Sports Day-2023, August 29th





Swachhata Pakhwada







Blood Donation Camp

11.10.2023



TECHKRIYA





Dress Distribution to Govt schools



Sexual Harassment at Workplace Prevention week



Mental Health Program



National Science Day -2024



MATRUBHASHA DIWAS -2024





Vote Awareness



VULCANZY-2024







11 ALL INDIA INTER NIT TOURNAMENT

NIT Andhra Pradesh has participated in several sports and athletic events conducted as part of Inter-NIT tournaments. Some glimpses of the event are provided below:





With the NIT Andhra Pradesh Director I/c Prof. Pramod M Padole







Intra-Departmental Annual Sports 2023-24

From March 6th, the intramural competitions have started. We have conducted about 14 games along with Athletics for all the B. Tech students against their branches. We have seen massive participation of around 1200 members. We have also conducted games for the staff and faculty members from March 15 to 31st March 2024.





STAFF GAMES AND ATHLETICS







Jai Hind

Annual Accounts 2023-24

NATIONAL INSTITUTE OF TECHNOLOGY, ANDHRA PRADESH

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NATIONAL INSTITUTE OF TECHNOLOGY
ANDHRA PRADESH

BALANCE SHEET AS AT 31-03-2024

(Amount in Rupees)

SOURCES OF FUNDS	SCHEDULE	Current Year	Previous Year
Corpus / Capital Fund	<u>1</u>	5,41,19,31,215	5,17,49,49,147
Designated / Earmarked / Endowment Funds	<u>2</u>	1,92,429	16,92,119
Current Liabilities & Provisions	<u>3</u>	45,39,09,013	44,77,12,728
TOTAL		5,86,60,32,657	5,62,43,53,993
APPLICATION OF FUNDS			
Fixed Assets			
-- Tangible Assets	<u>4</u>	4,29,73,60,798	4,26,22,43,678
-- Intangible Assets		12,85,509	0
-- Capital Work in progress		0	0
Investments			
-- Long Term			
-- Short Term	<u>5</u>	0	0
Investments - Others	<u>6</u>	0	0
Current Assets	<u>7</u>	1,43,45,16,073	1,27,40,61,814
Loans, Advances & Deposits	<u>8</u>	13,28,70,277	8,80,48,501
TOTAL		5,86,60,32,657	5,62,43,53,993

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NATIONAL INSTITUTE OF TECHNOLOGY
ANDHRA PRADESH

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2024

(Amount in Rupees)

SOURCES OF FUNDS	SCHEDULE	Current Year	Capital Fund	Total	Previous Year
Academic Receipts	9	12,06,79,000	0	12,06,79,000	9,93,76,930
Grants / Subsidies	10	56,44,45,763	0	56,44,45,763	46,22,70,562
Income from Investments	11	6,77,06,159	0	6,77,06,159	4,23,57,933
Interest Earned	12	42,097	0	42,097	9,414
Other Income	13	1,02,40,203	0	1,02,40,203	90,84,950
Prior Period Income	14	0	0	0	62,97,997
TOTAL (A)		76,31,13,222	0	76,31,13,222	61,93,97,786
EXPENDITURE					
Staff Payments & Benefits (Establishment Expenses)	15	16,53,59,215	0	16,53,59,215	20,00,08,989
Academic Expenses	16	14,11,81,355	0	14,11,81,355	6,16,13,869
Administrative and General Exp	17	17,60,63,736	0	17,60,63,736	15,09,62,435
Transportation expenses	18	51,39,742	0	51,39,742	63,77,397
Repairs & Maintenance	19	7,67,01,715	0	7,67,01,715	4,18,20,997
Finance Cost	20	0	0	0	0
Depreciation	4	12,91,52,867	0	12,91,52,867	12,28,14,043
Other Expenses	21	0	0	0	0
Prior Period Expenses	22	0	0	0	31,80,342
TOTAL (B)		69,35,98,630	0	69,35,98,630	58,67,78,072
Balance being excess of Income over Expenditure (A-B)		6,95,14,592	0	6,95,14,592	3,26,19,715
Transfer to / from Designated Fund		0	0	0	0
Building Fund		0	0	0	0
Others if Any		0	0	0	0
Balance being surplus (Deficit) carried to General Fund		6,95,14,592	0	6,95,14,592	3,26,19,715
Significant Accounting Policies	23				

SCHEDULE 1- CORPUS FUND / CAPITAL FUND

PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
Balance as at the beginning of the year	5,17,49,49,147	5,07,87,82,829
Add: Contributions towards Corpus / Capital Fund	0	
Add: Grants from UGC, GOI and State Government to the extent utilized for capital expenditure	16,74,67,476	6,35,46,603
Add: Assets purchased out of Earmarked Funds	0	0
Add: Assets purchased out of Sponsored Projects where ownership vests in the institution	0	0
Add: Assets Donated / Gifts Received - Land received from State Govt	0	0
Add: Other Addition	0	0
Add: Excess of Income over expenditure transferred from Income & Expenditure Account	6,95,14,592	3,26,19,715
	5,41,19,31,215	5,17,49,49,147
Ded: Deficit of Income over Expenditure transferred from Income & Expenditure Account	0	0
Balance at the year end	5,41,19,31,215	5,17,49,49,147

SCHEDULE - 2: DESIGNATED / EARMARKED / ENDOWMENT FUND

Particulars	FUND WISE BREAK UP							TOTAL	
	SC Sub Plan - Non Recurring	ST Sub Plan - Non Recurring	SC Sub Plan - Recurring	ST Sub Plan - Recurring	Grant for HEFA loan Repayment / Projects Earmarked	TOTAL DESIGNATED / EARMARKED FUNDS	ENDOWMENT FUND	CURRENT YEAR	PREVIOUS YEAR
a) Opg. Balance of the Funds	-	-	7,54,142	8,18,805	1,19,172	16,92,119	-	16,92,119	1,66,05,269
b) Additions during the year	1,37,00,000	80,00,000	3,88,00,000	2,08,00,000	-	8,13,00,000	-	8,13,00,000	4,60,00,000
c) Income from investments made of the funds	-	-	-	-	-	-	-	-	-
d) Accrued Interest on Investments / Advances	-	-	-	-	-	-	-	-	-
e) Interest on Savings Bank A/c	-	-	-	-	2,88,540	2,88,540	-	2,88,540	-
f) Other additions (Specify nature) Accrued Interest on SB Account	-	-	-	-	2,349	2,349	-	2,349	-
TOTAL (A)	1,37,00,000	80,00,000	3,95,54,142	2,16,18,805	4,10,061	8,32,83,008	-	8,32,83,008	6,26,05,269
Refunded to Ministry	-	-	-	-	2,17,632	2,17,632	-	2,17,632	29,00,000
B) Utilization / Exp towards objectives of funds									
i) Capital Expenditure	1,37,00,000	80,00,000	-	-	-	2,17,00,000	-	2,17,00,000	-
i) Revenue Expenditure	-	-	3,95,54,142	2,16,18,805	-	6,11,72,947	-	6,11,72,947	5,81,32,322
TOTAL (B)	1,37,00,000	80,00,000	3,95,54,142	2,16,18,805	2,17,632	8,30,90,579	-	8,30,90,579	6,10,32,322
Closing Balance at the year end (A-B)	-	-	-	-	1,92,429	1,92,429	-	1,92,429	15,72,947

Represented by									
Cash and Bank Balances	-	-	-	-	1,92,429	1,92,429	-	1,92,429	15,72,947
Investments	-	-	-	-	-	-	-	-	-
Interest accrued but not due	-	-	-	-	-	-	-	-	-
Total:	-	-	-	-	1,92,429	1,92,429	-	1,92,429	15,72,947

SCHEDULE 2A

ENDOWMENT FUNDS

Sr No	Name of the Endowment	Opg Balance		Additions during the year		Total		Expenditure on the object during the yr	Closing balances		
		Endowment	Accumulated Interest	Endowment	Interest	Endowment	Accumulated Interest		Endowment	Accumulated Interest	Total
1	2	3	4	5	6	7=(3+5)	8=(4+6)	9	10	11	12=(10+11)
	Total	0	0	0	0	0	0	0	0	0	0

- 1 The total of Columns 3 & 4 will appear as the opening Balances in the Column "Endowment Funds" in Schedule 2, of Earmarked Funds forming part of the B.S.
- 2 The total of Col.9 should normally be less than the total of Col.8, as only the interest is to be used for the expenditure on the object of the endowments
- 3 There should not normally be a debit balance in the schedule, if in a rare case, there is debit balance against any of the Endowment funds the debit balance should appear on the Assets side of the Balance Sheet as "Receivable", in Schedule-8 Loans, Advances & Deposits.

SCHEDULE 3 - CURRENT LIABILITIES & PROVISIONS

PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
A. CURRENT LIABILITIES		
1. Deposits from staff		
--- Security Deposit for Staff Quarters	0	0
2. Deposits from students		
--- Lab and Library Deposit	1,94,46,043	1,96,15,519
--- Hostel Caution Deposit	1,64,55,527	1,84,25,209
--- Mess Security Deposit	17,84,000	
3. Sundry Creditors		
a) For Goods & Services		0
b) Others		0
4. Deposits - others (including EMD, Security deposit)		
--- Tender Deposit	25,49,717	6,95,990
--- Other Deposit		0
5. Statutory Liabilities(GPF, TDS, WC TAX, CPF, GIS, NPS):		
a) Overdue		0
b) Others		
--- Profession Tax	44,010	42,760
--- GPF		0
--- GSLI		0
--- VPF		0
--- GST	20,95,104	830820
--- NPS	0	0
--- Income Tax (TDS)	21,77,979	26,22,277
6. Other Current Liabilities:		
a) Salaries - Outstanding salaries to Adhoc faculties		0
b) Receipts against sponsored projects		0
c) Receipts against sponsored fellowships & scholarships	77,24,429	99,62,864
d) Unutilised Grants		
--- Plan Grants		0
--- Non-Plan Grants	0	-5,64,344
--- Earmarked Funds(Capital Work In Progress)		0
e) Grants in advance (grants received in advance for next year)		0
f) Other funds		0
g) Other liabilities		
--- SBI CR Reddy Branch		0
--- HEFA Loan		0

--- NIT, Warangal	10,00,00,000	10,00,00,000
--- Fee Payable	54,13,985	3,14,67,838
--- Advance fee received	0	1,42,107
--- Alumni Association Fee	92,10,000	92,10,000
--- Cess	13,656	1,13,770
--- Games Fee	71,34,035	71,34,035
--- Institution Development fee	5,08,39,000	4,60,49,000
--- Internet & ICT Charges	1,60,77,600	1,60,77,600
--- Medical Fee	1,25,17,673	1,25,17,673
--- Magazine Fee	17,61,400	17,61,400
--- Other Deductions on Salaries	0	0
--- Seinarage	14,312	14,312
--- Students Club Fee	66,74,000	66,99,000
--- Student Library Fee	2,01,70,337	2,01,70,337
--- Student Welfare Fund	34,23,639	42,30,200
--- Technical Association Fee	29,91,800	29,91,800
--- Fest Fee Collected	45,56,077	44,72,059
--- Fest Sponsorship	-51,287	2,907
--- Student Scholarship	3,82,090	3,84,290
--- Un Identified Credit	0	0
--- Security Deposit: Withheld Amount	76,91,061	59,26,864
--- P.hd Stipend Hold	5,80,475	5,34,387
--- Consultancy	18,82,967	0
--- Mess fee	7,94,31,108	8,33,65,452
--- NIF	29,800	
--- Medical Insurance	25,14,500	0
--- Student Establishment & Maintenance	1,30,51,600	
--- Outstanding Liabilities	59,30,486	56,32,928
TOTAL (A)	40,45,17,123	41,05,29,054
B. PROVISIONS		
1. For Taxation	0	0
2. Gratuity	2,29,21,345	1,74,76,431
3. Superannuation/ Pension	0	0
4. Accumulated Leave Encashment	2,64,70,545	1,76,41,565
5. Trade Warranties/ Claims	0	0
6. Others (Specify)-	0	20,65,678
TOTAL (B)	4,93,91,890	3,71,83,674
TOTAL (A+B)	45,39,09,013	44,77,12,728
Note: Unutilised grants 6(d) will include grants received in advance for next year		

ENCLOSURE TO BALANCE SHEET

ENCLOSURE TO CURRENT LIABILITIES AND PROVISIONS (Schedule - 3)

HEAD OF ACCOUNT	OPG. BALANCE	RECEIPTS	PAYMENTS	CLG BALANCE
Other Deposits				
Tender Deposit	6,95,990	27,42,457	8,88,730	25,49,717
Advance fee recived	1,42,107	0	0	1,42,107
Alumni Association Fee	92,10,000	0	0	92,10,000
Cess	1,13,770	13,656	1,13,770	13,656
Games Fee	71,34,035	0	0	71,34,035
Institution Development fee	4,60,49,000	48,60,000	70,000	5,08,39,000
Internet & ICT Charges	1,60,77,600	0	0	1,60,77,600
Medical Fee	1,25,17,673	0	0	1,25,17,673
Magazine Fee	17,61,400	0	0	17,61,400
Other Deduction on Salaries	1,28,147	0	0	1,28,147
Seinrage	14,312	0	0	14,312
Students Club Fee	66,99,000	0	25,000	66,74,000
Student Library Fee	2,01,70,337	0	0	2,01,70,337
Student Welfare Fund	42,30,200	0	8,06,561	34,23,639
Student Scholarship	3,84,290	17,64,606	17,66,806	3,82,090
Technical Association Fee	29,91,800	0	0	29,91,800
Fest Fee Collected	44,72,059	84,018	0	45,56,077
Fest Sponership	2,907	13,84,000	14,38,194	-51,287
FDP	0	0	0	0
Un Identified Credit	45,501	0	0	45,501
Security Deposit: Withheld Amount	59,26,864	55,17,779	37,53,582	76,91,061
M.Tech Stipend Hold	46,088	0	0	46,088
P.hd Stipend Hold	5,34,387	0	0	5,34,387
Consultancy	0	1,16,30,716	97,47,749	18,82,967
Medical Insurance	0	25,72,000	57,500	25,14,500
Student Establishment & Maintenance	0	1,30,51,600	0	1,30,51,600
Mess fee	8,33,65,452	8,37,79,144	8,77,13,488	7,94,31,108
Sub Total (a)	22,27,12,919	12,73,99,976	10,63,81,380	24,37,31,515
Student Deposits				
Hostel Caution Deposit	1,84,25,209	19,04,000	38,73,682	1,64,55,527
Lab and Library Deposit	1,96,15,519	30,39,304	32,08,780	1,94,46,043
Mess Security Deposit	0	18,08,000	24,000	17,84,000
Sub Total (b)	3,80,40,728	67,51,304	71,06,462	3,76,85,570
Grand Total (a+b)	26,07,53,647	13,41,51,280	11,34,87,842	28,14,17,085

HEAD OF ACCOUNT - STATRY LIABILITIES	OPG. BALANCE	RECEIPTS	PAYMENTS	CLG BALANCE
Professional Tax	42,760	4,89,350	4,88,100	44,010
GPF	0	0	0	0
GSLI	0	0	0	0
VPF	0	0	0	0
TDS	26,22,277	1,84,07,125	1,88,51,423	21,77,979
GST	8,30,820	98,83,161	86,18,877	20,95,104
NPS	0	2,64,65,715	2,64,65,715	0
GRAND TOTAL	34,95,857	5,52,45,351	5,44,24,115	43,17,093

Unutilized Non-Plan Grants	CURRENT YEAR	PREVIOUS YEAR
A. Non-Plan Grants: Government of India		
Balance B/f	32,50,013	2,14,29,856
Add: Receipts during the year	49,86,00,000	42,31,50,000
Total(a)	50,18,50,013	44,45,79,856
Less: Refunds		4,10,05,960
Less: Utilized for Revenue Expenses	50,18,50,013	40,03,23,883
Less: Utilized for Capital Expenses		0
total(b)	50,18,50,013	44,13,29,843
Unutilized carried forward (a-b)	-	32,50,013

SCHEDULE - 3(a) - SPONSORED PROJECTS

SI No	Name of the Sponsor	Opening Balance as on 01.04.2023		Transactions during the year		Closing Balance as on 31.03.2024	
		Cr	Dr	Cr	Dr	Cr	Dr
1	University Grant Commission	0	0	0	0	0	0
2	Ministry.....	0	0	0	0	0	0
1	DST-SERB - Scanning near Field Optical Microscopy Investigation of Optical Field Strength in Metal Dielectric Nanostructures andSpectroscopy - Dr Mahamad Ahamad Mohiddon	5,68,316	-	-	-	5,68,316	-
2	Dr Thella Babu Rao	19,607	-	-	-	19,607	-
3	Dr J Krishna Murthy	11,275	-	-	-	11,275	-
4	Dr Vinoth Kumar Raja	5	-	4,296	4,296	5	-
5	Dr T Ramesh	10,004	-	-	-	10,004	-
6	Dr Puli Kishore Kumar	8,62,842	-	60,419	2,10,040	7,13,221	-
7	Dr Ch Sripatha	1,40,599	-	4,470	1,45,069	-	-
8	Dr T Reshma	70,127	-	-	-	70,127	-
9	Dr B Giridhar Rajesh	-	-	-	-	-	-
10	Dr N Jayaram	22,653	-	50,000	72,653	-	-
11	Dr Sharad Dwivedi	2,52,475	-	9,203	2,40,584	21,094	-
12	Dr Narasimha Rao Banavathu	4,15,615	-	1,62,746	5,44,518	33,843	-
13	Dr Subba Rao Pichuka	1,10,773	-	-	-	1,10,773	-
14	Dr Karthick Seshadri	9,13,050	-	13,50,000	3,72,000	18,91,050	-
15	Dr R Arun Kumar	1,81,155	-	5,00,000	5,96,387	84,768	-
16	Dr Narayana Thota	-	-	23,61,648	23,56,165	5,483	-
17	Dr Phani Krishna Karri	1,36,284	-	4,22,127	4,82,362	76,049	-
18	Dr J Krishna Murthy	7,11,232	-	10,06,022	14,06,382	3,10,872	-
19	CRTDH	-	-	69,13,873	69,13,873	-	-
20	Dr J Krishna Murthy	1,90,994	-	57,221	1,67,590	80,625	-
21	Dr Tapas Parmanick	2,98,758	-	-	2,24,245	74,513	-
22	Dr S Yuvraj	-	-	-	-	-	-
23	Dr Baranidharan	7,57,932	-	19,189	7,39,519	37,602	-
24	Dr R Arun Kumar	10,728	-	3,14,272	3,14,470	10,530	-
25	Dr T Ramesh	39,00,000	-	14,95,502	52,25,573	1,69,929	-
26	PROJECT A	1,96,848	-	-	-	1,96,848	-

27	PROJECT B	1,80,000	-	-	-	1,80,000	-
28	PROJECT C	-	-	5,94,720	-	5,94,720	-
29	SERB-SCHOLAR-CH PRASANTH	-	-	1,41,045	1,41,045	-	-
30	SERB-SCHOLAR-	-	-	2,69,261	2,67,678	1,583	-
31	SERB-SCHOLAR-	-	-	1,38,750	1,38,750	-	-
32	Dr.Subhani	-	-	5,18,579	5,18,579	-	-
33	Dr.Tapas	-	-	21,42,958	21,42,958	-	-
34	Dr.Baranidaran	-	-	1,50,000	1,50,000	-	-
35	Dr.Seenivasan	-	-	1,50,000	1,50,000	-	-
36	Dr.Rajeswara Reddy	-	-	5,00,000	-	5,00,000	-
37	Dr.T.Baburao	-	-	19,50,000	-	19,50,000	-
	Total	99,61,272.00	-	2,12,86,301.00	2,35,24,736.00	77,22,837.00	-

- 1 The Projects may be listed agency-wise, with sub-totals for each agency
- 2 The total of Col.8 (Credit) will appear under the above head on the liabilities side of the Balance Sheet (Schdule-3)
- 3 The total of Col.9(debit) will appear as Receivables in Schedule 8, Loans, Advances and Deposits on the Assets of the Balance Sheet

SCHEDULE 3(b) SPONSORED FELLOWSHIPS AND SCHOLARSHIPS

SI No	Name of the Sponsor	Opening Balance as on 01.04.2023		Transactions during the year		Closing Balance as on 31.03.2024	
		Cr	Dr	Cr	Dr	Cr	Dr
1	University Grant Commission	0	0	0	0	0	0
2	Ministry.....	0	0	0	0	0	0

- 1 The total of Column 7 (Credit) will appear under the above head, on the liabilities side of the Balance Sheet (Sch-3)
- 2 The total of Column 8 (Debit) will appear as Receivables on the Assets side of the Balance Sheet (Sch-8)

SCHEDULE 3 (c)- UNUTILISED GRANTS FROM UGC, GOVERNMENT OF INDIA AND STATE GOVERNMENTS

	CURRENT YEAR	PREVIOUS YEAR
A. Plan Grants: Government of India		
Balance B/f	0	0
Add: Receipts during the year	12,83,00,000	0
Total(a)	12,83,00,000	0
Less: Refunds	0	3,11,00,000
Less: Utilized for Revenue Expenses	0	0
Less: Utilized for Capital Expenses	12,83,00,000	0
total(b)	12,83,00,000	3,11,00,000
Unutilized carried forward (a-b)	0	-3,11,00,000
B. UGC Grants: Plan		
Balance B/f	0	0
Receipts during the year	0	0
Total(c)	0	0
Less: Refunds	0	0
Less: Utilized for Revenue Expenses	0	0
Less: Utilized for Capital Expenses	0	0
total(d)	0	0
Unutilized carried forward (c-d)	0	0
C. UGC Grants Non Plan		
Balance B/f	0	0
Receipts during the year	0	0
Total(e)	0	0
Less: Refunds	0	0
Less: Utilized for Revenue Expenses	0	0
Less: Utilized for Capital Expenses	0	0
total(f)	0	0
Unutilized carried forward (e-f)	0	0

D. Grants from State Govt.		
Balance B/f	0	0
Receipts during the year - Cost of Land	0	0
Total(g)	0	0
Less: Refunds	0	0
Less: Utilized for Revenue Expenses	0	0
Less: Utilized for Capital Expenses - Cost of Land	0	0
total(h)	0	0
Unutilized carried forward (g-h)	0	0
Grand Total (A+B+C+D)	0	-3,11,00,000

- Unutilized grants includes advances on Capital Account
- Unutilized grants include grants received in advance for the next year
- Unutilized grants are represented on the Assets side by Bank Balances, Short term Deposits with Banks and Advances on Capital Account

FIXED ASSET SCHEDULE

SCHEDULE - 4 - FIXED ASSETS

(Amount in Rupees)

S.No	DESCRIPTIONS	GROSS BLOCK				DEPRECIATION				NET BLOCK	
		Opg Balance	Additions	Deductions	CI Balance	Dep Opening	Depreciation	Deduction /	Total	31.03.2024	31.03.2023
		01.04.2023				Balance	for the year	Adjustments	Depreciation		
1	Land	1	0	0	1	0	0	0	0	1	1
2	Site Development	0	0	0	0	0	0	0	0	0	0
3	Buildings	4,12,21,80,602	8,93,379	0	4,12,30,73,981	8,89,81,570	8,23,47,699	0	17,13,29,269	3,95,17,44,712	4,03,31,99,032
4	Roads & Bridges	0	0	0	0	0	0	0	0	0	0
5	Tubewells & Water Supply	0	0	0	0	0	0	0	0	0	0
6	Sewarage & Drainage	0	0	0	0	0	0	0	0	0	0
7	Electrical Installation and Equipment	1,94,42,629	1,19,09,995	0	3,13,52,624	47,84,905	15,67,637	0	63,52,542	2,50,00,082	1,46,57,724
8	Plant & Machinery	0	0	0	0	0	0	0	0	0	0
9	Scientific & Laboratory Equipment	13,16,89,521	7,24,69,496	0	20,41,59,017	3,64,13,646	1,63,32,721	0	5,27,46,367	15,14,12,650	9,52,75,875
10	Office Equipment	66,15,790	12,43,765	0	78,59,555	18,94,414	6,64,066	0	25,58,480	53,01,075	47,21,376
11	Audio Visual Equipment	2,43,21,543	18,32,309	0	2,61,53,852	59,46,272	19,61,544	0	79,07,816	1,82,46,036	1,83,75,271
12	Computers & Peripherals	9,30,79,225	1,16,41,309	0	10,47,20,534	7,24,57,086	1,22,80,376	0	8,47,37,462	1,99,83,072	2,06,22,139
13	Furniture, Fixtures & Fittings	9,12,72,251	6,53,34,701	0	15,66,06,952	2,44,70,288	1,17,47,322	0	3,62,17,610	12,03,89,342	6,68,01,963
14	Vehicles	0	0	0	0	0	0	0	0	0	0
15	Lib Books & Scientific Journals	1,39,44,869	0	0	1,39,44,869	72,66,548	13,94,493	0	86,61,041	52,83,828	66,78,321
16	Small Value of assets	0	0	0	0	0	0	0	0	0	0
	Tota (A)	4,50,25,46,431	16,53,24,954	0	4,66,78,71,385	24,22,14,729	12,82,95,858	0	37,05,10,587	4,29,73,60,798	4,26,22,43,678
17	Capital Work in progress (B)	0	0	0	0	0	0	0	0	0	0

S.No	Intangible Assets	Opg Balance	Additions	Deductions	CI Balance	Dep / Amortization / Opening Balance	Depreciation / Amortization for the year	Deduction / Adjustments	Total Depreciation / Amortization	31.03.2024	31.03.2023
		01.04.2023									
18	Computer Software	56,79,898	21,42,522	0	78,22,420	56,79,902	8,57,009	0	65,36,911	12,85,509	-4
19	E-Journals	0	0	0	0	0	0	0	0	0	0
20	Patents	0	0	0	0	0	0	0	0	0	0
	Total (C)	56,79,898	21,42,522	0	78,22,420	56,79,902	8,57,009	0	65,36,911	12,85,509	-4
	Grand Total(A+B+C)	4,50,82,26,328	16,74,67,476	0	4,67,56,93,804	24,78,94,631	12,91,52,867	0	37,70,47,498	4,29,86,46,307	4,26,22,43,674

FIXED ASSET SCHEDULE

SCHEDULE - 4A - PLAN

(Amount in Rupees)

S.No	DESCRIPTIONS	GROSS BLOCK				DEPRECIATION				NET BLOCK	
		Opg Balance 01.04.2023	Additions	Deductions	CI Balance	Dep Opening Balance	Depreciation for the year	Deduction / Adjustments	Total Depreciation	31.03.2024	31.03.2023
1	Land	1	0	0	1	0	0	0	0	1	1
2	Site Development	0	0	0	0	0	0	0	0	0	0
3	Buildings	4,11,78,19,530	8,93,379	0	4,11,87,12,909	8,88,87,453	8,22,60,597	0	17,11,48,050	3,94,75,64,859	4,03,63,78,787
4	Roads & Bridges	0	0	0	0	0	0	0	0	0	0
5	Tubewells & Water Supply	0	0	0	0	0	0	0	0	0	0
6	Sewarage & Drainage	0	0	0	0	0	0	0	0	0	0
7	Electrical Installation and Equipment	1,23,11,334	1,19,09,995	0	2,42,21,329	36,96,557	12,11,071	0	49,07,628	1,93,13,701	77,72,987
8	Plant & Machinery	0	0	0	0	0	0	0	0	0	0
9	Scientific & Laboratory Equipment	10,37,42,574	7,24,69,496	0	17,62,12,070	3,14,29,050	1,40,96,965	0	4,55,26,015	13,06,86,055	7,01,67,102
10	Office Equipment	11,54,421	12,43,765	0	23,98,186	5,78,043	2,02,627	0	7,80,670	16,17,516	-4,05,333
11	Audio Visual Equipment	1,16,25,190	18,32,309	0	1,34,57,499	30,59,662	10,09,315	0	40,68,977	93,88,522	67,03,401
12	Computers & Peripherals	8,25,95,264	1,16,41,309	0	9,42,36,573	6,52,03,138	1,10,50,942	0	7,62,54,080	1,79,82,493	1,30,15,838
13	Furniture, Fixtures & Fittings	5,88,70,176	4,97,79,204	0	10,86,49,380	1,69,76,779	81,49,953	0	2,51,26,732	8,35,22,648	3,77,19,834
14	Vehicles	0	0	0	0	0	0	0	0	0	0
15	Lib Books & Scientific Journals	1,23,90,698	0	0	1,23,90,698	64,56,683	12,39,075	0	76,95,758	46,94,940	53,67,709
16	Small Value of assets	0	0	0	0	0	0	0	0	0	0
	Tota (A)	4,40,05,09,188	14,97,69,457	0	4,55,02,78,645	21,62,87,365	11,92,20,545	0	33,55,07,910	4,21,47,70,735	4,17,67,20,326
17	Capital Work in progress (B)	0	0	0	0	0	0	0	0	0	0

S.No	Intangible Assets	Opg Balance 01.04.2023	Additions	Deductions	CI Balance	Dep / Amortization Opening Balance	Depreciation / Amortization for the year	Deduction / Adjustments	Total Depreciation / Amortization	31.03.2024	31.03.2023
18	Computer Software	0	0	0	0		0	0	0	0	0
19	E-Journals	0	0	0	0	0	0	0	0	0	0
20	Patents	0	0	0	0	0	0	0	0	0	0
	Total (C)	0	0	0	0	0	0	0	0	0	0

	Grand Total(A+B+C)	4,40,05,09,188	14,97,69,457	0	4,55,02,78,645	21,62,87,365	11,92,20,545	0	33,55,07,910	4,21,47,70,735	4,17,67,20,326
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FIXED ASSET SCHEDULE

SCHEDULE - 4B - NON PLAN

(Amount in Rupees)

S.No	DESCRIPTIONS	GROSS BLOCK				DEPRECIATION				NET BLOCK	
		Opg Balance 01.04.2023	Additions	Deductions	CI Balance	Dep Opening Balance	Depreciation for the year	Deduction / Adjustments	Total Depreciation	31.03.2024	31.03.2023
1	Land	0	0	0	0						
2	Site Development	0	0	0	0	0	0	0	0	0	0
3	Buildings	0	0	0	0	0	0	0	0	0	0
4	Roads & Bridges	0	0	0	0						
5	Tubewells & Water Supply	0	0	0	0	0	0	0	0	0	0
6	Sewarage & Drainage	0	0	0	0	0	0	0	0	0	0
7	Electrical Installation and Equipment	0	0	0	0	0	0	0	0	0	0
8	Plant & Machinery	0	0	0	0	0	0	0	0	0	0
9	Scientific & Laboratory Equipment	0	0	0	0	0	0	0	0	0	0
10	Office Equipment	0	0	0	0	0	0	0	0	0	0
11	Audit Visual Equipment	0	0	0	0	0	0	0	0	0	0
12	Computers & Peripherals	0	0	0	0	0	0	0	0	0	0
13	Furniture, Fixtures & Fittings	0	0	0	0	0	0	0	0	0	0
14	Vehicles	0	0	0	0	0	0	0	0	0	0
15	Lib Books & Scientific Journals	0	0	0	0	0	0	0	0	0	0
16	Small Value of assets	0	0	0	0	0	0	0	0	0	0
	Tota (A)	0	0	0	0	0	0	0	0	0	0
17	Capital Work in progress (B)	0	0	0	0	0	0	0	0	0	0

S.No	Intangible Assets	Opg Balance 01.04.2023	Additions	Deductions	CI Balance	Dep / Amortization / Opening Balance	Depreciation / Amortization for the year	Deduction / Adjustments	Total Depreciation / Amortization	31.03.2024	31.03.2023
18	Computer Software	0	0	0	0	0	0	0	0	0	0
19	E-Journals	0	0	0	0	0	0	0	0	0	0
20	Patents	0	0	0	0	0	0	0	0	0	0
	Total (C)	0	0	0	0	0	0	0	0	0	0

	Grand Total(A+B+C)	0	0	0	0	0	0	0	0	0	0
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FIXED ASSET SCHEDULE

SCHEDULE 4C - INTANGIBLE ASSETS

S.No	DESCRIPTIONS	GROSS BLOCK				DEPRECIATION				NET BLOCK	
		Opg Balance 01.04.2023	Additions	Deductions	CI Balance	Dep / Amortization / Opening Balance	Depreciation / Amortization for the year	Deduction / Adjustments	Total Depreciation / Amortization	31.03.2024	31.03.2023
1	Patents & Copyrights	0	0	0	0	0	0	0	0	0	0
2	Computer Software	56,79,898	21,42,522	0	78,22,420	56,79,902	8,57,009	0	65,36,911	12,85,509	4,10,920
3	E-Journals	0	0	0	0	0	0	0	0	0	0
	Total	56,79,898	21,42,522	0	78,22,420	56,79,902	8,57,009	0	65,36,911	12,85,509	4,10,920

SCHEDULE - 4D - OTHERS

(Amount in Rupees)

S.No	DESCRIPTIONS	GROSS BLOCK				DEPRECIATION				NET BLOCK	
		Opg Balance 01.04.2023	Additions	Deductions	CI Balance	Dep Opening Balance	Depreciation for the year	Deduction / Adjustments	Total Depreciation	31.03.2024	31.03.2023
1	Land	0	0	0	0	0	0	0	0	0	0
2	Site Development	0	0	0	0	0	0	0	0	0	0
3	Buildings	43,61,072	0	0	43,61,072	94,117	87,102	0	1,81,219	41,79,853	42,66,955
4	Roads & Bridges	0	0	0	0	0	0	0	0	0	0
5	Tubewells & Water Supply	0	0	0	0	0	0	0	0	0	0
6	Sewarage & Drainage	0	0	0	0	0	0	0	0	0	0
7	Electrical Installation and Equipment	71,31,295	0	0	71,31,295	10,88,348	3,56,566	0	14,44,914	56,86,381	60,42,947
8	Plant & Machinery	0	0	0	0	0	0	0	0	0	0
9	Scientific & Laboratory Equipment	2,79,46,947	0	0	2,79,46,947	49,84,596	22,35,756	0	72,20,352	2,07,26,595	2,29,62,351
10	Office Equipment	54,61,369	0	0	54,61,369	13,16,371	4,61,439	0	17,77,810	36,83,559	41,44,998
11	Audio Visual Equipment	1,26,96,353	0	0	1,26,96,353	28,86,610	9,52,229	0	38,38,839	88,57,514	98,09,743
12	Computers & Peripherals	1,04,83,961	0	0	1,04,83,961	72,53,948	12,29,434	0	84,83,382	20,00,579	32,30,013
13	Furniture, Fixtures & Fittings	3,24,02,075	1,55,55,497	0	4,79,57,572	74,93,509	35,97,369	0	1,10,90,878	3,68,66,694	2,49,08,566
14	Vehicles	0	0	0	0	0	0	0	0	0	0
15	Lib Books & Scientific Journals	15,54,171	0	0	15,54,171	8,09,865	1,55,418	0	9,65,283	5,88,888	7,44,306
16	Small Value of assets	0	0	0	0	0	0	0	0	0	0
	Tota	10,20,37,243	1,55,55,497	0	11,75,92,740	2,59,27,364	90,75,313	0	3,50,02,677	8,25,90,063	7,61,09,879
17	Capital Work in progress	0	0	0	0	0	0	0	0	0	0
	Grand Total	10,20,37,243	1,55,55,497	0	11,75,92,740	2,59,27,364	90,75,313	0	3,50,02,677	8,25,90,063	7,61,09,879

1 The figure in column "Deduction" under Gross Block against the head Capital Work in Progress represents the transfer from Work in Progress to Assets during the year

2 The figure in column "Additions during the year under Gross Block against Assets 1 to 14 include transfer from work in progress during the year, as well as further acquisition during the year.

SCHEDULE 4(C) (i) PATENTS AND COPYRIGHTS

PARTICULARS	Op Balance	Addition	Gross	Amortization	Net Block 31.03.2024	Net Block 31.03.2023
A. Patents Granted						
1. Balance as on 31.03.2016 of Patents obtained in 2015-16 (Original Value - Rs...../-)	0	0	0	0	0	0
2. Balance as on 31.03.2021 of Patents obtained in 2020-21 (Original Value - Rs...../-)	0	0	0	0	0	0
3. Balance as on 31.03.2022 of Patents obtained in 2021-22 (Original Value - Rs...../-)	0	0	0	0	0	0
4. Patents granted during the current year (2022-23)	0	0	0	0	0	0
Total	0	0	0	0	0	0

PARTICULARS	Op Balance	Addition	Gross	Amortization	Net Block 31.03.2024	Net Block 31.03.2023
B. Patents pending in respect of Patents applied for						
1. Expenditure incurred during 2015-16 to 2020-21	0	0	0	0	0	0
2. Expenditure incurred during 2021-22	0	0	0	0	0	0
3. Expenditure incurred during 2022-23	0	0	0	0	0	0
Total	0	0	0	0	0	0

C. Grand Total (A+B)	0	0	0	0	0	0
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The Addition in Part A (patents granted) will be figure of patents granted during the year, transferred from Part B (Column- Patents granted/rejected). The amount against grants rejected during the year is written off in the income and expenditure account.

SCHEDULE 5 - INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS

S.No.	PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
1	In Central Government Securities	0	0
2	In State Government Securities	0	0
3	Other Approved Securities	0	0
4	Shares	0	0
5	Debentures and Bonds	0	0
6	Term Deposits with Banks	0	0
7	Others (to be specified)	0	0
	TOTAL	0	0

SCHEDULE 5(A): INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS (FUND WISE)

SI No	FUNDS	CURRENT YEAR	PREVIOUS YEAR
		0	0
		0	0
	Total	0	0

The total in this sub schedule will agree with the total in Schedule 5

SCHEDULE 6 - INVESTMENTS - OTHERS

PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
1. In Central Government Securities	0	0
2. In State Government Securities	0	0
3. Other Approved Securities	0	0
4. Shares	0	0
5. Debentures and Bonds	0	0
6. Others (to be specified)	0	0
TOTAL	0	0

SCHEDULE 7 - CURRENT ASSETS

PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
1. Stock:		
a) Stores and Spares		
--- Stores and Spares	0	0
--- Loose Tools	0	0
--- Publications	0	0
--- Laboratory chemicals, consumables and glassware	0	0
--- Building Material	0	0
--- Electrical Material	0	0
--- Stationery	0	0
--- Water supply material	0	0
2. Sundry Debtors:		
a) Debts outstanding for a period exceeding six months	0	0
b) Others		
--- Fee Receivable	3,77,679	26,29,133
--- Consultancy Fee Receivable		30,95,033
--- other Receivable	7,63,752	
3. Cash and Bank Balances		
a) Cash Balance in hand(incl cheques / drafts and imprest)		
- Main Cash Balance	0	0
- Petty Cash Balance	0	0
- Imprest with department/sections/others	2,80,000	2,70,000
b) With Scheduled Banks:		
- In Current Accounts	75,72,555	11,72,43,413
- In Term Deposit Accounts - STDR	1,41,84,38,554	1,13,61,66,338
- In Savings Accounts	70,83,533	1,46,57,897
c) With Non-Scheduled banks:		
- In Current Accounts		0
- In Term Deposit Accounts		0
- In Savings Accounts		0
4. Post Office- Savings Accounts		0
TOTAL	1,43,45,16,073	1,27,40,61,814

ENCLOSURE TO SCHEDULE - 7 - BANK DEPOSITS (Item No 3(b))

HEAD OF ACCOUNT	OPG. BALANCE	DEPOSITED	MATURED	CLG BALANCE
Short Term Deposit Account	1,13,61,66,338	30,66,44,083	2,43,71,867	1,41,84,38,554
GRAND TOTAL	1,13,61,66,338	30,66,44,083	2,43,71,867	1,41,84,38,554

ENCLOSURE TO LOANS & ADVANCES AND OTHER ASSETS

HEAD OF ACCOUNT	OPG. BALANCE	ADVANCED	COLLECTION	CLG BALANCE
--- Advances to Co-ordinator	0	0	0	0
--- Advances to DOC	0	0	0	0
GRAND TOTAL	0	0	0	0

ANNEXURE A		
		Amount In Rupees
I.	Current Account	
	1 Main Account - 34999496394	3059163
	2 EMD - 35579546371	68272
	3 Fee - 35068108633	140184
	4 Fest - 36693749770	84655
	5 Gratuity - 40107272647	0
	6 Hostel - 39408132197	31451
	7 Leave Encashment - 40107273061	0
	8 Projects - 35410591939	13240
	9 Recruitment - 37722875550	43754
	10 Scholarship - 35246973163	55587
	11 Deduction - 35210003605	3996521
	12 FDP - 40107272308	79727
	13 HEFA - Prinicpal - 2785201000162	0
	14 HEFA - Interest - 2785201000163	2
	15 TSA - 10682601001	0
	Total (a)	7572555
	Savings Account	
	1 GIAN - 40726016939	147129
	2 PROJECTS - 40377943211	5063602
	3 ALUMNI - 40728915572	0
	4 GUEST HOUSE - 11012641680	1872802
	Total (b)	7083533
	ZBSA Account	
	1 PROJECTS - 60445769223	0
	2 PROJECTS - 464702010028215	0
	3 CRDTH - 110081230682	0
	Total (c)	0
II.	Term Deposits With Schedule Bank	
	1 State Bank of India	1418438554
	Grand Total	1433094642

SCHEDULE 8 - LOANS, ADVANCES & DEPOSITS

PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
1. Advances to employees (Non-interest bearing):		
a) Salary	0	0
b) Festival	0	0
c) LTC	0	0
d) Others (to be specified)	0	0
2. Long Term Advances to employees (Interest bearing)		
a) Vehicle loan	0	0
b) Home Loan	0	0
c) Others (to be specified)	0	0
3. Advances and other amounts recoverable in cash or in kind or for value to be received:		
a) On Capital Account	0	0
b) To Suppliers	0	0
c) Others	52,11,605	31,53,273
4. Prepaid Expenses	0	0
a) Insurance		
b) Other Expenses - Advance Rental to BSNL	7,28,650	7,28,650
5. Deposits		
a) Telephone	0	0
b) Lease Rent	0	0
c) Electricity	38,99,000	38,99,000
d) AICTE, if applicable	0	0
e) Others(to be specified)	0	0
6. Income Accrued:		
a) On Investments from Earmarked/ Endowment Funds	0	0
b) On Investments- Others	12,26,81,068.00	7,96,22,114
c) On Loans and Advances	0	0
d) Others (includes income due unrealized)	0	6,315
7. Other Current Assets receivable from UGC / sponsored projects		
a) Debit balances in Sponsored Projects	0	0
b) Debit balances in Sponsored Fellowship & Scholarship	0	0
c) Grants Receivable	0	0
d) Other receivables from UGC	0	0
8. Claims Receivable		
a) TDS Receivable	39,127	6,29,389
b) GST Receivable	3,10,827	9,760
TOTAL	13,28,70,277	8,80,48,501

If revolving funds have been created for House Building, Computer and Vehicle advances to employees, the advances will appear as part of Earmarked/endowment Funds. The balance against these interest- bearing advances will not appear in schedule.

SCHEDULE 9- ACADEMIC RECEIPTS

FEE FROM STUDENTS	CURRENT YEAR	PREVIOUS YEAR
A. Academic		
1. Tution fee	5,94,30,809	2,61,10,121
2. Admission fee	11,97,500	18,77,500
3. Enrolment fee		
4. Library Admission fee		
5. Laboratory fee		
6. Art & Craft fee		
7. Registration fee		
8. Convocation fee	4,82,000	7,70,500
TOTAL (A)	6,11,10,309	2,87,58,121
B. Examinations		
1. Admission Test fee		0
2. Annual Examination fee		0
3. Marksheet, Certificate fee		0
4. Entrance Examination Fee - Study Mode / Summer Quarter Exam Fee	45,51,400	14,13,334
TOTAL (B)	45,51,400	14,13,334
C. Other fees		
1. Identity Card fee	95,800	1,50,200
2. Fine/ Miscellaneous fee		
3. Medical fee		
4. Transportation fee		
5. Hostel fee	5,49,21,491	6,90,55,275
6. Mess fee		0
TOTAL (C)	5,50,17,291	6,92,05,475
D. Sale of Publications		
1. Sale of Admission forms	0	0
2. Sale of Syllabus and Question paper, etc.	0	0
3. Sale of Prospectus including admission forms	0	0
TOTAL (D)	0	0
E. Other Academic Receipts		
1. Registration fee for workshops, programmes	0	0
2. Registration fees (Academic Staff College)	0	0
TOTAL (E)	0	0
GRAND TOTAL (A+B+C+D+E)	12,06,79,000	9,93,76,930

SCHEDULE 10 - GRANTS / SUBSIDIES (IRREVOCABLE GRANTS RECEIVED)

PARTICULARS	PLAN			TOTAL PLAN	NON PLAN / UGC	CURRENT YEAR TOTAL	PREVIOUS YEAR
	GOVT OF INDIA	UGC					
		PLAN	SPC SCHEME				
Balance B/f	32,50,013	0	0	32,50,013	0	32,50,013	3,64,62,178
Add: Receipts during the year	70,82,00,000	-	-	70,82,00,000	-	70,82,00,000	46,91,50,000
Total	71,14,50,013	-	-	71,14,50,013	-	71,14,50,013	50,56,12,178
Less: Refunded to MoE		-	-	-	-	-	4,39,05,960
Balance	71,14,50,013	-	-	71,14,50,013	-	71,14,50,013	46,17,06,218
Less: Utilized for Capital Expenditure (A)	16,74,67,476	-	-	16,74,67,476	-	16,74,67,476	-
Balance	54,39,82,537	-	-	54,39,82,537	-	54,39,82,537	46,17,06,218
Less: Utilized for Revenue Expenditure (B)	56,44,45,763	-	-	56,44,45,763	-	56,44,45,763	45,84,56,205
Balance C/f (C)	(2,04,63,226)	-	-	(2,04,63,226)	-	(2,04,63,226)	32,50,013

A. Appears as additions to Capital Fund as well as additions to Fixed Assets during the year

B. Appears as income in the Income & Expenditure Account

C. (i) Appears under Current Liabilities in the Balance Sheet and will become the opening balance next year

(ii) Represented by Bank Balances, Investments and Advances on the Assets side.

SCHEDULE 11- INCOME FROM INVESTMENTS

PARTICULARS	Earmarked / Endowment Funds		Other Investments	
	CURRENT YEAR	PREVIOUS YEAR	CURRENT YEAR	PREVIOUS YEAR
1. Interest				
a) On Govt. Securities	-	0	0	0
b) Other Bonds/ Debentures	-	0	0	0
2. Interest on Term Deposits	-	-	2,40,79,477	12,36,189
3. Income accrued but not due on Term Deposits / Interest bearing advances to employees	-		4,36,26,682	4,11,21,744
4. Interest on Savings Bank Accounts	2,88,540	112921	-	0
5. Others (Interest Accrued but not due on SB Accounts)	2,349	6251	-	0
TOTAL	2,90,889	1,19,172	6,77,06,159	4,23,57,933
TRANSFERRED TO EARMARKED/ ENDOWMENT FUNDS	2,90,889		-	-
Balance	-	1,19,172	6,77,06,159	4,23,57,933

Note: Interest accrued but not due on Term Deposits from HBA fund, conveyance advance fund and Computer Advance fund and on Interest bearing advances to employees will be included here (item3), only where Revolving funds (EMF) for such advance have been set up.

SCHEDULE 12- INTEREST EARNED

Particulars	CURRENT YEAR	PREVIOUS YEAR
1. On Savings Accounts with Scheduled Banks	42,031	9,350
2. On Loans		
a) Employees / Staff		0
b) Others		0
3. On Debtors and Other Receivables		0
4. Others (Interest Accrued but not due on SB Accounts)	66	64
TOTAL	42,097	9,414

SCHEDULE 13- OTHER INCOME

A.Income from Land & Building	CURRENT YEAR	PREVIOUS YEAR
1. Hostel Room Rent	21,04,761	9,96,854
2. License fee	6,60,578	4,40,580
3. Hire Charges of Auditorium/Play ground/Convention Centre,etc.	0	0
4. Electricity Charges recovered	7,27,965	7,07,283
5. Water Charges recovered	2,43,258	2,39,144
Total (A)	37,36,562	23,83,861
B. Sale of Institute's Publications	0	0
C. Income from from holding events		
1.Gross Receipts from annual function/sports carnival	0	0
Less : Direct Expenditure incurred on the annual function/sports carnival	0	0
2. Gross Receipts from fetes	0	0
Less : Direct Expenditure incurred on the fetes	0	0
3. Gross Receipts for educational tours	0	0
Less : Direct Expenditure incurred on the tours	0	0
4. Others (to be specified and separately disclosed)	0	0
TOTAL(C)	0	0

SCHEDULE 13- OTHER INCOME

D. Others		
1. Income from Consultancy	0	18,60,600
2. RTI Fees	0	0
3. Income from Royalty	0	0
4. Sale of application form (recruitment)	16,80,368	0
5. Misc. receipts (Sale of tender form, waste paper, etc.)		
--- Miscellaneous Receipts	11,64,733	14,21,182
--- Tender Application Fee	3,75,512	46,011
--- Electricity Bill Recoverd from Employees	2,76,799	2,76,448
--- Rent Recoverd from Employees	20,75,215	22,81,545
--- Income from Guestes in Hostel	8,16,994	10,51,717
6. Profit on Sale/ Disposal of Assets:		
a) Owned Assets	1,14,020	0
b) Assets acquired out of grants, or received free of cost	0	0
7. Grants / Donations from Institutions, Welfare Bodies and International Organizations	0	0
8. Others (Specify)		-2,36,414
TOTAL(D)	65,03,641	67,01,089
GRAND TOTAL (A+B+C+D)	1,02,40,203	90,84,950

SCHEDULE 14- PRIOR PERIOD INCOME

Particulars	CURRENT YEAR	PREVIOUS YEAR
1. Academic Receipts	0	0
2. Income from Investments		0
3. Interest Income		0
4. Other Income	0	62,97,997
TOTAL	0	62,97,997

SCHEDULE 15- STAFF PAYMENTS & BENEFITS

PARTICULARS	CURRENT YEAR			PREVIOUS YEAR		
	PLAN	NON PLAN	TOTAL	PLAN	NON PLAN	TOTAL
a) Salaries and Wages						
i) Teaching	8,07,91,230		8,07,91,230	0	7,69,94,828	7,69,94,828
ii) Non-Teaching	4,44,04,455		4,44,04,455	0	4,10,20,780	4,10,20,780
iii) Ad-Hoc	0		0	0	0	0
b) Allowances and Bonus - Bonus for Non Teaching Staff	0		0	0		0
c) Contribution to Provident Fund	0		0	0		0
d) Contribution to Other Fund (Specify)	0		0	0		0
e) Staff Welfare Expenses	0		0	0	14,68,848	14,68,848
f) Retirement and Terminal Benefits	3,01,12,194		3,01,12,194	0	2,55,62,766	2,55,62,766
g) LTC facility	18,93,776		18,93,776	0	28,92,826	28,92,826
h) Medical facility	10,50,077		10,50,077	0	6,31,451	6,31,451
i) Children Education Allowance	0		0	0		0
j) Honorarium	0		0	0		0
k) Others (CPDA)	71,07,483		71,07,483	0	13,49,206	13,49,206
--- Outsourcing Salaries / Security Services	0		0	0		0
TOTAL	16,53,59,215	0	16,53,59,215	0	14,99,20,705	14,99,20,705

SCHEDULE 15A - EMPLOYEES RETIREMENT AND TERMINAL BENEFITS

PARTICULARS	PENSION	GRATUITY	LEAVE ENCASHEMENT	TOTAL
Opening Balance as on 01.04.2023	0	0	0	0
Addition: Capitalized value of contributions received from organizations	0	0	0	0
Total (a)	0	0	0	0
Less: Actual Payment during the year (b)	0	0	0	0
Balance Available as on 31.03.2024 c(a-b)	0	0	0	0
Provision required on 31.03.2024 as per Acturial Valuation (d)	0	5444914	9333787	14778701
A. Provision to be made in the Current Year (d-c)	0	5444914	9333787	14778701
B. Contribution to New Pension Scheme	15333493	0	0	15333493
C. Medical Reimbursement to Retired Employees	0	0	0	0
D. Travel to hometown on Retirement	0	0	0	0
E. Deposit Linked Insurance Payment	0	0	0	0
TOTAL (A+B+C+D+E)	15333493	5444914	9333787	30112194

Note:

SCHEDULE 16- ACADEMIC EXPENSES

PARTICULARS	CURRENT YEAR			PREVIOUS YEAR		
	PLAN	NON PLAN	TOTAL	PLAN	NON PLAN	TOTAL
a) Laboratory Expenses	0	63,62,220	63,62,220	0	26,94,713	26,94,713
b) Field work/ Participation in Conferences	0	92,232	92,232	0	88,001	88,001
c) Expenses on Seminars / Workshops	0	7,27,660	7,27,660	0	1,47,617	1,47,617
d) Payment to Visiting Faculty - Guest Lectures - Honorarium	0	11,87,090	11,87,090	0	68,68,791	68,68,791
e) Examination	0	9,64,125	9,64,125	0	1,43,925	1,43,925
f) Student Welfare expenses	0	14,29,314	14,29,314	0	15,63,914	15,63,914
g) Admission expenses	0	0	0	0	1,53,500	1,53,500
h) Convocation expenses	0	37,59,619	37,59,619	0	15,27,140	15,27,140
i) Publications	0	7,351	7,351	0	0	0
j) Stipend/ means-cum-merit scholarship	0	5,28,54,469	5,28,54,469	0	4,49,04,313	4,49,04,313
k) Subscription expenses	0	59,72,282	59,72,282	0	0	0
l) Others						
i) Seed Capital	0	0	0	0	0	0
ii) Seed Project Expenditure	0	1,58,095	1,58,095	0	34,33,096	34,33,096
iii) Hostel Expenditure	0	0	0	0	0	0
iv) Medals & Prizrs and Other Expenditure	0	56,780	56,780	0	88,859	88,859
v) Inaugration Expenses	0	0	0	0	0	0
vi) Adhoc Teaching	0	6,71,69,981	6,71,69,981	0	5,00,88,284	5,00,88,284
o) Others	0	4,40,137	4,40,137	0	0	0
TOTAL	0	14,11,81,355	14,11,81,355	0	11,17,02,153	11,17,02,153

SCHEDULE 17- ADMINISTRATIVE AND GENERAL EXPENSES

PARTICULARS	CURRENT YEAR			PREVIOUS YEAR		
	PLAN	NON PLAN	TOTAL	PLAN	NON PLAN	TOTAL
A. Infrastructure						
a) Electricity and Power	0	2,97,64,084	2,97,64,084	0	2,53,12,747	2,53,12,747
b) Water charges	0	0	0	0	0	0
c) Insurance	0	0	0	0	0	0
d) Rent, Rates and Taxes (including property tax)	0	0	0	0	0	0
B. Communication						
e) Postage and telegram	0	49,103	49,103	0	53,265	53,265
f) Telephone, Fax and Internet Charges	0	23,15,838	23,15,838	0	23,75,324	23,75,324
C. Others						
g) Printing and Stationary (Consumption)	0	35,88,193	35,88,193	0	12,38,445	12,38,445
h) Travelling and Conveyance Expenses (Officers Establishments)	0	20,08,611	20,08,611	0	21,66,685	21,66,685
i) Hospitality	0	4,46,500	4,46,500	0	7,00,000	7,00,000
j) Auditor's Remuneration	0	0	0	0	0	0
k) Professional Charges	0	6,64,355	6,64,355	0	4,26,000	4,26,000
l) Advertisement and Publicity	0	0	0	0	2,42,500	2,42,500
m) Magazines and Journals	0	0	0	0	0	0
n) Recruitment Expenses	0	0	0	0	0	0
O) Others (Specify)						
--- DOC - Contingent Expenses	0	28,61,514	28,61,514	0	58,39,840	58,15,840
--- Contingencies for Sp. Faculty & Allowances	0	0	0	0	0	0
--- Catering and maintenance of Guest House	0	44,78,926	44,78,926	0	3,43,521	3,43,521
--- Maintenance of VIP Bunglaw	0	0	0	0	0	0
--- Bank Charges	0	40,712	40,712	0	20,476	20,476
--- Medical Expenses	0	18,76,251	18,76,251	0	22,00,596	22,00,596
--- Inaguration Expenses	0	0	0	0	0	0
--- Sports	0	32,55,870	32,55,870	0	5,07,481	5,07,481
--- Identity Card expenses	0	1,78,175	1,78,175	0	35,560	35,560
--- Staff & Students Amenities	0	0	0	0	0	0
--- TDS Expenses	0	0	0	0	3,14,828	3,14,828
--- Outsourcing Salaries	0	12,45,35,604	12,45,35,604	0	10,42,72,677	10,42,72,677
--- Adhoc Non - Teaching	0	0	0	0	0	0
--- Other Miscellaneous Expenses	0	0	0	0	49,36,490	49,36,490
TOTAL	0	17,60,63,736	17,60,63,736	0	15,09,86,435	15,09,62,435

SCHEDULE 18- TRANSPORTATION EXPENSES

PARTICULARS	CURRENT YEAR			PREVIOUS YEAR		
	PLAN	NON PLAN	TOTAL	PLAN	NON PLAN	TOTAL
1. Vehicles (owned by educational institution)						
a) Running Expenses	0	0	0	0	0	0
b) Repairs and Maintenance	0		0	0		0
c) Insurance Expenses	0	0	0	0	0	0
2. Vehicles taken on Rent/ Lease						
a) Rent/ Lease Expenses	0	51,39,742	51,39,742	0	63,77,397	63,77,397
3. Vehicle (Taxi) hiring expenses	0	0	0	0		0
TOTAL	0	51,39,742	51,39,742	0	63,77,397	63,77,397

SCHEDULE 19- REPAIRS AND MAINTENANCE

PARTICULARS	CURRENT YEAR			PREVIOUS YEAR		
	PLAN	NON PLAN	TOTAL	PLAN	NON PLAN	TOTAL
a) Building	0	6,65,485	6,65,485	0	16,66,296	1,66,900
b) Furnitures and Fixtures	0	22,10,923	22,10,923	0	50,15,431	50,15,431
c) Plant and Machinery	0	1,72,02,892	1,72,02,892	0	1,09,48,701	1,09,48,701
d) Office Equipment	0	4,25,890	4,25,890	0	79,920	79,920
e) Computers	0	90,62,328	90,62,328	0	3,58,576	3,58,576
f) Laboratory & scientific equipment	0	22,16,917	22,16,917	0	14,34,517	12,13,701
g) Audio Visual Equipment	0	59,754	59,754	0	27,435	27,435
h) Cleaning Material & Services	0	8,51,496	8,51,496	0	8,53,895	8,53,895
i) Book binding charges	0	0	0	0	0	0
j) Gardening	0	94,22,604	94,22,604	0	78,09,260	78,09,260
k) Estate Maintenance	0	2,39,26,297	2,39,26,297	0	46,19,517	46,19,517
l) Others						
i) Internet & Email	0	90,66,616	90,66,616	0	64,22,674	64,22,674
ii) Roads & Water Lines	0	13,65,000	13,65,000	0	37,39,914	28,46,535
iii) Sports Amenities	0	1,49,166	1,49,166	0	6,97,110	6,97,110
iv) Others	0	76,347	76,347	0	35,730	7,61,342
TOTAL	0	7,67,01,715	7,67,01,715	0	4,37,08,976	4,18,20,997

The increase in expenditure pertaining to

- (A) Plant & Machinery (19(c)) : Addition of AMCs of Plants pertaining to Lifts Service, Waste Management, Pest Control Service, Water Softeners, Sewage Treatment Plants, R.O Plants, Repairs & replacement works of the HVAC Systems.
- (B) Computers (19(e)) : Purchase of Warranty for computers, IEEE Xplore Digital Library e database licence & SITC of the MR access point with 3 years enterprises license.
- (C) Estate Maintenance (19(k)) : Addition of AMCS pertaining to Electrical substation, Plumbing Material for Maintenance, Electrical Material For Estate Maintenance etc.,

SCHEDULES FORMING PART OF INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR 2022-23

SCHEDULE 20- FINANCE COSTS	CURRENT YEAR			PREVIOUS YEAR		
	PLAN	NON PLAN	TOTAL	PLAN	NON PLAN	TOTAL
a) Bank Charges	0	0	0	0	0	0
b) HEFA Loan Interest	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0

Note: If the amount is not material, the head Bank Charges could be omitted and these could be accounted as Admin Expn in Schedule 17

SCHEDULE 21- OTHER EXPENSES	CURRENT YEAR			PREVIOUS YEAR		
	PLAN	NON PLAN	TOTAL	PLAN	NON PLAN	TOTAL
a) Provision for Bad and Doubtful Debts/ Advances	0	0	0	0	0	0
b) Irrecoverable Balances Written-off	0	0	0	0	0	0
c) Grants / Subsidies to other Institutions /Organizations	0	0	0	0	0	0
c) Others (Specify)	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0

Note: Other expenses shall be classified as writes-off, provisions, miscellaneous expenses, loss on sale of investments, loss of fixed assets and loss on sale of fixed assets etc., and disclosed accordingly.

SCHEDULE 22- PRIOR PERIOD EXPENSES	CURRENT YEAR			PREVIOUS YEAR		
	PLAN	NON PLAN	TOTAL	PLAN	NON PLAN	TOTAL
1. Establishment Expenses	0	0	0	0	0	0
2. Academic Expenses	0	0	0	0	0	0
3. Administrative Expenses	0	0	0	0	0	0
4. Transportation Expenses	0	0	0	0	0	0
5. Repairs & Maintenance	0	0	0	0	0	0
c) Other Expenses	0	0	0	0	31,80,342	31,80,342
TOTAL	0	0	0	0	31,80,342	31,80,342

**NATIONAL INSTITUTE OF TECHNOLOGY
ANDHRA PRADESH**

RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31-03-2024

(Amount in Rupees)

RECEIPTS	Current Year	Previous Year	PAYMENTS	Current Year	Previous Year
I. Opening Balances:			I. Expenses		
a) Cash in hand			a) Establishment Expenses	16,53,59,215	20,00,08,989
--- Main Cash Book	0	0	b) Academic Expenses	14,11,81,355	6,16,13,869
--- Imprest with Departments	2,70,000	4,80,000	c) Administrative Expenses	17,60,63,736	15,09,86,435
b) Bank Balances			d) Transportation Expenses	51,39,742	63,77,397
Main Account - 34999496394	3,41,13,797	2,45,15,621	e) Repairs & Maintenance	7,67,01,715	4,37,08,976
EMD - 35579546371	50,79,157	2,47,65,108	f) Prior Period Expenses	0	31,80,342
Fee - 35068108633	3,94,94,919	17,76,54,842	g) Finance Cost	0	0
Fest - 36693749770	2,77,479	13,51,486			
			II. Payments made against Earmarked / Endowment Funds		
Gratuity - 40107272647	0	0	--- Earmarked Fund	41,63,163	0
Hostel - 39408132197	3,28,93,123	6,13,93,685	--- Endowment Fund	0	0
Leave Encachment - 40107273061	0	0			
Projects - 35410591939	67,780	0	III. Payments against Sponsored Projects / Schemes	2,10,43,063	0
Recruitment - 37722875550	22,34,335	22,34,984			
Scholarship - 35246973163	3,58,436	3,48,181	IV. Payments against Sponsored Fellowships / Scholarships	17,67,455	2,95,99,542
SC Recurring - 40107176534	0	4,23,86,075			
ST Recurring - 40107272002	0	2,45,14,247	V. Investments and Deposits made		
Deduction - 35210003605	27,14,308	43,75,163	a) Out of Earmarked / Endowments funds	0	0
FDP - 40107272308	10,075	2,29,497	b) Out of Own funds	0	0
Project (Savings) - 40377943211	1,34,96,872	3,19,51,945	VI. Term Deposits with Scheduled Banks	28,17,02,073	41,63,62,855
GIAN - 40726016939	1,43,215	10,80,473			
Alumni - 40728915572	0	0	VII. Expenditure on Fixed Assets and Capital Works - in - Progress		
Guest House - 110012641680	10,17,810	1,48,376	a) Fixed Assets	16,55,55,497	6,35,46,603
HEFA Principal - 2785201000162	0	0	b) Capital Work - in - Progress	0	0
HEFA Interest - 2785201000163	2	0	VIII. Other Payments incl statutory payments		
CRDTH - 110081230682	0	0	--- Statutory Liabilities	5,42,36,780	4,80,38,531
Projects - 464702010028215	0	0	IX. Refunds of Grants	0	7,60,05,960
TSA - 10682601001	0	0			
Projects - 60445769223	0	0	X. Deposits and Advances		
II. Grants Received			--- Other Deposits	0	70,36,198
a) From Govt. of India			--- Advances to Co-ordinator / Dept	0	46,81,008
--- Towards General Fund			--- Advance Rent to BSNL	7,28,650	7,28,650
--- Towards Revenue Exp			--- Advance CPWD	0	0
--- MHRD Grants Received	62,69,00,000	42,31,50,000	XI. Other Payments	74,21,98,695	22,04,473
b) From State Government					
c) From Other Sources			XII. Closing Balances		
III. Academic Receipts	38,74,94,227	18,59,20,719	a) Cash in hand		
IV. Receipts against Earmarked / Endowment Fund			--- Main Cash Book	0	0
--- Earmarked Fund	8,13,00,000	4,60,00,000			
--- Endowment Fund		0			
V. Receipts against Sponsored Projects / Schemes	1,94,23,625	0			

NATIONAL INSTITUTE OF TECHNOLOGY
ANDHRA PRADESH

RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31-03-2024

(Amount in Rupees)

RECEIPTS	Current Year	Previous Year	PAYMENTS	Current Year	Previous Year
VI. Receipts against Sponsored Fellowships and Scholarships	17,64,606	1,39,93,513			
			--- Imprest with Others / Departments	280000	2,70,000
VII. Income on Investments from			b) Bank Balances		
--- Earmarked / Endowment Funds	2,94,791	0	Main Account - 34999496394	30,59,163	3,41,13,798
--- Other Investments		0	EMD - 35579546371	68,272	50,79,158
			Fee - 35068108633	1,40,184	3,94,94,920
			Fest - 36693749770	84,655	2,77,479
VIII. Interest received on			Gratuity - 40107272647	0	0
--- Bank Deposits	2,40,79,477	12,36,189	Hostel - 39408132197	31,451	3,28,93,123
--- Loans and Advances			Leave Encashment - 40107273061	0	0
--- Savings Bank Account	42,095	7,17,796	Projects - 35410591939	13,240	67,780
IX. Investment encashed	0		Recruitment - 37722875550	43,754	22,34,335
			Scholarship - 35246973163	55,587	3,58,436
X. Term Deposits with Scheduled Banks encashed	0	2,52,18,238	Deduction - 35210003605	39,96,521	27,14,308
			FDP - 40107272308	79,727	10,075
			Project (Savings) - 40377943211	50,63,602	1,34,96,872
XI. Other Income (including PPI)			GIAN - 40726016939	1,47,129	1,43,215
--- Misc Fund for Hostel		0	Alumni - 40728915572	0	0
--- Other Income	9,25,813	90,84,951	Guest House - 110012641680	18,72,802	10,17,810
--- Misc Receipts for Institution	0	13,59,622	HEFA Principal - 2785201000162	0	0
--- Recruitment Application Fee	16,10,068	0	HEFA Interest - 2785201000163	2	2
XII. Deposits & Advances			CRDTH - 110081230682	0	0
--- Other Deposits	49,79,64,871	3,00,24,789	Projects - 464702010028215	0	0
--- Advances Accounts	0	45,77,735	TSA - 10682601001	0	0
--- Advance CPWD	0	0	Projects - 60445769223	0	0
--- Advance to BSNL	7,28,650				
XIII. Misc Receipts incl Statutory Receipts					
--- Statutory Liabilities	5,66,62,283	4,72,46,605			
XIV. Any Other Receipts	1,94,15,413	6,02,91,298			
	1,85,07,77,226	1,24,62,51,138		1,85,07,77,226	1,24,62,51,138

NATIONAL INSTITUTE OF TECHNOLOGY
ANDHRA PRADESH
NPS TIER-I ACCOUNT
BALANCE SHEET FOR THE YEAR ENDED ON 31-03-2024

(Amount in Rupees)

(Amount in Rupees)

LIABILITIES:	Current Year	Previous Year	ASSETS:	Current Year	Previous Year
NPS Tier-I Account			NPS Tier-I Account		
Opening balance	0	24,21,743	Subscription and Contribution due for 3/2024	0	0
Less: Subscription for 3/2022	0	-24,21,743	Investment	0	0
Add: Subscription for present year	2,64,65,715	2,47,15,965	Interest accrued but not due	0	0
Add: Interest Credited	0	0	Balance at Bank	0	0
Less: Transferred to NSDL	-2,64,65,715	-2,47,15,965			
Add: Subscription for 3/2023	0	0			
Excess of Income over expenditure					
Balance as on 01.04.2022	0	0			
Add: During the year	0	0			
TOTAL	0	0	TOTAL	0	0

NATIONAL INSTITUTE OF TECHNOLOGY
ANDHRA PRADESH
NPS TIER-I ACCOUNT
INCOME AND EXPENDITURE ACCOUNT FOR THE FINANCIAL YEAR 2023-24

(Amount in Rupees)

(Amount in Rupees)

<u>EXPENDITURE</u>	Current Year	Previous Year	<u>INCOME</u>	Current Year	Previous Year
Interest Credited to Subscribers' Accounts	0	0	Interest Earned on Investment	0	0
Bank Charges	0	0	Less: Interest Accrued 31/03/2022	0	0
Excess of Income over Expenditure	0	0	Interest Accrued but not due	0	0
TOTAL	0	0	TOTAL	0	0

NATIONAL INSTITUTE OF TECHNOLOGY
ANDHRA PRADESH
NPS TIER-I ACCOUNT
RECEIPTS AND PAYMENTS ACCOUNT FOR THE FINANCIAL YEAR 2023-24

(Amount in Rupees)

(Amount in Rupees)

RECEIPTS	Current Year	Previous Year	PAYMENTS	Current Year	Previous Year
Opening Balance as on 01/04/2023	0	24,21,743	Investment	0	0
NPS Tier-I Account			Withdrawal/Refund to NSDL	2,64,65,715	2,71,37,708
Own Subscription	1,10,27,474	1,02,99,114			
University Contribution	1,54,38,241	1,44,16,851	Closing Balance as on 31/03/2024	0	0
Interest Received on Investment	0	0			
Interest on saving bank a/c	0	0			
Investment Encashed	0	0			
TOTAL	2,64,65,715	2,71,37,708	TOTAL	2,64,65,715	2,71,37,708

SCHEDULE : 23

SIGNIFICANT ACCOUNTING POLICIES

1. BASIS FOR PREPARATION OF ACCOUNTS:

The Accounts are prepared under the Historical Cost Convention unless otherwise stated and generally on the accrual method of accounting.

2. REVENUE RECOGNITION

2.1 Fees from Students (except Tuition Fees), Sale of Admission Forms, Royalty and Interest on Savings Bank account are accounted on cash basis. Tuition Fees collected separately for each semester is accounted on accrual basis.

2.2 Interest on Investments are accounted on accrual basis.

2.3 The Institute has not given any advance to staff for House Building, Purchase of Vehicles and Computers. Hence no interest recognized.

3. FIXED ASSETS AND DEPRICIATION

3.1 Fixed assets are stated at cost of acquisition including inwards freight, duties and taxes and incidental and direct expenses related to acquisition, installation and commissioning.

3.2 No value is available for value of Land which was allotted by the State Government. Hence the value is shown as Rs.1.00.

3.3 Fixed assets are valued at cost less accumulated depreciation.

3.4 Depreciation on fixed assets is provided on straight line method, at the following rates

Tangible Assets:

1. Land	0%
2. Site Development	0%
3. Buildings	2%
4. Roads & Bridges	2%

5. Tube wells & Water Supply	2%
6. Sewerage & Drainage	2%
7. Electrical Installation & Equipment's	5%
8. Plant & Machinery	5%
9. Scientific & Laboratory Equipment	8%
10. Office Equipment	7.5%
11. Audio Visual equipment	7.5%
12. Computers & Peripherals	20%
13. Furniture, Fixture & Fittings	7.5%
14. Vehicles	10%
15. Lib Books & Scientific Journals	10%

Intangible Assets

- | | |
|---------------------------|---------|
| 1. E-Journals | 40% |
| 2. Computer Software | 40% |
| 3. Patents and Copyrights | 9 Years |

3.5 Depreciation is provided for the whole year on additions during the year

4. **STOCKS:** Expenditure on purchase of chemicals, glassware, publications and other stores is accounted as revenue expenditure, except that the value of closing stocks held on 31st March is set up as inventories by reducing the corresponding Revenue Expenditure on the basis of information obtained from Departments. The closing stock as at 31st March is **NIL**.

5. RETIREMENT BENEFITS

Retirement benefits of Rs. 1,54,38,241/-/- has been paid under employer share in NPS.

A provision for Gratuity of Rs. 54,44,914/- has been provided.

A provision for Leave Encashment of Rs. 93,33,787/- has been provided.

6. INVESTMENTS: - Nil -

7. Earmarked / Endowment Funds:

The details of funds received as Earmarked Funds for the year 2023-24 are furnished here under:

Sl No	Description	Grants Received	Grants Returned	Grants Utilized	Balance
1	SC Recurring Grants	3,88,00,000.00	0.00	3,88,00,000.00	0.00
2	ST Recurring Grants	2,08,00,000.00	0.00	2,08,00,000.00	0.00
3	SC Non - Recurring Grants	1,37,00,000.00	0.00	1,37,00,000.00	0.00
4	ST Non - Recurring Grants	80,00,000.00	0.00	80,00,000.00	0.00
TOTAL		8,13,00,000.00	0.00	8,13,00,000.00	0.00

8. CORPUS/CAPITAL FUND / OTHER FUNDS:

The fund was established in F.Y.2015-16. The Contributions from UGC, Central Government and State Government to the extent utilized for Capital nature are treated as additions to Capital Fund.

9. GOVERNMENT AND UGC GRANTS

9.1 Government Grants and UGC Grants are accounted on realization basis. However, where a sanction for release of grant pertaining to the financial year is received before 31st March and the grant is actually received in the next financial year, the grant is accounted on accrual basis and an equal amount is shown as recoverable from the Grantor.

9.2 To the extent utilized towards capital expenditure, (on accrual basis) government grants and grants from UGC are transferred to the Capital Fund.

9.3 Government and UGC grants for meeting Revenue Expenditure (on accrual basis) are treated, to the extent utilized, as income of the year in which they are realized.

9.4 Unutilized grants (including advances paid out of such grant) are carried forward and exhibited as a liability in the Balance sheet

10. INVESTMENTS OF EARMARKED FUNDS AND INTEREST INCOME ACCRUED ON SUCH INVESTMENTS:

----Nil---

11. SPONSORED PROJECTS: --- Nil ---

12. INCOME TAX

The income of the Institution is exempt from Income Tax under Section 10(23c) of the Income Tax Act 1961. No provision for tax is therefore made in the accounts.

a) **PRIOR PERIOD ADJUSTMENTS: --Nil--**

SCHEDULES 24: CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS:

ITEMS TO BE COVERED IN THIS SCHEDULE ARE LISTED BELOW

A. CONTINGENT LIABILITIES:

1.	Claim against the Entity not acknowledged as debts	--- Nil ---
2.	Guarantees and Letters of credit outstanding	--- Nil ---
3.	Other items for which the entity is contingently liable	--- Nil ---

B. NOTES ON ACCOUNTS:

1.	Commitments on Capital Account not provided for	This would arise in terms of contracts / arrangements in terms of which amounts would have to be paid for acquisitions / constructions of assets as and when they take place. The amount, net of advances is required to be disclosed. Rs.0/-
2.	Educational institutions should host following information in public domain so as to enable all other stakeholders to have a bird's eye view of educational institutions' capacity and capability	
(i)	No of students	2564
(ii)	No of teachers	146
(iii)	Collection on account of building fund and expenditure thereof	Nil
(iv)	Collection for sports activities and expenditure thereof	Amount Collected : Rs.0.00/- Expenditure incurred : Rs.0.00/-
(v)	Collection for co-curricular activities and expenditure thereof	Nil

(vi)	(a) Collection on account of development charges and expenditure thereon (b) Student Establishment & Maintenance	Amount Collected : Rs.48,60,000/- Expenditure incurred : Rs.*70,000/- Amount Collected : Rs.1,30,51,600/- Expenditure incurred : Rs. *0.00/-
(vii)	Collection for medical expenses and expenditure thereon	Amount Collected : Rs.0.00/- Expenditure incurred : Rs.*0.00/-
(viii)	Compliance with statutory dues like EPF and ESI	Not Applicable
(ix)	Salary structure of teachers	7 th CPC

The above information can also be calculated on per student basis.

* This amount has been refunded to the students who as opted out for the college.

3. Related Party Disclosures: --- No transactions were taken place during the financial year with related party.

4. The Details of balances in Savings Bank Accounts, Current Accounts and Fixed Deposit Accounts with Banks are enclosed as Attachment to the Schedule of Current Assets.

5. Electricity Security Deposit of Rs.38,99,000/- is shown under Schedule-8 "Loans - Advances.

6. An amount of Rs 1,19,172/- is shown under Schedule -2 "Designated/Earmarked/Endowment fund.

7. Total land given to the Institute by State Government is 172.08 Acres and no additional land was either given by the State Government or any other donor and also the Institute has not purchased / sold any land there upon till 31.03.2024

9. The Expenditure made by to the Institute from Institute fund (IRG) In furnished has under

S.No	Financial Year	Particulars	Amount
1	2023-24	Towards creating capital Assets	1,74,67,476.00
2	2023-24	Towards Recurring expenditure	9,30,072.00
Total			1,83,97,548.00

10. Previous Year figures have been regrouped wherever necessary

11. Schedules 1 to 24 are annexed to and form an integral part of the Balance Sheet at 31st March, 2022 and the Income & Expenditure account for the year ended on that date.

No.PDA(C)/CEA/NITAP/SAR 2023-24/2024-25/

Date:12.09.2024

सेवा में
सचिव,
भारत सरकार,
शिक्षा मंत्रालय,

महोदय,

विषय: Separate Audit Report on the Accounts of the National Institute of Technology, Andhra Pradesh, for the year 2023-24.

Separate Audit Report on the Accounts of the National Institute of Technology, Andhra Pradesh, for the year 2023-24, Annexure thereof and one copy of the Annual Accounts for the year 2023-24, are forwarded herewith for placing before both the Houses of Parliament.

The dates of presentation of Separate Audit Report in both the Houses of Parliament may please be intimated.

Receipt of this letter along with the enclosures may kindly be acknowledged.

संल:यथोपरि

भवदीय,

Sd/-

Principal Director of Audit (Central)

No.PDA(C)/CEA/NITAP/SAR 2023-24 /2024-25/

Date: 12.09.2024

Copy to Prof. B.S.Murthy, Director (In-charge), National Institute of Technology, Tadepallygudem, Andhra Pradesh, along with one copy of Annual Accounts for the year 2023-24 (English version), with a request to furnish Hindi version of the approved Annual Accounts 2023-24 (2 sets), to this Office.

संल:यथोपरर



(Ch.V. Sai Prasad)

**Director/ Central Expenditure Audit
O/o Principal Director of Audit (Central)**

**SEPARATE AUDIT REPORT OF THE COMPTROLLER & AUDITOR
GENERAL OF INDIA ON THE ACCOUNTS OF NATIONAL INSTITUTE OF
TECHNOLOGY (NIT), TADEPALLIGUDEM, ANDHRA PRADESH FOR
THE YEAR ENDED 31 MARCH 2024**

We have audited the attached Balance Sheet of National Institute of Technology, Andhra Pradesh (NIT AP), Tadepalligudem as at 31 March 2024, the Income &

Expenditure Account and Receipts & Payments Account for the year ended on that date under section 19(2) of the Comptroller & Auditor General's (Duties, Powers & Conditions of Service) Act, 1971. These financial statements are the responsibility of the management. Our responsibility is to express an opinion on these financial statements based on our audit.

2. This Separate Audit Report contains the comments of the Comptroller & Auditor General of India (CAG) on the accounting treatment only with regard to classification, conformity with the best accounting practices, accounting standards and disclosure norms, etc. Audit observations on financial transactions with regard to compliance with the Law, Rules & Regulations (Propriety and Regularity) and efficiency-cum-performance aspects, etc., if any are reported through Inspection Reports/CAG's Audit Reports separately.

3. We have conducted our audit in accordance with auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements. An audit includes examining, on a test basis, evidences supporting the amounts and disclosure in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.

4. Based on our audit, we report that:

i. We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of our audit;

ii. The Balance Sheet and Income & Expenditure Account/ Receipts & Payments Account dealt with by this Report have been drawn in the Format of

Accounts, prescribed by Government of India, Ministry of Education, for Central Educational Institutions.

- iii. In our opinion, proper books of accounts and other relevant records have been maintained by the Institute, in so far as it appears from our examination of such books.
- iv. We further report that:

A	Comments on Accounts
A	Balance Sheet
A.1	Application of Funds
A.1.1	Schedule 8- Loans, advances & deposits-₹13.29 crore
A.1.1.1	Reference Number: OBS-1436808 & OBS-1437058

An amount of ₹78,79,598 incurred towards Renewal of Cisco Merki License, Extension warranty of HP ProDesk PC and Purchase of Network license for Meraki MRLicense for the period from 04/2024 to 04/2026 (2024-25 & 2025-26) was included in the current year expenditure under Schedule 19- Repairs and Maintenance, thereby causing overstatement of current year expenditure and understatement of prepaid expenses under Schedule 8 Loans, Advances and Deposits by ₹78.80 lakh.

B	Income and Expenditure Account
B.1	Expenditure
B.1.1	Prior Period Expenses-₹ nil
B.1.1.1	Reference Number: OBS-1437048 & OBS-1436974

- (i) Prior period expenditure amounting to ₹ 20,65,678 (pertaining to the year 2022-23) was included in Grants utilised for Revenue expenditure under Schedule-10 Grants/Subsidies which is in contravention to the Rules of Grants-in-aid and their utilisation. Incorrect depiction of revenue grants utilised resulted in overstatement of Income in Income and Expenditure Accounts and thereby causing overstatement of Surplus as well as Capital Account to the extent of ₹ 20,65,678.
- (ii) An expenditure amounting to ₹46,57,184 pertaining to the year 2022-23 was shown under current year's expenditure instead of prior period expenses under Schedule-22. This resulted in understatement of Prior Period Expenditure and overstatement of current year's expenditure to the extent of ₹46,57,184.

B.1.2 Staff Payments and Benefits-₹16.54 crore

B.1.2.1 Reference Number: OBS-1436462

University contribution towards New Pension Scheme during the year was shown at ₹1,54,38,241 in Receipt & Payment accounts for the NPS Tier-I Account whereas the same under Schedule 15A-Employee Retirement and Terminal Benefits was shown as

₹1,53,33,493. This resulted in understatement of Schedule 15 as well as Expenditure account to the extent of ₹1,04,748.

C. General

C.1 Reference Number: OBS-1437052

(i) Total receipts during the year under Schedule 3 (b)-Sponsored fellowship and Scholarship were shown as nil whereas the same in Receipts & Payments account were ₹17,64,606.

(ii) Total receipts during the year Schedule 3(a) -Sponsored projects were shown at ₹2,12,86,301 whereas the same in Receipts & Payments account were ₹1,94,23,625. This needs to be rectified.

C.2 Reference Number: OBS-1436995

Action needs to be taken to adjust/clear the following amounts which are being carried forward as liabilities for two years without adjustment.

Sl. No.	Name of the fee collected	Balance accumulated as on 31.3.2023 & 2024 (₹)
1.	Alumni Association fee	92,10,000
2.	Games fee	71,34,035
3.	Medical fee	1,25,17,673
4.	Internet and ICT charges	1,60,77,600
5.	Magazine fee	17,61,400
6.	Student club fee	66,74,000
7.	Student library fee	2,01,70,337
8.	Technical association fee	29,91,800
9.	Fest fee	45,56,077

C.3 Reference Number: OBS-1437027

Under Schedule-3 Current Liabilities & Provisions

(i) The Opening Balance of "M.Tech stipend hold" was shown as ₹46,088 though the closing balance of the same as per previous year's annual accounts (2022-23) was nil. This needs to be rectified.

(ii) The liability of ₹10.00 crore under the name of NIT, Warangal is being carried forward every year without clearance.

C.4 Reference Number: OBS-1437033

Schedule 8- Loans, Advances & Deposits (3C-Others) included unsettled advances of Rs.30.50 lakh for more than two years which need to be adjusted.

S.No.	To whom advance given	Amount (₹)
1.	Former Director	20,50,000
2.	Recruitment advance to former Director	5,00,000
3.	PS to former Director	5,00,000
	Long pending unsettled advance	30,50,000

D. Grants-in-aid: The Institute received Grants-in-aid amounting to ₹70.82¹ crore during the year 2023-24 and utilised them fully as on 31 March 2024.

E. Management Letter

Deficiencies that have not been included in the Separate Audit Report have been brought to the notice of the Director, National Institute of Technology, Andhra Pradesh, through a Management letter issued separately for remedial/corrective action.

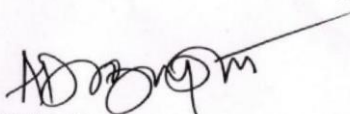
v. Subject to our observations in the preceding paragraphs, we report that the Balance Sheet, Income & Expenditure Account and Receipts & Payment Account dealt with by this report are in agreement with the books of accounts.

vi. In our opinion and to the best of our Information and according to the explanations given to us, the said financial statements read together with the Accounting Policies and Notes on Accounts and subject to the significant matters stated above and other matters

¹ Grants to acquire Capital Assets- Rs. 15.00 crore + Revenue Grants- Rs. 55.82 crore

mentioned in Annexure to this Audit Report, give a true and fair view in conformity with accounting principles generally accepted in India:

- a. In so far as it relates to the Balance Sheet, of the state of affairs of the National Institute of Technology, Andhra Pradesh (NIT AP), Tadepalligudem, as at 31 March 2024; and
- b. In so far as it relates to Income & Expenditure Account of the **Surplus** for the year ended on that date.



(Anindya Dasgupta)
Principal Director of Audit (Central), Hyderabad

ANNEXURE TO SAR

1. **Adequacy of Internal Audit System:** Internal Audit was not conducted for the year 2023-24.
2. **Adequacy of Internal Control System:** Internal Control System is not adequate due to the following reasons:
 - a. The Institute does not have Accounts Manual.
 - b. There is no Investment Policy.
 - c. There is no Internal Audit Manual.
 - d. Three Board of Governors (BOG) meetings were conducted as against four mandatory meetings.
 - e. Two Finance Committee (FC) were conducted as against four mandatory meetings.
 - f. No meeting was conducted in respect of Building and Works Committee (BWC) during the year.
3. **System of Physical verification of fixed assets:** Physical verification of fixed assets was conducted for the year 2023-24.
4. **System of Physical verification of inventory:** Physical verification of Inventory was conducted for the year 2023-24.
5. **Regularity in payment of statutory dues:** The Institute is regular in payment of statutory dues.



(Ch.V. Sai Prasad)
Director/ Central Expenditure Audit
O/o Principal Director of Audit (Central)

Annexure to Comment -A.1.1.1

S. No.	Vr. No.	Date	Period of expenditure	Nature of expenditure	Amount involving (₹)	Prepaid amount (₹)	Current year amount (₹)
1.	461 /2023-24	8-8-2023	June 2023 to May 2025	Extended Warranty for HP ProDesk 600 G4 MT PC for two years	13,27,500	7,74,375	5,53,125
2.	184 /2023-24	26-5-2023	Apr 2023 to Mar 2026	Meraki MR enterprise license for 3 yrs	24,86,920	16,57,947	8,28,973
3.	NIL	31-5-2023	17.04.2023 to 16.04.2026	Renewal of Cisco Merki License and Support for three years	79,95,667	54,47,276	25,48,391
Total:						78,79,598	

**Annexure to Comment
B.1.1.1.**

S. No.	Vr. No.	Date	Period of expenditure	Nature of expenditure	Amount involving (₹)	Prior period amount (₹)	Current year amount (₹)
1.	35/2023-24	17-4-2023	Mar 2023	AMC of water softeners	2,29,000	2,29,000	0
2.	277/2023-24	20-6-2023	Feb 2023 to Apr 2023	Lift maintenance charges	3,91,140	2,60,760	1,30,380
3.	233/2023-24	13-6-2023	Jan 2023 to Dec 2023	IEEE Xplore Digital Library e-database	48,71,111	12,17,778	36,53,333
4.	140/2023-24	11-5-2023	Mar 2023	Maintenance charges for Gardening	5,97,000	5,97,000	0
5.	750/2023-24	13-10-2023	Jan 2023 to Mar 2023	Municipal water charges	2,01,105	2,01,105	0
6.	106/2023-24	8-5-2023	Mar 2023	Guest house maintenance charges	2,37,271	2,37,271	0
7.	107/2023-24	8-5-2023	Feb 2023	Guest house maintenance	2,37,271	2,37,271	0
8.	125/2023-24	9-5-2023	Jan 2023	Guest house maintenance	2,37,271	2,37,271	0
9.	274/2023-24	21-6-2023	May 2022	Housekeeping maintenance	1,97,623	1,97,623	0
10.	273/2023-24	21-6-2023	Apr 2022	Housekeeping maintenance	1,97,623	1,97,623	0
11.	275/2023-24	21-6-2023	Mar 2022	Housekeeping maintenance	1,97,623	1,97,623	0

				e			
12.	1389/20 23-24	12-1-2024	Jun 2022	Housekeepi ng maintenanc e	1,97,623	1,97,623	0
13.	1378/20 23-24	18-1-2024	Mar 2022	Manpower at guest house and Director's Bungalow	1,62,309	1,62,309	0
14.	1379/20 23-24	18-1-2024	Apr 2022	Manpower at guest house and Director's Bungalow	1,62,309	1,62,309	0
15.	1380/20 23-24	18-1-2024	May 2022	Manpower at guest house and Director's Bungalow	1,62,309	1,62,309	0
16.	1390/20 23-24	18-1-2024	Jun 2022	Manpower at guest house and Director's Bungalow	1,62,309	1,62,309	0
Total						46,57,184	

Anindya Dasgupta, IAsAS
Principal Director of Audit (Central)

Management Letter

No. PDA(C)/CEA/NIT AP/SAR.2023-24/ 2024-25/

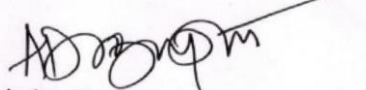
Date: 12/0G/2024

Audit of Annual Accounts of The National Institute of Technology, Andhra Pradesh, for the year 2023-24 was conducted during July-August 2024. Significant comments on accounts for the year 2023-24 are included in the Separate Audit Report issued separately to the Government of India, Ministry of Education, New Delhi and copies marked to you. The observations which are not included in the Separate Audit Reports, meriting the attention of the Management, are detailed below to enable your office to take necessary corrective action.

I would like to inform you that the issues included in the Part 'A' are persistent irregularities which have been included in the previous years' Separate Audit Reports but remained unattended to. Hence, remedial action may be arranged to be taken urgently in these issues.

Further other minor irregularities are in Part 'B' which have been noticed during the current audit and which require the necessary corrective action to be taken by the Management.

Yours sincerely,



(Anindya Dasgupta)
Principal Director of Audit (Central), Hyderabad

Prof. B.S.Murthy,
Director (In-charge),
National Institute of Technology, Tadepallygudem

Annexure to Management Letter

PART-A

NIL

PART-

B

1 Reference Number: OBS-1436G76

Action needs to be taken to verify the sponsored projects (Annexure) which have not been operated for the last one/two years.

2 Reference Number: OBS-1437567

The following Omissions/typographical Errors/Deviations need to be corrected:

1. In the heading on cover page of Annual Accounts for the year 2023-24 at "NATIONAL INSTITUTE OF TECHNOLOGY, ANDHRA PRADESH-534101", the INSTITUTE was misspelt as INSTITUE.

2. In the index of Annual Accounts,

(i) at Sl. No. 4, "Schedules to Incomes C Expenditure Account of Institute" was typed instead of "Schedules to Income C Expenditure Account of Institute".

(ii) at Sl. No. 8, "NPS Tier-I Income C Expenditure Accounts" was typed instead of "NPS Tier-I Income C Expenditure Account".

(iii) at Sl. No. 9, "NPS Tier-I Receipts C Payments Accounts" was typed instead of "NPS Tier-I Receipts C Payments Account".

3. At Page No.1 of Annual Accounts, under application of funds of Balance Sheet, "Loans, Advanes C Deposits" was typed instead of "Loans, Advances C Deposits".

4. At Page No.3 -Under Schedule 1 : Corpus Fund/ Capital Fund – in particular :-

In Deduction : Word "Income" was misspelt as "Incover".

5. Under Enclosure to Current Liabilities and Provisions (Schedule-3)(Page No. 9), "HEAD OF ACCOUNT-STATUTORY LIABILITIES" was misspelt as "HEAD OF ACCOUNT-STATRY LIABILITIES".

6. At Page No.10 - a) under Schedule 3(a) : Sponsored Projects : at Sl. No. 1, "Investigation" was misspelt as "Ivnestigation" and,

b) Under Schedule 3(b) : Sponsored fellowships and scholarships,

(i) in note 1, "total" was wrongly spelt as "toatal".

(ii) in note2, "Receivables" was wrongly spelt as "Receiables".

7. Under Schedule 3(c), in Note 3, word "side" was misspelt as "die".

8. At Page No.18 -Under Schedule 4(c) (i) : Patents and Copyrights,

(i) in particulars : Patents Granted, Balance as on 31.03.2023 of Patents obtained in 2022-23 may be included and “Patents granted during the current year (2022-23)” was typed instead of “Patents granted during the current year (2023-24)”.

(ii) in particulars : Patents pending in respect of Patents applied for, Expenditure incurred during 2023-24 may be included.

9. At Page No.19 - In the note under Schedule 5, the word “Schedule” was wrongly spelt as “Schdule”.

10. Under Enclosure to Schedule – 7- Bank Deposits, Page No. 22, “Enclosure” was wrongly spelt as “Encosure”.

11. At Page No. 29-Under Schedule 13 –Other Income, word “from” was repeated in (C). Income from from holding events.

12. Page no.34 -Under Schedule 16-Academic Expenses, in particulars, under (l) Others : “iv) Medals C Prizes and Other Expenditure” was typed as “iv) Medals C Prizrs and Other Expenditure”, and “(m) Others” was typed as “(o) Others”.

13. Page No.42 -Under NPS Tier-I Account, Income and Expenditure Account for the fina ncial year 2023-24, in income side, “31/03/2024’ was typed as “31/03/2022”.

14. Page No.49 – Sl. No.9 – “The expenditure made by to the Institute from Institute fund (IRG) In furnished has under” to be written as “The expenditure made by the Institute from Institute fund (IRG) is furnished as under”.

15. Page 50 -Sl.No.11- It was mistakenly mentioned as Balance Sheet at 31 March, 2022 as against Balance Sheet at 31st March, 20

3 Reference Number: OBS- 1437295

Under Depreciation Statement attached to Final Accounts, depreciation on Electric equipment (SL.No.436,437 & 438) was shown twice (at ₹13,600, ₹38,940 and ₹15,081) under current year column as well as previous year column for the assets acquired during the year. This resulted in overstatement of depreciation and understatement of Fixed assets by ₹67,421.

4 Reference Number: OBS-1437335 & OBS-1437081

Fixed Assets amounting to ₹71,079 procured during the financial year 2023-24 whose worth was more than ₹5,000, were incorrectly treated as revenue expenditure instead of capitalizing under Fixed Assets. This resulted in overstatement of Revenue Expenditure and understatement of Fixed Assets by Rs.71,079. Depreciation needs to be provided with regard to these assets.

Sl. No	Item purchased	Vr. No. and date	Amount (₹)	Classification of asset
1	LG 27M1600 LCD monitor	Vr. No.1064/2023-24	12,649	Computer & Peripherals

2	GCO 220 Chop saw Bosch	Vr.No.1006/ 2023-24	33,772	Office Equipment
3	GDC 141 Wood machine Bosch	Vr.No.1006/ 2023-24	13,358	Office Equipment
4	Voltage Stabilizers	449/2023-24 dt. 4-8- 2023	11,300	Furniture & Fixtures
Total			71,079	

5 Reference Number: OBS-1437179

As per Register of Medicines, there was a stock of 162 varieties of Medicines as on 31.3.2024. However, Stock balance under Schedule 7-Current Assets as well as Schedule 23 - Significant Accounting Policies (at Sl.No.4) was shown as NIL. This resulted in understatement of Current Assets and hence needs to be verified and rectified.

6 Reference Number: OBS-1436782

As per Formats of Financial Statements for Central Higher Education Institutions - Expenses/Liabilities and Provisions should be disclosed item wise clearly.

a) In Schedule 17 (C) (k) (Administrative and General Expenses), an amount of ₹6,64,355 was shown under Professional Charges which included Legal Charges amounting to Rs. 3,20,000. These Legal Charges have to be separately exhibited, but the said amount was included in Professional Charges.

b) In Schedule 16 (o) (Academic Expenses), an amount of ₹4,40,137 was shown under Others which includes Inauguration Expenses of ₹74,679. These Inauguration Expenses have to be separately exhibited under Schedule 16(l)-v -Inauguration Expenses.

c) Schedule 3 (6) (g)-Other Liabilities-Unidentified Credit was shown Zero in Current Year as well as Previous Year columns. However, in enclosure to Current Liabilities and Provisions (Schedule-3) in the Annual Accounts for the year 2022-23, an amount of ₹45,501 was exhibited as Opening and Closing Balance. These need to be reconciled.

7 Reference Number: OBS-1436995

The depiction of minus figure of ₹51,287 in respect of Fest sponsorship resulted in understatement of Current Liabilities and Provisions by ₹0.51 lakh.

8 Reference Number: OBS- 1437295

The difference of ₹12 between the value of assets as per Balance sheet (₹4,29,86,46,307) and Written Down Value as per Depreciation statement (₹4,29,86,46,295) needs to be reconciled.

9 Reference Number: OBS-1437018

(i) The difference amount of ₹1,592 shown under credit balance of Schedule 3(a) - Sponsored Projects (₹77,22,837) and receipts against sponsored fellowships and scholarships under Schedule 3 – Current liabilities and Provisions (₹77,24,429) needs to be reconciled and rectified.

(ii) The sponsored projects were incorrectly exhibited under 6(c) Receipts against sponsored fellowship & Scholarships of Schedule 3 instead of under 6(b) Receipts against sponsored projects

10 Reference Number: OBS-1437027

Under Schedule-3 Current Liabilities & Provisions-the opening balance of ₹1,28,147 under “Other deduction on salaries” was shown as liability, which was not carried forward from previous year’s annual accounts and had not been cleared during the current year also.



(Ch.V. Sai Prasad)

**Director/ Central Expenditure Audit
O/o Principal Director of Audit (Central)**

Annexure

Comment 1 of Management Letter -Reference Number: OBS-1436G76

S. No.	Name of the sponsored project	OB (₹)	Transactions during the year		CB (₹)	Remarks
			Cr	Dr		
1	DST-SERB	5,68,316	-	-	5,68,316	No transactions for the last two years
2	Dr. Thella Baburao	19,607	-	-	19,607	No transactions for the last one year
3	Dr. J.Krishna Murthy	11,275	-	-	11,275	No transactions for the last one year
4	Dr. T Ramesh	10,004	-	-	10,004	No transactions for the last one year
5	Dr. T Reshma	70,127	-	-	70,127	No transactions for the last one year
6	Dr. Subbarao Pichuka	1,10,773	-	-	1,10,773	No transactions for the last one year
7	Project A	1,96,848	-	-	1,96,848	No transactions for the last one year
8	Project B	1,80,000	-	-	1,80,000	No transactions for the last one year

Sl. No	Name of the Autonomous Body	:	National Institute of Technology, Tadepalligudem, Andhra Pradesh		
			Year of accounts: 2023-24		
1.	Date of submission of the accounts to Audit by the autonomous body	:	04.07.2024		
2.	Where applicable, reasons for returning the accounts for revision indicating why the accounts could not be certified with qualifications	:	--		
3.	Date of submission of revised accounts to Audit where revision was considered essential	:	--		
4.	Dates on which audit was taken up and completed	:	15.07.2024 to 01.08.2024		
5.	Date of issue of draft SAR to Autonomous Body for replies/comments	:	20.08.2024		
6.	Date of receipt of replies/comments from Autonomous Body (if received)	:	29.08.2024		
7.	Date of issue of draft SAR including replies/comments of Autonomous Body along with an Aide-memoire to CAG's office for approval	:	06.09.2024		
8.	(a) Date of CAG's office letter communicating approved SAR	:	10.09.2024		
	(b) Date of receipt of letter and approval at 8(a)	:	10.09.2024		
9.	Date of issue of final Separate Audit Report to Govt. of India/State Govt./CAG's office English version – Hindi version (if required) ---	:	12.09.2024		
10.	Reasons for delay, if any, at various stages	:	-----		
11.	Dates of presentation of the previous year Separate Audit Report in both the Houses of Parliament	:	Year of the Report	Lok Sabha	Rajya Sabha
			2022-23	24.07.2024	24.07.2024