

ANNUAL REPORT

2021-22

NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL

TELANGANA - 506004

National Institute of Technology Warangal

List of Board of Governors

Prof. N. V. Ramana Rao Chairperson I/c, Board of Governors, NITW & Director, National Institute of Technology, Warangal.	
Ms. Saumya Gupta, IAS Joint Secretary (NITs) Ministry of Education New Delhi.	
Ms. Darshana M Dabral Jt. Secretary & Financial Advisor MoE, Dept. of Higher Education Shastri Bhawan, New Delhi.	
Prof. B.S. Murty Director Indian Institute of Technology, Hyderabad Kandi, Sangareddy.	
Prof. N.V. Umamahesh Professor Department of Civil Engineering National Institute of Technology, Warangal.	
Dr. K. Ramesh Associate Professor Dept. of Computer Science & Engineering National Institute of Technology, Warangal.	
Shri S. Goverdhan Rao Secretary, Board of Governors & Registrar National Institute of Technology, Warangal.	

Foreword



Prof. N.V. Ramana Rao, Director, NIT Warangal

National Institute of Technology, Warangal is one of the premier Technical Institutes of the country imparting high quality technical education. With the support of all stakeholders, the Institute has done reasonably well on all fronts in the academic year 2021-22. The Institute is continuously striving to maintain its standards and live up to the expectations during this post-COVID times. The Institute has also thrived well on all fronts in the last academic year 2020-21.

Though online teaching through LMS was a new experience to all of us, the LMS team of the Institute has created the necessary LMS infrastructure so that the academic activities could be conducted smoothly in the online/offline (hybrid) mode without interruption during the second semester of the academic year 2021-2022. The academic year has been successfully completed with the support of all the stakeholders. I congratulate all the teaching faculty for the remarkable transformation from “Online” mode to post COVID hybrid and offline mode. I am sure that this experience will facilitate enhancing our outreach programs, and blended hybrid mode will become a part of our teaching- learning process.

The 20th Convocation of the Institute was held in offline mode after COVID times for two days on 3rd (UG) and 4th (PG&PhD) September, 2022. This is the first of this kind in the convocation history of NIT Warangal to have conducted in two days. Prof. SUDHIR K. JAIN, Vice-Chancellor, Banaras Hindu University, Varanasi, UP, India, was the chief guest of the first day of convocation ceremony. Dr. N. KALAISELVI, Director General, CSIR & Secretary, DSIR, Government of India, was the chief guest of second day on the occasion.

The NITW Alumni Association has been doing great work by contributing in different ways for the development of the Institute. Research, Publications and Patents have become a part of our Institute Work Culture. I am very happy that a large number of our faculty colleagues were recently sanctioned prestigious externally sponsored R&D Projects. I congratulate all of them. A large number of patents have been filed in this academic year 2021-22. My special congratulations to all the faculty colleagues whose patents were granted. I am confident that this work culture of "Academics blended with Projects, Publications and Patents" will take the Institute to greater heights. I am sure this will definitely make an impact on the NIRF ranking of NITW to move forward in the forthcoming NIRF rank from the previous rank among the engineering colleges of the country.

The Institute has been periodically starting new programs making use of the expertise available in the Institute and the demands of the society. The curriculum of all the programs is being revised by incorporating the provisions of the NEP-2020. The revised curriculum has been implemented from this academic year 2021-22. A new a 5-years integrated M. Sc program has been started from this academic year 2021-22. This is only a beginning, but we have a long way to go before all the provisions of the NEP-2020 are completely implemented.

The students of the Institute have been excelling on all fronts. It is heartening to note that our Institute has done extremely well in the campus placements. A record number of UG and PG students were selected with attractive packages in the academic year 2021-22 when compared to the previous academic year.

The Annual Report 2021-22 is a compilation of all the achievements of the institute, details of the academic and research activities, training and placement activities and various other developments taking place in the institute. I place on record my deep sense of appreciation to all those involved in the preparation of this Annual Report. I also take this opportunity to thank the members of the faculty, non-teaching staff, students and alumni of the institute, who are relentlessly working for the betterment of the institute.



Prof. N.V. Ramana Rao

Director

NIT Warangal

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Vision Statement

Towards a global knowledge hub, striving continuously in pursuit of excellence in education, research, entrepreneurship and technological services to the society



Mission Statement

- “Imparting total quality education to develop innovative, entrepreneurial and ethical future professionals fit for globally competitive environment."

- "Allowing stake holders to share our reservoir of experience in education and knowledge for mutual enrichment in the field of technical education."

- "Fostering product oriented research for establishing a self-sustaining and wealth creating center to serve the societal needs."

Objectives

- To create an educational environment in which students are prepared to meet the challenges of the modern industry and society, by equipping them with

  - Up-to-date technical knowledge
  - Analytical and practical skills
  - Management competence
  - A creative and innovative approach to work.

- To strengthen links with industry and commerce through lasting partnerships focusing on

  - Curriculum Development
  - Training and Placement
  - Consultancy and other services
  - Research and Development

- To provide within the Institute an environment where the staff are encouraged to maintain intellectual curiosity and improve technical expertise through continuous staff development programmes.

- To create conditions in which the institute is recognized as a self-regulating prime centre in Technical Education.



Brief Profile of the Institute

Pandit Jawaharlal Nehru, the architect of Modern India, had conceived and implemented the concept of Regional Engineering Colleges for technical advancement and promotion of national integration in the country. He laid the foundation stone for REC Warangal on 10th October 1959. REC Warangal holds the distinction of being the first in the series of RECs established in the country. Now elevated to the status of an NIT, it has the distinction of offering the highest number of postgraduate courses among NITs.

This reputed institute has sailed through several phases in its historical journey assimilating newer experiences, academic as well as administrative, and yet retaining its original sheen and noble objectives. Established as an affiliate college of Osmania University (1959), REC Warangal came under the purview of Jawaharlal Nehru Technological University (1972) with full academic autonomy, a status enjoyed by a few RECs in the country then. It was an affiliate college of Kakatiya University (1976) and then on, steadily marched towards a University Status. It was declared a Deemed University in the year 2002. It was subsequently given the status of Institute of National Importance and renamed as National Institute of Technology, Warangal.

During this span of 62 years of existence, it has become a proud Alma Mater for over 19623 graduates in different branches of technology, 12785 postgraduates and 837 doctorates in technology, science, management and humanities. The alumni of the institute can be found across the globe adorning very high positions in academics, industry, politics, administration, research and entrepreneurship, thus creating an international flavour for the institute. As part of its admission policies today, it draws students from different parts of the world for its UG, PG and Ph.D. programmes under Direct Admission for Students Abroad (DASA) and other schemes of the Government of India. It has thus become an International Institute of excellence, offering quality technical education. In its quest for establishing a brand image commensurate with its international complexion, it is striving towards excellence in several areas.

The Institute is presently offering eight undergraduate programmes in Civil, Electrical and Electronics, Mechanical, Electronics and Communication, Metallurgical & Materials, Chemical, Computer Science and Engineering and Biotechnology streams; and the thirty-postgraduate Programmes in diverse branches of Engineering, Sciences, MBA and MCA. The Institute also offers Ph.D. programmes in Engineering, Science, Management and Humanities disciplines.

A large number of patents have been filed in this academic year 2021-22. The Institute strives to set higher standards for itself in imparting technical education, research and consultancy works. In this direction, several curricular and administrative reforms have taken place, notable among them being the introduction of Choice Based Credit System (CBCS) of Education.

The Institute has been periodically starting new programs making use of the expertise available in the Institute and the demands of the society. The curriculum of all the programs is being revised by incorporating the provisions of the NEP-2020. The revised curriculum has been implemented from this academic year 2021-22. A new 5-years integrated M. Sc program has been started from this academic year 2021-22. This is only the beginning, but we have a long way to go before all the provisions of the NEP-2020 are completely implemented.

The Institute has research projects sponsored by agencies such as CSIR, DST, DIT, DRDO, NRB, BRNS etc. during the year 2020-21.

The institute has good infrastructure, which is being further improved under Technical Education Quality Improvement Programme (TEQIP-Phase III) funded by the World Bank. The placement of students through campus interviews during the year 2020-21 has been excellent. More than 200 organizations visited the campus and offered a total of 1111 placements. Among the students, 646 were B.Tech students, 465 were students from M.Tech., M.Sc. (Tech.), M.Sc., MCA., and MBA.

The institute is located in a sprawling area with a residential campus with accommodation for all students and most of the members of the staff. Hostel facilities are being further strengthened by creating new hostels as well as renovating the existing ones. Sports facilities include huge playgrounds, an impressive modern stadium with a turf wicket for cricket and a national level 400 meter track. The Institute has 28 student clubs and 12 departmental associations, which organize several activities in order to promote holistic personality development among students.

The NITW Alumni Association has been doing great work by contributing in different ways for the development of the Institute.The Alumni Association of the Institute is very active with fifteen chapters in various cities of the country and one chapter in USA. The institute maintains a close rapport with the alumni in all matters relating to the institute’s progress.

INTRODUCTION

1. Education System

Choice Based Credit System: Both the UG and PG programmes follow the Choice Based Credit System of Teaching and evaluation. The academic year is divided into two semesters, namely, odd and even semester.

Attendance: Attendance in all classes (lecturers / tutorials, laboratories, workshops etc) is compulsory. A student may be debarred from appearing for an examination on grounds of unsatisfactory attendance, which is less than 80% of number of classes held in each course at PG level and 75% in the case of UG courses.

Registration: Every student is required to be present and register at the commencement of each semester on the day notified in the Academic calendar.

- Registration for all courses is compulsory during the first two semesters of B.Tech programme and it is automatic when a student is admitted into the 1st year.
- From 3rd semester onwards, the registration is organized departmentally under the supervision of the Head of the Department.
- Only those students will be permitted to register who have:
  - Cleared all the dues of the Institute and Hostel in the previous semesters.
  - Paid the prescribed fees for the current semester, and
  - Not been debarred from registering for a specified period on disciplinary or any other ground.
  - Academic Requirements:
    - To be able to register for the second year and continue his/her study in the Institute at the end of the first year, a student must have completed satisfactorily at least 30 credits (after supplementary examinations) and
    - To be able to register for the third year, a student should have satisfactorily completed at least 30 credits in II year first and second Semesters put together (after supplementary examinations) and should have satisfactorily cleared all the courses of 1st year.
    - To be able to register for the IV year, a student should have satisfactorily completed at least 30 credits in III year first and second Semesters put together (after supplementary examinations) and should have satisfactorily cleared all the courses of 2nd year.

The Institute is adopting having the education system followed in IITs in terms of semester pattern, updating curriculum and choice based credit system.

2. New Initiatives

The institute is developing infrastructure as well as facilities for Teaching, Research and Development with a view to further enhancing the quality of teaching, learning and research. The following centres of excellence for research have been established.

- Centre for Advanced Materials (CAM)
- Centre for Automation and Instrumentation (CAI)
- Centre for Urban Transport Studies (CUTS)

New Centres being established

- Centre for Sustainable and Alternate Energies (CSAE)
- Teaching Learning Centre

AN OVERVIEW

3. Historical Background

National Institute of Technology, Warangal, formerly known as Regional Engineering College, witnessed some memorable milestones during its triumphant march:

October 10, 1959	Pandit Jawaharlal Nehru laid foundation stone for the College, the first in the chain of NITs (formerly RECs) in the country.
November 10, 1959	Registration of the Society of Regional Engineering College, Warangal
August, 1965	Commencement of UNESCO assistance project.
October, 1972	Change of affiliation of the College from Osmania University to Jawaharlal Nehru Technological University. Academic autonomy conferred on the College.
August 19, 1976	Change of affiliation of the College from JNTU to Kakatiya University.
July, 1978	AICTE grants the status of QIP (Quality Improvement Programme) Centre to the Civil Engineering Department for Ph.D and M.Tech. Programmes
August, 1981	Admission into B.Tech. Through Common Entrance Examination for students from Andhra Pradesh.
January, 1990	The College is selected for assistance under UK-INDIA Project.
April, 1994	Commencement of UK - INDIA RECs Project.
October, 1996	Commissioning of a dedicated Internet connectivity through VSAT dish.
October 23-24, 1999	40th Foundation Day Celebrations. His Excellency Dr.C.Rangarajan, Governor of A.P. and General K.V. Krishna Rao (Retd. Chief of Army Staff) graced the occasion by their presence.
July 20, 2001	AICTE grants the status of QIP (Quality Improvement Programme) Centre to the following departments: Ph.D. Programme – Departments of Mechanical Engineering, Chemical Engineering and Mathematics M.Tech. Programme – Departments of Electrical Engineering and the Department of Electronics and Communication Engineering.
September 2001	Fiber Optic Campus LAN established
July, 2002	Board of Governors resolved to approve the new Memorandum Of Association (MOA) for conversion of Regional Engineering College, Warangal into National Institute of Technology (NIT), Warangal.
September, 2002	Institute renamed as National Institute of Technology, Warangal and conferred the status of Deemed University.
July, 2003	Commencement of admission of students into B.Tech through AIEEE stream
August, 2003	**Change over to IIT Pattern in Curriculum** Development and method of evaluation.
June, 2004	The Institute receives an assistance of Rs. 11.41 crores from the World Bank under TEQIP (Technical Education Quality Improvement Programme).
March 1, 2004	**Ist Convocation of NIT Warangal**. Prof. S.K. Joshi, Chairman, Board of

	Governors, IIT Roorkee and Former Director General, CSIR delivers the First Convocation address.
June 5, 2007	NIT's Act of Parliament received the assent of the President
January 25, 2008	Bharath Ratna Dr. A. P. J. Abdul Kalam, Former President visits Campus during TECHNOZION
	Honourable Minister of MHRD Smt. Purandeswari inaugurated New Computer Centre and lays foundation stone for Ultra Mega Hostel
October 10, 2008	NIT (REC) Golden Jubilee Year Celebrations
December 28, 2009	Inauguration of the Centre for Innovation and Incubation.
October 2012	NIT Warangal entered into an MoU with the Erasmus Mundus (Indo – Europe Academic Exchange Programme) Scheme, called, "HERITAGE" Programme. Eight Indian Higher Education Institutes (IHEIs) and 12 European Higher Education Institutes (EHEIs) are the major partners under this Programme
October 15, 2013	11th Convocation was held on 15th Oct. 2013, in which Dr. Krishna M. Ella, Chairman BOG, NIT Warangal, was the Chief Guest
August 9, 2014	12th Convocation was held on 9th Aug. 2014, in which Padma Sree Avinash Chander, Scientific Adviser to Raksha Mantri, Secretary, Dept. of Defence R&D and DG DRDO, Govt. of India, was the Chief Guest
December 13, 2015	13th Convocation was held on 13th Dec. 2015, in which Padma Shri A.S. Kiran Kumar, Secretary, Dept. of Space Chairman, Space Commmission and Chairman, ISRO, was the Chief Guest
October 8, 2018	Golden Jubilee Inauguration by His Excellency, Vice President of India, Sri M. Venkaiah Naidu.
August 17, 2019	17th Convocation was held on 17th Aug. 2019, in which, Prof. Nitin Kumar Tripathi, Director Special Degree Programs, AIT Bangkok, Thailand, was the Chief Guest
October 22, 2020	Foundation laid for Rudrama Devi Ladies Hostel Complex
October 22, 2020	Inauguration of Visvesvaraya Centre for Skill Development
October 22, 2020	Inauguration of Sardar Vallabhbhai Patel Athithi Griha
October 22, 2020	18 th Convocation held in Virtual mode
July 21, 2021	Curriculum revision as per NEP-2020.
October 01, 2021	Established Central Research Instrumentation Facility
October 01, 2021	Inauguration of NITW – SIEMENS Centre of Excellence
October 19, 2021	Foundation stone laid for Major Dhyan Chand Sports Complex
October 19, 2021	Foundation stone laid for Academic Buildings of :- (Civil and Mechanical Engineering Departments)
October 19, 2021	Inauguration of NITW – Hitachi Energy Smart Electric Grid Laboratory
October 19, 2021	19 th Convocation held in Virtual mode

2021 - 2022	Started 5 Year Integrated M.Sc. in Mathematics, Physics and Chemistry
2021 - 2022	Curriculum of all the programs revised by incorporating the provisions of the NEP-2020 and implemented
September 03-04 2022	20 th Convocation held in off line mode

4. Location

Warangal is located at the latitude of 18.01 and the longitude of 79.58.

The institute is located on 248 acres extending on either side of Hyderabad – Warangal National Highway at a distance of 3 Kms from Kazipet Railway Station and 12 Kms from Warangal Railway Station. It is 140 Kms from Hyderabad. Warangal enjoys a unique position in the cultural and historical map of the state. The exquisite and intricate architecture in Ramappa, Thousand Pillar Temple, Bhadrakali Temple and the Warangal Fort have been centres of attraction. Lovely gardens, wildlife sanctuaries, lakes and rocks in the vicinity are other places of interest for students and visitors. The place enjoys pleasant climate throughout the year except for a spell of hot summer during May-June.

5. Campus

It is a residential campus with all the basic facilities for the students, faculty and other staff to live on the campus. The following statistical figures might give an idea about the buildings on the campus. The plinth areas of the different buildings on the campus are: Administrative Building (3,331 Sqm), Academic Buildings (34,448 sqm), Library Building (3,610 sqm), Students Hostels (32,642 sqm), Sports Pavilion and Gallery (784 Sqm), Director’s Bungalow, Staff Quarters and Guest House (31,598 sqm.) The road network in the campus runs to a length of 12 kms. Work is in progress for creating more space for varied purposes referred to above and also for constructing a network of roads which has become necessary in view of the hectic construction under way.

6. Administration

The Board of Governors (BoG)

1.	Prof. N. V. Ramana Rao, Chairperson I/c, Board of Governors, NITW & Director, N.I.T, Warangal.	Chairperson
2.	Ms. Saumya Gupta, IAS Joint Secretary (NITs) Ministry of Education, New Delhi	Member
3.	Ms. Darshana M Dabral, Jt. Secretary & Financial Advisor Dept. of Higher Education M.H.R.D, Government of India Shastri Bhawan, New Delhi.	Member
4.	Prof B.S. Murty Director, Indian Institute of Technology, Hyderabad Kandi, Sangareddy.	Member
5.	Prof. M. Sydulu Department of Electrical Engineering National Institute of Technology, Warangal	Member (upto 30.10.2021)
6.	Prof. N.V. Umamahesh Department of Civil Engineering National Institute of Technology, Warangal.	Member (from 1.11.2021)
7.	Dr. K. Ramesh Associate Professor, Department of CSE National Institute of Technology	Member
8.	Shri S. Goverdhan Rao Registrar National Institute of Technology, Warangal.	Secretary

The Finance Committee (FC)

1.	Prof. N. V. Ramana Rao Chairperson I/c, Finance Committee, NITW & Director, N.I.T, Warangal.	Chairperson
2	Ms. Saumya Gupta, IAS Joint Secretary (NITs) Ministry of Education, New Delhi	Member
3.	Ms. Darshana M Dabral Jt. Secretary & Financial Advisor Dept. of Higher Education M.H.R.D, Government of India Shastri Bhawan, New Delhi.	Member
4.	Prof. M. Sydulu Department of Electrical Engineering National Institute of Technology Warangal	Member (up to 30.10.2021)
5.	Prof. N.V. Umamahesh Department of Civil Engineering, National Institute of Technology Warangal.	Member (from 01.11.2021)
6	Sri S. Goverdhan Rao Registrar National Institute of Technology Warangal.	Member-Secretary

Building Works Committee (BWC)

1.	Prof. N. V. Ramana Rao Chairperson & Director National Institute of Technology, Warangal.	Chairperson
2	Shri Anil Kumar Director, (Finance), Integrated Finance Division Department of Higher Education, MoE, New Delhi	Member
3.	Prof. P. Bangaru Babu Dean (Planning & Development), National Institute of Technology, Warangal.	Member (up to 08.02.2022)
4.	Prof. M. Chandrasekhar Dean (Planning & Development), National Institute of Technology, Warangal.	Member (from 09.02.2022)
5.	Shri N. Naga Sambasiva Rao Chief Engineer Central Public Works Dept., Nirman Bhawan, Sultan Bazar, Hyderabad	Member
6.	Shri K. Kishan Chief General Manager (Opn-II)(Electrical), TSNPDCL, Warangal.	Member
7.	Shri S. Goverdhan Rao Registrar, National Institute of Technology, Warangal.	Member-Secretary

The Director

The Head of the Institution is the Director with full financial and administrative powers.

The Senate

CHAIRMAN

Prof. N. V. Ramana Rao

Director, NITW & Chairman, Senate

Shri. S. Goverdhan Rao
Registrar, NITW & Secretary, Senate

Members (Internal)

1 Dr. K.V. Jayakumar
2 Dr. N.V. Uma Mahesh
3 Dr. C.S.R.K. Prasad
4 Dr. M. Chandrasekhar
5 Dr. C.B. Kameswara Rao
6 Dr. P. Ananda Raj
7 Dr. D. Ramaseshu
8 Dr. G. Rajesh Kumar
9 Dr. Deva Pratap
10 Dr. P. Ratish Kumar, HoD , Civil
11 Dr. Gunneswara Rao T.D.
12 Dr. V. Ramana Murty
13 Dr. Sydulu Maheswarapu
14 Dr. D.M. Vinod Kumar
15 Dr. D.V.S.S. Siva Sarma
16 Dr. Bhagwan K Murty
17 Dr. N. Subrahmanyam
18 Dr. N. Viswanathan
19 Dr. V.T. Somasekhar
20 Dr. S. Srinivasa Rao,
21 Dr. M. Sailaja Kumari, HoD, EED.
22 Dr. K. Madhu Murthy
23 Dr. CSP Rao (on Deputation)
24 Dr. S. Srinivasa Rao
25 Dr. P. Bangaru Babu
26 Dr. A. Venu Gopal
27 Dr. N. Selva Raj
28 Dr. P. Ravikumar
29 Dr. G. Amba Prasad Rao
30 Dr. L. Krishnanand
31 Dr. A. Neelakanteswara Rao
32 Dr. K.V. Sai Srinadh
33 Dr. R. Narasimha Rao
34 Dr. Adepu Kumar, HoD, MED
35 Dr. V. Suresh Babu
40 Dr. C.B. Rama Rao
41 Dr. G.V.S. Nageswara Rao
42 Dr. N. Narasaiah
43 Dr. Asit Kumar Khanra, HoD, MMED(upto 7.12.21)
44 Dr. T. Mahesh Kumar, HoD, MMED (from 8.12.21)
45 Dr. Sonawane Shirish Hari
46 Dr. A. Venu Vinod
Dr. A. Sarat Babu
47 Dr. K. Anand Kishore
48 Dr. DVLN Somayajulu (on Deputation)
49 Dr. BB Amberkar
50 Dr. S.G. Sanjeevi
51 Dr. R.B.V. Subrahmanyam
52 Dr. P. Radha Krishna
53 Dr. R. Satish Babu, HoD, Biotech (up to 3.8.21)
54 Dr. K. Narasimhulu, HoD, Biotech (From 4.8.21)
55 Dr. J.V. Ramana Murthy
56 Dr. Y.N. Reddy
57 Dr. K.N.S. Kasiviswanadham
58 Dr. Debashis Dutta
59 Dr. D. Srinivasacharya
60 Dr. P. Muthu, HoD, Mathematics
61 Dr. L. Ramgopal Reddy
Dr. R.L.N. Sai Prasad
62 Dr. K. Venugopal Reddy
63 Dr. D. Dinakar, HoD, Physics.
64 Dr. A. Ramachandraiah
65 Dr. K. Laxma Reddy
66 Dr. V. Rajeswara Rao
67 Dr. K.V. Gobi
68 Dr. P. Venkata Sri Laxmi
69 Dr. Vishnu Shanker, HoD, Chemistry
70 Dr. M. Ravinder Reddy, HoD, SoM (from 8.7.21)
71 Dr. V. Ramadevi, HoD, SoM (upto 7.7.21)
72 Dr. K. Madhavi, HoD, H&SS

36 Dr. NVSN Sharma (on Deputation)
37 Dr. T. Kishore Kumar
38 Dr. L. Anjaneyulu, HoD, ECE.
39 Dr. N. Bheema Rao
73 Dr. P. Ravi Kumar, HoD, Physical Education.
74 Dr. Dayanidhi
75 Dr. P. Madhusudhan Reddy

External Members (upto 20.08.2021)

1. Prof. T. Sundarajan
2. Dr. (Mrs.) Kirti Srivastava
3. Prof. Debashis Acharya

External Members (from 21.08.2021)

1. Prof. KVL Subramaniam, IIT Hyderabad
2. Prof. Sujatha Mukiri, EFLU, Hyderabad
3. Prof. Ch. Subrahmanyam, IIT Hyderabad

The Deans' Committee

The Deans' Committee assists the Director in taking decisions in day-to-day Administration.

The Deans

The Director is assisted by 6 Deans namely, Dean (Research & Consultancy), Dean (Academic), Dean (Faculty Welfare), Dean (Planning & Development), Dean (Students' Welfare) and Dean (International Relations & Alumni Affairs). There are Associate Deans to assist the Deans in day-to-day activities

The Heads of the Departments

The Heads of the Departments look after all the affairs pertaining to the respective Department.

The Registrar

The Registrar is the head of the non-teaching staff of the Institute. He is assisted by Deputy Registrars and they in turn are assisted by the Assistant Registrars.

The Chief Warden

The Chief Warden is the head of the students' hostels. He is in turn assisted by a team of wardens.

Other Committees

a) Deans' Committee:

All the Deans are the members with the Director, as Chairman and Registrar as the Secretary

b) The Hostel Advisory Council (H.A.C.):

1. Director	…	Chairman
2. Registrar	…	Member
3. Dean (Students' Welfare)	…	Member
4. Dean (Faculty Welfare)	…	Member
5. Dean (International Relations & Alumni Affairs)	…	Member
6. Dean (Planning & Development)	…	Member
7. Dean (Academic)	…	Member
8. Chief Warden	…	Convener

Warden Representatives:

1. Dy.Chief Warden	…	Member
2. Dy.Chief Warden, (Priyadarshini Mess)	…	Member
3. Dy.Chief Warden (Warden Mess-I)	…	Member
4. Warden IFC-C	…	Member
5. Warden (Block- 1.8K)	…	Member
6. Warden(Block-11)	…	Member
7. Warden (Block- 1K)	…	Member
8. Warden(New LH)	…	Member
9. Warden (Block-1K)	…	Member

Student Representatives:

1. Mess Secretary	…	Member
2. LH Representative	…	Member

Special Invitees:

1. Professor I/c E&MU	…	Member
2. Medical Officer	…	Member
3. Executive Engineer (E&MU)	…	Member

c) Departmental Academic Committee – Undergraduate (DAC UG):

1. Head of the Department	…	Chairman
2. Two Professors of the Department	…	Members
(By rotation, for two years)		
3. Two Associate Professors of the Department	…	Members
4. Two Assistant Professors	…	Members
(By rotation for two years)		

Note:

1. The Head of the department will nominate one of the members as secretary.
2. There shall be one DAC-UG for every department that is involved in the teaching for the B.Tech. programme.
3. The Chairman may co-opt and / or invite more members including external experts while framing the curriculum / or revising the curriculum.

Functions:

1. To monitor the conduct of all undergraduate courses offered by the Department and course work of undergraduate programme.
2. To ensure academic standards and excellence of the courses offered by the department.

3. To develop the curriculum for the undergraduate courses offered by the Department and recommend the same to the Board of Studies.
4. To review and approve grades.
5. To consolidate the registration of students and communicate to the course instructors and Dean (Academic Affairs).
6. To consider any matter related to the undergraduate programme(s) of the Department.
7. To take up any responsibility or function assigned by the Senate or the Chairman of the Senate or Chairman of the Board of Studies.
8. To examine the malpractices of examinations and submit a suitable recommendation to the Dean, Academic Affairs.

d) Departmental Academic Committee – Postgraduate & Research (DAC-PG&R):

1. Head of the Department	…	Chairman
2. Two Professors of the Department (By rotation, for two years)	…	Members
3. Two Associate Professors of the Department (By rotation, for two years)	…	Members
4. Two Assistant Professors of the Department possessing Ph.D Degree	…	Members

Note:

1. The Head of the Department will nominate one of the members as secretary.
2. There shall be one DAC-PG&R for every department, which is involved in the teaching for any of the PG degree programme.
3. The Chairman may co-opt and / or invite more members including external experts while framing or revising the curriculum.

Functions:

1. To monitor the conduct of all postgraduate courses and course work of Ph.D programme.
2. To ensure academic standards and excellence of the courses offered by the department.
3. To develop the curriculum for the postgraduate courses offered by the department and recommend the same to the Board of Studies.
4. To review and approve grades.
5. To consolidate the registration of Postgraduate and Ph.D., students and communicate to the course instructors and Dean (Academic Affairs).
6. To consider any matter related to the postgraduate programme(s) and Ph.D. programme of the Department and make suitable recommendation to the Board of Studies.
7. To monitor the progress of research of all the candidates of the Department.
8. To forward the recommendations of the Doctoral Scruitiny committee and the panel of External Examiners as recommended by the DSC to the Dean (Academic Affairs).
9. To take up any responsibility or function assigned by the Senate or the Chairman of the Senate of Chairman of the Board of Studies.

e) Doctoral Scrutiny Committee (DSC):

1. Head of the Department	…	Chairman
2. Research Supervisor	…	Member & Secretary

3. Co-supervisor (if any)	…	Member
4. Two faculty members of the Department	…	Members
5. One faculty member of the allied Department	…	Member

Note:

If the Research Supervisor happens to be the Head of the Department, another faculty member of the Department has to be included in DSC.

Functions:

1. To formulate the course work of the candidate.
2. To scrutinize syllabi of courses of self-study (if any) prepared by the Research Supervisor(s) and send the same to Dean (Academic Affairs).
3. To finalise and forward the grades of the candidate in each of the courses to the Dean (Academic Affairs).
4. To review the progress of the candidate once every six months and send the progress report to the Dean (Academic Affairs).
5. To assess and approve the research proposal of the candidate.
6. To assess and approve the adequacy of work in the Pre-synopsis seminar and communicate the same through Departmental Research Committee to the Dean (Academic Affairs).
7. To act as members of the Viva-Voce Board along with the external examiner and submit the Viva-voce report.

f) Stores Purchase Committee

1. Dean (Research & Consultancy)	…	Chairman
2. Board Members (Internal) - Two	…	Members
3. Registrar	…	Member
4. Head of the concerned Department	…	Member
5. Principal Investigator, in case of Projects	…	Member
6. Dy. Registrar (Central Stores)	…	Convenor

g) Disciplinary Committee

1. Director	…	Chairman
2. Dean (R&C)	…	Member
3. Dean (AA)	…	Member
4. Dean (FW)	…	Member
5. Dean (SW)	…	Member
6. Dean (P&D)	…	Member
7. Registrar	…	Member & Secretary

h) Accommodation Committee

Registrar & Estate Officer	…	Chairman
Associate Dean (Works)	…	Member
Dy. Registrar (Admin)	…	Member

i) Library Advisory Committee

1. Dean (Academic)	…	Chairman
2. Registrar	…	Member
3. One faculty member from each Academic Department to be nominated by the Hod	…	Member
4. Students one each from UG, PG and Ph.D to be nominated by Dean (SW)	…	Member
5. Librarian	…	Member Secreatary

j) Institute Dispensary

Registrar	…	In-Charge

k) Games Committee

Dr. M. Ravinder Reddy	…	Chairman

l) SC / ST Cell

Dr. J. Ravi Kumar	…	Coordinator

m) Minorities Cell

Dr. Arif Ali Baig Mogal	…	Coordinator

n) Internal Complaint Committee

1	Dr. B. Lakshmi	**---**	Chairperson
2	Dy. Registrar (Admn)	**---**	Member
3	Dr C. Vanitha	**---**	Member
4	Dr. J. Pranitha	**---**	Member
5	Ms. Ruhi Fathima Secretary, Human Rights & Crime Control council,Warangal	**---**	Member
6	Three student council members to be nominated by Dean (SW	**---**	Member(s)

o) Differently Abled People Cell

Dr. V. Rama	…	Coordinator

p) OBC Cell

Dr. V. Rama	…	Coordinator

q) Legal Cell

Registrar	…	In-Charge

r) Administrative & Other Officers

S.No	Name	Designation	Dept./Sec.
1	Shri Goverdhan Rao	Registrar	Registrar Office
2	Prof.A.Venu Gopal	Dean (Academic) (upto 23.01.2022)	Dean' Office
3	Prof.K.N.S.Kasi Viswanadhan	Dean (Academic) (from 24.01.2022 To 21.03.2022)	Dean' Office
4	Prof.N.V.Uma Mahesh	Dean (Academic) (from 22.03.2022)	Dean' Office
5	Prof.J.V.Ramana Murthy	Dean (Student & Welfare) (upto 23.12.2021)	Dean' Office
6	Prof.Puli Ravi Kumar	Dean (Student & Welfare) (from 24.12.2021)	Dean' Office
7	Prof.P.Bangaru Babu	Dean (Planning & Development) (upto 10.02.2022)	Dean' Office
8	Prof M.Chandrasekhar	Dean (Planning & Development) (from 11.02.2022)	Dean' Office
9	Prof.V.Rajeswar Rao	Dean (Research & Consultancy)	Dean' Office
10	Prof.G.Amba Prasad Rao	Dean (Faculty Welfare)	Dean' Office
11	Prof.N.Selvaraj	Dean (IR&AA) (upto 30.01.2022)	Dean' Office
12	Prof.N.Subramanyam	Dean (IR&AA) (from 31.01.2022)	Dean' Office
13	Dr. K. Veeranjaneyulu	Librarian	Central Library
14	Shri T. Krishna Sai	Principal SO(from 20.09.2021)	CRIF
15	Shri Venugopala Reddy Tamma	Superintending Engineer (from 10.06.2021)	E & MU
16	Shri S. Venkateswaran	Dy. Registrar	Administration
17	Shri Soumen Karmakar	Dy. Registrar	Academic Section
18	Shri Sudam Damu Adlinge	Dy. Registrar (from 07.05.2021)	Purchase & Stores
19	Shri Vijay Anavaratham C	Dy. Registrar (from 07.05.2021)	Accounts Section
20	Shri Iranna Mallappa Shettar	Dy. Librarian (from 18.10.2021)	Central Library
21	Shri Prasanth. P	Senior SAS Officer (from 08.10.2021)	Physical Education
22	Shri P. Bhargava Reddy	Technical Officer	CISS/MIS
23	Shri D. Govinda Rao	Technical Officer (from 14.09.2021)	CISS/MIS
24	Shri V. Sudhakar	Technical Officer (from 14.09.2021)	CRIF
25	Shri Madupu Harish	Technical Officer (from 21.09.2021)	CRIF
26	Shri D. Ravi Kumar	Technical Officer (from 14.12.2021)	Centre For Technical Services (CTS)
27	Smt Gollapalli Sree Rama Sanjeevini	Technical Officer (from 04.02.2022)	Centre For Technical Services (CTS)
28	Dr. Ch. Karthik Chintala	Medical Officer	Institute Health Centre
29	Dr. Pradeep Dodda	Medical Officer	Institute Health Centre
30	Dr.Anchoori Karthik	Medical Officer	Institute Health Centre
31	Shri G. Ramesh	Executive Engineer	E & MU
32	Shri Pelluru Suresh	Executive Engineer	E & MU
33	Shri Gardasu Balakrishna	Assistant Librarian	Central Library
34	Shri Hari Devasoth	SAS Officer (15.09.2021)	Physical Education

s. Non-Teaching Staff

S No. Name & Designation

SUPERINTENDENT SG-II

1. Raju G

SUPERINTENDENT

1. Quraishi A.A
2. Prakash S S
3. Quamar Pasha S A
4. Shamshul Hussain Md

ASSISTANT (SG-II)

1. Sridhar Rao M
2. Bhasker J
3. Jai Singh A
4. Dilip Kumar T
5. Prem Kumar P
6. Narender V
7. Srinivas Rao K
8. Suresh V
9. Aliullasha Khader Md
10. Mahesh Kumar Y
11. Hymavathi P
12. Veda Prakash G
13. Srinivas R
14. Dayakar P
15. Indira Priyadarshini B

JUNIOR ASSISTANT

1. Jafar Md
2. Akbar Md
3. Heerulal P
4. Kishore Kumar N
5. Inqushaf Ali Md.
6. Sridhar Kumar G
7. Sambaiah G
8. Srikanth P

PERSONAL ASSISTANT

1. Renuka D
2. Ashok Kumar P

TECHNICAL ASSISTANT SG-II

1. Rameeja Bee K
2. Rangilal B

S No. Name & Designation

SENIOR SUPERINTENDENT

1. Samba Murthy M
2. Zafar Md
3. Gopinath R

ASSISTANT (SG-I)

1. Bala Subramanyam G
2. Shiva Kumar P
3. Rama Rao A (Retired on 31.07.2021)
4. Srinivasa Reddy M
5. Sanjeeva M
6. Kiran Kumar T
7. Sadar Lal M
8. Afzal Md.
9. Nagender Rao K
10. Shyamala J
11. Venkateswarlu S
12. Parasuramulu R

SENIOR ASSISTANT

1. Bhaskar T
2. Someshwar Rao A
3. Ms. Husna
4. Padmaja G
5. Kiran Kumar A
6. Ashwin Kumar D
7. Dr. Nanu Lunavath
8. Srinivas T
9. Dr. Mangilal B
10. Rajanna M
11. Jagadeesh Kumar A
12. Ramesh D
13. Vara Prasad A
14. Bhaskar P
15. Shoukat Ali Md.
16. Rajendra Prasad P
17. Suresh kumar. M
18. Srinivas J

SENIOR TECHNICAL ASSISTANT

1. Karuna Rani M
2. Aparna T (Vol. Retired on 01.11.2021)
3. Govinda Rao D (up to 13.09.2021)
4. Padma Sri K. S. S. S.
5. Ramesh K

TECHNICAL ASSISTANT

1. Veeranna T
2. Srinivas B
3. Suryanarayana T
4. Harinath N
5. Nagabhushanam A
6. Laxman A
7. Narasimha M
8. Ramesh K(Jr.)
9. K. Ravinder
10. Sudhakar V (up to 13.09.2021)

TECHNICIAN (SG-II)

1. Anand Singh K
2. Sunil Kumar D
3. Devender B
4. Veeraiah D
5. Sambayya V
6. Ramesh M
7. Rajamouli A
8. Ramulu B
9. Kumaraswamy M
10. Shankaraiah M
11. Shankaraiah G

JUNIOR ASSISTANT (UPGRADED)

1. Ramesh Babu Ch
2. Bikshapathy Y
3. Farooq Azam Md
4. Narayana. G
5. Kamala K
6. Kumar Swamy M
7. Krishna Veni P
8. Gouri Shankar G (Expired on 06.03.2022)
9. Sambaiah A
10. Srihari G (Retired on 31.01.2022)
11. Ramesh V
12. Ravinder M
13. Eshwar P
14. Bikshapathy A
15. Narasaiah J
16. Aruna Mary D
17. Shaheen Begum
18. Zaheeruddin Md.

ASST. ENGINEER

1. Sardar Singh M

TECHNICIAN (SG-I)

1. Purushottam K
2. Ramchander Y
3. Parasu Ramulu K
4. Sudhakar N
5. Venugopal S
6. Srinivasulu N
7. Ravinder R
8. Ravi S
9. Veeranna T
10. Veerender V
11. Chandra Narayana A
12. Vijay Kumar K
13. Mahendra Kumar K

TECHNICIAN / WORK ASSISTANT

1. Santosh G
2. Anandam G (Expired on 14.05.2021)
3. Ramesh A
4. Ramesh A
5. Rajender K
6. Abdul Gaffar Md
7. Mallikarjun K
8. Mahboob Md

TECHNICIAN (UPGRADED)

1. Rajaiah K
2. Srinivas A
3. Dayakar Y
4. Saraiah P
5. Yadimallu P
6. Murali Krishna K
7. Laxmi T
8. Venkatamma K
9. Rajamma J
10. Rajanna J (Expired on 13.05.2021)
11. Ilaiah R
12. Surayya B
13. Jayasri B
14. Pratap G
15. Murali G
16. Yakaiah J (Retired on 30.06.2021)
17. Kumara Swamy A

CARETAKER SG-I

1. Venkateswarlu E (Retired on 31.08.2021)
2. Dasthagir Md (Retired on 30.06.2021)
3. Komaraiah J
4. Beeraiah G
5. Venkataswamy N (Retired on 30.06.2021)
6. Sammaiah P
7. Ramulu .N (Retired on 30.06.2021)

CARETAKER SG-II

1. Ialiah G
2. Krishna Swamy N
3. Sambaiah G
4. Chandru G (Expired on 10.10.2021)
5. Sadanandam B
6. Kumara Swamy B
7. Yellaiah S
8. Azeez Khan Md
9. Raju K
10. Sambaiah Gillapally
11. Ramulu N
12. Afzal Pasha. Mohd
13. Jayaraju K

SENIOR CARETAKER

1. Ravi. M
2. Tirupathi T
3. Lal G
4. Kumara Swamy. K
5. Kumar. P
6. Kumar. B
7. Kumara Swamy.G
8. Sadanandam .B
9. Sammaiah N
10. Cheralu M
11. Veeraiah K
12. Prasad S
13. Venkataiah K
14. Damodar Reddy V (Retired on
15. Nirmala.R
16. Ramesh.T

SENIOR ATTENDANT

1. Ashok K

7. Acaemic Programmes

The Institute offers the following undergraduate, postgraduate and doctoral programmes:

B.Tech., 5 years Integrated M.Sc., M.Tech.,(Regular & Self Finance), M.Sc., M.Sc (Tech), MCA, MBA, PG Diploma (One year full time) and **Ph. D (Regular & Self Finance)**

8. Courses offered

a). Undergraduate Courses (B.Tech Engineering and 5 Years Integrated M.Sc.)

Under Graduate (B.Tech Engineering Degree & 5 years Integrated M.Sc.) programs are offered in the following disciplines by the respective program hosting departments.

Branch/Stream	Current Year Sanctioned Intake (JOSAA)	DASA	Study in India	ICCR	COMPEX (NEPAL)	Total Intake	Year Started in
Civil Engineering	115	22	10	4	2	153	1959
Electrical and Electronics Engineering	136	24	10	5	2	177	1959
Mechanical Engineering	135	23	10	5	2	175	1959
Electronics & Communication Engineering	136	24	14	5	2	181	1971
Metallurgical and Materials Engineering	78	5	5	1	2	91	1965
Chemical Engineering	115	11	10	4	2	142	1964
Computer Science and Engineering	136	24	16	5	2	183	1983
Biotechnology	78	5	5	1	2	91	2006
5 Years Integrated M.Sc. Mathematics	20	0	0	0	0	20	2021
5 Years Integrated M.Sc. Physics	20	0	0	0	0	20	2021
5 Years Integrated M.Sc. Chemistry	20	0	0	0	0	20	2021
Total Seats	**989**	**138**	**80**	**30**	**16**	**1253**	

b). Postgraduate Programmes in Engineering M.Tech (Regular & Self finace), Sciences & Management

Statement showing total enrolment of the PG - students for the academic year 2021-2022:

Sl. No.	Engineering	Indian - Regular			Indian - Self Finance (Started from 2021-22)			ICCR			Total (Including ICCR)	Year Started In
		Intake	Boys	Girls	Intake	Boys	Girls	Intake	Boys	Girls		
	Civil Engineering											
1	Engineering Structures	30	26	4	5	2	2	2	1	0	35	1967
2	Geo-Technical Engineering	30	21	9	5	3	0	2	0	0	33	1964
3	Transportation	30	25	4	5	2	1	2	0	0	32	1968

	Engineering											
4	Water Resource Engineering	30	18	12	5	0	1	2	0	0	31	1964
5	Remote Sensing & GIS	20	12	6	5	0	0	2	0	0	18	2000
6	Environmental Engg.	30	24	6	5	2	3	2	0	0	35	2004
7	Construction Technology & Management	30	27	2	5	4	1	2	0	0	34	2008
8	Waste Management	20	13	6	5	0	0	2	0	0	19	2020
	Electrical Engineering										0	
1	Power Electronics & Drives	33	28	4	5	2	0	2	0	0	34	1964
2	Power Systems Engg.	32	25	7	5	0	1	2	0	0	33	1964
3	Smart Electric Grid	30	20	10	5	1	2	2	0	0	33	2020
	Mechanical Engineering										0	
1	Thermal Engineering	22	22	0	5	5	0	2	0	0	27	1964
2	Manufacturing Engineering	22	22	0	5	1	1	2	0	0	24	1966
3	Computer Intergrated Manufacturing	20	18	2	5	1	0	2	0	0	21	2000
4	Machine Design	22	22	0	5	2	1	2	0	0	25	2000
5	Automobile Engineering	20	18	1	5	1	2	2	0	0	22	2008
6	Materials and Systems Engineering Design	15	13	1	5	0	0	2	0	0	14	2013
7	Additive Manufacturing	12	7	2	5	3	0	2	0	0	12	2014
	Electronics & Communication Engineering											
1	Electronics Instrumentation and Emdedded Systems	26	20	6	5	1	4	2	0	0	31	1966 2020
2	VLSI System Design	24	18	6	5	3	1	2	1	0	29	2001
3	Advanced Communication Systems	30	29	1	5	3	1	2	0	0	34	2006
	Metallurgical and Materials Engineering											
1	Industrial Metallurgy	20	9	0	5	0	0	2	0	0	9	1983
2	Materials Technology	20	16	1	5	1	0	2	0	0	18	2008
	Chemical Engineering											
1	Chemical Engineering	25	12	5	5	4	1	2	0	0	22	1968

2	Systems and Control Engineering	25	12	0	5	0	1	2	0	0	13	2016
	Computer Science & Engineering											
1	Computer Science and Engineering	25	19	6	5	0	0	2	1	0	26	1987
2	Computer Science & Information Security	25	19	6	5	1	0	2	0	0	26	2008
	Bio-Technology											
1	Bio-Technology	20	6	12	5	1	4	2	0	0	23	2020
	Engineering Course Total	**688**	**521**	**119**	**140**	**43**	**27**	**56**	**3**	**0**	**713**	
	Sciences											
1	M.Sc. Mathematics (Applied Mathematics)	30	15	15	0	0	0	0	0	0	30	1970
2	M.Sc. Mathematics (Mathematics and Scientific Computing)	30	21	9	0	0	0	0	0	0	30	2001
3	M.Sc. Tech. Engineering Physics	60	37	19	0	0	0	0	0	0	56	1970
4	M.Sc. Chemistry (Organic Chemistry)	30	18	11	0	0	0	0	0	0	29	1977
5	M.Sc. Chemistry (Analytical Chemistry)	30	15	15	0	0	0	0	0	0	30	1999
	Science Courses Total	**180**	**106**	**69**	**0**	**0**	**0**	**0**	**0**	**0**	**175**	
	MCA											
1	Master of Computer Applications	58	40	18	0	0	0	0	0	0	58	1986
	School of Management											
1	Master of Business Administration	77	13	13	0	0	0	0	0	0	26	2000
	Grand Total	**1003**	**680**	**219**	**140**	**43**	**27**	**56**	**3**	**0**	**972**	

c). Doctoral programmes (leading to the degree of Ph.D Regular, Self-finance & Part Time) are offered in

a) All branches of Engineering and Technology
b) Sciences (Mathematics, Physics and Chemistry)
c) Humanities & Social Sciences
d) Management

9. Admission Procedure

Admission into B.Tech.

Admissions into the B.Tech. Programmes are made on the basis of the performance of students in the JEE Main examination for Indian Nationals and under the DASA scheme for NRIs following the guidelines of CCB (Central Counselling Board). The CCB works under direction from Government of India, MHRD and with full co-operation from National Informatics Centre (NIC), CBSE, and participating institutions (PIs). The rules and regulations for admission change from time to time. The main stages in the procedure are the entrance test (JEE Main), off-line counselling, on-line counseling and admission.

Among the AIEEE, there shall be two mode of admissions viz. (a) qualified AP State pool (b) qualified national pool. Of them reservation of seats is as per GoI norms. In addition to them, students are admitted under DASA programme as per the recommendations of the Ministry/ICCR, etc.

B.Tech Programme Structure

The total course package for B.Tech Degree Program typically consists of the following components.

a) Basic Science Core Courses ≥ 20 Credits

b) Other Engineering Core courses ≥ 28 Credits

c) Humanities and Social Science Core Courses ≥ 7 Credits

d) Program Core Courses ≥ 81 Credits

e) Departmental Electives ≥ 18 Credits

f) Open Elective Courses ≥ 6 Credits

(Open Elective Courses can be any of the following: Basic Sciences, Other Engineering Courses,

Humanities, Social Science, Management)

g) Mandatory Courses = 04 credits

(Environmental studies: 3, Seminar-1, Extra Academic Activity-0)

h) Departmental/Program Major Project = 06 Credits

Each student should have cleared, with P or better grade, at least 190 credits to be eligible for the award of the B.Tech. Degree.

The Departmental Board of Studies (UG-DAC along with external members) discusses and finalizes the exact credits offered for the program for the above components 'a' to 'h', the semester wise distribution among them, as well as the syllabi of all undergraduate courses offered by the department from time to time and recommend the same to the Senate for consideration and approval.

Curriculum in the first two semesters:

In the first two semesters, students of all the B.Tech. programs have the same curriculum.

Every student admitted in the first year is required to register and complete satisfactorily Extra-Academic Activity (EAA) in the first two semesters, which is mandatory. However, the EAA does not carry any credit.

Under EAA, the students can opt for either Games & Sports or NCC or NSS.

Major Project: The Major Project is a 6-credit course and is offered in IV Year First and Second semesters. It carries 2 credits in the First semester and 4 credits in the Second semester. The method of evaluation may be as per the guidelines given under B.Tech Project evaluation.

The minimum number of credits that a student can register in any given semester is 16. The maximum number of credits that can be registered in a semester is 30 inclusive of backlog subjects registered for "Study". It is 34 inclusive of backlog subjects registered for "Study" as well as "Examination"

Admission into M. Tech Programmes

Admissions into M Tech are made on All India basis for all the programs, with reservations as per Government of India norms. The selection criterion for admission into all the M.Tech programs is valid GATE score. Candidates seeking admission into M.Tech in Engineering should have passed BE / B.Tech or equivalent degree in the subject concerned from a recognized University/Institute with First Class and not less than 60% aggregate marks (of all the years) or equivalent CGPA of 6.5/10. In case of SC/ST candidates, 55% aggregate marks (of all the years) or equivalent CGPA of 6.0/10 is the eligibility requirement. Eligibility and other criteria for admissions into M. Tech. courses of the Institute will be reviewed and decided by the Senate from time to time.

M.Tech Programme Structure

An M.Tech program is of 4-semester duration with course work in the first two semesters followed by dissertation work for two semesters. The total course package for M.Tech Degree program typically consists of the following components.

a) Core Courses	≥ 24 Credits
b) Elective Courses	≥ 15 Credits
c) Dissertation	= 26 Credits
d) Mandatory	= 06 Credits
(Seminars- 02, Comprehensive viva-04)	

The Departmental Board of Studies discusses and finalizes the exact credits offered for the program for the above components 'a' to 'd' in the range of 76-84, the semester-wise distribution of the courses and credits, and the syllabi of all M. Tech. Programs offered by the department from time to time and recommend the same to the Senate for consideration and approval.

In order to qualify for a post graduate degree of the Institute, a student is required to complete all the credits specified in the scheme of instruction for that program as approved by the Senate from time to time.

Admission into M.Sc, M Sc (Tech), MCA and MBA

Admissions are made on All India basis for all the programs, with reservations as per Govt. of India norms. The selection criterion for admission into

i. M.Sc., and M.Sc.(Tech) is based on NITW Entrance Test (NITWET) for 50% of seats and 'JAM' (Joint

admission test for M.Sc) for 50% of the seats

- Candidates seeking admission into M.Sc. and M.Sc.(Tech) should have passed BA/B.Sc. or equivalent degree in the subject concerned from a recognized University/Institute with First Class and not less than 60% aggregate marks (of all the years) or an equivalent CGPA of 6.5/10. In case of SC/ST candidates 55% aggregate marks (of all the years) or equivalent CGPA of 6.0/10 is the eligibility requirement.

ii. M.C.A. is based on NITs MCA Entrance Test (NIMCET)

- Candidates seeking admission into M.C.A. should have passed three year degree or equivalent degree from a recognized University/Institute with First Class and not less than 60% aggregate marks (of all the years) or an equivalent CGPA of 6.5/10. In case of SC/ST candidates 55% aggregate marks (of all the years) or equivalent CGPA of 6.0/10 is the eligibility requirement.
- Candidates seeking admission into M.C.A. should have studied Mathematics or related subjects in their 10+2 and in degree.

iii. M.B.A. is based on CAT/ MAT score followed by group discussion and personal interview.

- Candidates seeking admission into M.B.A. should have completed their B. Tech. in any branch of Engineering from a recognized University/Institute with First Class and not less than 60% aggregate marks (of all the years) or equivalent CGPA of 6.5/10. In case of SC/ST candidates, 55% aggregate marks (of all the years) or equivalent CGPA of 6.0/10 is the eligibility requirement.

Admission into Doctor of Philosophy: Ph.D.

The Institute provides facilities for research leading to the degree of Doctor of Philosophy (Ph.D.).

Student Categories: There are seven types of student categories in the Ph.D. Degree Program, five in Full Time and two in Part Time.

Full Time:

a) Full-Time student on Institute Fellowship.

b) Full-Time Government/Semi-Government Fellowship awardees / QIP / FIP (UGC) / CSIR / UGC / DOE / DST / DBT / NBHM etc.

c) Full-Time project fellows/JRF/SRF appointed in R&D projects being carried out in NITW.

d) Full-Time Sponsored student from Industry/R&D organizations.

e) Indian Council for Cultural Relations (ICCR) fellowship awardees (Foreign students).

Part Time:

a) Permanent faculty and other permanent staff of NIT, Warangal

b) External scholars from National Research Laboratories and PSUs which have MoU with NIT Warangal / R & D Organizations (approved by the Senate) having necessary and required research facilities.

NOTE:

a) A student of category (a) will receive the Institute Felloship for a duration of three years, which may be extendable by one more year, based on the recommendations of the Doctoral Scrutiny Committee

b) Student of Category (d) shall be sponsored and financed by the sponsoring organization:

c) A part-time student of category (f) shall produce a sponsorship-cum-clearance certificate from the Director, NITW.

d) A part-time student of category (g) shall produce a no objection certificate from the present employer and also acceptance from a possible supervisor along with biodata from the organization.

e) Change of status from one category to another category or from full-time to part time and vice versa, will be subjected to approval of the senate based on recommendations of DSC and DAC-PG & R.

f) No student can receive scholarship/fellowship from more than one source, either Government or Private.

ELIGIBILITY:

i. The prescribed minimum qualification for admission into full time Ph.D. program is M.Tech/ME/M.Phil or equivalent degree, or M.Sc./ M.Sc.(Tech) / MBA / MA or equivalent degree. Admission into Ph.D. program shall be open to candidates who passed the prescribed qualifying examination in first class with a Cumulative Grade Point Average (CGPA) of at least 6.5/10 (6.0/10 in the case of SC/ST candidates), or not less than 60% aggregate marks (55% marks in the case of SC / ST candidates).

ii. As per AICTE / UGC norms, students of category (a) must have passed GATE / UGC / CSIR exam / DAE-JEST. In case of students with M.Sc. / M.Sc (Tech) / MBA / MA qualification, GATE / UGC - CSIR NET qualification is necessary.

iii. In case of students of category (d), (e), (f) and (g), GATE / UGCCSIR NET, qualification is relaxed. However, they will be selected through an institute entrance test and/or an interview, which is at the discretion of the department.

iv. Written test is exempted for a permanent faculty/staff member, who wishes to register for Ph.D. in the department where he/she is working. If the permanent faculty/staff member wishes to work for his Ph.D. in some other department, then the written test and/ or interview are/is necessary.

v. Admission under category (g) is open to:

a) JRFs / SRFs in CSIR / DST / Defence laboratories / Government R&D Organizations

b) Scientists / Engineers with ME / M.Tech. working in National Research Laboratories and PSUs and having MOU with NIT Warangal / R and D Organizations, who have put-in at least three years of experience and having measurable research output.

c) Scientists / Engineers with B.Tech. working in Research labs / PSU having MOU with NIT Warangal / R and D organizations with research facilities who have put in at least 6 years of experience and having measurable research output. The selection of candidates under this category is based on interview.

Residential Requirement

- Unless there is explicit permission from the Chairman, Senate to any candidate to stay outside the campus, all candidates admitted into the Ph.D. program will be required to stay in the institute till they complete all assigned work and submit thesis.
- In the case of part-time external candidates from organizations having R&D facilities, the residential requirement may be reduced by at least one semester if he is under self study, or at least two semesters out of which one semester can be at a stretch, if he/she is registering for the course work.
- In case of part-time external candidates with at least 10 years of research experience in R&D Organizations, with the special permission of the DSC and approval of the senate, the residential requirement may be waived completely. Nevertheless, it is mandatory for such candidates also to complete the course work for the prescribed number of credits on self-study mode, following all requirements such as assignments, examinations etc., as prescribed for any regular course at NIT, Warangal. However, it is mandatory that he/she has to deliver atleast one seminar per semester before DSC, which reviews his/her progress.

10. Students

a) Number of candidates admitted into First year UG during 2021-2022

Sl.No.	Branch	Boys		Girls		Total	
		Indians	Foreign	Indians	Foreign	Indians	Foreign
1	Civil Engineering	89	1	25	0	114	1
2	Electrical and Electronics Engineering	109	9	27	1	136	10
3	Mechanical Engineering	107	11	27	1	134	12
4	Electronics & Communication Engineering	107	13	29	11	136	24
5	Metallurgical and Materials Engineering	61	0	16	0	77	0
6	Chemical Engineering	91	0	23	0	114	0
7	Computer Science and Engineering	107	25	28	10	135	35
8	Biotechnology	56	1	19	1	75	2
1	5 Years Integrated M.Sc. Mathematics	15	0	3	0	18	0
2	5 Years Integrated M.Sc. Physics	13	0	3	0	16	0
3	5 Years Integrated M.Sc. Chemistry	12	0	4	0	16	0
	Total	**767**	**60**	**204**	**24**	**971**	**84**

b) Number of candidates admitted into First year

PG courses during 2021-22 **: 972**

c) Number of candidates admitted into

Ph.D. courses during 2021-22 **: 359**

d) Total Student Strength in the Institute (2021-22)

Under Graduate Students : **4130**

Post Graduate Students : 1967

Number of Ph.D. students on Rolls (both full time, Self Finance and part time) : 947

Total Number of Students : 7044

11. Examinations and Evaluation

B.Tech. Examination and Evaluation Procedure:

As a measure of student's performance, a 7-scale grading system using the following letter grades and corresponding grade points per credit shall be followed:

Letter Grade	S	A	B	C	D	E	P	F
Grade Point	10	9	8	7	6	5	4	0

The norms for the award of the letter grade are as follows:

- No student can be awarded P or better grade without securing at least 35% marks in a course.
- It is also mandatory that the student should secure at least 35% marks in the End Semester examination in the subject for award of P grade or better Grade.
- The Grading shall be based on relative grading system.
- The class average mark (after excluding the marks obtained by students with F grade) should be in mid-range of C grade and other grade (S, A, B, D, E and P) ranges are to be fixed appropriately, so that the distribution of number of students in the pass grades is a "near-normal bell-curve".
- DAC (UG) is authorized to modify the grade ranges for various grades, if it is felt necessary. However, all such modifications are to be recorded and placed before Senate for approval.

In addition, there shall be four transitional grading symbols, which can be used by the examiners to indicate the special position of a student in the subject.

I: for "Incomplete assessment", when the student misses the End-Semester examination on Medical grounds (see rule 12.4 of academic rules and regulations of NIT Warangal).

R: for "Insufficient attendance" in the course (see rule 7.2).

W: for "Temporary withdrawal "from the Institute (see rule 13).

X: for "Debarred" on grounds of indiscipline/malpractices in examinations (see rule 14).

A semester Grade Point Average (SGPA) will be computed for each semester. The SGPA will be calculated as follows:

$$SGPA = \frac{\sum_1^n C_i GP_i}{\sum_1^n C_i}$$

Where C_i=Credit for the course

GP_i=the grade point obtained for the course

n=Number of subjects registered in the Semester.

Starting from I year II Semester a Cumulative Grade Point Average (CGPA) will be computed for every student at the end of every semester. The CGPA would give the Cumulative performance of the student from the first semester up to the end of the semester to which it refers and is calculated as follows.

$$CGPA = \frac{\sum_1^n S_i C_i}{\sum_1^n C_i}$$

Where n= the total number of Semesters under Consideration

C_i = the number of Credits Registered during a Particular Semester

S_i = SGPA of the Semester.

The CGPA, SGPA and the grades obtained in all the subjects in a semester will be communicated to every student at the end of every semester excepting IV year II semester. In its place a consolidated grade sheet (with 190 credits) will be issued. This consolidated grade sheet supersedes all the earlier grade sheets.

Both SGPA and CGPA will be rounded off to the second place of decimal and recorded as such. Whenever these grade point averages are to be used for the purpose of determining the inter-se merit ranking of a group of students, only the rounded off values will be used.

Transitional Grades:

(a) Grade I:
When a student gets I Grade for any subject(s) during a semester, the SGPA of that semester and the CGPA at the end of that semester will be tentatively calculated ignoring this (these) subjects for the semester and CGPA at the end of the semester will be recalculated after taking into account the new grades.

(b) About grades R, W and X:
When a student gets any of these transitional grades in any of subject(s) during a semester, the SGPA of that semester and the CGPA at the end of that semester will be tentatively calculated by taking 'zero point' for these subject(s). After these transitional grades have been converted to appropriate grades, the SGPA for the semester and CGPA at the end of the semester will be recalculated after taking into account the new grades.

(c) About F Grade:
When a student gets 'F' grade in any subject during a semester, the SGPA and the CGPA from that semester onwards will be tentatively calculated, taking only 'zero point' for each such 'F' grade. After the 'F' grade has been substituted by better grades during a subsequent semester, the SGPA and CGPA of all the semesters starting from the earliest semester in which the 'F' grade has been updated will be recomputed and recorded to take this change of grade into account.

M Tech, M. Sc., M. Sc(Tech) and M.C.A. Examination and Evaluation Procedure:

As a measure of student's performance, a 7-scale grading system using the following letter grades and corresponding grade points per credit shall be followed.

Letter Grade	S	A	B	C	D	E	P	F
Grade Point	10	9	8	7	6	5	4	0

- No student can pass without securing at least 40% marks in a course.
- Relative grading system shall be followed

A. In case of bunching, the DAC - PG and R may review the reasons for bunching and modify the ranges, marginally. In all such cases, the modified ranges and the reason should be presented to the Senate for its approval.
B. In addition, there shall be four transitional grading symbols, which can be used by the examiners to indicate the special position of a student in the subject.

I: for "Incomplete assessment", when the student misses the End-Semester examination on Medical grounds (see rule 12.4).

R: for "Insufficient attendance" in the course (see rule 7.2).

W: for "Temporary withdrawal "from the Institute (see rule 13).

X: for "Debarred" on grounds of indiscipline/malpractices in examinations (see rule 14).

A semester Grade Point Average (SGPA) will be computed for each semester. The SGPA will be calculated as follows:

$$SGPA = \frac{\sum_1^n C_i GP_i}{\sum_1^n C_i}$$

Where C_i=Credit for the course

GP_i=the grade point obtained for the course

n=Number of subjects registered in the Semester.

Starting from I year II Semester a Cumulative Grade Point Average (CGPA) will be computed for every student at the end of every semester. The CGPA would give the Cumulative performance of the student from the first semester up to the end of the semester to which it refers and calculated as follows.

$$CGPA = \frac{\sum_1^n S_i C_i}{\sum_1^n C_i}$$

Where n= the total number of Semesters under Consideration

C_i = the number of Credits Registered during a Particular Semester

S_i = SGPA of the Semester.

The CGPA, SGPA and the grades obtained in all the subjects in a semester will be communicated to every student at the end of every semester.

Both SGPA and CGPA will be rounded off to the second place of decimal and recorded as such. Whenever these grade point averages are to be used for the purpose of determining the inter-se merit ranking of a group of students, only the rounded off values will be used.

Transitional Grades:

A. Grade I:
When a student gets I Grade for any subject(s) during a semester, the SGPA of that semester and the CGPA at the end of that semester will be tentatively calculated ignoring this (these) subjects. After these transitional grades have been converted to appropriate grades, the CGPA at the end of the semester will be recalculated after taking into account the new grades.

B. About F Grade:
When a student gets 'F' grade in any subject during a semester, the SGPA and the CGPA from that semester onwards will be tentatively calculated, taking only 'zero point' for each such 'F' grade. After the 'F' grade has been substituted by better grades during a subsequent semester, the SGPA and CGPA of all the semesters starting from the earliest semester in which the 'F' grade has been updated will be recomputed and recorded to take this change of grade into account.

C. About grades R, W and X:

When a student gets any of these transitional grades in any of subject(s) during a semester, the SGPA of that semester and the CGPA at the end of that semester will be tentatively calculated by taking 'zero point' for these subject(s). After these transitional grades have been converted to appropriate grades, the SGPA for the semester and CGPA at the end of the semester will be recalculated after taking into account the new grades.

12. Degrees Awarded Till June, 2022

A) B.Tech

Civil Engineering	3269
Electrical Engineering	3380
Mechanical Engineering	4071
Electronics & Communication Engineering	3232
Metallurgical and Materials Engineering	1551
Chemical Engineering	2261
Computer Science & Engineering	2853
Biotechnology	784
Total	**21401**

B) M.Tech./M.Sc./M.Sc. (Tech) / M.C.A. /M.B.A

Civil Engineering	3359
Electrical Engineering	1402
Mechanical Engineering	2265
Electronics & Communication Engineering	1280
Metallurgical and Materials Engineering	507
Chemical Engineering	474
Computer Science & Engineering	807
Mathematics	787
Physics	687
Chemistry	878
Master of Computer Application	1099
Master of Business Administration	759
Total	**14304**

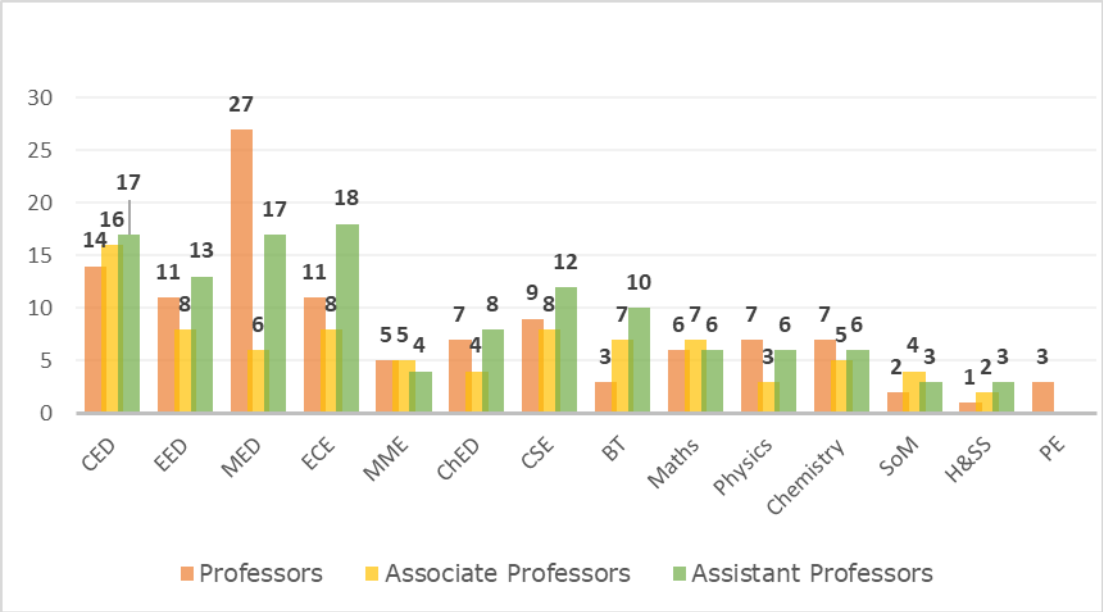
C) Ph.D (Doctor of Philosophy)

Civil Engineering	154
Electrical Engineering	94
Mechanical Engineering	181
Electronics & Communication Engineering	71
Metallurgical and Materials Engineering	38
Chemical Engineering	65
Computer Science & Engineering	45
Biotechnology	18
Mathematics	128
Physics	63
Chemistry	149
School of Management	14
Humanities & Social Sciences	18
Physical Education	02
Total	**1040**

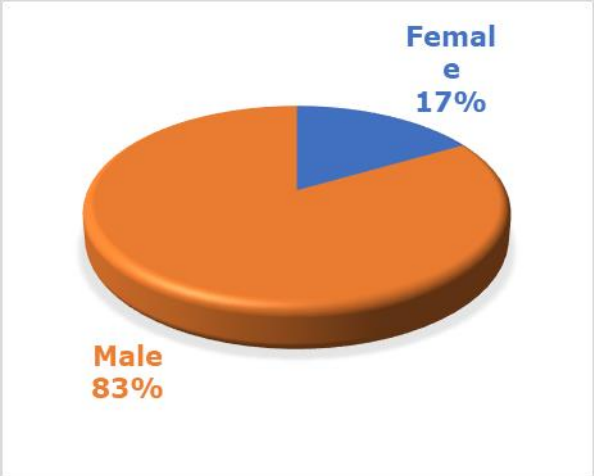
Faculty Details

Total Faculty on Rolls: 319

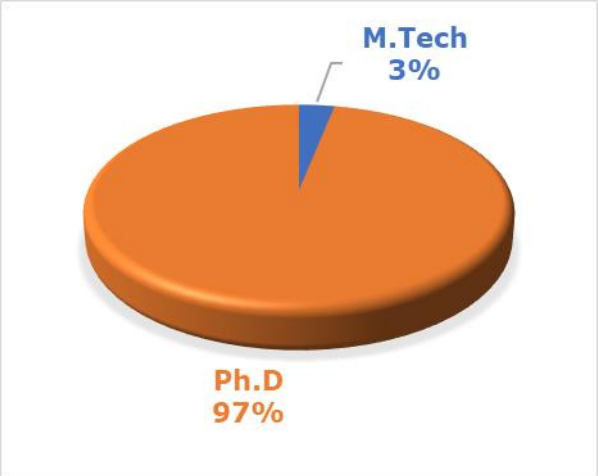
Department wise faculty distribution:



Faculty details: Gender Wise

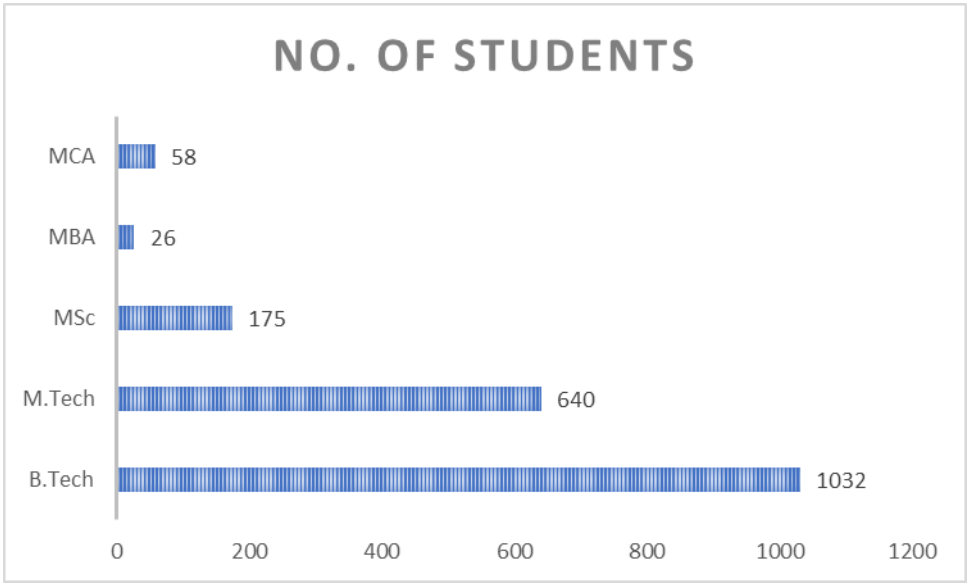


Faculty details: Qualification Wise

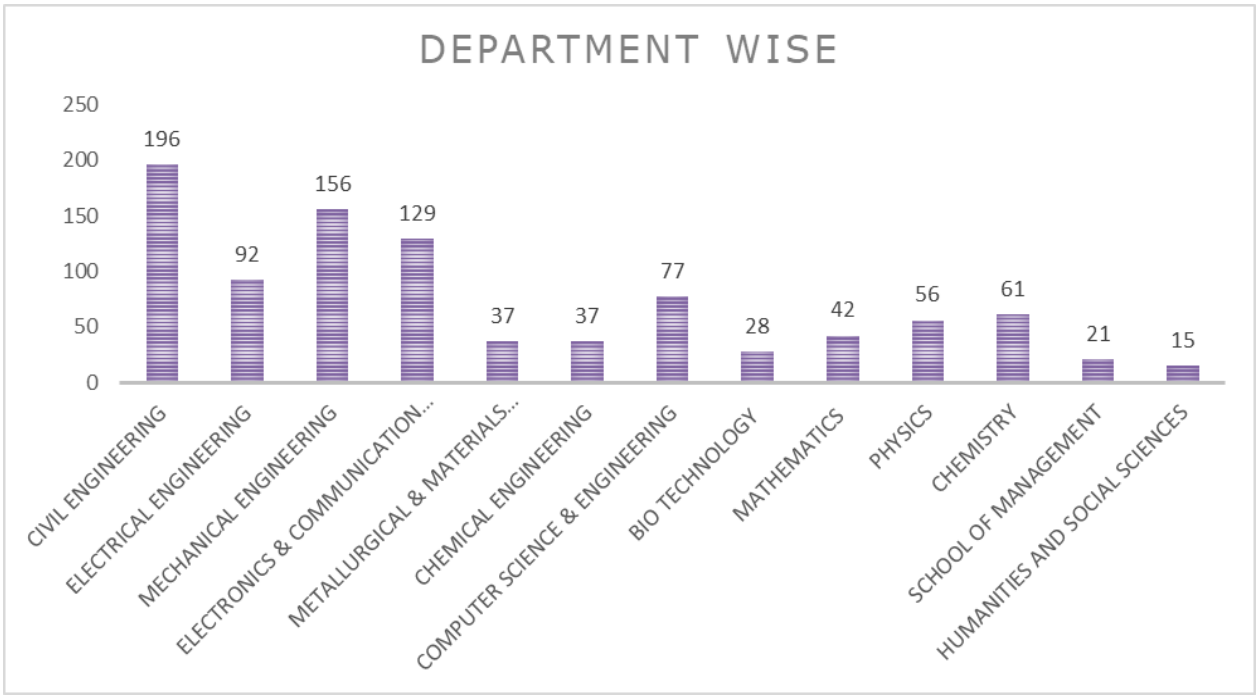


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Students Admitted during 2021-2022



PhD Scholars-Department Wise



Placement Report 2021-2022

Centre for Career Planning and Development (CCPD)



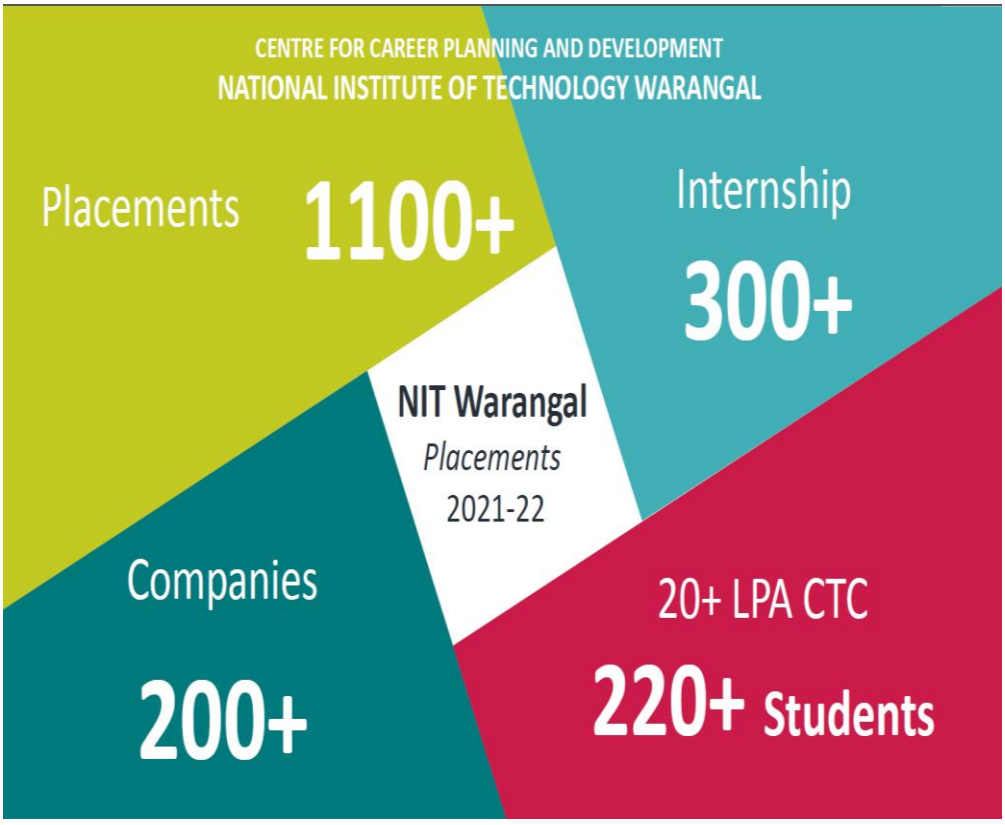
Type of Jobs Offered to Students:

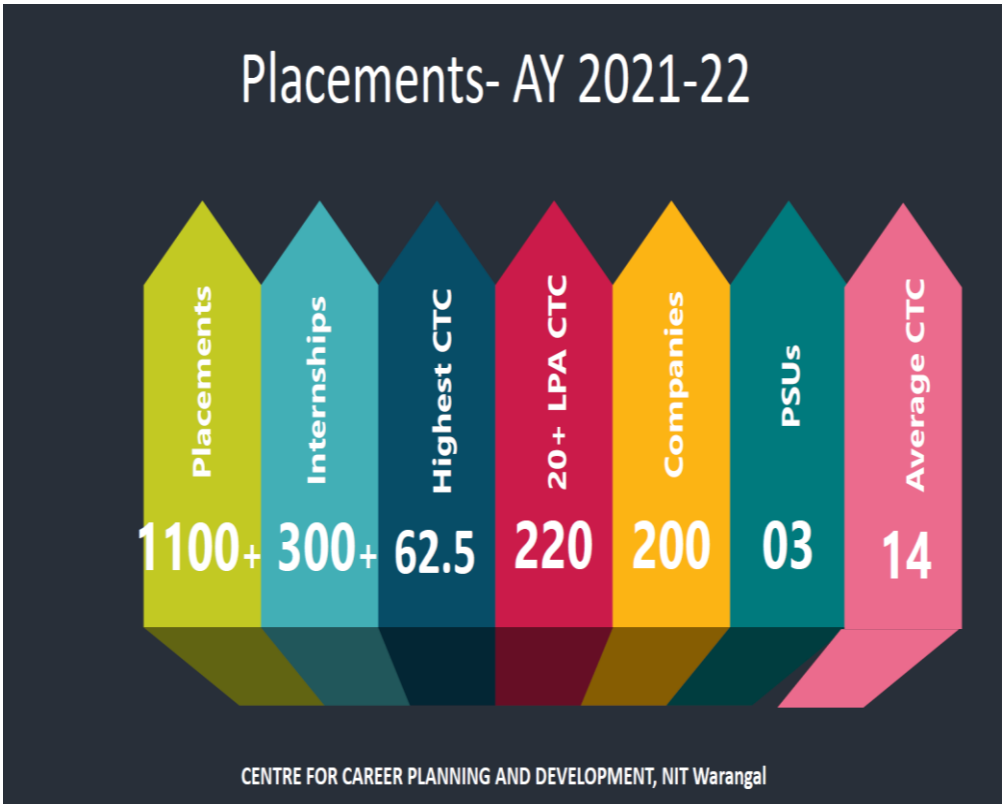
- Core
- IT
- Business
- Analytics
- Banking
- Teaching

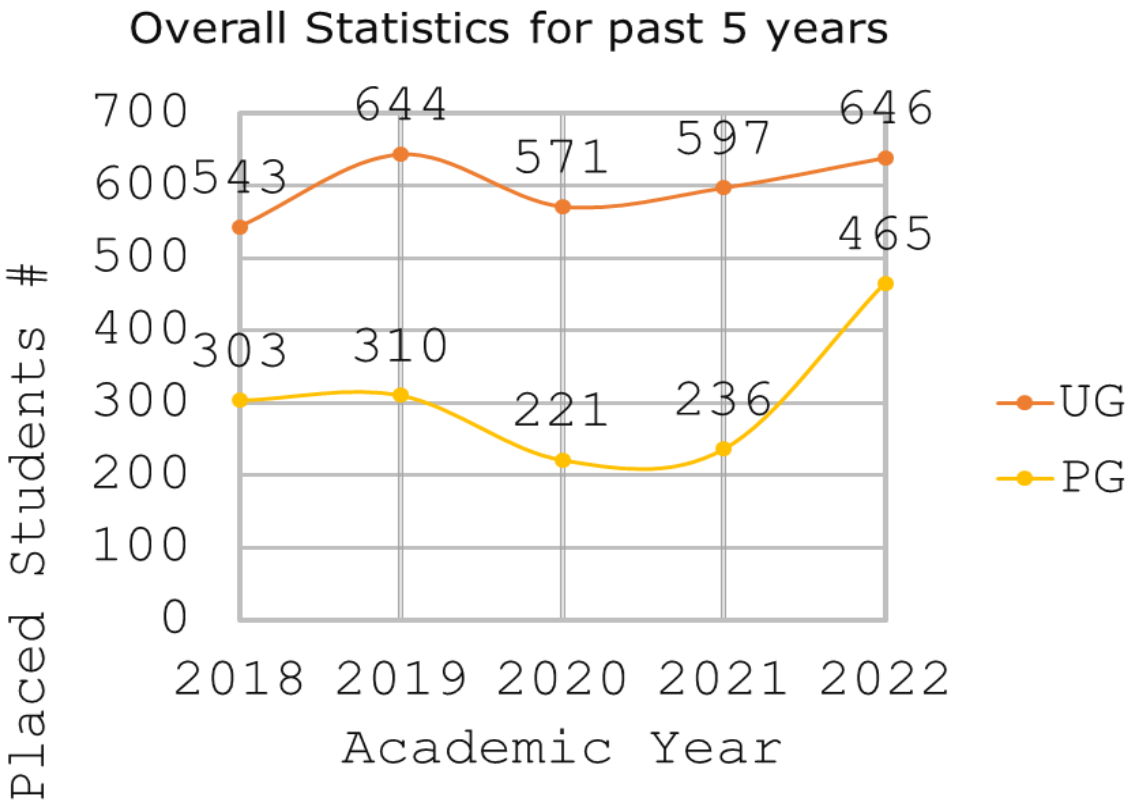
Type of Recruiters visit NIT Warangal for on-campus Placements:

- Government
- PSU
- MNC
- Private
- NGO




CENTRE FOR CAREER PLANNING AND DEVELOPMENT
NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL
Placements
1100+
Internship
300+
NIT Warangal
Placements
2021-22
Companies
200+
20+ LPA CTC
220+ Students


Placements- AY 2021-22
Placements
1100+
Internships
300+
Highest CTC
62.5
20+ LPA CTC
220
Companies
200
PSUs
03
Average CTC
14
CENTRE FOR CAREER PLANNING AND DEVELOPMENT, NIT Warangal



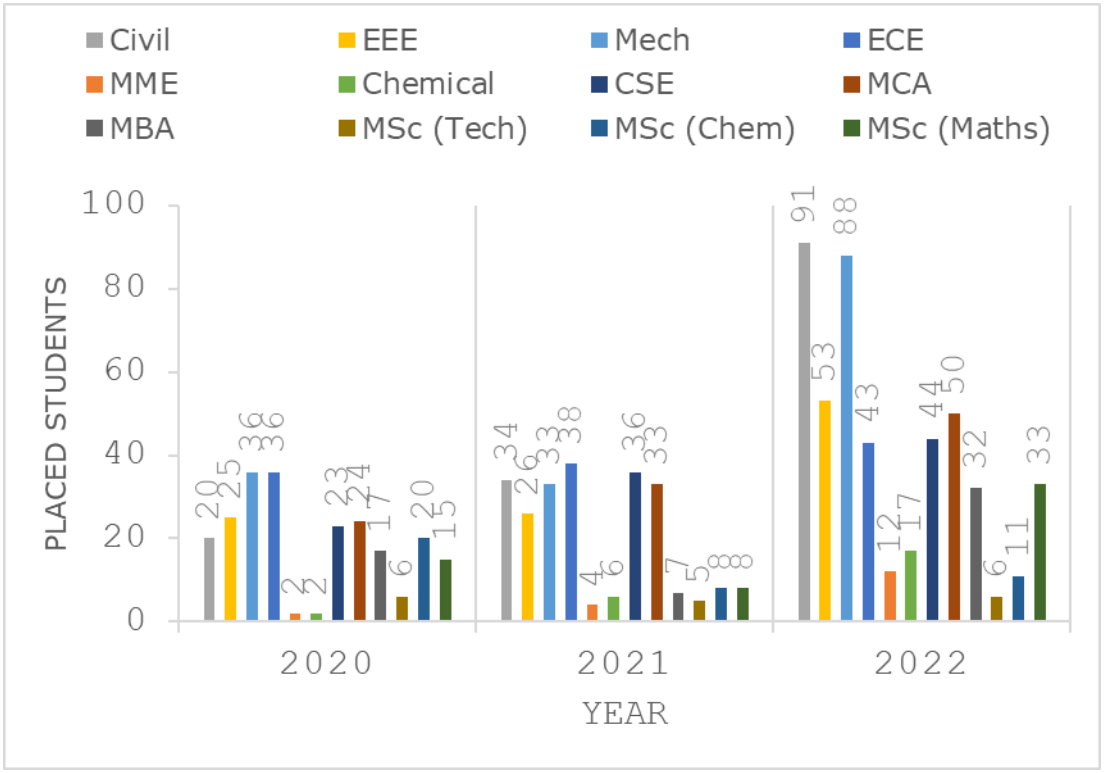
UG Placement Statistics for 2021-22

Branch	Total Students (Eligible*)	Placed	Max. Sal LPA	Avg. Sal. LPA
Civil Engg.	109(73)	60	16	8.93
EEE	133(113)	103	32.5	15
Mechanical Engg.	154(119)	114	37	11.05
ECE	140(113)	107	45.03	18.96
MME	57(38)	30	32	12.83
Chemical Engg.	103(74)	70	26.1	10.09
CSE	143(129)	70	62.5	25.5
Bio-Technology	60(42)	34	31.5	10.62

Number of BTech students placed for the past five years



PG Placements Statistics



Placement activities for AY 2022-2023

- Placement season will start in August 2022
- No. of Companies visited so far: nearly 55
- No. of students placed so far: 380+
- No of students got/doing internship: 340+
- Students with CTC more than 19.9 LPA are >200

Central Library





Dr. Venu Gopal A
Chairman, LAC
(Till 23rd Jan 2022)



Dr. Kasi Viswanadham K N S
Chairman, LAC
(23rd Jan to 21st Mar 2022)



Dr. N. V. Umamahesh
Chairman, LAC
(21st March 2022 onwards)



Dr. K. Veeranjaneyulu
Librarian



Sri. Iranna M. Shettar
Deputy Librarian
(Joined on 18th Oct 2022)



Sri. G. Balakrishna
Assistant Librarian

Introduction:

The Central Library at the National Institute of Technology, Warangal, established along with the institute's inception, is located adjacent to the administrative block. The library is housed with a plinth area of 4000 Sq. Mtrs (Ground + 2 floors), which includes stack rooms (for the textbooks), reading halls (reference section), current journals/periodicals area (print version), newspaper section, video lecture halls, digital library, book banks, separate reference area (TEQIP hall). The Central Library supports the regular academic activities of the institute (teaching and research by providing necessary books for the students, faculty and non-faculty of the Institute. It also disseminates information according to the requirement of the users of the institute.

Vision:

Our vision is to provide high-quality scholarly resources and services, and an environment that encourages NITW user community to achieve excellence in learning and research.

Mission:

The Central Library supports the academic, research and life-long learning activities by providing quality information resources, services and facilities to students, faculty, staff, and researchers of NITW.

Objectives:

1. A Library is the heart of any Academic Institution and plays a vital role in supporting teaching, learning and research by providing the required learning resources, and an ambiance of a quiet and comfortable place for study.
2. The Central library's main objective is to accomplish its given task of fulfilling all the information needs of the academic community of NITW consisting of Students, Research Scholars and Faculty.
3. To achieve this, the Central Library is fully automated and has a wide range of learning resources including the latest books on engineering and allied disciplines, and also subscribes to many national and international journals both in print and electronic formats.

Learning Resources (including e-resources):

The Central Library has a wide range of resources on Engineering, Technology, Sciences, Management and Humanities & Social Sciences.

Sl. No.	Collection	Quantity
1.	Books (No. of Volumes)	1,87,014
2.	No. of. E-Books	222
3.	Books (No. of Titles)	22,912
4.	No. of e-journals subscribed	7,870
5.	No. of Print Journals	22
6.	No. of Books in Book Bank (including SC & ST Book Bank)	30,445

The Central Library of NIT Warangal is a member of the e-ShodhSindhu consortium and subscribes to online journals through the e-ShodhSindhu consortium and the institute funds. Through the MyLOFT App, research scholars and faculty members can access e-resources subscribed by the NITW anywhere and anytime. The details of the e-journals subscribed by NIT Warangal are as follow:

NIT, Warangal subscribed e-journals and databases:

Sl.No.	Name of the Database / Publishers	No. of Journals
1.	ASTM Standards + Digital Library	Database
2.	Elsevier Science Direct	1,129
3.	Emerald e-ShodhSindhu	312
4.	Royal Society of Chemistry	46
5.	Sage - Materials Science & Engineering Collection	78
6.	SciFinder Scholar	Database
7.	Springer Link	1,714
8.	Taylor & Francis	349
9.	American Chemical Society Journals	64
10.	IEEE Online	558
11.	MathSciNet	Database
12.	John Wiley & Sons Ltd	11
13.	IOP Journals	4
14.	World Scientific e-journals	2
15.	AIP Journals	2
16.	SIAM e-journals	2
17.	ICE Publishing E-Journals	2
18.	NRC Research Press Journals	2
	Total	**4,275**

E-Resources Provided by INFLIBNET through ESS Consortium:

Sl.No.	Name of the Database / Publishers	No. of Journals
1.	ACM Digital Library	1,153
2.	ASCE Journals Online	36
3.	ASME Journals Online	29
4.	Economic & Political Weekly	1
5.	Institute for Studies in Industrial Development (ISID)	Abstract Database
6.	JGate Plus (JCCC)	Abstract Database
7.	JSTOR	3,165
8.	Oxford University Press	262
9.	Web of Science	Citation Database
	Total	**4,646**

E-Journals Usage Statistics:

Name of the Database	2019	2020	2021
ACM Digital Library	1,728	942	1,056
ASCE	6,361	3,987	4,849
ASME	2,210	1,096	1,219
ASTM DL	2,360	1,539	1,032
Emerald	6,259	4,626	7,713
IEEE	1,74,575	93,823	1,23,233
JSTOR	1,981	1,547	1,865
OUP	1,007	656	859
ScienceDirect	1,31,594	1,10,440	1,48,785
SciFinder	21,098	28,517	49,282
SpringerLink	47,526	54,902	75,920
Taylor & Francis Online	17,194	12,286	16,463
WoS	3,152	4,296	8,571

Resource Sharing:

J-Gate@e-ShodhSindhu provides a single point search for consortia subscribed, library subscribed and open access journals. Portal to discover, access and share journal articles online within the institutes participating.

Accessibility to students:

Total built-up area	4,000 Sq. Mts
Library Staff Members	08
Number of Books	1,87,014
Reprographic facility	Yes
Number of seats in reading space	472
Data usage of the Library	Student – 6000 No.s, Faculty – 319 No., Non-Teaching Staff – 303 No.s
Annual Budget	5 Crore (Approx.)
Timing during working days	8:45 A. M. to 9:00 P.M.
Timing on Saturdays & Sundays	9:00 A.M. to 5:00 P.M. (Closed on National Holidays)

Digital Library:

The Central Library has acquired and installed 60 new computers with higher configurations (32 RAM and 1 TB HDD) for the Digital Library for the benefit of faculty and students.



Photocopying and Printing service:

Central Library, NITW provides photocopying and online printing facility to students, research scholars and faculty during working days on a payment basis @ 0.50/- (Fifty paise only) per page for Scientific articles and extracts from books available in the Library.

Support to students for self-learning activities:

●Central Library conducts user orientation programs to the newly joined faculty and students about the facilities available in the Library.
●Central Library has been WI-Fi enabled to provide wireless access to the Internet. Users are welcome to use their laptops in the library.

Web Online Public Access Catalogue (OPAC):

The Central Library has implemented KOHA - Integrated Library Management Software for the automation of library functions. The Online Public Access Catalogue (OPAC) was available only over the Intranet, through which users can browse the catalogue of print resources available in the Central Library at NIT Campus, Warangal. An open-source link to e-books was also provided in this OPAC. During the prevailing Covid-19 situation, students and faculty could not access open e-resource links provided through the OPAC. Hence, Web-OPAC is implemented using cloud computing to overcome the access problem. Henceforth, the faculty and students can access the open-source link of e-books from anywhere and anytime by using the following link.
http://nitwopac.in:7071/

Remote Access Service:

Central Library, NITW introduced a new service called "Remote Access Services - MyLOFT (My Library on Fingertips)" for the benefit of Research Scholars and Faculty. MyLOFT is a mobile App. Through MyLOFT research scholars and faculty can access e-resources subscribed by the NITW anywhere and anytime.
https://app.myloft.xyz/user/login

Central Library organized programs:

●Central Library, National Institute of Technology, Warangal has organized a Webinar on "Key Scientific Writing Strategies for building a strong Manuscript" on 10th and 12th August 2021 from 4:00 P.M. to 6:00 P.M. in collaboration with ACS Publications for the benefit of Faculty, P.G. and Ph. D. Students.
● Central Library, National Institute of Technology, Warangal has organized a Webinar on "Challenges and Opportunities for Environmental Sustainability in World's Fastest Growing Region" on 08th September 2021 from 4:00 P.M. to 6:00 P.M. in collaboration with ACS Publications for the benefit of Faculty, P.G. and Ph. D. Students.
● Central Library, National Institute of Technology Warangal is organized a Webinar on "Use of Online Digital Information Resources" on 16th September 2021 at 4.30 p.m. for the benefit of Faculty, Research Scholars and P.G. Students.

NITW - Faculty Information System

The Central Library has implemented a new "Faculty Information System" under the Indian Research Information Network System (IRINS) to showcase the academic and research activities of the institute faculty members and provide an opportunity to create a scholarly research network.

The NITW- Indian Research Information Network System (IRINS) will support the integration of the existing research management system such as HR system, course management, grant management system, institutional repository, Open and commercial citation databases, scholarly publishers, etc. This will be integrated with the academic identities such as ORCID ID, Scopus ID, Research ID, Microsoft Academic ID, and Google Scholar ID for ingesting the scholarly publication from various sources. This Faculty Information System can become the source for the NIRF, NAC and other international raking systems. Everyone can access the Faculty Information System through the following link:

https://nitw.irins.org/

Institutional Repository:

The Central Library NITW has created the Institutional Repository to showcase, organize, share, and preserve the scholarly output of the National Institutes of Technology Warangal. The Repository is designed to facilitate scholarly communication by providing access to the knowledge resources created by NITW and preserving the same for future generations of scholars. The Central

Library is proud to host and maintain the repository and facilitate access to the knowledge resources of the NITW community.

http://ir.library.nitw.ac.in:8080/jspui/

NITW – Annual Research Digest of Ph. D. Theses

The Central Library brings the "Annual Research Digest of Ph.D. Theses of NITW" for the benefit of Students, Research Scholars and Faculty not only to know the Doctoral Research work completed in the Institute but also to identify the research problems for their future research work.

Compilation of Open Access e-Resources:

Central Library, NITW has compiled a discipline-wise list of Open Access E-books and Open Access E-Journals for the benefit of faculty, students and scholars. These resources are hosted on Web-OPAC which can be accessible from anywhere, anytime.

Shodhganga:

Full-text of Ph.D. theses are uploaded on the Shodhganga: A Reservoir of Indian Theses @ INFLIBNET. NITW Theses may be accessed from the below link:

https://shodhganga.inflibnet.ac.in/handle/10603/349258

Inauguration of OPAC Kiosk and release of books published by Central Library

Prof. N. V. Ramana Rao, Director, NITW, has inaugurated Online Public Access Catalogue (OPAC) Kiosks at the Central Library on 12-10-2021 for the benefit of Faculty and Students.





Hon'ble Director has also released two books compiled and published by Central Library on the same occasion entitled "*Open Access Journals in Engineering and Allied Sciences*" and "*Annual Research Digest of Ph. D. Theses (2019-2020)*".

NITW Librarian has Received Best Paper Award at Intl. Conference:

Dr. K. Veeranjaneyulu, Librarian, has received the Best Paper award for the paper entitled "*Transformation of National Institute of Technology-Warangal library during COVID-19 pandemic*" presented and published in the "4th I – LISS International Conference on Transition or Transformation of Libraries due to COVID Pandemic: Lessons to Learn" organized by International Library and Information Science Society, co-hosted by The Tamil Nadu Dr. Ambedkar Law University, Chennai, Tamil Nadu, India in association with JISTaP, Keimyung University, South Korea and Jeonbuk National University, South Korea.

Indexing of more than 1000 papers of NITW in the Scopus Database:

For the first time in the history of NITW, the total number of articles published in any calendar year by the faculty and scholars indexed in SCOPUS has crossed 1,000 in the year 2021. It is a landmark achievement and will undoubtedly help to achieve further milestones in the various ranking frameworks in the coming years.

Procurement of Print Books:

Central Library procured 1439 Print books for the financial year 2021-22 as per the recommendations of the Heads of Departments. The books were processed and ready for use.

Best Practices:

The Central Library, NIT Warangal follows the best practices such as

- Circulation of the information brochure to the newly joined students of the students, faculty, and staff.
- Conducting user orientation programs to the newly joined faculty and students about the facilities available in the Central Library.
- Information display and notifications by the institute and other institutes of the country.

Outreach Programmes:

As an outreach activity on behalf of the Institute and the Teaching Learning Centre, the Central Library conducts orientation programs to the faculty of the Degree and PG colleges of the Telangana State as well as from the other states. Also, the Central Library allows using the electronic content (journals and e-books) to the resident participants of various faculty development programs and GIAN programs conducted by the Institute.

Library expenditure on books, magazines/journals and miscellaneous contents:

Year	Expenditure (in Rs.)					
	Books	Magazines/ Journals (Print subscription)	e-Journals & Databases	Equipment/ Furniture	Misc. Exp.	Total
2021-22	2,75,776.00	89,100.00	3,67,57,506.40	3,46,920.00	3,56,899.00	3,78,26,201.40
2020-21	26,76,732.00 (e-Books)	43,580.00	2,91,94,331.00	23,68,286.00	1,45,233.00	3,44,28,162.00
2019-20	Nil	83761.00	2,84,25,105.00	6,08,804.00	1,63,732.00	2,92,81,402.00
2018-19	11,88,880.00	1,64,171.00	3,04,88,111.00	Nil	98,223.00	3,19,39,385.00

Discipline-wise collection status

Department	**No. of Titles**	**No. Volumes**
Civil engineering	13,118	29,347
Electrical Engineering	7,587	18,535
Mechanical Engineering	11,613	24,671
Electronics & Communication Engineering	7,643	18,709
Metallurgical and Materials Engineering	4,311	8,452
Chemical Engineering	4,299	8,724
Computer Science & Engineering	9,797	22,760
Mathematics	6,527	11,661
Physics	6,860	10,399
Chemistry	5,040	9,630
Management	2,543	4,877
Biotechnology	674	2,282
General	6,407	10,772
Humanities and Social Sciences	3,246	5,838
Total	**89,665**	**1,86,657**

Research Productivity:

Period	No of Publications	No of Citations	h-Index
Overall	7018	60,119	80

Year	No of Publications	No of Citations	h-Index
2019	783	4,399	27
2020	902	4,051	24
2021	1,031	1,751	13

Year-wise Transactions Statistics:

Year	No of Books Checked-out	No of Books Checked-in	No of Daily Visitors (Approx.)
2019	30,158	33,675	569
2020	6,878	7,514	546 (Except Pandemic Period)
2021	400	4,531	N.A. (Pandemic Period)

LIBRARY STAFF:

Professional Staff:

DESIGNATION	NAME	QUALIFICATION
Librarian & Head	Dr. K. Veeranjaneyulu	Ph.D., M.Com., M.L.I.Sc, B.G.L., PGDLAN
Deputy Librarian	Sri. Iranna M. Shettar	B.Sc., M.L.I.Sc., M.Phil, PGDLAN
Assistant Librarian	Sri. G. Balakrishna	B.Sc., M.L.I.Sc.
Lib. & Info. Asst.	Sri. Kanishka Samanta	M.L.I.Sc.

Supporting Staff:

NAME	DESIGNATION
Sri. A. Someshwar Rao	Senior Assistant
Sri. A. Sambaiah	Jr. Assistant (UG)
Smt. B. Jaya Sree	Technician
Sri. T. Ramesh	Sr. Caretaker
Sri. P. Saraiah	Technician
Sri. P. Eshwar	Jr. Assistant (UG)

Centre of Innovation and Incubation



The Center of Innovation and Incubation (CII) is a G+2 building, with a floor space of approx 30,000 sq ft. The mission of the center is to "promote innovations leading to new processes, products, design and technologies in collaboration with industry and thereby facilitate application of knowledge to society". The following are the objectives of the center

- To promote greater industry - academic interaction, by inviting industries to set up their research labs at this center and carry out their research projects using the talend on the campus.
- To encourage the first-generation entrepreneurs desirous of R&D partnership with NITW or otherwise to establish their research labs at this centre.
- To promote innovation projects of B.Tech and M.Tech students by providing appropriate facilities, infrastructure and financial assistance as per the norms of the institute.
- To facilitate the "on campus interaction" between the scientists of industries and faculty and students of NITW in order to enable orientation of R&D activities of NITW to potential needs of industry.

NIT Warangal being a premier technical institution plays a vital role in the process of technology entrepreneurship by offering a variety of services through CII in the area of startup creation, business incubation, easy access to capital and knowledge access with new and innovative ideas. Moreover, emphasis has also been given by the institute towards entrepreneurial focused education by providing entrepreneurship development and venture creation as elective courses for developing entrepreneurial competencies. Further, various support mechanisms were also provided in the form of structured mentorship programs, short training to build the confidence of students to convert ideas to innovation and startup establishment. Incubation facilities are also open for local startups in and around as social responsibility at minimal expenses, thereby contributing significantly in promoting the entrepreneurship culture in institutes and within the country. The CII facilitates the following at present

- Startup Cell
- Innovation Garage
- Industry R&D Labs

- EPICS Projects & TEP
- IPR Cell
- MoUs (National)

Startups

Student startups are current requirements and provide a great opportunity in market expansion and job creation. Startup policy of NITW targets to nurture and encourage entrepreneurship among students and young faculty to benefit from GOIs 'Startup India' and 'Make in India' programs. Students are encouraged to participate in idea generation in prototype events and the funding is provided to procure the hardware required through TEQIP-III.



DEPARTMENT OF CIVIL ENGINEERING

Brief History of the Department, Academic Programs

The Department of Civil Engineering was established in 1959, along with the setting up of the Regional Engineering College Warangal (RECW), the first among the chain of REC s. The department offers undergraduate and eight graduate programs in addition to Ph.D. Almost all programs are NBA accredited in compliance with the Washington Accord.

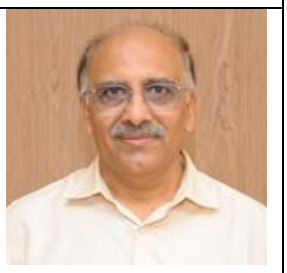
The department has highly qualified and committed faculty members who are well recognized and are members of many national and state level policy making and advisory bodies. The department of civil engineering has the honour of being recognized as QIP centre since 1978, to offer graduate and Ph.D. programs to faculty of other technical institutions.

Recently the curriculum revision has been completed for B.Tech and all M.Tech programs. The concept of Honors program for B. Tech in Civil Engineering and Minors in allied programs has been introduced. Several PG-Diploma and self-financed programs have been introduced in the existing specializations.

The department aspires to be a knowledge nerve centre in Civil Engineering Education, Research, Entrepreneurship and Industry outreach for creating sustainable infrastructure and enhancing the quality of life. This will be achieved by generating a specialized cadre of Civil Engineers by imparting quality education and training to attain International standards in teaching, research and consultancy with global linkages.



Faculty Details

S. No.	Name of the Faculty and Designation	Highest Qualification and Date of Joining	Research Interests	Photograph
1	Prof. N.V. Ramana Rao Professor and Director	Ph.D.	Vibrations, FEA, Structural Shape Optimisation of axisymmetric & prismatic shells & folded plates, GeopolymerConcrete, Composites, Ferrocement	
2	Dr. T.D.Gunneswara Rao Professor and HoD	Ph.D.	Fracture mechanics of Concrete structures, Fiber Reinforced Concrete, Reinforced Concrete, Sustainable construction materials	
3	Dr. N.V.Umamahesh Professor (HAG)	Ph.D.	Water Resources Systems, Hydrologic Modeling, Modeling Impact of Climate Change, Urban Floods	
4	Dr. C.S.R.K.Prasad Professor (HAG)	Ph.D.	Transportation Engg., Travel Demand, Urban & Regional Planning, Land Use Planning, Public Transport, Highway Network Design	
5	Dr. C.B. Kameswara Rao Professor	Ph.D.	Ferrocement, Fiber reinforced concrete, Sustainable Concrete, Torsion of RC members, Rehabilitation and retrofitting of structures, UHSC, Progressive Collapse	
6	Dr. P. Anandraj Professor	Ph.D.	Systems Analysis, Fuzzy Systems, Multi Criteria Decision Making, Hydrology and Fluid Mechanics	

7	Dr. D. Ramaseshu Professor	Ph.D.	New Concretes, Repair & Health Monitoring of Structures	
8	Dr. G. Rajesh Kumar Professor (HAG)	Ph.D.	High Strength Concrete, Prestressed Concrete, Self compacting self curing concrete	
9	Dr. Deva Pratap Professor	Ph.D.	Engineering Geology, Hydrogeology, Remote Sensing, GIS	
10	Dr. M. Chandrasekhar Professor (HAG)	Ph.D.	Water and Wastewater treatment, Air quality modelling, Water quality modelling, Solid waste Managemen	
11	Dr. P. Ratish Kumar Professor	Ph.D.	Sustainable Concrete Making Materials, Earthquake Engineering, Health Monitoring of Structures, Repair and Rehabilitation of structures	
12	Dr. V. Ramanamurthy Professor	Ph.D.	Expansive soils, Reinforced Earth, Utilisation of waste materials	

13	Dr. P. Hari Krishna Professor	Ph.D.	Granular Anchor Piles • Expansive Soils	
14	Dr. M. Heera Lal Professor	Ph.D.	Ground Improvements; Recycled materials; Geo-Environmental	
15	Dr. Venkaiah Chowdary Professor	Ph.D.	Characterization of asphalt binders and mixtures; asphalt pavement analysis, design and evaluation	
16	Dr. Venkata Reddy Professor	Ph.D.	Watershed modelling and management using numerical, soft computing and geospatial methods; Climate change impact studies	
17	Sri. V.N.Kameswara Rao Associate Professor	M.Tech.	Fluid Mechanics and Hydraulic Machines; Hydrologic Systems Modelling; Transport Phenomena of Mass, Momentum, Energy for climate modelling	
18	Sri. M. Sudhakar Associate Professor	M.Tech.	Steel fibre Reinforced Concrete	

19	Dr. P. Hari Prasad Associate Professor	Ph.D.	soil pollutant interaction, Soil stabilization, Contaminant Transport through porous media	
20	Dr.P.Venkateswara Rao Associate Professor	Ph.D.	Water supply, treatment and distribution, wastewater treatment, waste management, low cost water and wastewater treatment	
21	Dr.S.Venkateswara Rao Associate Professor	Ph.D.	Self Compacting concrete; Special concretes and nano materials in concrete and mortar; Repair and Rehabilitation of structures	
22	Dr. Arif Ali Baig Associate Professor	Ph.D.	Geoenvironmental Engineering; Unsaturated Soil Mechanics	
23	Dr. T.P. Tezeswi Associate Professor	Ph.D.	Experimental characterization and development of novel computational modeling methodologies to predict multi-scale behavior of cementitious composite Materials	
24	Dr. S. Shankar Associate Professor	Ph.D.	Low Volume Roads, Pavement Analysis and Design, Pavement Management System, Pavement Material characterization,	

25	Dr. M. Shashi Associate Professor	Ph.D.	Advanced Surveying; Photogrammetry;	
26	Dr. Ajey Kumar Patel Associate Professor	Ph.D.	Computational Fluid Dynamics (CFD); Environmental Fluid Mechanics; Wastewater Engineering	
27	Dr. D. Ravi Prasad Associate Professor	Ph.D.	cement concrete composites, structural health monitoring	
28	Dr. M.V.N. Siva Kumar Associate Professor	Ph.D.	Computational Mechanics; Fracture Mechanics Applications to Metal and Concrete Structures; Finite Element and Reliability Applications to Nuclear Reactor	
29	Dr. K.V.R. Ravi Shankar Associate Professor	Ph.D.	Interactions; Pedestrian behavioral analysis and modeling; Crowd dynamic analysis and emergency evacuation planning	
30	Dr. G. Kalyan Kumar Associate Professor	Ph.D.	Seismic hazard Analysis; Reliability Analysis; Soil Dynamics; Soil Pile Interaction; Laterally loaded piles; Seismic Microzonation;	

31	Dr. K. Gopikrishna Associate Professor	Ph.D.	Multi hazards performance Assessment of structures, Earthquake Engineering, Wavelet Finite Element Methods, Multi-scale Modeling of structures	
32	Dr. Arpan Mehar Associate Professor	Ph.D.	Macroscopic and microscopic traffic analysis, Highway Capacity and level of service, Highway geometric design, Traffic flow simulation	
33	Dr. P. Sridhar Assistant Professor	Ph.D.	Water/wastewater treatment, life cycle analysis, modelling of water/wastewater treatment, Solid waste management,	
34	Dr. G. VenkataRamana Assistant Professor	Ph.D.	Rock Mechanics and Rock Engineering, In-Situ and Laboratory Rock Mechanics Investigations	
35	Dr. S. AnithaPriyadharshani Assistant Professor	Ph.D.	Characterization of materials; Fiber Reinforced Polymer Composites; Stiffened panels; Experimental techniques; Finite Element Analysis	
36	Dr. B. Kavitha Assistant Professor	Ph.D.	Engineering Seismology; Earthquake data analysis; Simulation of ground motions; Probabilistic Seismic Hazard Assessment; Earthquake Forecastin	

37	Dr. Aneetha V. Assistant Professor	Ph.D.	Building Information Modelling, Road Information Modelling, Lean Construction, Virtual Reality in Construction, Construction Project Management	
38	Dr. Chinthala Sumanth Assistant Professor	Ph.D.	Air Pollution; Indoor Air Quality; Sustainable Development, Water and Waste water Mangement; Solid waste Management; Environmental Impact Assessment	
39	Dr. Umesh B. Assistant Professor	Ph.D.	Numerical Methods in Civil Engineering: Finite Difference Method, Finite Element Analysis and Iso-Geometric Analysis	
40	Dr. Shashi Ram Assistant Professor	Ph.D.	Sustainable Building Materials; Energy Efficient Buildings; Sustainable Construction Practices	
41	Dr. Sudheer Kumar Yamsani Assistant Professor	Ph.D.	Geoenvironmental Engineering Soil-Atmosphere Interaction Reinforced soil structures Applied Soil Mechanics	
42	Dr. Litan Kumar Ray Assistant Professor	Ph.D.	Stochastic hydrology, Flood & drought estimation, Real-time flood forecasting, Hydrologic Modelling, Climate change, and climate variability study	

43	Dr.Vema Vamsi Krishna Assistant Professor	Ph.D.	Hydrologic Modelling; Watershed Management; Parameterization of Watershed Models; Agricultural Water Management; Optimal Allocation of Resources	
44	Dr. Vishnu R Assistant Professor	Ph.D.	Pavement Materials, Pavement Management Systems, Pavement Design and Evaluation	
45	Dr. Sanjit Biswas Assistant Professor	Ph.D.	Soil Dynamics; Machine Foundations; Shallow and Deep Foundations; Field and Laboratory Testing; Finite Element Analysis; Continuum Approach Modelling	
46	Dr. R. Ramesh Nayaka Assistant Professor	Ph.D.	Building Information Modelling (BIM); Digital Construction; Sustainable Construction Materials; Construction Work Package	
47	Dr. Manish Pandey Assistant Professor	Ph.D.	Experimental Hydraulics, Sediment Transport, River Training Work	
48	Dr. Raghuram Kadali Assistant Professor	Ph.D.	Pedestrian Cross Flow Modelling, Non-Motorized Safety, Traffic Safety, Driver Behaviour, Traffic flow modeling • Transportation Environment	

49	Dr. Manali Pal Assistant Professor	Ph.D.	Hydrology; Climate Change; Soil Moisture Retrieval using Remote Sensing; Stochastic Modelling; Machine Learning and Artificial Intelligence	
50	Prof. K.V. Jayakumar Emeritus Professor	Ph.D.	Hydrology and Water Resources, Urban Water Management, Irrigation Engineering, Land and Water Management, Environmental Impact Assessment	

Funded Research Projects

S. No	Title & Name(s) of PI	Total Amount sanctioned (Rs in Lakhs)	Funding agency	Project No.
1	Development of Trip Generation Manual for Indian Cities. Dr. C. S. R. K. Prasad, Raghuram Kadali (Co-PI)	8.14	CSIR-CRRI	
2	Performance Evaluation of Emulsion Treated Base Layers in Low Volume Roads; Scheme: TARE Dr. C. S. R. K. Prasad (Co-PI)	18.30	DST SERB in association with StGITS Kottayam, Kerala	2022-25
3	Impacts of COVID-19 on Travel Behaviour and Its Association with Shared Mobility in Developing Countries Context. Dr. C. S. R. K. Prasad (Co-PI)		Scheme: India Japan Science and Technology Cooperation	Under Process
4	Effective Management of Process Slag from PCB Smelting Dr. P. Ratish Kumar	10	CMET, Hyderabad	2021-22
5	Exploring eco-friendly civil engineering techniques for disposal of plastic waste P. Hari Krishna (PI), T.D. Gunneswara Rao (Co-Investigator), Venkaiah Chowdary	19.72	NHAI New Delhi,	2019-2022 (On-going)

	(Co-Investigator)			
6	Integrated Water Management Model for BIS Countries Under Climate Change Scenarios. Indian P. Coordinator: K. Venkata Reddy	39.0	DST-International Multilateral Regional Cooperation Division	2019 (On-going)
7	Real Time Forecasting Floods Using SWAT Model. Indian PI: K. Venkata Reddy	81.76	MHRD, SPARC Programme	2019(Ongoing)
8	Determining JH2 constants for UHPC using SHPB, Dr.T.P. Tezeswi	17.7	CARS Project-DRDO	June 2022
9	A simple and robust non-contact method for rapid structural health monitoring of critical infrastructure using Digital Image Correlation. Dr. M. Shashi	30.0	MHRD-IMPRINT, (In Progress)	2019- (In Progress)
10	Innovative Development of Sustainable White Clay and Graphene Composite Ventilation Wall Cladding Tiles to Curtail Heat Ingress. PI - Dr. R. Ramesh Nayaka	44.11	Science and Engineering Research Board (SERB), G.O.I	Jan 2021 - Dec 2023
11	Life Cycle Cost Analysis (LCCA) of Steel Fibre Reinforced Concrete Structure by using Building Information Modelling (BIM) Approach. PI - Dr. R. Ramesh Nayaka	5.0	Research Seed Money (RSM) Grant, NIT Warangal, Government of India	Jan 2021 - Dec 2022
12	A study of pedestrian exposure to traffic emissions and consequences to their travel behaviour, PI - Dr. Raghuram Kadali	28.26	Science and Engineering Research Board (SERB-SRG), Government of India	Dec 2021 - Dec 2023
13	Evaluation of Transit Oriented Development (TOD) and Its Association with Travel Behavior and Gentrification Using Big Data Analytics. PI - Dr. Raghuram Kadali,	44.17	Departmentof Science and Technology (DST)-of India-Taiwan S&T Cooperation Programme, Government of India	May 2021 - Apr 2023
14	Evaluation of Traffic Emissions based on varied roadway	5.0	Research Seed Money (RSM)	Jan 2021 - Dec 2022

	characteristics. PI -Dr. Raghuram Kadali		Grant, NIT Warangal, Government of India	
15	Development of Global Vertical Soil Moisture Profile Database using SMAP Data. PI - Dr. Manali Pal	19.94	Science and Engineering Research Board (SERB-SRG), Government of India	January 2022 - January 2024
16	Development and Demonstration of Pilot-scale Hybrid Wastewater Treatment System with Hydrodynamic Cavitation and Biosurfactant for Recycling of Textile Effluent Shirish Sonawane (PI), AjeyKumar Patel (CoPI)	41.42	IMPRINT, SERB, New Delhi,	16-12-2019 to 15-12-2022 (Ongoing)

Patents

1) Dr M.Heeralal, Rathish Kumar Pancharathi etal, Innovation Patent on "Smart Rigid Pavement" Patent Number: 2021106229, Grant from 20th August 2021 for a period of Eight Years, Australian Government, IP Australia (**Patent Granted**).
2) Dr A. Suchith Reddy, Prof P.Rathish Kumar, Australian Patent on "A Methodological Framework and System for Achieving Sustainable Building Construction", Patent Number: 2021104847, Grant from 2nd August 2021 for a period of Eight Years, Australian Government, IP Australia.(**Patent Granted**)
3) Dr A. Suchith Reddy, **Rathish Kumar Pancharathi,** Indian Patent on "A Method and System for Assessing Sustainability of Civil Infrastructure"(Patent Application 202141054686) Published in Patent Office Journal Filed on 11th February 2022, **Published in Patent Office Journa**

PhD Research guidance

1. Utsav Vishal (Roll No. 701333) completed his Ph.D. with the title "Influence of moisture damage and hydrated lime on the fatigue life of hot mix asphalt and warm mix asphalt" under the guidance of Dr. Venkaiah Chowdary in December, 2021.
2. Kakara Srikanth (Roll No. 717004) completed his Ph.D. with the title "Influence of roughness induced dynamic loads on fatigue and rutting damages in flexible pavement" under the guidance of Dr. Venkaiah Chowdary in August 2022.
3. Alamandala Sravanthi (Roll No: 716051) completed her PhD with the title "Structural Health Monitoring of Bridge Structures using Fiber Bragg Grating Sensors" under the joint guidance of Dr Rathish Kumar Pancharathi and Dr R.L.N Sai Prasad
4. Ramireddy Sushmitha (Roll No. 717102), Ph.D. thesis titled "Capacity Analysis of Signalized Intersections in Mixed Traffic Conditions" under the supervision of Dr. Ravi Shankar K.V.R. in the month of January, 2022.

New Lab Equipments/software/Workstations Installed

i) Structures & Dynamics Laboratory-Shake Table & Vibration of Beams (TEQIP-III)



ii) Concrete Laboratory- Jaw Crusher (SRIC)



iii) Concrete Laboratory-Segregator (SRIC)



iv) Concrete Laboratory-Creep Testing Equipment (Plan Grants)



v) Structures Laboratory- 100 Ton UTM (TEQIP-III)



DEPARTMENT OF ELECTRICAL ENGINEERING

Brief History of the Department, Academic Programs

The Department of Electrical Engineering was established in 1959, along with the setting up of the Regional Engineering College Warangal (RECW), the first among the chain of REC s. The Department of Electrical Engineering is involved in teaching UG and PG students of Engineering and Science Programs. The department has highly qualified, motivated and experienced faculty, who guide Ph. D scholars and execute research projects. The department offers a three year M.Tech Electrical Engineering program with specializations in Power Electronics and Drives, Power Systems Engineering and Smart Electric Grid. The department is actively engaged in research and has a number of sponsored R & D projects on hand. The areas of research include include State Estimation and Real Time Control of Power Systems, Applications of ANN and Fuzzy Logic in Power Systems, Power System Deregulation, Power System Transients, Power Quality, EMTP applications in Power Systems, Relay Coordination, Application of Power Electronics to Power Quality Improvement and Industrial Drives, Hybrid Energy Storage Systems, DSP controlled Drives, Simulation of Power Electronic Converters and Drives Systems and Control of Special Machines. The department has MoU's with reputed industries and R & D organizations like Central Power Research Institute (CPRI), Defence Research and Development Organization (DRDO) to carry out the collaborative projects., etc. From the academic year 2021-2022, minor in Electrical engineering courses also introduced in accordance with NEP 2020 Standard. There are two options for departure. One at the end of fourth years for B.Tech. in Electrical Engineering, and the other at the end of the fifth year for B.Tech. honours.



S. No.	Activity	Number
1	**Publications (Peer Reviewed Journals/ conferences) (SCOPUS/SCI)**	
	International Journals with impact factor	63
	International Conferences	51
2	**Funded Research Projects/SPARC projects (2021-22)**	
	DBT, SERB, DRDO	8
	Ongoing Projects (Rs **4.5** Crores)	11
	Total number of projects ongoing	11
	Total budget	4.5 Crores
3	**PhD Awarded**	8
4	**Book Chapters**	12
	Book Published	01
5	**Patents file**	10

Summary

Faculty Details

S. No.	Name of the Faculty and Designation	Highest Qualification and Date of Joining	Research Interests	Photograph
1	Dr. Sailaja Kumari M Professor & HOD	Ph.D	Power Markets, Synchrophasor applications in Power Systems, Power System Optimization, AI applications in Power Systems	
2	Dr. D. M. Vinod Kumar Professor (HAG)	Ph.D		
3	Dr. Siva Sarma D V S S Professor (HAG)	Ph.D	Fault diagnosis of Electrical Equipment, Power Quality, Renewable Energy Integration,	
4	Dr. N. Subrahmanyam Professor	Ph.D		
5	Dr. Bhagwan Krishna Murthy Professor	Ph.D		

6	Dr. Vishwanathan N Professor	Ph.D	Resonant power converters: Induction Heating Applications, Power Converters for LED Drivers, Battery Chargers, High gain Converters.	
7	Dr. Somasekhar V. T. Professor (HAG)	Ph.D		
8	Dr. Srinivasa Rao. S Professor	Ph.D	Renewable Energy Systems; Power Quality; Power Electronic Converters; Induction Motor Drives; Unipolar and Bipolar DC Microgrids, Digital Signal Processor Controlled Drives.	
9	Dr. Srikanth N V Professor	Ph.D	HVDC and FACTS, AI techniques application to power systems and towards smart electric grid. Micro grid modelling control n stability enhancement using advanced machine learning etc.	
10	Dr Chintham Venkaiah Professor	Ph.D		

11	Dr. Narasimharaju B. L Professor	Ph.D	Grid & PV Fed LED Drivers for Lighting Systems; Multilevel Power Converters; Switched Reluctance Motor Drives;	
12	Dr. Porpandiselvi S Associate Professor	Ph.D	PV fed LED drivers, Induction Heating Applications, High frequency Soft-Switched Inverters	
13	Dr. Suresh Babu Perli Associate Professor	Ph.D	Power System Protection, Electric Vehicles, Smart Grid	
14	Dr. A. Kirubakaran Associate Professor	Ph.D	Power Electronics- DC-DC Converters, DC-AC Inverters, Multilevel Inverters, Power Quality and Grid Interface, Renewable Energy and Distributed Generation.	
15	Dr. Bhookya Nagu Associate Professor	Ph.D		

16	Dr. G. Siva Kumar Associate Professor	Ph.D	Power electronics application to the power system, renewable system, and AC microgrid	
17	Dr. D Sreenivasarao Associate Professor	Ph.D		
18	Dr. A. V. Giridhar Associate Professor	Ph.D	High Voltage Engineering, Condition Monitoring & Diagnosis of Power Equipments, Pulsed Power Technology, Nano Dielectrics.	
19	Dr. M Udaya Bhasker Associate Professor	Ph.D	Power Electronics-Bi-directional DC-DC converters, Energy Storage system, Digital Control system	
20	Dr. Srinivasan Pradabane Assistant Professor	Ph.D		
21	Dr. Y. Chandrashekhar Assistant Professor	Ph.D	Renewable energy resources in power systems; Microgrids; Multi-Microgrids; Optimization techniques, Meta-heuristic Techniques; Fast EV Charging stations; Blockchain Technologies to Smart Grid;	

22	Dr. Ch. Ramulu Assistant Professor	Ph.D		
23	Dr. Vinay Kumar T Assistant Professor	Ph.D	Power Electronics and Drives	
24	Dr. Satish Kumar I Assistant Professor	Ph.D		
25	Dr. Altaf Q H Badar Assistant Professor	Ph.D	Evolutionary Optimization Techniques, Energy Trading, Energy Management	
26	Dr. Swati Devabhaktuni Assistant Professor	Ph.D	Power Electronics- DC-DC Converters, DC-AC Inverters, Grid Interface, induction motor drive, linear induction motor drive, control system	

27	Dr. Palash Mishra Assistant Professor	Ph.D		
28	Dr. Ram Krishan Assistant Professor	Ph.D		
29	Dr. R. Jeyasenthil Assistant Professor	Ph.D		
30	Dr. Deepak R Pullaguram Assistant Professor	Ph.D		
31	Dr. Kanasottu Anil Naik Assistant Professor	Ph.D	Wind energy system grid integration issues; Intelligent control techniques application in power system; DSP techniques application in power system	

32	Dr. Debasmita Panda Assistant Professor	Ph.D		
33	Dr. Mahamad Nabab Alam Assistant Professor	Ph.D	Power system protection; Microgrids; Planning and optimization of networked microgrids;	

Funded Research Projects

S. No	Title & Name(s) of PI	Total Amount sanctioned (Rs in Lakhs)	Funding agency	Project No.	Installment received in 2021-2022
1	Blackout Prevention and Quick Service Restoration in Regional and United Indian Power Grid with Protection Reliability Enhancement using Optimal PMU placement- Dr Suresh Babu Perli	24.84	SERB-GoI	EEQ/2018/000128	Closed on 22.02.2022
2	Development of High PF Grid connected Induction Cooker with Direct AC-AC Conversion for Vessels of Different Material, Dr. S. Porpandiselvi, Prof. N. Vishwanathan, Prof. B L Narasimharaju	32.89	SERB, DST, GoI	CRG/2018/004568, Dt. 09.05.2019	4,00,000/-
3	"Investigation and Implementation of Model Predictive Control Strategies to a Multi-Phase Permanent Magnet Synchronous Motor for Photo-Voltaic based Hybrid Electric Vehicle Applications with Reduced Torque Ripple. Dr. T. Vinay Kumar	24	SERB, GoI	File No : EEQ/2020/000072, 10-Dec-2020	6,00,000/-

Patents

S. No	Date of Filing	Patent Title	Patent Applicant Name(s)	Patent No.	Department	Patent Nation	Patent Status
1.	11.11.2016	Full-Bridge Soft Switched Driver for LED Based Street Lighting Application	Dr. Neti Vishwanathan, Dr. S. Porpandiselvi, Mr. Kasi Ramakrishna reddy Ch	Application No. 201641038698	Electrical	India	Published on 25.11.2016. Reply to FER submitted on 17/12/2019
2	07.09.2016	Cyclic on-off Control for a Three-Output Inverter for Induction Cooking Application with Independent Control	Dr. Neti Vishwanathan, Mr. Devara Vijaya Bhaskar, Dr. Tanmoy Maity, Dr. S. Porpandiselvi	Application No. 201641030518	Electrical	India	Published on 30.09.2016. Reply to FER submitted on 15/5/2020
3		Model to Enhance Security and to Improve the Fault Tolerance	Dr Suresh Babu Perli		Electrical	India	Publication Number: 26/2022
4		A Web-Enabled Smart Home Gateway for Automatic Device and Network Configuration and Automatic System Updates via IoT.	Dr Suresh Babu Perli		Electrical (home automation)	Australia	Patent number : 2021107349

Ph.D Research guidance

1. Chejarla Madhu Kishore (Roll No. 701609) “Investigations on Synchrophasor assisted Power System State Estimation” under the guidance of Prof M Sailaja Kumari in March 2022

2. Mr. Kusuma Eshwar (Roll No. 717118)-" Modified Direct Torque and Predictive Torque Control Methods for Permanent Magnet Synchronous Motor Drive," under the guidance of Dr.T. Vinay Kumar, November2021.

DEPARTMENT OF MECHANICAL ENGINEERING

Brief History of the Department, Academic Programs

The Department of Mechanical Engineering was established in the year 1959. The department presently offers one Under Graduate Programme, i.e., B. Tech in Mechanical Engineering with an intake of around 170 students, seven M. Tech programs - Thermal Engineering, Manufacturing Engineering, Computer Integrated Manufacturing, Machine Design, Automobile Engineering, Materials and Systems Engineering Design, Additive Manufacturing – one P.G Diploma in Additive Manufacturing and Ph.D programs. At present, the Department has 48 faculty members with research expertise in different specializations of Mechanical Engineering. The Department has good research facilities for both experimental as well as simulation-based research. The department has liaison with reputed industries and R&D organizations such as NFTDC, DMRL, DRDL, ARCI, BHEL, CMTI, CPRI etc. All the faculty of the department are actively engaged in R&D and Consultancy. Presently the department is handling about 25 funded projects worth Rs. 3.00 Crores. The department has recently acquired a metal 3D printer at a cost of Rs.1.4 Crores under TEQIP -III grants. The institute is establishing SIEMENS Centre of Excellence in digital manufacturing and Industry 4.o in manufacturing in which the department is playing a key role. The department produces a large number of publications, and offers solutions to the industry regularly and is also active with regular outreach activities like workshops, conferences and executive programs for industry personnel. The department has been recognized as QIP Centre for M.Tech and Ph. D. programmes.



Faculty Details

S. No	Name of the Faculty	Highest Qualification	Research Interests	Photograph
1	Dr. V. Suresh Babu, Professor & HOD	PhD	Mechanism, Dynamics, Vibrations, Composite Material, Fault Diagnosis	
2	*Dr. RV Chalam, Prof. Emeritus	PhD		
3	Dr. K. Madhumurthy, Professor	PhD	Thermal Engineering; IC Engines; Biofuels; Entrepreneurship; Industrial and Small Enterprise Management	
4	Dr. C. Surya Prakasa Rao, Professor	PhD	Manufacturing	
5	Dr. L. Krishnanand, Professor	PhD	Industrial Engineering; CAD/CAM; Supply Chain Management; Additive Manufacturing	
6	Dr. S. Srinivasa Rao, Professor	PhD	Two-phase flow, I.C. Engines, Experimental Heat Transfer, Solar Energy	

7	Dr. A. Neelakanteswara Rao, Professor	PhD	Operations Management, Supply Chain Management, Theory of Constraints, Quality Engineering and Management	
8	Dr. P. Bangaru Babu, Professor	PhD	Mechanical Vibrations; Vibration Control; Finite Element Analysis; Mechanism Science; Engineering Design, Rotor Dynamics, Vehicle Dynamics.	
9	Dr. A. Venugopal, Professor	PhD	Conventional and Unconventional Machining, Coatings for High Speed Machining, Rapid Prototyping, Metrology	
10	Dr. N. Selvaraj, Professor	PhD	Modelling and Simulation, Flexible Manufacturing System, CNC Technology, Machine tools, Pull Systems and Composite Materials.	
11	Dr. K. V. Sai Srinadh, Professor	PhD	Mechanical behaviour of materials, Manufacturing process	
12	Dr. P. Ravi Kumar, Professor	PhD	I.C. Engines, Alternate Fuels, Design of Air Car, Fuel Cell Car (Solar/Hydrogen), Flying car, Engine Simulation, Lean burn combustion, Adiabatic engine, CNG & HCNG engine, Exhaust gas re-circulation, Turbocharger engines.	
13	Dr. G. Amba Prasada Rao, Professor	PhD	IC Engines; Engine Exhaust emission control; Alternate fuels; HCCI, Combustion	

14	Dr. R. Narasihma Rao, Professor	PhD	Tribology, Kinematics & Dynamics of Machinery, Machine Design, Finite Element Methods, Advanced Light Weight Composites	
15	Dr. Adepu Kumar, Professor	PhD	Friction stir welding/Processing, Additive Manufacturing, Electrical Discharge Machining, Fabrication and characterization of Micro/Nano composites	
16	Sri. G. R. K. Gupta, Associate Professor	M.Tech	CFD, Turbo-machines, Jet propulsion	
17	Sri. I. A. K. Reddy, Associate Professor	M.Tech	Elements of Mechanical Engineering	
18	Dr. A. Veeresh Babu, Professor	PhD	IC Engines, Alternate Fuels, Emissions control, Fuel cell, Refrigeration and Air-conditioning	
19	Dr. Y. Ravi Kumar, Professor	PhD	CAD/CAM/CIM, rapid prototyping, additive manufacturing, 3D printing, Bio-CAD, Bio-printing	

20	Dr. M. Joseph Davidson, Professor	PhD	Metal Forming, CAD/CAM, Statistical Modeling	
21	Dr. P. Subash Chandra Bose, Professor	PhD	Machining of high temperature alloys, CNC technologies, Optimization techniques, composite materials	
22	Dr. V. Vasu, Professor	PhD	Nano-materials, Nano-fluids, Nano-composites, Material testing Sustainable manufacturing, Metal cutting, Micro-Nano Machining Mechatronics & Systems Controls	
23	Dr. G. Naga Srinivasulu, Professor	PhD	I.C. Engines; Heat Transfer and Turbo machines	
24	Dr. P. Vamsi Krishna, Professor	PhD	Sustainable Manufacturing; Application of solid lubricants in machining; Application of nano-materials in machining.	
25	Dr. K. Kiran Kumar, Professor	PhD	Thermal Engineering; Heat Transfer; Nano-fluids; Refrigeration & Air-Conditioning; CFD; Non-Conventional Energy sources.	

26	Dr. V. Rajesh Khnana Raju, Professor	PhD	Fluid Dynamics, Heat Transfer, CFD, Combustion, Microfluidics	
27	Dr. Srikanth Korla, Professor	PhD	Piezoelectric Energy Harvesting, Structural Health Monitoring, Product Design and Development	
28	Dr. Hari Kumar Voruganti, Professor	PhD	Geometric Modeling for CAD, Finite Element / Iso-geometric Analysis, Robotics and Applied Optimization.	
29	Dr. D. Jaya Krishna, Professor	PhD	Utilization of Solar energy, CFD, Latent heat storage materials, Aerodynamics of cricket ball, Heat line visualization, heat transfer in porous media	
30	Dr. B. Satish Ben, Professor	PhD	Structural Health Monitoring, Tool Condition Monitoring, Nano Composites	
31	Dr. V. P. Chandra Mohan, Professor	PhD	(i) Computational Fluid Dynamics(ii) Convection and conduction heat transfer(iii) Drying and Simultaneous solution of heat and mass transfer(iv) Alternative fuels and Hydrogen fuel cell(v) Experimental heat transfer	

32	Dr. T. Sadasiva Rao, Associate Professor	PhD	Manufacturing Engg. & Foundry Technology	
33	Dr. Syed Ismail, Associate Professor	PhD	Surface Texturing; Lubrication;	
34	Dr. Karthik Balasubramanian, Associate Professor	PhD	Microchannel Flow Boiling; Phase Change Heat Transfer; Microfluidics; Thermal management; Solar Thermal; Solar PV and Hybrid systems; HVAC systems.	
35	Dr. G. Raghavendra, Assistant Professor	PhD	Composites, Nano materials, Tribology, Polymer Composites.	
36	Dr. Gudipadu Venkatesh, Assistant Professor	PhD	Abrasive Flow Machining, Magnetic Abrasive finishing, Non-traditional manufacturing processes, Microwave Material processing, Hybrid Machining, Advanced Manufacturing Processes, Surface Engineering.	
37	Dr. Vijay Kumar Manupati, Assistant Professor	PhD	Manufacturing Systems Design, Supply Chain Management, Health Care Systems Optimization and Simulation, Intelligent Manufacturing Systems, Soft Computing Techniques including Artificial and Machine Intelligence Techniques.	

38	Dr. P. Suresh, Assistant Professor	PhD	Distributed-Reconfigurable (1D-3D) and Integrated macro/microsensors design.; Non-Destructive Testing and Wave Propagation.; Temperature-dependent materials property measurement of solids/fluids.; Also, interest in Advanced Energy.	
39	Dr. Marrapu Bhargava, Assistant Professor	PhD	Metal forming - sheet metal forming, formability evaluation and prediction, hydroforming and formability at elevated temperatures, Mechanical behaviour of materials, Heat treatment processes, Material model development	
40	Dr. Hari Krishna Chilukoti, Assistant Professor	PhD	Nanoscale Heat and Mass Transfer; Molecular Dynamics	
41	Dr. Anant kumar Rai, Assistant Professor	PhD	Fluid mechanics, Hydraulic turbines, Turbomachinery, Hydropower, Renewable Energy, Material wear testing, Sediment Transport	
42	Dr. Shivraman, Assistant Professor	PhD	Welding, wear, corrosion and welding metallurgy	
43	Dr. Manjaiah M, Assistant Professor	PhD	Advanced manufacturing, shape memory alloys, additive manufacturing, surface engineering	
44	Dr. Gaurav Kumar Sharma, Assistant Professor	PhD	Computer aided design, digital manufacturing, product design	

45	Dr. Satyanand Abraham, Assistant Professor	PhD	Thermal Management of Electronic Package, Gas Turbines and vehicle Battery, Waste Heat Recovery, Surface Wettability	
46	Dr. Gangadharudu Talla, Assistant Professor	PhD	Non- traditional machining, metal cutting, surface engineering, micro machining	
47	Dr. Thamarai Selvan, Assistant Professor	PhD	Computational solid mechanics, contact mechanics, FEM, FGM, layer substrate systems	
48	Dr. Prasanth Anand Kumar Lam, Assistant Professor	PhD	Computational Fluid Dynamics and Heat Transfer, Electronics Cooling, Heat Transfer Augmentation, Heat Exchanger Design, Refrigeration & Air-Conditioning	
49	Dr. Chinige Sampath Kumar, Assistant Professor	PhD	Liquid metal cooling, jet impingement, porous media, lattice Boltzmann method	

Patents

a. Filed

P S Ranjit, A. Veeresh Babu, Steering Design- Part III: Evaluation of Angle between Horizontal Center line of the Pivot centers to drop arms of left side wheel of Ackerman Steering Mechanism based Steering on Automobile by considering the acute angle

Adepu Kumar and P Naresh, Multi-Groove Technique to Formulate Bulk Hybrid Surface Metal Matrix Composites by Friction Stir Processing

b. Published

Chandramohan V.P., Ramakrishna Balijepalli, Pritam Das, K. Kirankumar, Design and development of solar updraft tower (SUT) plant for generating electrical power: A novel structure, appropriate materials with optimized collector angle, Indian Patent

Srikanth Korla, Suryawanshi Nikhil Ramakrishna, Pen Stand Puzzle, Indian Patent

Srikanth Korla, Akash Paidalwar, Shubham Awashi, Saumay Agarwal, Dual Security Pad-Lock, India Patent

a. Granted

Suresh Periyannan and K. Balasubramaniam, Ultrasonic waveguide technique for distributed sensing and measurements of physical and chemical properties of surrounding media

Suresh Periyannan, K. Balasubramaniam, Integrated Thermocouple Waveguide Sensor System and Method - To Measure Physical Properties of Waveguide Material And Surroundings

Katakam Vishnu Sree Shanthanu and Devanuri Jaya Krishna, A modified refrigeration system for biomedical storage

Sushyanth Sridhar, Devanuri Jaya Krishna and, Patri Sreehari Rao, A solar powered cooling chamber for storing farm produce

Prasanth A. Lam, Vijaya Hanamant Bichakar, Ratul Maity, Mukesh Muthamilan, Hrushikesh C. Prabhu, SHELF ASSEMBLY FOR AN APPLIANCE

A. Manmadhachary, Aditya Mohan Alwala, V. Giridhar Kumar, Y. Ravi Kumar, Implantable Device for Temporomandibular Joint and Method of Production Thereof

Funded Research Projects

S. No	Project title	Sanctioned Amount	Sanctioned Agency
1	Berra Satish Ben, Development of self-healing materials based on Thermally reversible polymer for biomimetic structural applications	24.11 Lakhs	SERB, DST
2	Anant Kumar Rai, Enhancing Performance Characteristics of a Centrifugal pump in Erosive Conditions	26.06 Lakhs	SERB, DST
3	Shivraman and Adepu Kumar, Mechanical and tribological characterization of Al-Si Product developed by wire arc additive manufacturing	23.74 Lakhs	ARDB
4	V V Mani, V Vasu, Indigenous test bed for Industry 4.0 using Visible Light Communication with Industrial Internet of Things	30.84 Lakhs	ASEAN-DST
5	V Vasu, D Kashinath, Synergistic Effect of Phosphonium, Ammonium Based Ionic Liquid and Nano Lubricants on the Tribological and Rheological Properties	16.6 Lakhs	SERB, DST
6	Chandramohan V.P., Karthik Balasubramanian, Development of Active Cooling for Avionics	14.39 Lakhs	DRDO
7	Adepu Kumar, Kishore Kumar babu, Mahesh Kumar, Investigation of interfacial interaction and grain structure development in friction stir welds for dissimilar joining of high strength aluminum to titanium alloys	10.04 Lakhs	DST
8	B Satish Ben, Development of FRP Composites with Crack Arrest and Self-Healing to Maintain Structural Integrity	30.06 Lakhs	DST-SERB
9	G. Naga Srinivasulu (PI), S. Srinivasa Rao and V.Vasu, Experimental Investigations on different Geometrical shapes of Passive Direct Methanol Fuel cell stacks for Low Power Applications	43.24 Lakhs	SPARC

10	G.Naga Srinivasulu (PI), S.Srinivasa Rao, Amba Prasad Rao and V.R.K.Raju, Simulation and experimental evaluation of dual- fuel Homogeneous Charge Compression Ignition Engine by using reactivity fuels	36.78 Lakhs	SPARC
11	G.Naga Srinivasulu (PI), P.V.Suresh and S.Srinivasa Rao, Design and Development of Passive Direct Methanol Fuel cell integrated with liquid electrolyte for Portable Power Applications	19.45 Lakhs	SERB-EMR
12	Gudipadu Venkatesh, Manufacturing of Advanced materials using microwave hybrid heating technique		MHRD-NITW
13	P. Vamsi Krishna (CO-PI), National Centre for Development of Advanced Materials and Manufacturing Processes for Clean Coal Technologies for Power Applications	90.81 Lakhs	DST-ARCI
14	P. Vamsi Krishna (PI), Vibration Assisted Turning for Improving Fatigue Life of Ti6Al4V Aerospace Components	28.6 Lakhs	DST-AMT
15	R Narasimha Rao, Syed Ismail, Insight Development on Tribological Response of Hybrid Aluminum Based Nanocomposites for Transportation sector	40.52 Lakhs	SPARC
16	Srikanth K., Uday Bhasker M., Modelling and Simulation of Energy Harvesting using Piezoelectic Materials and Super Capacitors	6.75 Lakhs	RCI - DRDO
17	Suresh Periyannan, Ultrasonic Sensors Design and Development for Industrial Application	5.0 Lakhs	MHRD-NITW
18	Syed Ismail, Development of Multi- Scale Textured Piston Ring and Study of its Impact on the Fuel Economy of an Internal Combustion Engine	32.04 Lakhs	SERB
19	V.K Manupati, Developing of Telefacturing based distributed manufacturing support system for optimal manufacturing service for Indian small and medium scale enterprises	5.0 Lakhs	MHRD-NITW
20	V.K Manupati, Developing of Telefacturing based distributed manufacturing support system for optimal manufacturing service for Indian small and medium scale enterprises	13.59 Lakhs	
21	V.K Manupati, Artificial Intelligence, Machine Learning and Deep Learning applications in Production and Manufacturing systems	9.0 Lakhs	DST-ICPS
22	K.Madhu Murthy, Dr. D. Jaya Krishna, Dr. A. Veeresh Babu, and Prof. G Ambaprasad Rao, “Internal flow field analysis of Solid Rocket Motor with thrust termination ports”	9,93,850	ASL, DRDO

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Brief History of the Department, Academic Programs

The Department of Electronics and Communication Engineering was established in 1971, along with the setting up of the Regional Engineering College Warangal (RECW), the first among the chain of REC s. The Department of Electronics and Communication Engineering is involved in teaching UG and PG students of Engineering Programs. The department has highly qualified, motivated and experienced faculty, who guide Ph. D scholars and execute research projects. The department offers a three-year M. Tech. program with specializations in electronic instrumentation and Embedded systems, VLSI system Design and Advanced communication. The department is actively engaged in research and has a number of sponsored R & D projects on hand. The faculty is actively engaged in providing solutions to industry problems as consultants. The academic programs of the department are rated among the top in the country. The graduating students are well placed in leading academic institutes, research organizations and industries including Intel, Qualcom, Texas Instruments, Cadence, Sandisk, Xilinx, Synopsys etc., along with software companies like Oracle, Goldman Sachs, Microsoft, Mathworks etc. The department enjoys strong research collaborations with Defense laboratories, AMD, ECIL, Intel, Austria micro systems.

The Department of Electronics and Communication Engineering is one of the country's larger ECE departments among all NITs in India and one of the largest departments of the National Institute of Technology, Warangal (NITW). The ECE Department at NITW has been an international reputation of excellence in teaching, research and service. The areas of research include including smart antennas, Millimeter-wave front-ends, IC Design, 5G communication, signal processing and machine learning sponsored by MHRD, DST, Ministry of Defense, Meity etc.



Faculty Details

S. No.	Name of the Faculty and Designation	Highest Qualification and Date of Joining	Research Interests	Photograph
1	Prof. Sreehari Rao Patri	Ph.D.	Analog and Mixed-Signal IC Design, Power Management ICs, Smart SoC design for IoT applications, Communication Systems, Smart Sensors, SERDES Circuits.	
2	Prof. Narasimha Sarma N V S	Ph.D.	Numerical Electromagnetics ANNs and Wireless Sensor Networks Antennas	
3	Prof. T. Kishore Kumar	Ph.D. DoJ: 01-06-1999	Artificial Intelligence and Machine Learning for Speech, Image & Medical Applications, Real time Embedded systems and Internet of Things	
4	Prof. L. Anjaneyulu	Ph.D. DoJ: 27/04/1997	Computer Networks, Antennas, Microwave Engineering, Signal Processing, Radar Signal processing, Antennas Underwater communications	
5	Prof. N. Bheema Rao	Ph.D. DoJ: 09/06/1993	On-Chip Inductors for RF Applications and Device Modelling	
6	Prof. C.B. Rama Rao	Ph.D. DoJ: 28/08/1982	Digital Signal Processing, Adaptive Signal Processing, DSP Architectures and Algorithms.	

7	Prof. B. Lakshmi	Ph.D. DoJ: 04/04/1990	IoT VLSI Architectures Embedded System Design FPGA Design Low Power VLSI design	
8	Prof. TVK Hanumantha Rao	Ph.D.	Biomedical signal processing and Fault tolerant network on chip	
9	Prof. D. Vakula	Ph.D. DoJ: 30/11/2006	Multifunction Antennas, Ultrawideband antennas, Metamaterials, Fault Diagnosis of Antenna Arrays, Waveguide slot radiators, Conformal Antennas, Artificial neural networks, Terahertz systems	
10	Prof. V.V. Mani	Ph.D.	Signal Processing for wireless communication MIMO OFDM UWB & Green Communication	
11	Prof. J. Ravi Kumar	Ph.D. DoJ: 16/11/2006	Signal Processing, Control System Design, Machine Learning	
12	Prof. S. Anuradha	Ph.D. DoJ: 15/02/2008	Wireless Communications, Coding Techniques, Fading Channels, Cognitive Radios, Signal Processing for Communications, Antennas for Cognitive Radios	

13	Shri M.V. Raghunadh	M.E. DoJ: 16/10/1985	5G Communications, Image Processing, Pattern Recognition	
14	Shri K. Ravi Kishore	M.E.	Wireless Sensor & Computer Networks Digital System Design Wireless Communications	
15	Dr. S.K.L.V. Sai Prakash	Ph.D. DoJ: 24/03/1992	Wireless Communications, Cellular Networks, Computer Networks and Internet of Things	
16	Shri P. Hari Krishna Prasad	M.E. DoJ: 04-06-1993	Wireless communications	
17	Shri K.V. Sridhar	M.Tech. DoJ: 07/05/1997	Bio-medical signal/Image Processing Adaptive Signal Processing	
18	Dr. A. Prakasa Rao	Ph.D. DoJ: 29/07/1999	Smart Antenna Systems, Optimization Techniques, EDC, & Signals and Systems	

19	Dr. P. Muralidhar	Ph.D. DoJ: 30-04-1997	VlSI Architectures, Embedded Systems Design, System on Chip (SoC) Design	
20	Dr. Ch. Rama Rao	Ph.D.	Speech processing	
21	Dr. P. Prithvi	Ph.D.	Digital System Designs, Embedded Systems Designs, Speech Processing	
22	Dr. V. Rama	Ph.D. DoJ: 01/03/1999	Basic Electronics Engg., Digital Electronics, Analog Electronics, Biomedical Instrumentation, Biomedical Signal Processing, Quality Reliability of Electronic Systems , Neural Networks & IC Applications,	
23	Shri K. Sarangam	M.E. DoJ: 04/12/2006	VLSI Circuit Design low power design novel device	
24	Dr. Kalpana Naidu	Ph.D. DoJ: 19/04/2018	Wireless Communication, 5G communication, Heterogeneous Communication, Resource allocation	

25	Dr. G. Arun Kumar	Ph.D. DoJ: 04/06/2018	Microwave and Millimeter wave passive and active circuits, Communication and Radar front end design, Metamaterials, Substrate Integrated Waveguides circuits and antennas, and Reconfigurable filters and antennas	
26	Dr. Atul Kumar Nishad	Ph.D. DoJ: 11/04/2018	VLSI Interconnects, Microelectronics and VLSI, 2D Materials, VLSI Circuits and Systems	
27	Dr. V. Narendar	Ph.D. DoJ: 11/05/2018	Beyond CMOS, Nanoscale device design and modeling, Modeling and simulation of semiconductor devices, Carbon Nanotubes and 2D material based devices, VLSI Circuits & Systems	
28	Dr. Himanshu Shekhar Pradhan	Ph.D. DoJ: 18/04/2018	Optic Sensors; Optical Signal Processing; Nonlinear Fiber Optics; Optical Communication; Structural Health Monitoring using Fiber Optic Sensors; Free Space Optical Communication; Channel modelling in FSO system.	
29	Dr. Gopi Ram	Ph.D. DoJ: 20/04/2018	Analysis and Synthesis of Radiation Pattern of Time-Modulated Antenna Array Structures; Evolutionary Optimization Techniques; Application of Soft Computing in Electromagnetics; RF and Microwave.	
30	Dr. BKN Srinivasa Rao	Ph.D. DoJ: 18/04/2018	VLSI architectures for image and video processing, Embedded systems design, System on chip (SoC), Network on chip (NoC).	

31	Dr. Md. Farukh Hashmi	Ph.D. DoJ: 11/04/2018	Digital Image Processing, Computer Vision, Machine Vision, Video Processing, Video Codec Design, Embedded Systems, Internet of Things (IOT), Digital Signal Processing(DSP), Machine Learning, Deep Learning for Health Care and Computer Vision, Digital Design, Embedded Image Processing, Biomedical Image Processing, Real Time Operating Systems.	
32	Dr. M. Satish	Ph.D. DoJ: 23/04/2018	Novel devices design using calibrated TCAD; Compact modeling of novel devices; Characterization and fabrication of MOS devices/circuits; Design of low power analog and digital circuits; Design of embedded/IoT applications or systems	
33	Dr. Prakash Kodali	Ph.D. DoJ: 19/04/2018	Printed Flexible Electronics, Embedded Systems and Biomedical Electronics	
34	Dr. Chayan Bhar	Ph.D. DoJ: 02/01/ 2020	AI for networks; Reinforcement Learning based Network Design; Network Design and Analysis	
35	Dr. Ekta Goel	Ph.D. DoJ: 26/12/2009	Modeling and Simulation of Advanced MOS Devices	

36	Dr. Amarjit Kumar	Ph.D. DoJ: 02/12/2019	Active and Passive RF microwave devices and THz components, Sensors	
37	Dr. Vasundhara	Ph.D. DoJ: 17/12/2019	Adaptive Signal Processing, Hearing Aid Design, Distributed System Estimation, Active Noise Control	

Funded Research Projects

1. Prof. P. Sreehari Rao, "Design and Implementation of Smart Internet of Things (IoT) System," Global Initiative for Academic Networks (GAIN) Rs.5.68 Lakh
2. Dr. G. Arun Kumar, Prof. P. Sreehari Rao and Prof. L. Anjaneyulu, Miniature High Performance GNSS ultra-Low Noise Amplifier with NavIC Signals, 28.75 Lakhs, ISRO-IISU
3. Prof. T. Kishore Kumar (PI), Development of Artificial Intelligence And IoT Based Portable Knee Joint Health Care Monitoring System For Rural India, 38.61 Lakhs, SERB - CRG
4. Prof. T. Kishore Kumar (PI), Development of Novel Video/ Image Compression Algorithms, 9.8 Lakhs, DRDO, Go
5. Prof. B. Lakshmi (PI) "Technology Driven approaches for Neurodevelopmental and Neurodegenerative Disorders" Global Initiative for Academic Networks (GAIN) Rs.5.68 Lakh
6. Prof. J. Ravi Kumar (PI), Development of IP core for accident prevention system during rainy and hazy weather conditions,19.65 Lakhs, SERB, DST
7. Prof. S. Anuradha (PI), Hardware implementation of UAV based Spatial NOMA for 6G Networks, 32.00 Lakhs, DST-SERB
8. Dr. Gande Arun Kumar and Dr. Gopi Ram (Department of ECE) havereceived a project on 'CARS Project ASL-DRDO: Study and simulation of metamaterials for RF communication blackout during Re-entry', worth of Rs. 9.98 Lakhs
9. Dr. Narendar (PI), Design and Optimization of Novel Negative Capacitance (NC) FET for Low-Power and High-Switching Applications 33.00 Lakhs DST-SERB
10. Dr. Prakash Kodali, Flexible and Wearable Triboelectric Nanogenerators Development for Sensing, Energy Harvesting to Drive Implantable Electronic Medical Devices - 3 Years (2022-2025) 35.20 Lakhs DST-SERB
11. Dr. Prakash Kodali, D-Powerpad: Self Configurable Renewable Powered Autonomous Drone Charging Station with Battery Swapping System- 1.5 Years (2022-2023) 17.80 Lakhs TiHAN-IITH.
12. Dr. Prakash Kodali, Smart Electronic Handheld Device for Non-Invasive Drug Delivery – 1 Year (2022-2023) 12.75 Lakhs MSME Innovation
13. Dr. Prakash Kodali, Screening of Salt Tolerance in Plants using Internet of Things and Machine Learning – 1 year (2022-2023)12.75 Lakhs MSME Innovation

ONGOING PROJECTS

1. Prof. V Venkata Mani, Indigenous test bed for Industry 4.0 using Visible Light Communication with Industrial Internet of Things, AISTIC, 68lakh
2. Dr. K. Naga Srinivasarao Batta, Programmable Electronic Jacquard Machine for complex designs in Handloom sector, SERB Start-up Research Grant Project, 22.5 Lakhs
3. Dr. Chayan Bhar, Design of a multi-operator telecommunication network to support heterogeneous services using network slicing, SERB Start-up Research Grant Project, 12.5 lakhs
4. Dr. Chayan Bhar, Design of a multi-operator telecommunication network to support heterogeneous services using network slicing, RSM, 4.8 Lakhs
5. Dr. Vasundhara, Design and Development of an integrated self-voice enhancement and feedback mitigation system for hearing assistive devices, RSM, 4.9 Lakhs
6. Dr. Amarjit Kumar, Wireless Health Monitoring of Ripened Fruits and Vegetables in Cold-Stores, RSM, 4.9 Lakhs
7. Dr. Ekta Goel, Performance optimization of Tunneling Finfets, RSM, 4.9 Lakhs.

Patents

S. No	Date of Filing	Patent Title	Patent Applicant Name(s)	Patent No.	Department	Patent Nation	Patent Status
1	2021-08-23	A Flipped Voltage Follower-Based Low Drop-Out Regulator Device	Reddy, K. Krishna; Patri, Sreehari Rao; Reddy, M. V. Krishna	2021106673	ECE	Australia	Granted
2	2021-08-21	IoT Based System And Method For Malnutrition Tracking	Shukla, Saurabh; Patri, Sreehari Rao; Avinash P.	2021106366	ECE	Australia	Granted
3	2021-08-16	A Solar Powered Cooling Chamber for Storing Farm Produce	Sridhar, Sushyanth; Devanuri, Jaya Krishna; Rao Patri, Sreehari	2021105620	ECE	Australia	Granted
4	2021-08-16	A Tele-Health Care System And Method For Early Disease Detection	Rama, V.; Rama Rao, C. B.; swaraj, Nikhil; Cumarasurier, Shantosh; Moni, Vidya	2021105599	ECE	Australia	Granted

PhD Research guidance

1. K.V.B Vasanta Rayudu (Roll No. 701358) completed his PhD with the title "Some Investigations of efficient testing and fault diagnosis algorithm for VLSI circuits" under the guidance of Prof. Patri Sreehari Rao
2. Aruru Sai Kumar (Roll No. 717129) completed his PhD with the title "Real-Time Embedded Application Core Mapping for NoC with enhanced performance and energy efficiency" under the guidance of Prof. T. V. K. Hanumantha Rao
3. Ravikanti Swetha (Roll No. 716141) completed his PhD with the title "Some Investigations on performance evaluation of compact circularly polarized anntennas for 5G wireless applications" under the guidance of Prof. L. Anjaneyulu
4. Krishna Reddy Komatla (Roll No. 718042) completed his PhD with the title "Novel design Techniques for energy harvesting Integrated circuits" under the guidance of Prof. Patri Sreehari Rao
5. S Siva Priyanka (Roll No. 717030) completed his PhD with the title "Development of novel adapative Beamframing approaches for Multi-Channel speech enhancement" under the guidance of Prof. T. Kishore Kumar
6. Kanaka Linga Venkata Sai Prakash Sakuru (Roll No. 718047) completed his PhD with the title "Time Synchronization over bounded delay paths in wireless sensor and IoT networks" under the guidance of Prof. N. Bheema Rao.
7. Bodile Roshan Mukindrao (Roll No. 716025) completed his PhD with the title "Investigations on Model- Based Bayesian filtering approach and Meta-heuristic algorithms for ECG Denoising" under the guidance of Prof. T. V. K. Hanumantha Rao.
8. Vakkalakula Bharath Srinivasulu (Roll No. 718144) completed his PhD with the title "Design and optimization of spacer engineered emerging Nanoscale junction less FETs for Low power and High frequency applications" under the guidance of Dr. Vadhiya Narender.
9. Karnati Sudarsana Reddy (Roll No. 716032) completed his PhD with the title "An optimal Airborne telemetry system for long range Aerospace vehicles" under the guidance of Prof. B. Lakshmi.

Summary (ECE)

S. No.	Activity	Number
1	Publications (Peer Reviewed Journals/ conferences) (SCOPUS/SCI)	131
	International Journals with impact factor	97
	International Journals without impact factor	00
	International Conferences	34
2	Funded Research Projects/SPARC projects (2021-22)	21
	DBT, SERB, DRDO, ISRO (Rs. 267.33 Lakhs)	14
	Ongoing Projects (Rs 103 Lakhs)	07
	Total number of projects ongoing	21
	Total budget	370.33 Lakhs
3	PhD Awarded	12
4	Book Chapters	4
5	Patents filed	4
	Patents granted Awarded	4

DEPARTMENT OF METALLURGICAL AND MATERIALS ENGINEERING

Brief History of the Department, Academic Programs

The Metallurgical Engineering Department of NIT, Warangal was found in the year 1965. The students strength of the department is about 365. In the last academic year, the IV B. Tech students have got placement opportunities in core companies such as Vedanta, Tata Steel Ltd., AMNS, LnT and various software, coaching institutes and finance management companies. The B. Tech placement is 79% and M. Tech students placement improved to 66.7%. Good number of students are going for higher studies in India or foreign countries and also getting opportunities off the campus as well. About 40 research scholars are currently pursuing their PhD in the department. The department has been part of National Mission Project on developing Advanced Ultra Supercritical (AUSC) technology for the country. Currently about Rs. 3.95 crores worth of research projects are being carried out in the department. Some of the major research funding organisations are DAE-BRNS, DST-SERB, UGC-DAE-CSR, GTRE, ARDB, NTPC-NETRA, AUSC, ISRO, and DRDO. From the academic year 2021-2022, in line with the NEP 2020 the Department revised curriculum and is offering new programs B. Tech Minor in Materials Engineering, B. Tech Honours in Met. & Mat. Engineering, PG Diploma (Industrial Metallurgy, Materials Technology) and Integrated MTech & PhD along with the old programs (B. Tech in Met. & Mat. Engineering, M. Tech (Industrial Metallurgy), M. Tech (Materials Technology) and PhD).



Department faculty-Group photo



Summary

S. No.	Activity	Number
1	**Publications (Peer Reviewed Journals/ conferences) (SCOPUS/SCI)**	49
	International Journals with impact factor	48
	International Journals without impact factor	01
	International Conferences	06
2	**Funded Research Projects/SPARC projects (2021-22)**	00
	Ongoing Projects (Rs. **3.94** Crores)	07
	Total number of projects ongoing	07
	Total budget	3.94 Crores
3	**PhD Awarded**	11

Faculty Details

S. No.	Name of the Faculty Member and Designation	Highest Qualification	Research Interests	Photograph
1.	Dr. T. Mahesh Kumar Professor & Head of the department	Ph. D	Metal Joining, Additive Manufacturing, High Temperature Materials	
2.	Dr. G. V. S. Nageswara Rao Professor (HAG)	Ph. D	Powder metallurgy, Surface Engineering, Materials Testing and Characterization	
3.	Dr. N. Narasaiah Professor	Ph. D	Mechanical Behaviour of Materials, Fatigue, Fracture Mechanics, Failure Analysis	
4.	Dr. C. Vanitha Professor	Ph. D	Physical Metallurgy, Texture, Nuclear Materials, Light Metals & Alloys, Corrosion	
5.	Dr.Asit Kumar Khanra Professor	Ph. D	Powder Metallurgy, Processing of Advanced Ceramics, Biomaterials	

6.	Dr. N. Kishore Babu Associate Professor	Ph. D	Metal Joining, Additive manufacturing, nanocomposites	
7.	Dr. Brahma Raju Golla Associate Professor	Ph. D	Ultra High Temperature Ceramics, Advanced Materials Processing, Tribology	
8.	Dr. B. Srinivasa Rao Associate Professor	Ph. D	Process- Microstructure-Property Relationship, Nanocrystalline Materials	
9.	Dr.Ajoy Kumar Pandey Associate Professor	Ph. D	Mechanical Metallurgy, Bio-Ceramics, Powder Metallurgy	
10.	Dr. R. Arockia Kumar Associate Professor	Ph. D	Shape Memory Alloys, Friction Stir Processing, Physical Metallurgy, Severe Plastic Deformation	
11.	Dr. V. Sreedevi Asst. Professor Grade-II	Ph. D	Synthesis and Characterization of Bulk Nanocrystalline Materials	

12.	Dr. V. Rangadhara Chary Asst. Professor Grade-II	Ph. D	High Performance Structural Ceramics, High Entropy Alloys Phase Transformations	
13.	Dr. Uma Maheswara Rao S Asst. Professor Grade-II	Ph. D	Non-equilibrium Processing of Materials, Advanced Characterization, Magnetic Materials	
14.	Dr. Y. Raghupathy Asst. Professor Grade-II	Ph. D	Applied Nanomaterials and Coatings, Corrosion Engineering	
15.	Dr.SuklaMondol Asst. Professor Grade-II	Ph. D	Alloy development, light alloys, Microstructural characterization, TEM	
16	Dr. Ashwinee Kumar Ad-hoc faculty	Ph.D	Computational Materials Engineerig. Ab initio modelling of water metal interface.	
17	Dr. Naga SruthiNeelam	Ph.D	High Temperature materials, Intermetallics, Ti alloys	
18	Dr. G. RamyaSree	Ph. D	Nanostructured High-Entropy alloys: synthesis and characterization.	

Funded Research Projects

New Projects Sanctioned

1. Dr. Ajoy Kumar Pandey, Dr. N. Narasaiah and Dr. B. Srinviasa Rao (Department of MME) have received a project on 'Exploratory studies on effect of fatigue and hold time on crack growth behavior of GTM Ti-64 alloy', from Gas Turbine Research Establishment (GTRE), Bangalore, worth of Rs. 90.56 Lakhs. (GTRE/MMG/BMR1/1218/21/CARS/A/21), dated 10.03.2022.
2. Dr. Nagamuthu Kishore Babu, Teachers Associateship for Research Excellence (TARE) SERB, File No. TAR/2021/000325 Date: 01-Feb-2022, worth of Rs. 18.30 Lakhs.
3. Dr. Asit Kumar Khanra, Development of Al-Ni-RE Alloys for High Temperature and Tribological Applications (India-Slovenia Bilateral Scientific and Technological Cooperation – Nov-2021) worth of Rs. 21.0 Lakhs.
4. Dr. R. Arockia Kumar, Development of novel bioresorbable zinc alloys for bioimplant applications (India-Slovenia Bilateral Scientific and Technological Cooperation – Nov-2021) worth of Rs. 14.0 Lakhs.

Ongoing

- Dr. Mahesh Kumar Talari, Development of novel B and C modified fillers for the gas tungsten arc welding of Ti alloys, Aeronautics R&D Board, DRDO, Rs. 48 Lakhs.
- Dr. Nagamuthu Kishore Babu, Understanding the Role of Hydrogen in Titanium Alloy Weldments, Aeronautics R&D Board, DRDO, Rs. 48.24 Lakhs.
- Dr. Uma Maheshwara Rao Seelam, Towards 3 tesla coercivity Nd-Fe-B magnets without dysprosium addition into the bulk, SERB-Core Research Grant, File No. CRG/2020/006001 Dt. 29/12/2020, Rs. 29.8 Lakhs.
- Dr. Sreedevi Varam, Hydrogen Production through Water Splitting by Novel Nanocrystalline Al-based Alloys (with Added Few Layered Graphene), SERB-Core Research Grant, File No. SERB/F/10375/2019-20 dated 18/02/2020, Rs. 34.2 Lakhs
- Dr. N. Narasaiah, Dr. G. V. S Nageswara Rao, Dr. C. Vanitha, Dr. Ajoy Kumar Pandey, Dr. G. Brahma Raju, Dr. B. Srinviasa Rao, Oxide dispersion strengthened (ODS) iron-based alloys for Advanced Utra Super Critical (AUSC) Technology, DST, TMD/CER/CleanCoal/2017/036 (ARCI) (C) and (G) dated 24-08-2018, Rs. 90.812 Lakhs

S. No.	Title	Total Amount sanctioned	Funding agency and Project No.	Installment 1, 2019-2020	Installment 2, 2020-2021
1	Development of novel B and C modified fillers for the gas tungsten arc welding of Ti alloys	48 Lakhs	AR&DB	----------	Rs.29,81,172.00 Installment 1
2	Understanding the Role of Hydrogen in Titanium Alloy Weldments	48.24Lakhs	AR&DB	----------	Rs.29,24,770.00 Installment 1
3	Hydrogen Production through Water Splitting by Novel Nanocrystalline Al-based Alloys	34.2 Lakhs	SERB-Core Research Grant, File No. SERB/F/10375/2019-20	Rs.19,46,754.00 Installment 1	Yet to receive 2nd installment
4	Towards 3 tesla coercivity Nd-Fe-B magnets without dysprosium addition into the bulk	29.8 Lakhs	SERB-Core Research Grant, File No. CRG/2020/006001	----------	Rs.9,50,000.00 Installment 1 **(2021-2022)** Rs.6,99,000.00 Installment 2
5	Teachers Associateship for Research Excellence (TARE), SERB	18.30 Lakhs	File No. TAR/2021/000325 Date: 01-Feb-2022 ,	----------	----------
6	Oxide dispersion strengthened (ODS) iron - based alloys for Advanced Utra Super Critical (AUSC) Technology	90.812 Lakhs	DST TMD/CER/Clean Coal/2017/036 (ARCI) (C) and (G)	Rs.3.12 Lakhs	Rs.2.2 Lakhs
7	Exploratory studies on effect of fatigue and hold time on crack growth behavior of GTM Ti-64 alloy	90.56 Lakhs	GTRE/MMG/BMR1/1218/21/CARS/A/21, dated 10.03.2022	----------	----------

Completed Consultancy Projects

1. **Prof. N. Narasaiah, Dr. Ajoy Kumar Pandey, Dr. R. Arockia Kumar, Dr. B. Srinivasa Rao**, Wear Life enhancement study of coal pulverizer grinding media (Z019X00004, dated 30/12/2019) (BHEL, Hyderabad) worth of **Rs. 3.5 Lakh**

New Lab Equipments/software/Workstations Installed

1. Purchases & Installed Glove box to maintain argon atmosphere.
2. Purchased &installed Upright Metallurgical Microscope (Quasmo make & QX4RT model) in Physical metallurgy lab to investigate the microstructure of materials.
3. Purchased the Chipset (SEM computer part) of Tescan brand.
4. Established 'welding Lab' with the instruments of Shielded metal arc welding (SMAW), Gas metal arc welding (GMAW), Gas Tungsten arc welding (GMAW), Abrasive cutting machine, Sub merged arc welding (SAW) and Varestraint testing equipment (Photographs are included below).



Shielded metal arc welding (SMAW)



Gas metal arc welding (GMAW)



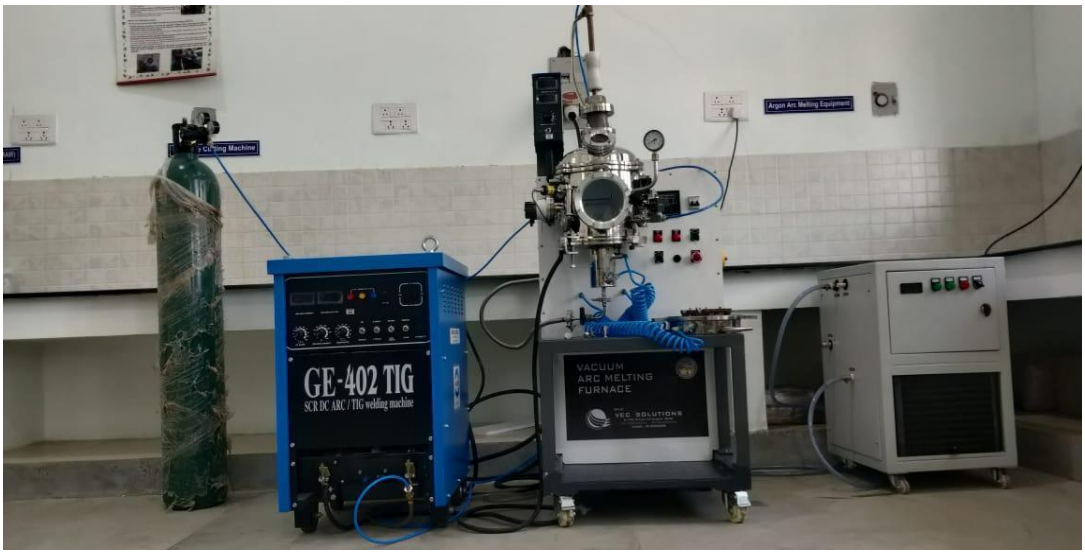
Gas Tungsten arc welding (GMAW)



Abrasive cutting machine



Sub merged arc welding (SAW)



Argon arc melting equipment



Varestraint testing equipment

DEPARTMENT OF CHEMICAL ENGINEERING

Brief History of the Department, Academic Programs

The department of Chemical Engineering was started in the year 1964 and since then it has come a long way in educating budding chemical engineers and scholars. The department celebrate its Golden Jubilee in 2014-15. The department offers B.Tech. M.Tech. and Ph.D. prorammes. B.Tech. program in Chemical Engineering has been accredited for 5 years by NBA with effect from June 2015. M.Tech in Chemical Engineering with Specialization in CAPED has been re-designated as M.Tech. in Chemical Engineering in 2015.M.Tech. Course in Process Control is being started in 2016 which has been re-designed as M.Tech in Systems and Control Engineering in 2021. Students are admitted to these programmes based on National level competitive examinations. Foreign national students are also given admission to these programmes. The department has well qualified faculty dedicated to teaching and doing research in fundamental and advanced areas. The department houses various laboratories catering to the needs of the curriculum. The faculty are actively engaged in industrial consultancy and sponsored research projects. The department has inked MoUs with some of the leading industries. The graduating students are absorbed into reputed firms through campus placements. The department aims at inculcating lifelong learning skills in the students. The alumni of the department are shouldering high positions in multifarious organizations.



Summary

S. No.	Activity	Number
1	**Publications (Peer Reviewed Journals/ conferences) (SCOPUS/SCI)**	62
	International Journals with impact factor	59
	International Journals without impact factor	3
2	**Funded Research Projects/SPARC projects (2020-21)**	6
	DBT, DRDO	1
	Ongoing Projects	6
	DST, SERB, IITM, NHAI, CSIR	7
	Total number of projects ongoing	**16**
	Total budget	**429.88 lakhs**
3	**Ph.D. Awarded**	6
4	**Book Chapters**	19

Faculty Details

S. No.	Name of the Faculty Member and Designation	Highest Qualification	Research Interests	Photograph
1.	Prof. Shirish H. Sonawane Professor	Ph.D.	Fluidized beds, Biochemical Engg., Microbial fuel cells	
2.	Prof. A. Venu Vinod Professor	Ph.D.	Fluidized beds, Bioreactors, Heat transfer, Nanofluids	

3.	Prof. Sarath Babu Anne Professor	Ph.D.	Modelling and Simulation, Reaction Engg., CO_2 Capture and Utilization	
4.	Prof. Anand Kishore. K Professor	Ph.D.	Biochemical Engg. Modelling and Simulation	
5.	Dr. K. Srivani Professor	Ph.D.	Biochemical Engineering	
6.	Dr. S. Srinath Professor & Head	Ph.D.	Fluidized bed combustion, Modelling and Simulation	
7.	Dr. A. Seshagiri Rao Professor	Ph.D.	Process Control, Wastewater treatment	
8.	Dr. P.V. Suresh Professor	Ph.D.	Fuel Cells, CO_2 Capture and Utilization, CFD, Chemical looping Combustion.	
9.	Dr. S. Vidyasagar Associate Professor	Ph.D.	Sustainable Energy Technologies, Modelling and Simulation	
10.	Dr. S. Murali Mohan Associate Professor	Ph.D.	Flow Batteries, Fuel cells and Membrane Separations	

11.	Dr. G. Uday Bhaskar Babu Associate Professor	Ph.D.	Modelling and Simulation, Energy Integration, Process Control	
12	Dr. V. Ram Sagar Associate Professor	Ph.D.	Process Scheduling, Chemical Looping Combustion	
13.	Dr. Raghu Raja Pandiyan Assistant Professor	Ph.D.	Thermoset Composites, Process Modelling and Simulation	
14.	Dr. K.S. Rajmohan Assistant Professor	Ph.D.	Nanocatalysis, Fuel cells and Batteries, Bio refineries	
15.	Dr. Manohar Kakunuri Assistant Professor	Ph.D.	Synthesis of carbon Nanomaterials, Li-ion batteries	
16.	Dr. Praveen K. Bommineni Assistant Professor	Ph.D.	Molecular Dynamics and Simulations	
17.	Dr. Ramya Araga Assistant Professor	Ph.D.	Synthesis of Nanomaterials, Wastewater Treatment	

18.	Dr. Anjana PA Assistant Professor	Ph.D.	Catalysis, Energy and Environmental Applications	
19.	Dr. P. Sampath Kumar Assistant Professor	Ph.D.	Energy Storage and Conversion Devices, Scale-up of Nanomaterials	
20.	Dr. Naresh Thota Assistant Professor	Ph.D.	Molecular Dynamics and Simulation for Energy, Environmental, and Healthcare Applications	
21.	Dr. Kishant Kumar Assistant Professor	Ph.D.	Molecular Dynamics, Monte Carlo Simulation	
22.	Prof.Y. Pydi Setty Visiting Professor	Ph.D.	Fluidized beds, Biochemical Engg., Microbial fuel cells	

Funded Research Projects

New Projects Sanctioned

1. Dr. P.A. Anjana (Department of Chemical Engineering) have received a project on 'Development of single-crystal pyrochlore nanomaterial and its study as electrolyte for Intermediate Temperature Solid Oxide Fuel Cells', Startup Research Grant (SRG) SERB worth of Rs. 24.97 Lakhs.
2. Dr. Srinath S and Dr. Raghu Raja Pandiyan Kuppusamy (Department of Biotechnology) have received a project on "Development of 3D printable composite

thermal shields using photo cure short fiber nano hybrid resins through Reactive Additive Manufacturing Process", DST, worth of Rs. 30.4 Lakhs.

3. Dr. P.A. Anjana (Department of Chemical Engineering) have received a project on 'Development for Hydrogen Peroxide dissociation for monopropellant Thrusters', ISRO, RESPOND worth of Rs. 24.97 Lakhs.
4. Dr. Shirish Sonwnne and Dr. Srinath S (Department of Chemical Engineering) have received a project on "Development of Technology for color- coated Coins/Blank /Medallions and Tokens for Atmanirbhar Bharat", IGM, Hyderabad, worth of Rs. 10.4 Lakhs.
5. Dr. Shirish Sonwnne "Development of effective robust process for the synthesis of polyacrylic based Microspheres" Kiron Lab USA/Gujarat India worth of Rs. 5.30 Lakhs
6. Dr. P. Sampath Kumar "Analyze the composite materials for electrical properties" Nanospan India Pvt. Ltd, Patancheru, worth of Rs. 1 Lakh.

Ongoing Projects

1. Dr. Shirish Sonwnne (Department of Chemical Engineering) and Dr. Perugu Shyam (Department of Biotechnology) ongoing project on "Demonstration of Technology for treatment of rain harvested water lakes in Warangal Telangana State", DST WTI, worth of Rs. 44.41 Lakhs. (2021-24)
2. Dr. Shirish Sonwnne and Dr. Murali Mohan Seepana (Department of Chemical Engineering) ongoing project on "Development and Demonstration of Pilot-scale Hybrid Wastewater Treatment System with Hydrodynamic Cavitation and Biosurfactant for Recycling of Textile Effluent", IMPRINT SERB, worth of Rs. 44.42 Lakhs. (2019-22).
3. Dr. Shirish Sonwnne (Department of Chemical Engineering) ongoing project on "Development of electrically conductive adhesives for flexible film circuits and microrocssor packaging applications", MEITY R&D in Electronics and Cyber Security Group, Electronic Material and Component Development Division, worth of Rs. 44.10 Lakhs. (2021-24).
4. Dr. Anand Kishore Kola (Department of Chemical Engineering) ongoing project on "Low-cost Biodegradable Polymer for Application in Food Packaging", SERB, worth of Rs. 25.5 Lakhs. (2021-23).
5. Dr. Murali Mohan Seepana, (Department of Chemical Engineering) "Tackling textile pollution using a 3D printed hybrid process", The Royal Society, UK, IES\R1\201244 dated 30-03-2021, worth of Rs.12.36 Lakhs.

6. Dr. Sheshagiri Rao (Department of Chemical Engineering) “Development of advanced automatic control-based wastewater treatment process towards sustainable water-energy-food nexus” DST (DST/TMD) worth of Rs.67.49 Lakhs (2021-24).
7. Dr. Shirish Sonwnne (Department of Chemical Engineering) ongoing project on “Development of process for the synthesis of cellulose nanocrystals from MCC”, Tevoren Technologies LLP worth of Rs.3.30 Lakhs.
8. Dr. Manohar Kakunuri (Department of Chemical Engineering) “Development of Task-Specific Functional Ionic Liquid Extractant and Nanofibrous Membrane for Extraction of Rare Earth Elements” Lanum Foundry, USA worth of Rs.56.1 Lakhs.
9. Dr. Kishant Kumar, “Green Solvents for Recycling Cathodes of Spent Li-Ion Batteries”, SERB, GoI, 2021, 25.16 Lakhs.
10. Dr Srinath, Dr Shirish, Dr Kishant (Department of Chemical Engineering) and Dr P. Rathish Kumar (Civil Eng.), “Effective Management of Process Slag from PCB smelting, C-MET Hyderabad. Dated 05-05-2021, Rs. 10 Lakhs.

Completed

1. Dr Shirish Sonawane, “Process Development for the production of Janus Nanoparticles for selected catalytic reactions”, SERB DST, 2018-21, GOI. Rs.20.87 Lakhs.
2. Dr. G Uday Bhaskar Babu, “Identification and Control strategies for improvement of Proton Exchange Membrane (PEM) Fuel Cell”, SERB, DST, EEQ/2018/000993 dated 26-02-2019, Rs. 17.1 Lakhs.
3. Dr. A. Seshagiri Rao, “Low-cost innovative technology for water quality monitoring and water resources management for urban and rural water systems in India”, (LOTUS) Indo-European Horizon 2020 project.
4. Dr. A. Seshagiri Rao, “Duo-India grant to visit The Autonomous University of Barcelona (UAB), Spain and work on Machine learning based control for wastewater treatment plants”, Euro 3000, 2020.
5. Dr. Manohar Kakunuri, “Fabrication of carbon soot based reusable and robust nanofiber membranes for effective oil-water separation”, SRG-SERB, worth of Rs.27.1 Lakhs.
6. Dr. Murali Mohan Seepana, “Development and Demonstration of Hydrogen Redox Flow Battery using Non-Precious Electrocatalysts” SPARC 2019-2021, worth of Rs.43.17 Lakhs.
7. Dr Shirish Sonawane and Dr S. Srinath, “Cavitation based dispersion of Boron nanoparticles into JP10 Fuel”, GTRE DRDO, 2019-21, Rs. 9.95 Lakhs.

S. No.	Title	Total Amount sanctioned	Funding agency and Project No.	Instalment, 2021-2022
1.	Development of single-crystal pyrochlore nanomaterial and its study as electrolyte for Intermediate Temperature Solid Oxide Fuel Cells. Dr. P.A. Anjana	Rs. 24.97 Lakhs	SRG-SERB	Rs. 1,77,8605/-
2.	Development for Hydrogen Peroxide dissociation for monopropellant Thrusters Dr. P.A. Anjana	Rs. 24.97 Lakhs	ISRO-RESPOND	Rs. 1,02,5750/-
3.	Development of 3D printable composite thermal shields using photo cure short fiber nano hybrid resins through Reactive Additive Manufacturing Process Dr. Srinath S and Dr. Raghu Raja K.P.	Rs. 30.4 Lakhs	CRG-SERB	Rs. 15,02,600/-
4.	Development of Technology for color- coated Coins/Blank /Medallions and Tokens for Atmanirbhar Bharat Dr. Shirish Sonwnne	IGM, Hyderabad, Rs. 10.4 Lakhs	IGM, Hyderabad,	Rs. 1,87,000/-
5.	Development and electrically conductive adhsives for flexible film circuits and microprocessor packaging applications Dr. Shirish Sonwnne	MEITY R&D in Electronics and Cyber Security Group, Rs. 44.10 Lakhs.	MEITY	Rs.17,70,000/-
6.	Development of advanced automatic control-based wastewater treatment process towards sustainable water-energy-food nexus Dr. Sheshagiri Rao	DST (DST/TMD) worth of Rs.67.49 Lakhs		
7.	Development and Demonstration of Pilot-scale Hybrid Wastewater Treatment System with	Rs. 41.42 Lakhs	IMP/2019/000004, dated 16 December 2019	Rs. 15,00,000/-

	Hydrodynamic Cavitation and Bio surfactant for Recycling of Textile Effluent			
8.	Process Development for the production of Janus Nanoparticles for selected catalytic reactions	Rs. 20.87 Lakhs	SERB DST, 2018-21, EMR/2016/007585	Rs. ZERO
9.	Identification and Control strategies for improvement of Proton Exchange Membrane (PEM) Fuel Cell	Rs. 17.1 Lakhs	SERB, DSTEEQ/2018/000993 dated 26-02-2019	
10.	Low -cost innovative technology for water quality monitoring and water resources management for urban and rural water systems in India.	-	Indo-European Horizon 2020 project	
11.	Machine learning based control for wastewater treatment plants	Euro 3000	Duo-India grant to visit The Autonomous University of Barcelona (UAB), Spain	
12.	Fabrication of carbon soot based reusable and robust nanofiber membranes for effective oil-water separation	Rs. 27.08 Lakhs	SERB, SRG/2019/00313.	Rs.2,87,000/-
13.	Development and Demonstration of Hydrogen Redox Flow Battery using Non-Precious Electrocatalysts SPARC 2019-2021, Rs.43.17 Lakhs.	Rs.43.17 Lakhs.	SPARC 2019-2021,	
14.	Effective Management of Process Slag from PCB smelting.	Rs. 10 Lakhs	C-MET Hyderabad. Dated 05-05-2021,	Rs.10,00,000/-
15.	Tackling textile pollution	Rs.12.36	The Royal	-

	using a 3D printed hybrid process,	Lakhs	Society, UK, IES\R1\201244 dated 30-03-2021.	
16.	Low-cost Biodegradable Polymer for Application in Food Packaging"	Rs. 23.414 Lakhs.	SERB, GoI, 2021,	
17.	Green Solvents for Recycling Cathodes of Spent Li-Ion Batteries,	Rs. 26.76989 Lakhs.	SERB, GoI, 2021,	
18.	Development of process for the synthesis of cellulose nanocrystals from MCC, Tevoren Technologies LLP, 2021.	Rs.3.30 Lakhs.	Tevoren Technologies LLP, 2021,	Rs.0/-
19.	Cavitation based dispersion of Boron nanoparticles into JP10 Fuel.	Rs. 9.95 Lakhs.	GTRE/MMG/BMR/1046/19/CARS/A/19, dated 13th June, 2019	Rs.2,70,000/-
20.	Ultrasonic encapsulation of bioactive compounds to deliver in the food matrix.	Rs. 16 Lakhs	Indo-Russia DST-/INT/RUS/RFBR/P-324, 2018-20,	Rs. 0/-
21.	Demonstration of Technology for treatment of rain harvested water lakes in Warangal Telangana State	Rs. 44.41 lakhs	DST/TMD/EWO/WTI/2K19/EWFH/2019/111(G), dated 04 February 2021	Rs. 16,15,421/-

PhD Research guidance

1. Radhika Gandu (716163) completed her PhD with the title “Vapor Recompression in Batch distillation for Separation of Ternary Zeotropic MIxtures: Feasibility and Analysis” under the guidance of Dr. Uday Bhaskar Babu G (Main Supervisor) and Dr Seshagiri Rao A (CO-Supervisor) June (2022).
2. Suresh Chiluka (717142) completed his PhD with the title “Data-driven Robust Controller Design via Virtual Reference Feedback Tuning Approach” under the guidance of Dr. Uday Bhaskar Babu G (Main Supervisor)

and Dr. Muralimohan (CO-Supervisor) July 2022.

3. Tejaswini (717143) completed her PhD with the title "Design of Control Strategies for Activated Sludge based Waste Water Treatment Plants for Improved Operability" under the guidance of Dr. Seshagiri Rao A (Main Supervisor) and Dr. Uday Bhaskar Babu G (CO-Supervisor) December (2021).
4. Yashawantha K M (718155) completed his PhD with the title "Heat Transfer Enhancement using Ethylene Glycol and Water mixture based nanofluids in a Plate Heat Exchanger" under the guidance of Dr. A. Venu Vinod April (2022).
5. Sheik Abdul Gaffar (716164) completed his PhD with the title "Heat Transfer Enhancement using Ethylene Glycol and Water mixture based nanofluids in a Plate Heat Exchanger" under the guidance of Dr. Murali Mohan (Main Supervisor) and Dr. A. Sheshagiri Rao (Co-Supervisor) April (2022).
6. Surywanshi Gajanan Dattarao (716040) completed his PhD with the title "4-E (Energy, Exergy, Ecological and Economic) analyses of Chemical-Looping Combustion based Coal Fired Power Plants for CO_2 Capture and Utilization" under the guidance of Dr. P .V. Suresh June (2021).

New Lab Equipments/software/Workstations Installed

1. Purchased & Installed High Pressure Hydrothermal Autoclave Reactor.
2. Purchased & Installed Photochemical Reactor
3. Purchased & Installed Fast Pyrolysis reactor
4. Purchased & Installed Emulsion Polymerization Reactor
5. Purchased & Installed 3D Printer with Curing and Washing Accessories
6. Purchased & Installed Bench Ultraviolet Light Accelerated Weathering Tester
7. Purchased & Installed Refrigerated centrifuge
8. Purchased & Installed Optical Microscope
9. Purchased Doctor blade
10. Purchased & Installed Coin cell crymper
11. Purchased & Installed Servers (Tyrone 2 x Intel DDR4 SDRAM with EC 64GB).
12. Purchased & Installed Pervaporation Membrane System.

Department of Computer Science and Engineering

As per NEP guidelines 2020, the Department of Computer Science and Engineering has revised the existing curriculum and has designed new scheme and syllabus for both UG and PG programs. As part of curriculum revision, the department has started offering one Minor program in CSE and B. Tech. Honors in CSE from 2021-2022 academic year onwards. Core Computer Science subjects need strong mathematical background and computational knowledge, and thus the department added a good number of mathematics subjects related computer science, besides Computational Thinking Practice, in the revised curriculum of UG and PG programs. Additional lab and tutorial hours are also included so that the students can spend more time in practicing the concepts. Since advances in the Computer Science extending its horizons in both depth and breadth manner, new courses such as Deep Learning, Reinforcement Learning, Microprocessor, Internet of Things, Blockchain Technologies and Software Defined Network are introduced in the new curriculum.

Patents Granted

1. Dr. K.V. Kadambari Assistant Professor, Department of CSE and her student Ms. B. Lavanya Madhuri were awarded a patent entitled, "Acceleration of incremental learning and decremental unlearning of Support vector machines", (Commissioner of Australia Patents) Patent number: 2021101567, April 2021.



2. E. Suresh Babu "An Efficient Spectral Cluster Routing Method to Enhance the Network Performance in Wireless Sensor Networks Publication. The Patent Office Journal No. 12/2021 Dated 19/03/2021.



3. Bablani, Annushree Ms.; Reddy Edla, Damodar Dr. Bablani, Annushree; Reddy Edla, Damodar; Reddy, P. Saidi; Ch., Ramalingaswamy; Kumar, Pankaj, 2021102773, "A System And Method For Determining Truthful And Deceptive State Of A Person" 2021-05-23



Pro\jects

1. Dr. Ram Krishan, Dr. Deepak Reddy Pullaguram, Dr. Sanjaya Kumar Panda, Dr. Venkateswara Rao Kagita, were sanctioned a Project entitled “Dynamic and Static Security Analysis of Large Power System using High Performance Computing”, Grant: 45 Lakhs, NSM-IISC Bangalore (DST).





2. A project under “Student innovation program” by ARTPARK team of IISC Bangalore was granted to Mr. Vivek Dalai, MTech student under the guidance of Dr. K V Kadambari. The title of the project is “Masked face detection”. Project is granted for 5.8 lakhs.



3. Dr. M. Srinivas received a grant to conduct an online skill development program from SERB under Advance for Accelerate Vigyan track.



4. Dr. Sangharatna Godboley (P.I), NIT Warangal and Prof. P. Radha Krishna (Co-PI), NIT Warangal, “Smart Cleaner: Automatic Clean the Smart Contract by Repairing Dead Atomic Conditions” Technology Incubation Hub (TIH) of National Mission on Interdisciplinary Cyber Physical Systems (NMICPS) for IIT Bhilai Innovation and Technology Foundation (IBITF) in FinTech Technologies under “Promotion and Acceleration of Young and Aspiring technology entrepreneurs (PRAYAS)” track for Rs. 26.46 Lakhs (3 years) 2022-2025.





5. Dr. Balaprakasa Rao Killi (P.I), NIT Warangal and Dr.Rakesh Tripathi (Co-PI), NIT Raipur “Blockchain-Enabled Digital Identity and Authentication for Dynamic KYC (Know Your Customer) in Banking and Finance Investigators”, Technology Incubation Hub (TIH) of National Mission on Interdisciplinary Cyber Physical Systems (NMICPS) for IIT Bhilai Innovation and Technology Foundation (IBITF) in FinTech Technologies under “Promotion and Acceleration of Young and Aspiring technology entrepreneurs (PRAYAS)” track for Rs. 7.62 Lakhs (1 Year) 2022-2023.



DEPARTMENT OF BIOTECHNOLOGY

The Department of Biotechnology of NIT Warangal was established in 2006. The program was initiated with a 4-year B.Tech in Biotechnology degree. Subsequently, in the year 2009, the Department welcomed candidates for pursuing PhD in Biotechnology. In 2020, M.Tech in Biotechnology program was introduced in the Department. The Department also includes Postdoctoral fellows pursuing their research in various areas.

There are twenty dedicated faculty members who have expertise in diversified research areas of Biotechnology. The Department aspires to become a centre imparting superior education and research in Biotechnology. It also promotes entrepreneurship and industrial collaborations for enhancing the quality of human life. The goal of the Department in generating a pool of highly skilled individuals, at various levels, comparable to international standards, is being achieved by imparting quality education and training.



Faculty Profile

S. No.	Name of the Faculty and Designation	Highest Qualification and Date of Joining	Research Interests	Photograph
1	Dr. Korrapati Narasimhulu Professor and HOD	Ph. D 17-01-2008	Environmental Biotechnology, Modelling & Simulation of Bioprocesses, Biofuels & Bioenergy, Systems Biology	
2	Dr. Sreenivasa Rao Parcha Professor	Ph. D 17-07-2008	Stem Cell Engineering, Downstream Processing and Enzyme Engineering	
3	Dr. R. Satish Babu Professor	Ph.D 29-03-2012	Bioprocess Engineering Environmental Biotechnology Modeling and Simulation of Bioprocesses Metabolic Engineering Bioinformatics	
4	Dr. Onkara Perumal. P Associate Professor	Ph. D 30-11-2006	Bioinformatics; Computational Biology; Functional Genomics; Metabolic Disorders	
5	Dr. Amitava Bandhu Associate Professor	Ph. D 17-12-2013	Studies on gene regulation in Mycobacteria	

6	Dr. Rama Raju. B Associate Professor	Ph. D 24-09-2013	Metabolic Engineering, Bio fuels and Biomaterials	
7	Dr. V. Kohila Associate Professor	Ph. D 24-09-2013	Protein Engineering, Immunology	
8	Dr. Asim Bikas Das Associate Professor	Ph.D 08-10-2013	Network Biology, Cancer Genomics	
9	Dr. Urmila Saxena Associate Professor	Ph.D 10-10-2013	Statistical Analysis of Biological Data for Biomarker Identification; Medical Biosensors; Nanobiotechnology	
10	Dr. Prakash Saudagar Associate Professor	Ph.D 30-09-2013	Molecular Cell Biology & Protein Biochemistry, Molecular Approach to Infectious Diseases, Molecular & Biochemical Parasitology	
11	Dr. Perugu Shyam Assistant Professor	Ph.D 09-04-2018	Bioinformatics, Systems biology, Cancer biology, Molecular Dynamics & Simulations, Drug Design and Discovery, Machine Learning, Data Science.	

12	Dr. M. Jerold Assistant Professor	Ph.D 13-04-2018	Biofuels & Bioenergy; Bioprocessing; Biosorption; Wastewater Treatment; Bioseparation; Algal Biotechnology ; Biopolymer; Biorefineries; Biomass Valor	
13	Anbumathi P , Assistant Professor	Ph.D 20-04-2018	Systems Biology	
14	Dr. Rathnaprabha D Assistant Professor	Ph.D 09-04-2018	Plant Biotechnology	
15	Dr. Soumya Lipsa Rath Assistant Professor	Ph.D 20-11-2019	Computational Biophysics	
16	Dr. Surajbhan Sevda, Assistant Professor	PhD 16-12-2019	Environmental Bioprocess, Bioelectrochemical System	
17	Dr. Priya Assistant Professor	Ph.D 07-12-2019	Cell and molecular biology; epigenetics	

18	Dr. Thyageshwar Chandran Assistant Professor	Ph.D 04-11-2019	Structural Proteomics; Molecular Dynamics of Macromolecules; Molecular Biophysics	
19	Dr. Chockalingam S Assistant Professor	PhD 22-11-2019	Cancer biology; Cancer cell signaling; Cancer stem cell biology	
20	Dr. Ashish A Prabhu Assistant Professor	Ph.D 03-07-2020	Bioprocess engineering and Metabolic Engineering	

Funded Research Projects

S. No	Title & Name(s) of PI	Total Amount sanctioned (Rs in Lakhs)	Funding agency	Project No.	Installment received
1	Transcriptome to graph embedding: Development of a framework for predicting stage-specific biomarker in lung cancer. PI Name: Asim Bikas Das	6.60	SERB (MATRICS)	MTR/2021/000258	2.20
2	Metabolic engineering of Pichia pastoris cell factory for efficient valorization of food waste in to citramalic acid: A biorefinery approach toward sustainable biopolymer	32.09	DST-SERB (SRG)	SRG/2021/000485	24,59,5590

	production PI Name: Ashish A Prabhu				
3	Recovery of Ammonia and Phosphorous Accompanied by Microbial ProteinProduction Using Electrochemically and Bioelectrochemically Driven Process from Human Urine PI Name: Dr Surajbhan Sevda	24.27 Lac	DST-SERB (SRG)	SRG/2021/001460	16,64,740
4	To develop a strategy for drug repurposing studies to combat amr using bioinformatics tools for alternative lead molecules focusing on inhibitor resistant tem (/rt) Beta-lactamase PI Name: Dr. Devjani Banerjee Co PI Name: Dr. Debjani Arun Chakraborty Co PI Name: Dr. S. L. Rath PI Name: Dr. Himanshu Pandya Co-PI: Dr. Rupal Patel Co-PI: Dr. Naimika Patel	91.69 Lakhs	GSBTM, (DST, Government of Gujarat)	GSBTM/JD(R&D)/618/21-22/0Q003679	37 Lakhs [Received by PIs]

PhD completed

1. R Kowshik Aravilli (Roll No. 714042) completed his Ph.D with the title "Heuristics in role of Human Glutathione S-transferase Mu 1 as Nitric Oxide Carrier and its Engineered Variants for Enhanced Activity" under the guidance of Dr. V. Kohila in October, 2021.
2. Aditya Velidandi (Roll No 714156.): In vitro biological and catalytic applications of nanoparticles synthesized from Annona muricate leaf extract (Degree Awarded 30th September, 2021) under the guidance of Dr. Rama Raju.B
3. Ninian Prem Prashant Pabbathi (Roll No 715075): Isolation, cloning, and characterization of buffalo rumen metagenome derived Cellulase (Cel-3.1) and its application in biomass saccharification (Degree Awarded on 12th August, 2021), under the guidance of Dr. Rama Raju.B
4. Santanu Sasidharan (716182), Thesis title: “Genetic and chemical validation of

Leishmania tyrosine aminotransferase as a potential drug target", under the guidance of Dr. Prakash Saudagar in May, 2022.

New Lab Equipments/software/Workstations Installed

1. Purchased & Installed UV Transilluminator for genetic engineering laboratory.
2. Purchased & Installed Ice flaking machine in biochemistry laboratory.
3. Schrodinger software purchased and installed for the Bioinformatics laboratory.
4. Purchased & Installed water purification system in genetic engineering laboratory.





Summary

S. No.	Activity	Number
1	**Publications (Peer Reviewed Journals/ conferences) (SCOPUS/SCI)**	
	International Journals with impact factor	52
	National Conferences	16
2	**Funded Research Projects/SPARC projects**	
	Ongoing Projects (Rs **62.96 Lakhs**)	3
	DST, SERB, IITM, NHAI, CSIR	4 (ongoing)
	Total number of projects ongoing	3
	Total budget	62.96 Lakhs
3	**PhD Awarded**	4
4	**Book Chapters**	14

DEPARTMENT OF MATHEMATICS

Brief History of the Department, Academic Programs

The Department of Mathematics was established in 1959, along with the setting up of the Regional Engineering College Warangal (RECW), the first among the chain of REC s. The Department of Mathematics is involved in teaching UG and PG students of Engineering and Science Programs. The department has highly qualified, motivated and experienced faculty, who guide Ph. D scholars and execute research projects. The department offers a two year M.Sc Applied Mathematics and two year M.Sc Mathematics and Scientific Computing programs. The Department offers basic courses in Mathematics for B.Tech. At postgraduate level, the Department offers well-designed diverse courses for all programs of M.Tech., M.C.A, M.B.A. and also offers Open Electives for all UG, PG and Ph.D. programs. The Department offers Ph.D. program in Mathematics on both Regular and Part-Time basis, and also under Quality Improvement Program (QIP). The Department is the only QIP centre for Mathematics in India. Number of Ph.D. awarded is 124 as of October 2022.

The department is actively engaged in research and has a number of sponsored R & D projects on hand. The areas of research include Numerical Analysis, Fluid Mechanics, Computational Fluid Dynamics, Finite Element Method, Operations Research, Fuzzy Sets and Systems, Mathematical Modelling, Algebraic Coding Theory, Cryptography, Differential Equations. The department has MoU's with reputed institutes like Indian Institute of Geomagnetism.

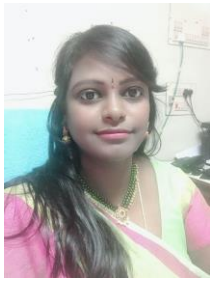
From the academic year 2021-2022, a 5-year Integrated MSc in Mathematics has been offered, with candidates admitted through JEE MAINS. This course is based on the NEP 2020 standards. The first three years of the curriculum are shared by the math, physics, and chemistry departments. The major goal of the program is to develop competent science teachers, scientists, and researchers. There are two options for departure, namely, In case of Integrated M.Sc. program, the student is permitted to exit with a B.Sc. at the end of third year and B.Sc. Honors at the end of fourth year based on the student's request subject to meeting all the eligibility requirements.

The M.Sc. programs for both streams of Mathematics are designed with one laboratory course in each semester in addition to the regular rigorous theory courses. They inculcate a spirit of practical applications of mathematical concepts and also instill enthusiasm for research activity. Special emphasis is laid on promoting team spirit and improving the oral communication skills of the students, which enables all-round development of the students.

S. No.	Activity	Number
1	Publications (Peer Reviewed Journals/ conferences) (SCOPUS/SCI)	60
	International Journals	58
	International Conferences	2
	National Conferences	
2	Funded Research Projects/SPARC projects (2020-21)	3
	DBT, SERB, DRDO	1
	Ongoing Projects (Rs 63 L)	3
	DST, SERB, IITM, NHAI, CSIR	2
3	PhD Awarded	6
4	Book Chapters	2
5	Patents	

Faculty Details

S. No.	Name of the Faculty Member and Designation	Highest Qualification & Date of Joining	Research Interests	Photograph
1.	Prof. Ramana Murthy J V Professor (HAG)	PhD 09-06-1993	Fluid Dynamics, HAM, Perturbation methods	
2.	Prof. Reddy Y N Professor	Ph. D 01-07-1992	Numerical Analysis	
3	Prof. Kasi Viswanadham K N S Professor	Ph. D 30-9-1991	Numerical Analysis, Finite Element Methods, Optimization Techniques	
4	Prof. Debashis Dutta Professor	Ph. D 19-8-1993	Operations Research, Statistics & Mathematical Modelling	
5	Prof. Srinivasacharya D Professor	Ph. D	Fluid Mechanics; Computational Fluid Dynamics; Micropolar and Couple Stress Fluids; Convective Heat and Mass Transfer; Bio Mechanics; Flow through Porous Media	

6	Dr. Hari Ponnamma Rani Professor & HOD	Ph. D 21-01-2008	Nonlinear dynamics, Finite difference methods, Finite volume methods, Computational Fluid Dynamics, Instability and vortex analysis, Heat and Mass Transfer problems.	
7	Dr. P. Muthu Associate Professor	Ph. D 06-02-2008	Computational Fluid Dynamics (CFD) ; Bio Mechanics ; Mathematical Modelling ; Hydrodynamic Lubrication ; Mathematical Biology	
8	Dr. Benerji Babu A Associate Professor	Ph. D 21-07-2008	Fluid Dynamics (Geophysical Fluid Dynamics)	
9	Dr. R. S. Selvaraj Associate Professor	Ph. D 15-01-2007	Algebraic Coding Theory (It is a branch of Information Theory; It is a mathematical discipline for which Linear Algebra and Abstract Algebra will be essential)	
10	Dr. Pranitha J Associate Professor	Ph. D 27-07-2006	Fluid Dynamics; Heat transfer; Porous Media	
11	Dr. Ch. Ramreddy Associate Professor	Ph. D 09-12-2013	Fluid Dynamics, Convective Heat and Mass Transfer, Porous Media, Computational Methods & Its Stability	

12	Dr. D. Bhargavi Associate Professor	Ph. D 07-05-2012	Computational Fluid Dynamics, Numerical Heat transfer through porous media	
13	Dr. Satyanarayana Engu Associate Professor	Ph. D 10-7-2018	Partial Differential Equations	
14	Dr. Y Sreenivasa Rao Assistant Professor	Ph. D 18-4-2018	Public Key Cryptography and Its Applications (Key distribution, Cloud Security, Secure data sharing and data retrieval from cloud, Blockchain Security)	
15	Dr. Kaladhar K Assistant Professor	Ph. D 29-11-2019	Fluid Dynamics, Inventory management, Bio-Mathematics	
16	Dr. Deepika Neela Assistant Professor	Ph. D 18-12-2019	Hydrodynamic Stability; Convection in Porous media.	
17	Dr. Triveni Prasad Shukla Assistant Professor	Ph. D 11-11-2019	Quasilinear Partial Differential Equations, Nonlinear Waves	

18	Dr. Srinivas Jangili Assistant Professor	Ph. D 29-11-2019	Heat Transfer Analysis, Analytical and Semi-analytical Methods.	
19	Dr. Jagannath Roy Assistant Professor	Ph. D 13-11-2019	Multi-Criteria and Mutli-Objective Decision Making, Portfolio selection, Fuzzy Optimization	

Summary

Funded Research Projects

S. No	Title & Name(s) of PI	Total Amount sanctioned	Funding agency	Project No.
1	Study of different thermo-physical effects on PrandtlEyring Nanofluid flow and heat transfer due to rotating disk **Prof. D. Srinivasacharya**	18.30 lakhs	DST	DST – FSER, Project No SERB/F/5959 /2020-2021 dated 21st December 2020
2	NITW - RSM Project, Multi-criteria optimization of sustainable logistics management in uncertain paradigm	Rs. 5,00,000/-	NITW - RSM Project	
3	Investigation of Heat Transfer Characteristics of Electroosmotic Flow of non-Newtonian Fluid through Rectangular Microchannels	Rs. 5,00,000/-	NITW - RSM Project	
4	Design and Implementation of Solving Discrete Logarithm Problem over GF(2n) using Quasi Polynomial Time Algorithm.	24.97956 Lakhs	DRDO	DIR/MED& CoS/SAG/P(CARS)/ 21- 22/007 dated 03/03/2022
5	On the solutions of inhomogeneous Burgers equations **Dr. E. Satyanarayana**	20 lakhs	CSIR	CSIR & No.25(0302) /19/EMR-II

Ph.D Research guidance

1. Om Prakash Meena (Roll No. 717160) completed his Ph. D with the title “Similarity and non-similarity solutions for mixed convection flow across vertical wedge and cone” under the guidance of Dr. J. Pranitha in September, 2021.
2. Koragoni Naresh (Roll No. 716184) completed his Ph. D with the title “Numerical analysis of natural convective flow past vertical cylinder and inside the cavity” under the guidance of Dr. H.P Rani in March, 2021.
3. Kalakuntala Sita Ramana (Roll No. 718070) completed his Ph. D with the title “Bio-convention flow of a nanofluid past an inclined wavy surface” under the guidance of Prof. D. Srinivasacharya in August, 2021.
4. Vanacharla Pujitha (Roll No. 716047) completed her Ph. D with the title “ Mathematical models of synovial joint lubrication” under the guidance of Dr. P. Muthu in July, 2021.
5. Abhinava Srivastav (Roll No. 718064) completed his Ph. D with the title “Power-law fluid flows over a truncated cone in a non-darcy porous medium” under the guidance of Dr. Ch. Ramreddy in October, 2021.
6. Dipak Barman (Roll No. 717158) completed his Ph. D with the title “Linear stability analysis of viscous and nanofluid flows in horizontal/vertical channels” under the guidance of Prof. D. Srinivasacharya in June, 2021.

DEPARTMENT OF PHYSICS

Brief History of the Department, Academic Programs

The Department of PHYSICS was established in 1959, along with the setting up of the Regional Engineering College Warangal (RECW), the first among the chain of REC s. The Department of PHYSICS is involved in teaching UG and PG students of Engineering and Science Programs. The department has highly qualified, motivated and experienced faculty, who guide Ph. D scholars and execute research projects. The department offers a three-year M.Sc. (Tech) Engineering Physics program with specializations in Photonics, Electronics and Instrumentation. The department is actively engaged in research and has a number of sponsored R & D projects on hand. The areas of research include nanomaterials, glasses and biomaterials, magnetic materials, bio-polymers, photonics, electronics, biomedical instrumentation, transparent conducting oxides, liquid crystal displays, organic LEDs and hybrid solar cells. The department has MoU's with reputed industries and R & D organizations like BEL, CSIO, ELOIRA, etc.

From the academic year 2021-2022, a 5- year Integrated MSc in Physics will be offered, with candidates admitted through JEE MAINS. This course is based on the NEP 2020 standards. The first three years of the curriculum are shared by the math, physics, and chemistry departments. The course's major goal is to develop competent science teachers, scientists, and researchers. There are two options for departure. One at the end of three years for B. Sc Engineering Physics, and the other at the end of the fourth year for B. Sc honours.



Faculty Details

S. No.	Name of the Faculty and Designation	Highest Qualification and Date of Joining	Research Interests	Photograph
1	Dr. T Venkatappa Rao, Professor & Head	Ph. D & 16-01-2008	Materials Science, Electronics and Fiber Optics Sensors	
2	Prof. Dinakar Dantala	Phd& 30-12-11995	Optical fiber sensors, Material Science	
3	Dr.B. Sobha, Professor	PhD & 3rd June 1992	Sensors and instrumentation, Materials Science	
4	Dr. Abdul Azeem	Ph.D., & 17.09.2008	Glass science, Spectroscopy, Optical system designing, Optical properties of Glass and glass ceramics, Luminescent materials and Devices, Biomaterials for tissue engineering, drug delivery and bioimaging applications	

5	Dr. P. Syam Prasad Professor	Ph.D., & 21.01.2008	Glass science and engineering: Glasses for tissue engineering and photonic applications	
6	Dr. SOURABH ROY	PhD & 18-06-2012	Optical waveguides, Fiber Optic Devices and sensors, Photonics, Optical System Design	
7	Dr. K. THANGARAJU Professor	PhD & 10-10-2014	Organic and Hybrid optoelectronic devices	
8	Prof Haranath Divi	PhD & 11-07-2018	Photonic materials; Nanomaterials; Luminescent Materials and Devices; Mesoporous materials; Aerogels; Fractals; Sol-gel Technology; Energy Harvesting; Piezoelectric Devices	
9	Dr. Kusum Kumari	Ph.D & 13-08-2011	Quantum Materials, Organic Semiconductors, Hybrid Solar Cells, Energy Storage Devices	

10	Dr. D. Paul Joseph Associate Professor	PhD & 24-10-2013	Transparent Conducting Thin Films, Solar Cells, Magnetism and Superconductivity	
11	Dr. V. Jayalakshmi	PhD & 15/05/2014	Liquid Crystals, Nano Materials, Biosensors, Biophysics, Microfluidics	
12	Dr. R. Rakesh Kumar	PhD& 21/05/2018	Energy Harvesting, Energy Storage, Nanogenerators, Nanomaterials, Nanowires growth, 2D materials	
13	Dr. Surya K. Ghosh Assistant Professor	PhD & 13-11-2019	Statistical Mechanics, Soft Matter, Biophysics, Computational Physics	
14	Dr. Hitesh Borkar, Assistant Professor	PhD and 11-11-2019	Experimental Condensed matter Physics	
15	Dr. K. Uday Kumar	PhD & 31-10-2019	Thin Films; Electrochromics; Transparent Conducting Oxides; Energy Harvesting Materials and Devices.	

16	Dr. Aalu Boda Assistant Professor	Ph. D. 01-11-2019	Theoretical Condensed Matter Physics	
17	Dr. Vijay Kumar	Ph.D. 28/11/2019	Machine Learning, Deep learning, Optical Angular Momentum, Optical communication, Fiber optics, Nano-Optics,	

Funded Research Projects

S. No	Title & Name(s) of PI	Total Amount sanctioned	Funding agency	Project No.	Installment received in 2021-2022	Total
1	Development of fully bio-based and biodegradable polymer and bamboo fibers composites for commercial applications. Dr. T. V. Appa Rao	34.542	MBDB	MD/MBDB/CR-86/18-19/589, Dt.22.04.2019	11,27500/-	11,27,500/-
2	Stable Generation of Optical Vortex Beams using Long Period Grating inscribed Few-Mode Optical Fiber Dr. Sourabh Roy	39.5 lakhs	SERB DST	CRG/2019/006569, Dt 20/02/2020	14,65,454/-	
3	Ion Implantation on solution processed Alq3/ZnO hybrid thin films for efficient UV photodetector applications, IUAC Delhi.		IUAC (UGC)	User project	NA	NA

4	Development of Rare-Earth Free Long Afterglow Phosphors for Signage and Strategic Road Safety Marking Applications - Prof D Haranath (PI)	32.588 Lakhs	SERB - DST	CRG/2021/007142 Dt. 07-03-2022	18,61,500/-	18,61,500/-
5	Interface Engineering with CVD grown MoS2 ultra-thin layers for the Improvement of Perovskite Solar Cell Performance	37.53 Lakhs	DST-TMD-SERI 2016-2021	DST/TMD/SERI/S56 (C)	5.85 Lakhs	5.85 Lakhs
6	Design and Development of cost effective label free detection of Alzhiemer's Biomarkers using liquid crystals - Dr. V. Jayalakshmi	37.4 Lakhs	DBT	BT/PR35841/MED/32/745/2020	34.7Lakhs	34.7 Lakhs
7	Dynamics in Complex Environments: from Single Particle to Giant polymers Dr. Surya K. Ghosh (PI)	17 Lakhs	DST	SRG/2020/001606	5.64 Lakhs	5.64 Lakhs
8	Computational structure-based drug design Dr. Surya K. Ghosh (Co-PI)	37 Lakhs	XSEDE, USA & Microsoft Azure, USA	MCB200218 (HPC Consortium Project)	NA	NA
9	Machine learning assisted structured light demultiplexing using nanostructures Dr. Vijay Kumar	17.8 Lakhs	SERB	SRG/2021/001375 Dated: 03/12/2021	Rs. 1147044/-	

Patents

S. No	Date of Granting	Patent Title	Patent Applicant Name(s)	Patent No.	Department	Patent Nation	Patent Status
1	OCTOBER 2021	Calcium Silicate Based Nano Crystalline Ceramics: A Cost-effective Method For The Preparation Using Natural Resources	Dr. P. Abdul Azeem, P. Srinath, KVG Reddy	376586	Physics	Indian	Granted

PhD Research guidance

1. T. Ramesh (roll no. 714051) completed his ph.d with the title "development of novel porous carbons using agricultural biomass for high performance and cost-effective electrodes for supercapacitor application" under the guidance of prof. L Ram gopal reddy in october, 2021.
2. Lalsingh guguloth (roll no. 715084) completed his ph.d. With the title “studies on photophysics and charge carrier dynamics of graphene oxide and ternary blend-based polymer solar cells” under the guidance of dr. Kusum kumari in september, 2021.
3. Vdr pavan (roll no. 701640) completed his ph.d. With the title “studies on mode propagation and related phenomenon in photonic crystal waveguides” under the guidance of prof. Sourabh roy in june, 2022.
4. N. Purushotham reddy (reg. No: 717052) completed his ph.d. With the title “donor doped $basno_3$, sno_2 metal oxide photoanodes and prickly pear fruit extract photosensitizer alternatives for dye sensitized solar cells” under the guidance of dr. D. Paul joseph, in march 2022.
5. Mk gupta” improvement in the performance of laser-based rotation sensor using different nano finishing on glass and glass ceramics” awarded in december 2021, under the guidance of prof dinakar dantala
6. M.gopala krishna murthy” mechanization of coriolis vibratory gyroscope based on control algorithm comprehension and vacuum sealing for aerospace applications” awarded in september 2022, under the guidance of prof dinakar dantala
7. Vishnu vikesh jaiswal (reg no 718163) completed his ph.d. With the title “studies on multi-color emitting long afterglow phosphors for display, security and biological applications” under the guidance of Prof D. Haranath in 09 oct 2021.
8. M. Nagaraju (roll no. 716187), completed his ph.d entitled "study and evaluation of polyaniline–reduced graphene oxide composites and porous carbon electrode materials for supercapacitors" under the supervision of Prof. L. Ram gopal reddy & Dr. Kusum kumari in july 2022.
9. Mr. Gnyaneshwar dasi (roll. No. 716054) completed his phd with the title of “solution processed alq_3/zno hybrid thin films and strategy to improve optoelectronic device performance”, on 13th june 2022 under the guidance of Prof. K. Thangaraju.
10. Mr. Srinath palakurthy (roll. No. 716288) completed his phd with the title of “calcium silicate based bioceramics derived from natural resources for tissue engineering”, on 29th september 2021 under the guidance of prof. P. Abdul azeem and Prof. K. V.g reddy.

New Lab Equipments/software/Workstations Installed

1. Linear Four Probe equipment to measure resistance of large area samples was procured and installed at the Dept. of Physics.
2. Refrigerated centrifuge; 21000 rpm, REMI Instruments.
3. Ultrasonicator, M/s: Athena Technology - 29500/- Plan-General Equipment

(P845)" –Department of physics 2021-2022.

4. Spin coater, M/s: Apex instruments company private limited (MSE) - 1,56,188 "Plan-General Equipment (P845)" –Department of physics 2021-22.

5. UV-VISIBLE SPECTROMETER, Metler Toledo-UV5, Rs. 7,50,000/- "Plan-General Equipment (P845)" – Department of physics 2021-22.

6. Zeta potential and particle size analyser, Model Name: Litesizer 500, Rs.28,00,000.00, "Plan-General Equipment (P845)" –Department of physics 2021-22.

7. CO2 Incubator, Rs. 500000/- from DBT Project – 2021

Summary

S. No.	Activity	Number
1	Publications (Peer Reviewed Journals/ conferences) (SCOPUS/SCI)	116
	International Journals with impact factor	116
	International Journals without impact factor	
	National Journals	
	International Conferences	5
	National Conferences	5
2	Funded Research Projects/SPARC projects (2021-22)	4
	DBT, SERB, DRDO	4
	Ongoing Projects (Rs 4.84 Crores)	11
	BRNS	1
	FIST PROJECT (2.5 Cr)	1
	National Bamboo Mission	1
	DST, SERB, IITM, NHAI, CSIR	7
	Total number of projects ongoing	10
	Total budget	5.87 C
3	PhD Awarded	10
4	Book Chapters	10
	Book Published	
5	Patents filed	
	Patents granted Awarded	1

DEPARTMENT OF CHEMISTRY

Brief History of the Department, Academic Programs

Having been established in the Year, 1959, as an integral part of the Regional Engineering College Warangal (RECW), the Department of Chemistry is greeted as one of the most academically active Departments in the Institute since inception. The department housed 18 faculty members, 57 research scholars and over 100 M.Sc. students. It offers Chemistry courses to seven B.Tech. programmes and runs two M.Sc., Chemistry Programmes with specializations in Organic Chemistry and Analytical Chemistry. The Department has executed many sponsored research projects worth crores of rupees and has plenty of projects on hand to the tune of about Rs 15 crore. The department has been conducting cutting-edge research in contemporary topics of Organic, Inorganic, Physical and Analytical Chemistry. It has been publishing its research papers in journals of very high impact factor. So far, the department produced more than 150 Ph.D. students and published over 1100 research articles in various well-reputed international and national journals. In the department, various state-of-the-art facilities such as 400 MHz NMR, HRMS, BET, gas chromatography, HPLC, FTIR, UV-vis-NIR, fluorescence, electrochemical workstation, computational chemistry software, etc. are available. As a part of continuing education and outreach activities, the department organized national and international Conferences, seminars and workshops. In addition, many of the faculty also were known for their outreach activities and involvement in science popularization. The department surpasses in teaching, research and graduate students' placement.

VISION

Towards Serving as a Potential Hub of Knowledge in Chemical Sciences and Allied Areas So as to Uphold and Strengthen the Vision of the Institute as One among Many Pillars While Striving Continuously in Pursuit of Excellence in Chemical Education, Chemical Research, Chemical Industry and All Interfaces of Chemistry with Society

MISSION

Imparting Total Quality Education in Basic and Applied Chemistry to Develop Innovative, Entrepreneurial and Environment Friendly Graduates of Chemical Sciences of International Standards.

Offering Relevant Fundamental and Applied Attributes of Chemistry, the Central Science, to Engineering Students as an Integral Part of Technical Education.

Promoting Chemical Industry and Societal Service Sectors towards Environment-Friendly and Green Chemical Protocols by Innovation and Research in Cutting Edge Areas of Chemical and Allied Sciences

Augmenting the Country's Needs of Human Resources and Scientific Manpower in Basic and Advanced Chemistry through Learner-Centric and Atma Nirbhar Bharath Modern Education and Research.

Areas of Research Interest:

Organic Synthesis, Electrochemistry, Sensors, Energy Systems, Interfacial Chemistry; Medicinal, Chemistry, Drug Discovery, Catalysis, Self-assembly, Materials Chemistry, Analytical Reagents and Chromatography, Coordination Chemistry, Environmental Chemistry, Bio-organic Chemistry, Carbohydrate Chemistry, Nano Materials, Supramolecular Chemistry, Computational Chemistry

Courses Offered by Chemistry Department:

UG courses: Chemistry theory and laboratory to all engineering branches; Industrial Organic Chemistry Theory to ChE and Polymer Technology to MME.

5yr Integrated M.Sc. Program: Admission through JEE Mains with intake of 60 students. Math (20), Physics (20) and Chemistry (20). For the first three-year common syllabus is followed.

Postgraduate Programme: The Department of Chemistry has been running two 2-Year (4-Semester) M. Sc Chemistry Programmes with specialization in Organic Chemistry and Analytical Chemistry with an intake of 30 in each stream. The admission to these programmes is based on Joint Admission Test for Masters (JAM), an all India examination administered and conducted jointly by the Indian Institute of Science and seven Indian Institutes of Technology on behalf of the National Coordination Board - GATE, Department of Higher Education, Ministry of Education conducted by IITs and IISERs.

Doctoral (PhD) Programme: All the faculty members of the Department of Chemistry offer research guidance to registered Scholars leading to the award of Ph.D., degree in all branches of Chemistry and in cutting-edge inter-disciplinary areas of chemistry.

The Institute has both Full Time and External Ph.D., admissions. All the Full Time Research Scholars have financial assistance through either Institute Fellowships or Project Fellowships or own JRF/SRF Fellowships whereas the External (Part-Time) Ph.D., Scholars are those who work in National Laboratories or in reputed industrial R&D organizations. The Department has awarded more than 150 Ph.D., degrees so far and there are over 50 Ph.D., Scholars on rolls.

S. No.	Activity	Number
1	Publications (Peer Reviewed Journals/ conferences) (SCOPUS/SCI)	103
	International Journals with impact factor	103
2	Funded Research Projects/SPARC projects (2021-22)	2
	DBT, SERB, DRDO	6
	Ongoing Projects (Rs 6.8 Crores)	12
	FIST PROJECT (2.5 Cr)	1
	National Bamboo Mission	
	DST, SERB, IITM, NHAI, CSIR	4
3	Ph.D. Awarded	5
4	Book Chapters	10
	Book Published	
5	Patents filed	3
	Patents granted/Awarded	2
	Total patents	5

Faculty Details

S. No.	Name of the Faculty and Designation	Highest Qualification	Date of Joining	Research Interests	Photograph
1	Dr. K. Laxma Reddy Ph.D. (Kakatiya Univ.) Professor (HAG)	Ph. D		Coordination and Environmental Chemistry	
2	Dr. V. Rajeswar Rao Ph.D. (Kakatiya Univ.) Professor (HAG)	Ph. D	14-06-95	Synthetic organic chemistry, Synthesis of hybrid Natural Products, Synthesis of Biologically Active Heterocyclic Compounds, MCR approaches to new bioactive molecules and StereoSelective Synthesis.	
3	Dr. K. V. Gobi Ph.D. (Madurai Kamaraj Univ.), Professor	Ph. D	03-03-2008	Electrochemical Biosensors, Fuel Cell Electro- catalysts	
4	Dr. P. V. Srilakshmi Ph.D. (IICT, Hyderabad), Professor	Ph. D	01-11-2006	Bioorganic Chemistry, Drug Delivery/Gene Delivery	
5	Dr. Vishnu Shanker, Ph.D. (IIT Delhi), Professor	Ph. D	28-07-2008	Nanocomposite materials, Environmental remediation and photocatalysis	

6	Dr. D. Kashinath Ph.D. (IIT Bombay) Professor	Ph. D		Organic synthesis, Medicinal chemistry	
7	Dr. N. Venkatathri Ph.D. (CSIR-NCL, Pune) Professor	Ph. D	13-08-2008	Materials chemistry, Heterogeneous catalysis, Biomaterials and Electrochemistry	
8	Dr. Raghu Chitta Ph.D. (Wichita State Univ), Associate Professor	Ph. D	30-05-2018	Materials Chemistry, Solar energy, Chemosensors	
9	Dr. B. Srinivas Ph.D. (Univ. of Hyderabad), Associate Professor	Ph. D	24.09.2013	Organic synthesis, Supramolecular chemistry, Crystal engineering and polymorphism	
10	Dr. K. Hari Prasad Ph.D. (IIT Kanpur), Associate Professor	Ph. D	06.12.2013	Organic synthesis, Carbohydrate Chemistry	
11	Dr. S. Nagarajan Ph.D. (Univ. of Madras), Associate Professor	Ph. D	23-04-2018	Organic synthesis, Organic materials, Molecular self-assembly	

12	Dr. Santhosh Penta (NIT Warangal), Associate Professor	Ph. D		Organic synthesis, Drug Design of Pharmaceutical Importance, Catalysis, Ionic liquids, C-H activation	
12	Dr. M. Raghasudha, Ph.D. (Osmania Univ.) Assistant Professor	Ph. D	11-04-2018	Material Chemistry, Magnetic Nanomaterials, Photocatalysis, Catalysis	
13	Dr. C. Jugun Prakash, Ph.D. (IIT Bombay), Assistant Professor	Ph. D	26-04-2018	Medicinal inorganic and bio-analytical chemistry	
14	Dr. Ravinder Pawar, Ph.D. (CSIR-CLRI), Assistant Professor	Ph. D		Computational and theoretical chemistry	
15	Dr. Mukul Pradhan, Ph.D. (IIT Kharagpur), Assistant Professor	Ph. D	02/12/2019	Nanomaterials, Energy devices, Electrochemical and SERS sensors	
17	Dr. G. Rajeshkhanna, Ph.D. (IIT Madras), Assistant Professor	Ph. D		Nanomaterials, Energy storage and conversion systems, Electrocatalysis, Electrochemical sensors	

18	Dr. V. Rajeshkumar, Ph.D. (National Chiao Tung Univ.), Assistant Professor	Ph. D		Organic synthesis, Metal catalysis and green chemistry	

Funded Research Projects

1. Dr. Hari Prasad Kokatla has received a project entitled "Rongalite-induced Consecutive C1-Homologation/Fluorination Strategy for selective fluorination of Organic molecules" worth Rs. 41.2 Lakhs from DST-SEB- under the scheme of Special Call for Proposals (Selective Fluorination Strategies); Role: Principal Investigator. Duration: 2022-25.
2. Dr. S. Nagarajan has received a project entitled 'Synthesis and Anticancer Activity of Sugar-Based Natural Saffloflavonesides and their Heterocyclic Analogs' worth Rs 38.06 lakhs. Funding agency: SERB-CRG; sanction no. CRG/2018/001386 dated 07-03-2019); Period: 2019-2022; Role: Principal Investigator
3. Dr. S. Nagarajan has received a project entitled 'Fabrication of Printable Nanosensor Patch for Direct Detection of Plant Diseases from Nanocellulose Based Polydiacetylene using Molecular Self-assembly' worth Rs 49.8 lakhs. Funding agency: MHRD-SPARC; sanction no. SPARC/2018-2019/P263/SL dated 31-05-2019, Period: 2019-2023; Role: Principal Investigator.
4. Prof. P. V. Srilakshmi has received a project entitled "Heterocyclic Based Peptidomimetics for Non-viral Gene Delivery" worth Rs. 41.9 lakhs. Funding agency: SERB-CRG, sanction no. CRG/2018/001049 dated 20-03-2019); Period 2019-2022: Role Principal Investigator.
5. Dr. Rajeshkhanna Gaddam (Department of Chemistry) has received a project on 'Development of Metal-Organic-Framework-Derived Hybrid Composite Materials as Bifunctional Electrodes for Production of H_2 by Water Electrolysis', worth Rs. 25.5 Lakhs. Funding agency: SERB-SRG; sanction no. SRG/2021/001028 dated 02-11-2021); Period: 2021-2023; Role: Principal Investigator
6. Dr. Hari Prasad Kokatla has received a project entitled

"Rongalite/Molecular Oxygen: A mild and green reagent for oxidation of organic substrates under sunlight" worth of Rs. 41.0 Lakhs from DST-SEB-EEQ (file No. EEQ/2018/001257, 18/03/2019); Role: Principal Investigator. Duration: 2018-2021.

7. Dr. Raghu Chitta. Hexabenzocoronene as a versatile Template for Integrating Panchromatic Photosensitizer-Cheap Metal Catalyst to a Single Platform: A Novel Class of Cost-Effective Catalysts for Efficient Photo-Driven Water Oxidation. DST SERB Core Research Grant. Rs. 44 lakhs
8. Dr. Raghu Chitta in collaboration with Dr. Sriramgopal Naraharishetty and Prof. Narayanarao at University of Hyderabad on "Multidimensional Spectroscopy" Institute of Eminence, University of Hyderabad. Rs. 55 lakhs
9. Dr. Srinivas Basavoju. CSIR-EMR(II) Project completed on 31.06.2021 entitled ''Design, Synthesis and Biological evaluation of Thiazolidinone-Tetrazolopyrimidine Hybrid Molecules as Anti-Cancer Agents" with Rs. 15.46 Lakhs
10. Dr. Ravinder Pawar received a project entitled "Designing of Nanoreactors for Carbon Dioxide (CO_2) Conversion into Useful Chemicals" worth of Rs. 47.68 Lakhs from DST-SEB-EEQ (file No. EEQ/2019/000656, 27-Dec-2019); Role: Principal Investigator. Duration: 2019-2022.
11. Dr. Ravinder Pawar received a project entitled "Metal Flatlands (Atomically Thin Two-Dimensional Metals): Designing, Properties and Applications" worth of Rs. 41.16 Lakhs from DST-SEB-ECRA (file No. ECR/2018/002346, 20-Mar-2019); Role: Principal Investigator. Duration: 2019-2022.
12. Dr. V. Rajeshkumar received a project entitled "Strategy for the Synthesis of Indole fused Benzothiazepines and Benzothiazines and explore their biological activity" worth of Rs. 25,00,344 from DST-SERB SRG (File No: SRG/2020/001836, 13-Nov-20); Role: Principal Investigator. Duration: 2020-2022.
13. Dr. Mukul Pradhan received a project entitled "Novel Biocompatible Nanocomposites for SERS Based Sensing of Biomolecules and Toxic Metal Ions" worth of Rs. 35,00,000 from DST-INSPIRE (File No : INSPIRE Faculty Award /2016/DST/INSPIRE/04/2015/003227

); Role: Principal Investigator. Duration: 2016-2022.

14. Prof. N. Venkatathri received a project entitled "Photocatalytic environmental remediation by bimetallic mesoporous materials", worth Rs. 24 Lakhs from DST-INSPIRE (Inspire Award/2017/DST/INSPIRE/03/2017/160382); Principal Investigator, Duration: 2017-2022.

S. No	Title & Name(s) of PI	Total Amount sanctioned (Rs in Lakhs)	Funding agency	Project No.	Installment received in 2021-2022	
	Rongalite-induced Consecutive C1-Homologation/Fluorination Strategy for selective fluorination of Organic molecules	41.250	SERB	SCP/2022/000273-dated 31/10/2022		18.4
1	Synthesis and Anticancer Activity of Sugar-Based Natural Saffloflavonesides and their Heterocyclic Analogs Fabrication of Printable Nanosensor Patch for Direct Detection of Plant Diseases from Nanocellulose Based Polydiacetylene using Molecular Self-assembly	38.06 Lakhs	SERB, DST, GoI	CRG/2018/001386 dated 07-03-2019	9,00,000/-	9,00,000/-
2	Synthesis and Anticancer Activity of Sugar-Based Natural Saffloflavonesides and their Heterocyclic Analogs Fabrication of Printable Nanosensor Patch for Direct Detection of Plant Diseases from Nanocellulose Based Polydiacetylene using Molecular Self-assembly	49.8 Lakhs	MHRD-SPARC	SPARC/2018-2019/P263/SL dated 31-05-2019	-	-
4	Heterocyclic Based Peptidomimetics for Non-viral Gene Delivery PI:Prof. P.V.Srilakshmi	41.9 Lakhs	SERB	CRG/2018/001049	8,00,000	8,00,000
5	Rongalite/Molecular Oxygen: A mild and green reagent for oxidation of organic substrates under sunlight	41.9 Lakhs	SERB	EEQ/2018/001257	8,00,000	
6	Hexabenzocoronene as a versatile Template for Integrating Panchromatic Photosensitizer-Cheap Metal Catalyst to a Single Platform: A Novel Class of Cost-Effective Catalysts for Efficient Photo-Driven Water Oxidation	44.03	SERB	DST SERB CRG/2018/002661	7,50,000	

7	Strategy for the Synthesis of Indole fused Benzothiazepines and Benzothiazines and explore their biological activity; PI: Dr. V. Rajeshkumar	25 Lakhs	SERB	SRG/2020/001836	6,00,000	

Patents

S. No	Date of filing	Patent Title	Patent Applicant Name (s)	Patent No.	Department	Patent Nation	Patent Status
1	21-08-2021	PROCESS FOR PREPARING FARNESOL-BASED CATIONIC LIPIDS FOR CARRYING NUCLEIC ACIDS IN TO DESIRED CELL LINES	Venkatesh Ravula, Srilakshmi V Patri	AU 2021106376 A4	Chemistry	Australia	Granted
2	17.09.2022	A METHOD FOR SYNTHESIS AND DEVELOPMENT OF THE THERAPEUTIC AGENTS IN TREATING TUBERCULOSIS USING QUINOLINYL SPIROQUINAZOLINO NEOXADIAZOLES"	Srinivas Basavoju, Allaka Bhargava Sai, Istarla Madhu Rekha, Dharmarajan Sriram, Gamidi Ramakrishna	202241053187	Chemistry	Indian	published
3	17-09-2022	An improved process for the synthesis of Porous crystalline Silicoalumino phosphate molecular sieves through Non-aqueous media	N. Venkatathri, and S. Suresh,	202241053195	Chemistry	Indian	Filed
4.	26-11-2021	Synthesis of Graphitized Carbon from Biomass using Focused Sunlight in a Newly Designed Reaction Setup for Energy Storage Application.	Mukul Pradhan, S. Rudra, R. Chakraborty	202141054738	Chemistry	Indian	Filed

PhD Research guidance

1. Allaka Bhargava Sai (Roll. No. 701641) completed his Ph.D. with the title "Synthesis and anti-tubercular activity of heterocyclic and spiro compounds" under the guidance of Dr. B. Srinivas in April 2022.
2. V V N Phanikumar (Roll. No. 701450) completed his Ph.D. with the title "Investigation on natural and synthetic polymers as an aqueous binder for anodes of lithium-ion batteries (LIBs)" under the guidance of Prof. K. V. Gobi in April 2021.
3. Kummari Shekher (Roll No.716060) completed his Ph.D. with the title "Development of Hybrid Graphitic Carbon nanocomposites as Sensing Platform for Pharmaceutical Drugs in-vitro in Biological Fluid" under the guidance of Prof. K. V. Gobi in July 2021.
4. Suresh Siliveri (Roll No. 716192), Completed his Ph.D. with the title "Development of novel strategies for rapid synthesis of silicoaluminophosphate molecular sieves in non-aqueous media and catalytic application studies on metal supported SAPO-35" under the guidance of Prof. N. Venkatathri in July 2021.

New Lab Equipments/software/Workstations Installed

1. Purchased & Installed Liquid Nitrogen Plant
2. Purchased & Installed Oil-free scroll compressor for 400 MHz NMR instrument. (Draft) Include photos if any
3. Dr. Raghu Chitta. Electrochemical workstation (CH Instruments) procured under the DST SERB Grant DST/CRG/2018/002661
4. Dr. B. Srinivas. Procured Solid-state probe for 400 MHz NMR Instrument under TEQIP-III Grants.
5. Dr. Ravinder Pawar. 3 Node Cluster procured under DST SERB Grant ECR/2018/002346.
6. Dr. Ravinder Pawar. VASP software procured under DST SERB Grant ECR/2018/002346.
7. Dr. Ravinder Pawar. 4 computing Nodes Cluster procured under DST SERB Grant EEQ/2019/000656.
8. Dr. Ravinder Pawar. AMS-SCM software procured under DST SERB Grant EEQ/2019/000656.
9. Dr. Mukul Pradhan. Electrochemical workstation (CH Instruments) procured under the DST INSPIRE Faculty Grant DST/ INSPIRE Faculty Award /2016/DST/INSPIRE/04/2015/003227.

Department of School of Mangement









School of Management



School of Management

Recognizing the need of techno management, the institute has designed a comprehensive MBA program exclusively for engineers. Thus, came to light the "School of Management (SOM)" at NIT Warangal in 2000. The MBA program offered by the School of Management is exclusively for engineering graduates. A two-year course runs into 8 quarters. The program has extensive electives in the specialized areas of Marketing Management, Human Resource Management, Financial Management, Operations Management, Information Technology and allied areas of management. Students are exposed to industrial training for a period of eight weeks, after completion of first year and the project work for a period of twelve weeks during their final quarter. The School of Management provides a well-balanced combination of academic and practical business oriented content. The updated curriculum with its wide range of video materials, databases like prowess, case studies, research projects and other tools aim at enhancing the understanding of the business reality and imbibing problem-solving skills. The School has been accredited with Tata Consultancy Services and is having significant placements. The School has fully air-conditioned classrooms with Wi-Fi facility.

Faculty



Prof. M. Ravindar Reddy
Professor & (HoD)
Economics, Agriculture Economics, Rural Marketing



Dr. K. Padma
Associate Professor
Economics, Financial Management



Dr. P. Ramlal
Associate Professor
Human Resource Management, Soft Skills, Corporate Training



Dr. V. Rama Devi
Associate Professor
Organizational Behavior & Human Resource Management



Dr. G. Sunitha
Assistant Professor
Behavioral Finance, Financial Markets



Dr. S. L Tulasi Devi
Assistant Professor
Corporate Finance, Financial Econometrics



Dr. Francis Sudhakar
Assistant Professor

Consumer Behavior and Industrial Marketing



Dr. K Lakshminarayana
Assistant Professor
Information Systems, Socio Technical systems and E-Governance



Dr. P Ramachandra Gopal
Assistant Professor

Supply chain Management, Sustainability, Operations Management.



Dr. T.Rahul
Assistant Professor
Marketing Research, Business Analytics

Department of Humanities and Social Sciences

The Department of Humanities and Social Sciences at NIT Warangal was started in 2009. The Department offers courses across the board ranging from basic to advanced courses in English Communication and Two Foreign languages catering to diverse needs of students across UG /PG and PhD levels. Besides, the Department also offers research programs in the broad areas of ELT, British literature and American literature through regular, part time and self- finance modes. The Department has highly qualified and committed faculty members who are well recognized and are members of many Boards across colleges affiliated to state level universities.

Last academic year as per NEP guidelines 2020 the Department of Humanities and Social Sciences has revised the syllabi of existing courses and has designed 16 new courses at UG/PG/PhD levels. As part of curriculum revision the department is presently offering a Minor program to be offered at UG Level titled 'Professional Communication Skills for STEM

The Department of H& SS constantly thrives to impart quality education and life skills that enable students to become successful on the personal, academic, and professional front; to foster critical thinking through a diverse range of courses aimed at making students industry ready; to encourage and facilitate research in advanced areas of Humanities.

Faculty Details

S. No.	Name of the Faculty Member and Designation	Highest Qualification	Research Interests	Photograph
1.	Dr. K. Madhavi Reddy	Ph. D	Academic writing skills; Designing task-based ESP courses; Multiple intelligences -Visual Literacies; teaching reading and writing using technology; Learner strategies and styles.	
2.	Dr M Raja Vishwanathan/ Assistant professor-Grade1	PhD (ELT)	Bilingualism and bilingual education, Academic writing, critical pedagogy, ideology in language teaching, American literature, British literature, Indian writing in English	

3	Dr. B. Spoorthi Assistant professor-Grade II	Ph. D	Leveraging Technology for Language Learning, Content and Language Integrated Learning, Teacher Education and Reflection, Task Based Language Teaching, Virtual Reality in Education, Virtual Labs for Language Education	
4	Dr.P.Madhumathi Assistant professor-Grade II	Ph.D	Teacher Education, ELT, EAP, Virtual Education, Cultural Studies	
5	Dr. R. Vennela, Assistant Professor-Grade II	Ph. D	Bilingual education, Lexicography, Sociolinguistics	

Funded Research Projects (including SPARC etc.)

Dr. R. Vennela, Principle Investigator, Project Title: "Developing a Pilot English-Telugu bilingual pedagogic picture dictionary resource and teacher resource book for low resource ESL contexts", Funded Rs.5.16 lakhs (Hornby Trust, United Kingdom: 2021 – 22).

Dr. Amol Padwad (Ambedkar National University, Delhi), Dr. Krishna K. Dixit (Ambedkar National University, Delhi), Dr. Atanu Bhattacharya (Central University of Gujarat), Dr. R. Vennela, Assistant Professor, Department of H&SS, NITW, Project title: "Textbooks in Historical times: Reviewing the Status of Historical Explorations", Funded Rs.5.14 lakhs (Hornby Trust, United Kingdom: 2021 – 22).

DEPARTMENT OF PHYSICAL EDUCATION

Physical Education and youth fitness were assigned a definite place in their schemes of education. The finding of the biologists, physiologists and psychologists confirmed the necessity of activating muscles of all parts of the human body for their natural growth and the health for all round development. With inactivity recognized as a menace to physiological well-being. Some authorities including the doctors suggest that exercise is the cheapest preventive medicine in the world. Researchers in physical education do agree that physical exertion is necessary for maintaining a functional physical fitness. Physical fitness provides us with basis for optimal physiological health and the capacity to enjoy a full life. Probably we do not need a high level of physical fitness to work in a world dominated by technical innovations but regular physical activity is necessary if our body is to function properly.

Health education and physical education have been accepted by the policy framers an essential and very important part of educational activity in schools and colleges. There has been unanimous appreciation that a healthy mind dwells in a healthy body and, therefore, physical and mental developments go together. Participation in games and sports improves the health of the participant and improves his motor qualities and responses. Even more importantly, active participation in games and sports fosters the attitude of sportsmanship, fairness and team spirit. It has been internationally recognized since long that if the schools and colleges do not provide outlet for the youth in a constructive and healthy manner through sports and games, the youth get into the habit of idling.

Modern thinkers in education, now a days, emphasize that the best individual is one who is physically fit, mentally sound and sharp, emotionally balanced and socially well adjusted. Out of the myriads of new facts concerned with educational process, the fact that human beings need a well-planned curriculum of physical education deserves much consideration. It then becomes imperative that the discipline of physical education should be put into proper perspective and thoroughly studied for the welfare of the humanity at large. Keeping this as a background it is thought to strengthen the Physical Education Department at this prestigious institution so as to enable the student to improve their health and endurance, so that they can perform the duties that reward them after they leave the institution.



Dr.P.Ravikumar
Professor



Dr.R.Dhayanithi
Professor



Dr.P.Madhusudhan Reddy
Professor

The department of Physical Education has following Infra Structure Facilities INFRA STRUCTURE INDOOR FACILITIES

- 2 Table Tennis Halls.
- 1 Chess and 1 Carrom Hall.
- 1 Yoga Hall.
- 1 Meditation Hall.
- 3 shuttle Badminton Courts.
- 2 Gym Halls.
- 3 Faculty Rooms.
- 2 Store Rooms.
- 1 Games Boys Room.

IN THE STADIUM

- Multipurpose Ground Facility with flood lights which accommodates standard 400 Mts. Track with Flood lights
- Kho-Kho Ground, Football, Cricket fields and with 2 artificial turf net practising cricket pitches with Flood lights
- Galleries of sufficient seating capacity in the stadium and also a walking track.
- 2 Synthetic Top surface Basketball Courts with flood lights and sitting galleries.
- 2 Volleyball Courts 5 Tennis Courts (2 Synthetic, 1 Concrete and 2 Clay Courts),
- 2 Ball Badminton Courts with Flood lights

INFRA STRUCTURE FACILITIES IN AND AROUND HOSTEL BLOCKS

- 2 Shuttle courts and 1 Tennikoit court inside the Ultra Mega hostel.
- At Ultra Mega hostel 2 clay Volleyball Courts and Basketball court near the Ultra Mega Hostel.
- Multipurpose Ground with flood lights to play any sort of sports and games (rear side of the ultra-mega hostel).
- Gym facilities 2 common halls in the mega hostels and 2 rooms in the ultra-mega block 1 hall in the DASA hostel.
- 15 Table Tennis tables were placed in different hostels as detailed below:
- 4 Table tennis in Ultra mega hostels
- 3 in the mega hostel
- 2 T.T Tables in the DASA Hostel, 14th Block, 13th Block, 12th Block 11th Block, 2nd block and 1st block.

INFRA STRUCTURE FACILITIES IN GIRLS HOSTELS

- 1 Concrete Basketball Court proposed to upgrade with Synthetic top and flood light facility.
- 1 Volleyball Court
- 2 Gym rooms in the lady's hostels
- 1 Tennikoit Court
- 2 Table Tennis Tables

The Department conducts Extra Academic Activity (EAA) programme as a mandate course for the first year students.

ROUTINE PROGRAMME OF THE DEPARTMENT of PHYSICAL EDUCATION

- Facilitating the student and staff community for the utilization of the available infrastructure facility in the institute to be physically fit and wellbeing.
- Conducts International Yoga Day 21 June every year in a grand scale.
- Organises Independence Day and Republic Day in a befitting manner with number of Physical Education activities
- To prepare institute teams towards participation in the Extramural Competitions like Inter NIT or Inter Universities and other open tournaments in various sports and games.

National Open Athletics:

The 60th Open Nationals Race Walking Event, which has been, organized at our Campus in 20kms, 35kms, and 50kms Men and Women events. Our Beloved Director has flagged off the event and distributed the Medals to the winners. Registrar also gave away the Medals for the winners. The events took place during 16th-18th September 2021 from morning 5.00am to 11.30 am.

International Relations and Alumni Activities

SPARC (Scheme for Promotion of Academic and Research Collaboration):

The major aim of SPARC initiative is to bring the strong research collaboration between Indian research groups with top research group in the leading Universities of the world, in areas that are at the cutting edge of science or with direct social relevance to the mankind, specifically India. The strong joint research should lead to tangible result that should include large number of high-quality research publications, solution to key national and international problems, development of niche courses, high quality text books and research monographs, imbibing of best practices from top international academicians and researchers, strong bilateral co-operation, and improved world reputation and ranking of Indian Institutions. Prof N. Subrahmanyam is the nodal coordinator for SPARC from the institute. The institute also is the nodal coordinator for Taiwan under SPARC.

The institute has been sanctioned 10 projects under SPARC with collaboration from top universities of USA, UK, Taiwan, Singapore, Israel and Canada.

Budget for 10 Projects is Rs. 5,21,65,195/- (Rupees Five Crore Twenty-One lakh Sixty Five Thousand One hundred and Ninety Five Only)

GIAN (Global Initiative for Academic Networks):

GIAN is a flagship program of the Ministry of Human Resource Development to bring some of the reputed academicians, researchers and industrial experts to the Indian institutes to conduct short term programmes of duration one to two weeks with the following objectives:

- To increase the footfalls of reputed international faculty in the Indian academic institutes.
- Provide opportunity to our faculty to learn and share knowledge and teaching skills in cutting edge areas.
- To provide opportunity to our students to seek knowledge and experience from reputed International faculty.
- To create avenue for possible collaborative research with the international faculty
- To increase participation and presence of international students in the academic Institutes.
- Opportunity for the students of different Institutes/Universities to interact and learn subjects in niche areas through collaborative learning process.
- Provide opportunity for the technical persons from Indian Industry to improve understandings and update their knowledge in relevant areas.
- Motivate the best international experts in the world to work on problems related to India.
- Develop high quality course material in niche areas, both through video and print that can be

used by a larger body of students and teachers.

- To document and develop new pedagogic methods in emerging topics of national and international interest.
- It is to be noted that NIT Warangal has been identified as one of the best performing institutes in the country. 76 courses were completed at the institute and these courses were highly commended and 08 courses were approved during 2021 – 2022 and planning to be conducted during 2023.

Erasmus+ - Incoming Teaching Staff

The University of Santiago de Compostela participates in Erasmus+ International Credit Mobility (ICM) under Key Action 1 (KA107) since 2016 with partner institutions in several countries according to our Strategic Plan for Internationalisation

Erasmus+ ICM offers opportunities for students to study and staff to teach or train via exchanges with partner higher education institutions beyond Europe.

Via this programme, undergraduate students undertake an exchange for a semester for which credits are obtained, PhD students can carry out a research exchange for at least 3 months, and university staff can spend a week abroad teaching or training in Internationalisation. 2 proposals were approved and completed during 2021 – 2022.

Alumni Activities

- 1982-86 Batch Alumni has donated Advanced Life Support Ambulance to the institute on 13th March, 2022.
- Mr N. VENU, 1988 B.Tech EEE Alumni handed over 8 seater Electric Vehicle(EV) to the Institute on 25.11.2022
- One crore Donation was made by Sudhakar Rao 1982 Batch for Design thinking and tinkering labs.
- 1995 batch – Initiated Alumni Assistance Fund (donated 32,25,000/-)
- 1997 batch - Initiated Alumni Assistance Fund (donated 75,00,000/-)
- 1996 batch - NITW INNOVATION IGNITION FUND targeting the creation of a Rs. 30 lakh corpus by end of 2023 and is targeting to create a corpus of over Rs. 5 crores in this fund by end of 2025
- 1970 Batch - Golden Jubilee Reunion was held during 12th – 14th August, 2022
- 2002 Civil FDH Batch – 20 Years Reunion was held on 14th August, 2022
- 1995 Batch - Silver Jubilee Reunion was held during 12th – 14th August, 2022
- 1996 Batch - Silver Jubilee Reunion was held during 22nd – 24th July, 2022

- 1997 Batch - Silver Jubilee Reunion was held during 15th – 16th December, 2022
- 1980 Batch - Reunion was held during – 17th December, 2022
- 1972 Batch Golden Jubilee Reunions was held during 09-11 December, 2022
- 1973 Batch Golden Jubilee Reunions to be held during 22-24 December, 2022
- NITWAA Warangal Chapters Family Get Together was held on 12th November, 2022
- NITWAA Hyderabad Chapter Family Get Together was held on 20th November, 2022
- Distinguished Alumni Award Ceremony 2021 & 2022 held on 10th October, 2022

	
Awardees of DAA - 2021	**Awardees of DAA - 2022**
	
Alumnus Lifetime Achievement Awardee – 2021	**Alumnus Lifetime Achievement Awardee – 2022**

AMIT SRIVASTAVA MEMORIAL ALUMNI NETWORKING (ASMAN) AWARDS
For the years 2018 – 2022 held on 09th October, 2022



NITW Faculty Awards & Certificate of Appreciation held on 09th October, 2022



Donation of Advanced Life Support Ambulance by 1982-86 Batch Alumni



Mr N. VENU handed over of 8 seater Electric Vehicle(EV) to the Institute on 25.11.2022



REUNIONS



1996 Batch - Silver Jubilee Reunion



1995 Batch - Silver Jubilee Reunion



2002 Civil FDH Batch



1970 Batch - Silver Jubilee Reunion

CENTRAL RESEARCH INSTRUMENTATION FACILITY



About CRIF:

Central Research Instrumentation Facility (CRIF) is an integrated facility to provide high-end analytical services to academic and industrial research. The CRIF works with a motto to bring out the research output of scholars matching international standards. The central facility caters to the department requirements under a single umbrella by fostering interdisciplinary research. Students from different branches of science and engineering from various institutions come here for research and experimentation, creating a vibrant cross-disciplinary atmosphere. CRIF is a G+1 building with a floor space of around 28000 Sqft. CRIF has its web presence on the institutional website and can be accessed at https://www.nitw.ac.in/path/?dept=/nitwcentres

CRIF TEAM



Dr. T Krishna Sai, Principal Scientific Officer



Shri V Sudhakar, Technical Officer



Shri Harish Madupu, Technical Officer



Shri D Ravikumar, Technical Officer



Smt. GSR Sanjeevini, Technical Officer

Activities at CRIF

- STUTI-21, a DST project consisting of 12 awareness programs for science students, was conducted during Science week in Feb 2022.
- Under STUTI-21, 22 training programs for faculty, research scholars, and postdoctoral fellows from various institutions across the country are being organized by CRIF. 14 programs at NIT Warangal, JNTU Hyderabad, Osmania University, VNIT Nagpur, NIT Jalandhar, Guru Nanak Dev University Amritsar, Barathidasan University- Trichy, Pt. Ravishankar Shukla University Raipur, Sri Venkateswara University Tirupathi, Defence Institute of Advanced Technology Pune, and Banaras Hindu Univesity Varanasi are conducted in 2022 calendar year. 8 programs at NIT Warangal, VIT Vellore, Sathyabama Institute of Science and Technology Chennai, Central University of Tamil Nadu, NIT Trichy, NIT Jalandhar, Osmania University and Mangalore University are planned to be conducted in Jan and Feb 2023.
- I-Stem has sanctioned a one-month skill development program to train the unemployed youth in and around Warangal under Skill India- Kaushal Bharath Kushal Bharath initiative by Govt. of India. Under this 10participants are trained for one month from 30 Nov- 30 Dec 2022 on sophisticated analytical equipment namely LCHRMS, ICP-OES, XRD, SEM, UV-Vis-NIR Spectrophotometer and X-band ESR, and grades were allotted based on their theory and hands-on performance. Two of them are selected as i-stem interns for 3 months with a stipend from i-stem directly.
- A Tools Training Centre is established using written-off equipment for training the students by dismantling and identifying the internal modules of the high-end equipment for a better understanding of the working of state-of-the-art instruments
- As part of the induction program for newly recruited technical staff, a two-day training program was conducted in June 2022. This included safety measures to be taken during laboratory sessions, lab safety precautions, regular record maintenance, calibration of measuring equipment, and on sophisticated analytical equipment housed at CRIF.

Facilities at the centre



Liquid Chromatography-High Resolution Mass Spectrometry
Make: Agilent Technologies



X Band ESR Spectroscopy
Make: JEOL RESONANCE Inc., Japan



NMR Spectroscopy
Make: Bruker
Model: Avance III HD 400 MHz



Inductively Coupled Plasma-Optical Emission spectroscopy
Make: Agilent Technologies



UV-Vis NIR Spectrophotometer
Make: Agilent Technologies
Model: Carry 5000



Flourescence Workstation
Make: HORIBA INSTRUMENTS INCORPORATED, USA



Two Port Vector Network Analyzer (VNA)
Make: Anritsu
Model: MS46122B



Anechoic chamber
Make: Entuple Technologies.
Size of Chamber: 3 x 3 x 2.4 m (LWH)



CHNS Analyser
Make: Elementar, Germany
Model: UNICUBE+



PCB Prototype Machine
Make: Enthutech
Model: ETS-PCBMATE-1500W



Universal Testing Machine (UTM)
Make: JINAN TESTING EQUIPMENT IE CORPORATION, China



TGDTA
Make: Netzsch
Model: Regulars STA 2500



Impedance Analyser
Make: Biologic
Model: MTZ35



Trinocular Polarizing Microscope
Make: Olympus
Model: BX53





Differential Scanning Calorimeter
Make: PerkinElmer



Scanning Electron Microscope (SEM)
Make: TESCAN
Model: VEGA3 LMU



X- Ray Diffraction (XRD)
Make: Panalytical
Model: X-pert powder



Electrochemical Workstation
Make: ZAHNER

Spectrum Analyzer
Make: Anritsu
Model: MS2720T



Liquid Nitrogen Plant



Photo Gallery and News Coverage







NITW research output grows

HANS NEWS SERVICE
WARANGAL

THE research output of NIT Warangal has shown significant improvement in the recent years.

As per the Scopus database, the number of publications by the faculty and students of NIT Warangal in the current calendar year 2021 has crossed 1,000. This is a remarkable achievement. In 2017, the total number of publications was 540. In the last four years, the output has almost doubled. With the induction of new faculty, the research culture has seen renewed impetus. In the last two recruitments in 2018 and 2019, nearly 150 new faculty members were recruited. All the faculty members were given initial research funding of Rs 3 lakh each to establish their basic research facility. Also, funding was given generously to all the departments to purchase and upgrade the research equipment.

NITW Director Prof. NV Ramana Rao and Registrar S Goverdhan Rao congratulated the entire NITW faculty and students. In addition to completing the academic syllabus and laboratory classes online, the institute has supported and motivated the faculty and students to enhance their research efforts. The institute has also established new Centers of Excellence and a Centralized Research Instrumentation Facility to support multidisciplinary research not only among different departments but also in collaboration with the industry. The institute is also spending huge resources on e-journals, e-books, which can be accessed from any place.

Prof Ramana Rao informed that the curriculum of all the courses has been thoroughly revised in tune with the National Education Policy, 2020 and the intake of PhD scholars has been increased from 150 to 250 from the current academic year. Further new integrated courses in sciences have been introduced.



తక్కువ ఖర్చుతో టచ్‌లెస్ శానిటైజర్ మెషిన్

» అభివృద్ధి చేసిన 'నిట్' ఉద్యోగి

శంషునిపేట (నిట్‌క్యాంపస్), ఏప్రిల్ 8 : వరంగల్ జాతీయ సాంకేతిక సంస్థ (నిట్) ఈసీఈ విభాగంలో టెక్నికల్ అసిస్టెంట్‌గా పనిచేస్తున్న వి.సుధాకర్ తక్కువ ఖర్చుతో టచ్‌లెస్ శానిటైజర్ మెషిన్‌ను అభివృద్ధి చేశారు. అల్ట్రాసోనిక్ సెన్సార్ మైక్రో కంట్రోలర్, ఎల్‌ఈడీ సోలినోయిడ్ ఫియరీ ఆధారంగా ఈ మెషిన్‌ను రూపొందించారు. ప్రస్తుత మార్కెట్‌లో టచ్‌లెస్ శానిటైజర్ మెషిన్‌లు రూ. 2వేల పైనే ఉందన్నారు. అధునాతన సాంకేతికతతో రూ.800లకే లభ్యమయ్యే విధంగా ఈ మెషిన్‌ను రూపొందించినట్లు సుధాకర్ తెలిపారు. ఒక లీటర్ నిలువ చేయగల ఈ మెషిన్‌ను కార్యాలయాలతో పాటు జళ్లలోనూ నులువుగా వాడుకోవచ్చన్నారు. ఈ సందర్భంగా సుధాకర్‌ను గురువారం నిట్ డైరెక్టర్ ప్రొఫెసర్ ఎన్.వీ రమణారావు, రిజిస్ట్రార్ గోవర్ధన్‌లు అభినందించారు.



అభివృద్ధి చేసిన టచ్‌లెస్ శానిటైజర్ మెషిన్

ఆంధ్రజ్యోతి Fri, 09 April 2021
https://epaper.andhrajyothy.com/c/59667703

తక్కువ ఖర్చుతో 'టచ్ లెస్' శానిటైజర్ పరికరం

కాజీపేట అర్బన్ : కరోనా నివారణ జాగ్రత్తల్లో భాగంగా చేతులతో తాకకుండానే శానిటైజర్ వేసుకునే పరికరాన్ని నిట్ ఉద్యోగి తక్కువ ఖర్చుతో రూపొందించారు. కాజీపేట నిట్‌లోని ఈసీఈ విభాగం టెక్నికల్ అసిస్టెంట్ వి.సుధాకర్ ఈ పరికరాన్ని రూపొందించగా, డైరెక్టర్ ఎన్వీ.రమణారావు గురువారం ఆవిష్కరించి మాట్లాడారు. ఈ పరికరం మార్కెట్‌లో రూ.2వేలకు అమ్ముతుండగా, తాను కేవలం రూ.800 తో సిద్ధం చేశానని సుధాకర్ తెలిపారు. రిజిస్ట్రార్ గోవర్ధన్ రావు తదితరులు పాల్గొన్నారు.



పరికరం వద్ద డైరెక్టర్, తదితరులు

సాక్షి Fri, 09 April 2021
https://epaper.sakshi.com/c/59667567

NIT-Warangal crossed a milestone in research output

DC CORRESPONDENT
HANAMKONDA, DEC. 27

The National Institute of Warangal has crossed one more milestone in research output with the number of publications by the faculty and students crossing 1,000 in the current calendar year of 2021, informed the Director of the NIT, Prof N.V. Ramana Rao on Monday.

In a statement released here, Prof N.V. Ramana Rao stated that this is the remarkable achievement made by NIT, Warangal. Compared to the previous best of 540 publications in 2017, the output of publications was doubled after four years with the induction of new faculty.

In addition to completing the academic syllabus and laboratory classes online, the institute has supported and motivated the faculty and students to enhance their research efforts.

The institute also established new centers of Excellence and a centralised Research Instrumentation facility to support multidisciplinary research not only among different departments but also collaborating them with several industries along with investing in huge resources on e-journals and e-books so that the faculty and students can access easily from any place.

All the faculty were given initial research funding of Rs 3 lakh each to establish their basic research facilities. Funding was also given generously to all the departments to purchase and upgrade the research equipment.

The curriculum of all the courses has been thoroughly revised in tune with the National Education Policy, 2020, and the intake of PhD scholars has been increased from 150 to 250 from the Current academic year. With the improved vigor and enthusiasm the NIT-Warangal will achieve further milestones to better its ranking, he hoped and congratulated the faculty and students.

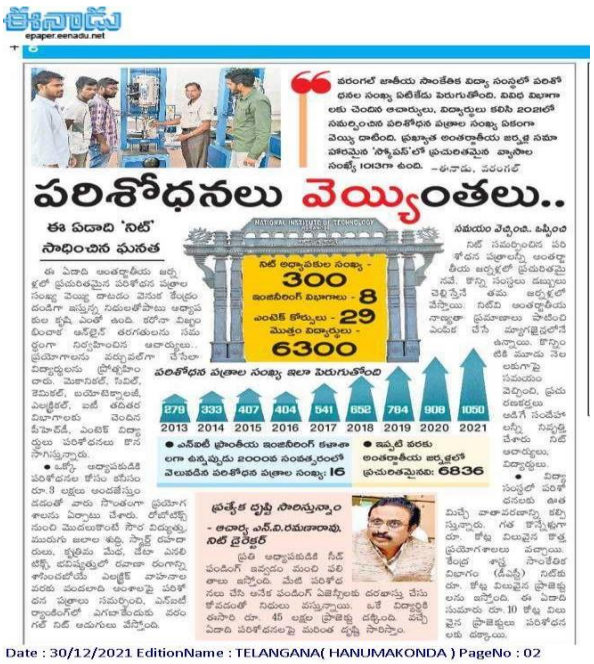
NIT-W SIGNS MoU WITH POSOCO OF BANGALORE

DC CORRESPONDENT
WARANGAL, DEC.10

The National Institute of Technology (NIT) Warangal and Southern Region Load Dispatch Center, POSOCO (Power System Operation Corporation Limited) Bangalore signed a Memorandum of Understanding (MoU) to cooperate and collaborate with each other for academic and research purposes in Hanamkonda of Warangal district on Friday.

The director of the NITW, Prof. N.V. Ramana Rao and the executive director of the POSOCO V. Suresh signed MoU papers online.

Speaking on the occasion, Prof. Ramana Rao said that the MoU which will be in force for five years would help both the institutes to engage in collaborative research projects on the areas of power grid system management.



Date : 30/12/2021 EditionName : TELANGANA(HANUMAKONDA) PageNo : 02

Over 1,000 NIT Warangal students land lucrative jobs

P LAXMA REDDY
Warangal

Two students get placed with DE Shaw for Rs 62.5L each per annum. In all, over 630 B.Tech and 370 PG students got placed

A total of 1,016 students from the National Institute of Technology, Warangal (NITW) landed jobs in different companies including multi-national firms this academic year through campus placements. While 839 students bagged jobs in the last academic year, this year the number crossed the 1,000 mark.

Due to the pandemic, the campus drives were conducted virtually. Nearly 250 companies visited the campus this year to hire talented students. In all, over 630 B.Tech and over 370 post-graduate students got placed in different companies. The top job offers were bagged by Gaurav Singh and Priyansh Maheshwari of B.Tech (CSE) final year, who got placed with DE Shaw which offered them a salary package of Rs 62.5 lakh per annum each. Debrup Mondal was also offered Rs 57.5 lakh per annum by DE Shaw, while 15 students were placed in Microsoft which offered a salary package of Rs 45 lakh per year. While 50 students secured jobs in Oracle with a package ranging from Rs 27 lakh to Rs 32 lakh per year, 24 students got jobs in Qualcomm with a package of Rs 25 lakh to Rs 32 lakh per annum. "The number of students who got packages with more than Rs 20 lakh per annum is 220, and the average package is Rs 14.5 lakh per annum," said NITW Director N V Ramana Rao. A total of 630 out of 700 eligible B.Tech students got placed, while 386 out of 677 eligible P.G students (Includes M.Tech, MBA, MCA, M.Sc) got placed, and more than 450 pre-final year students received internship offers from different companies. "The stipend varies from Rs 20,000 to Rs 1.60 lakh," said Centre for Career Planning and Development, Head Dr Kiran Kumar K. Some top recruiters included DE SHAW, Microsoft, Meshoo, Arcesium, Oracle, Service now, Uber, Qualcomm, GoldmanSachs, Amazon, Adobe, among others.





Telangana boy secures top rank in GATE '22

EXPRESS NEWS SERVICE
@ Hyderabad

A BTech Chemical Engineering student from National Institute of Technology (NIT), Warangal, T Mani Sandeep Reddy has secured all India first rank in Graduate Aptitude Test in Engineering (GATE) 2022.


Sandeep Reddy

The Indian Institute of Technology (IIT), Kharagpur declared the GATE 2022 results on Thursday.

Speaking to *Express*, a delighted Sandeep Reddy said: "I am feeling very happy that I achieved top rank in the national level exam. I prepared myself for GATE with the help from my professors who guided me in the right way."

He also revealed that during campus selection he got offers from GAIL and other oil and gas companies. "I now have to take a call on whether to go in for masters or accept a job offer to gain experience," he said.

In addition to the GATE 2022 results, IIT Kharagpur also issued stream-specific qualifying and cut-off marks of students who took the examination. The cut-off marks for Chemical, Biotechnology, Computer Science, ECE, Electronics and Communication Engineering Streams are now available at gate.iitkgp.ac.in

THE HANS INDIA

12th edition of CURA held at NIT Warangal



HANS NEWS SERVICE
WARANGAL



THE 12th edition of CURA, the national level management meet of School of Management, National Institute of Technology, Warangal inaugurated on Friday, by the chief guest Prof. NV Ramana Rao, Director NITW.

Guest of honours Prof. P. Ravi Kumar, Dean students' affairs, N. Jayaram Vice president, TCS and Prof. M. Ravinder Reddy, Head of the Department, SOM.

Prof. NV. Ramana Rao, Director, addressed about the event, followed by Prof. P. Ravi Kumar and Mr. N. Jayaram. The head of SOM described the philosophy as well as the history of CURA during his address and Dr. Rahul Thengada took the event further with his perspective about how CURA has evolved with time.

CURA consists of more than 10 management competitions, workshops and plethora of keynote speakers who share their experience with students from all walks of life and has been an integral part of NITW fests from the past 12 years.

The event kicked off at 9 am hold in a virtual mode in line with the Covid 19 guidelines. The inaugural event lasted till 9:30 am and was celebrated with gaiety. Over 250 participants were present from different corners of the country.

26/03/2022 WARANGAL Pg.02

నిట్‌లో 1016 మందికి ప్లేస్ మెంట్స్

కాజీపేట, వెలుగు: వరంగల్ నిట్ లో 1016 మంది స్టూడెంట్లకు ప్ లభించినట్లు డైరెక్టర్ ఎన్వీ రమణారావు తెలిపారు. గురువారం నిట్‌లోని అంబేద్కర్ ఆడిటోరియంలో నిర్వహించిన అభినందన సభలో ఆయన మాట్లాడారు. నిట్‌కు చెందిన 630 మంది బీటెక్, 386 మంది పీజీ స్టూడెంట్లకు అంతర్జాతీయ కంపెనీల్లో ఉద్యోగాలు వచ్చాయన్నారు. గౌరవ్ సింగ్, ప్రియాన్ష్ మహేశ్వర్ అనే స్టూడెంట్లకు అత్యధికంగా ఏడాదికి రూ.62.5ల క్షల వేతనానికి ఎంపికయ్యారన్నారు.

కృత్రిమ మేధ.. క్యాంపస్‌కు భద్రత



ఈనాడు, వరంగల్

క్యాంపస్‌లో విద్యార్థుల భద్రతకు కళాశాలలు ఎంతో ప్రాధాన్యం ఇస్తుంటాయి. వారు అర్ధరాత్రి బయటకు వెళ్లినా, అపరిచితులు లోనికి ప్రవేశించినా గేటు వద్దే సెక్యూరిటీ సిబ్బంది కారణాలు తెలుసుకొని వివరాలు నమోదు చేస్తుంటారు. అలాంటిది మానవ ప్రమేయం లేకుండా క్యాంపస్‌లోకి ఎవరు, ఎప్పుడు వచ్చారనే వివరాలు పక్కాగా తెలుసుకునేందుకు వరంగల్ ఎన్‌ఐటీ సరికొత్త ప్రయోగానికి శ్రీకారం చుట్టింది. కృత్రిమ మేధ (ఆర్టిఫిషియల్ ఇంటలిజెన్స్) సాంకేతికతను ఉపయోగించి "ఫేస్ డిటెక్షన్ చేసేందుకు ఎలక్ట్రానిక్స్ అండ్ కమ్యూనికేషన్స్ ఇంజినీరింగ్ ఆచార్యుడు రవికుమార్ మార్గదర్శనంలో ఈసీఈ మూడో సంవత్సరం చదువుతున్న ముగ్గురు విద్యార్థులు సరికొత్త ప్రయోగం చేస్తున్నారు.

100 మందిపై ప్రయోగం..

కృత్రిమ మేధ ద్వారా ముఖాలను గుర్తించేందుకు క్యాంపస్‌లో వందమంది విద్యార్థుల వివరాలు తీసుకున్నారు. తొలుత వారి ఫొటోలు, పేర్లను సంగణకంలో నమోదు చేశారు. ప్రధాన ద్వారం ముందు ఏర్పాటుచేసే కెమెరా ముందుకు రాగానే తెరపై పేరి పేర్లతో సహా వస్తుంది. అలా ఆ విద్యార్థి ఎన్ని సార్లు బయటకెళ్లొచ్చారు, ఏ సమయంలో వెళ్లారనేది తెలిసిపోతుంది. విద్యార్థులు నియమిత సమయాల్లో కాకుండా తరగతి వేళలు, అర్ధరాత్రి బయటకెళితే వారి మొబైల్‌కు అలర్ట్ వస్తుంది. మాస్కు ధరించిన వారిని కూడా కృత్రిమ మేధ ద్వారా గుర్తించే విధంగా సాఫ్ట్‌వేర్‌ను మలిచారు. రూ.400 కెమెరా దానికి ఒక తెర అనుసంధానించి ఈ విధానంలో ముఖాలను గుర్తించవచ్చని రవికుమార్ తెలిపారు. కరోనా తర్వాత చాలా కార్యాలయాల్లో వేళ్ల ద్వారా పనిచేసే బయోమెట్రిక్ హాజరు యంత్రాలను వినియోగించడం లేదు కాబట్టి 'ఏఐ' ద్వారా ముఖాలను గుర్తించి హాజరు కోసం కూడా వాడుకోవచ్చు. ఈ విధానంలో కెమెరా ముందుకు ఒకేసారి ముగ్గురు వచ్చినా పసిగడుతుంది. ఈ ప్రాజెక్టులో భాగంగా ఆన్ని ప్రాంతాల వారిని గుర్తించేందుకు వివిధ దేశాలకు చెందిన 18 వేల మంది డేటాను తీసుకున్నట్లు విద్యార్థులు వివరించారు. క్యాంపస్‌లోకి రోజుకు ఎంత మంది కొత్తవాళ్లు వచ్చారన్న డేటా కూడా వారి ముఖాలతో సహా తెలుసుకోవచ్చు. క్యాంపస్ భద్రతకు ఇది ఎంతో ఉపయుక్తం కానుంది.


ప్రాజెక్టు చేపడుతున్న ఈసీఈ విద్యార్థులు

గ్రీన్ క్యాంపస్!

వావ్ మియావాకీ..
నిట్‌లో మినీ ఫారెస్ట్

- 2019లో శ్రీకారం..
  2 ఎకరాల్లో 4 వేల మొక్కలు
- హరితహారంలో రూ.
  2 లక్షల ప్రోత్సాహకం
- ఆహ్లాదకర వాతావరణం
  ఉరుకుంటున్న విద్యార్థులు

బహుళ అంతస్తులు. మిద్దెలు, మేడలు. గజం జాగా ఉన్నా.. సిమెంట్ పూత పూసేస్తున్నాం. అడ్డుగా ఉన్నాయని చెట్లను తెగనరుకుతున్నాం. ఈ కరుణంలో గ్రేటర్‌ను ఊపిరిబూడేందుకు నిట్‌లో చిట్టడవి రూపుదిద్దుకుంది. 'మియావాకీ ఫారెస్ట్' పేరుతో నిట్ క్యాంపస్‌లో మూడేళ్లగా అవచచ్చు యజ్ఞం జరుగుతోంది. తక్కువ స్థలంలో దేశాది మొక్కలకు ప్రాణ ప్రతిష్ట జరుగుతోంది. ఆ గ్రీన్ క్యాంపస్ ముచ్చట్లు ఈ వారం 'సాక్షి' సండే స్పెషల్. - కాజీపేట అర్జున్



నిట్ క్యాంపస్‌లోని మియావాకీ ఫారెస్ట్

సాంకేతిక విద్యలో, క్యాంపస్ సెలక్షన్స్‌లో నేషనల్ ఇన్‌స్టిట్యూట్ ఆఫ్ టెక్నాలజీ (నిట్)ది ప్రవరంలోనే ప్రత్యేక స్థానం. ఓవైపు నరంకొత్త పరిశోధనలు, అవిష్కరణలు చేస్తూనే.. అంతరించిపోతున్న అడవులను పెంపొందించేందుకు నిట్‌లో మియావాకీ ఫారెస్ట్ పేరుతో నూతన ఒరవడికి శ్రీకారం చుట్టారు. 2019 ఆగష్టు 15న స్వాతంత్ర్య దినోత్సవాన్ని పురస్కరించుకుని మియావాకీ ఫారెస్ట్‌ను ప్రారంభించారు. మియావాకీ ఫారెస్ట్‌లో తక్కువ స్థలంలో ఎక్కువ మొక్కలు నాటడం ప్రధాన ఉద్దేశం. అప్పటినుంచి ప్రతీ శనివారం నిట్ వరంగల్ క్యాంపస్‌లో రెండు ఎకరాల్లో జపనీస్ సాంకేతంతో నిట్ యాజమాన్యం, విద్యార్థులు మొక్కలు నాటడం ప్రారంభించారు. ఐదేళ్ల వరకు 4వేల మొక్కలు నాటి చిట్టడవిని రూపొందించారు.

ఎవరీ మియావాకీ!

జపాన్‌కు చెందిన వృక్ష శాస్త్రజ్ఞుడు అకిరా మియావాకీ. అయన తక్కువ స్థలంలో ఎక్కువ మొక్కలను నాటే అడవిని సృష్టించే నూతన ఒరవడికి నాంది పలికారు. అకిరా మియావాకీ స్ఫూర్తితో.. నిట్ క్యాంపస్‌లోని ఆంబేద్కర్ లర్నింగ్ సెంటర్ ఆడిటోరియం ఆవరణలో మొక్కలు నాటుతూ వస్తున్నారు. ప్రస్తుతం మినీ ఫారెస్ట్‌గా ఇది అవతరించింది.

ఆక్సిజన్ అందించే మొక్కలే ఎక్కువ!

నిట్ క్యాంపస్ 250 ఎకరాల్లో విస్తరించి ఉంది. నూతన భవనాల నిర్మాణంలో కొన్ని చెట్లను నరకడం అనివార్యమైంది. వాటి స్థానంలో వాతావరణ సమతుల్యానికి మియావాకీ ఫారెస్ట్‌ను ఏర్పాటు చేశారు. ప్రస్తుతం క్యాంపస్ వీరాది మొక్కలతో ఆకుపచ్చదాల్ని అద్దుతుంది. కాగా మియావాకీ ఫారెస్ట్‌లో భాగంగా మెదుర మొక్కలు, అల్ల నేరేడు, మోదుగు, జామాయిల్, జామ, మేప, రాగి చెట్లు, ఆక్సిజన్‌ను ఎక్కువగా విడుదల చేసే మొక్కలను నాటారు.


మినీ ఫారెస్ట్‌లో చదువుకుంటున్న విద్యార్థులు


ఏపుగా ఎదిగిన మొక్కలు

6 వేల మొక్కలే లక్ష్యం

మియావాకీ ఫారెస్ట్‌లో నాటిన మొక్కలను పరిరక్షణలో ఎంపిక చేసి నిట్ క్యాంపస్‌కు రూ.2 లక్షల ప్రోత్సాహకాన్ని రాష్ట్ర ప్రభుత్వం అందించింది. మినీ ఫారెస్ట్‌లో 6 వేల మొక్కలు నాటడమే లక్ష్యంగా ముందుకు సాగుతున్నట్లు నిట్ యాజమాన్యం తెలుపుతోంది.

ఆహ్లాదానికి చిరునామా..

నిట్ విద్యార్థులు మియావాకీ ఫారెస్ట్‌లో గడిపే రోజు ఆహ్లాదాన్ని పొందుతున్నారు. విద్యార్థులు వాకింగ్ చేస్తూ, చెట్ల కింద వరుపుకుంటూ వచ్చని ఒడిలో సేదతీరుతున్నారు.

వాతావరణ సమతుల్యానికి



వాతావరణ సమతుల్యాన్ని కాపాడేందుకు విద్యార్థులకు ఆహ్లాదకర వాతావరణాన్ని అందించేందుకు మూడేళ్ల క్రితం మియావాకీ ఫారెస్ట్‌కు శ్రీకారం చుట్టాం. రెండెకరాల్లో ఫారెస్ట్‌ను ఏర్పాటు చేసి మొక్కలు నాటాం. భవిష్యత్తులో క్యాంపస్‌లోని ఖాళీ స్థలాల్ని గుర్తించి మొక్కలు పెంచుతాం.

- ఎన్వీరమణారావు, నిట్ డైరెక్టర్

అడవిలో వెళ్లిన అనుభూతి



మియావాకీ ఫారెస్ట్‌లోకి వెళ్తే అడవిలోకి వెళ్లిన అనుభూతి కలుగుతోంది. మియావాకీ ద్వారా మొక్కల పెంపకం, సంరక్షణ గురించి తెలుసుకున్నాం. ఫారెస్ట్‌ను అభివృద్ధి చేసేందుకు అవసరమైన సహకారం అందిస్తాం.

- వీపీశారమ్, పీహెచ్‌డీ స్కాలర్

ఇంటి ఆవరణలో పెంచుతా..



తక్కువ స్థలంలో ఎక్కువ మొక్కలు నాటి మియావాకీ ఫారెస్ట్‌ను ఏర్పాటు చేసుకున్నట్లుగానే.. ఇంటి ఆవరణలోనూ మొక్కలు పెంచుకోవాలనే ఆలోచన వచ్చింది. వాతావరణ కాలుష్య సమస్యలకు చెక్ పెట్టేందుకు పాట్స్ ఏర్పాటు మంచి పరిష్కారం.

- వినోదాయన్, పీహెచ్‌డీ స్కాలర్



ఈ రోడ్డుపై నీళ్లు నిలవవు!

వరంగల్ నిట్‌లో 'పోరస్ ఆస్ఫాల్ట్' రోడ్డుపై పరిశోధన • లోతట్టు, ముంపు ప్రాంతాల్లో ప్రయోజనం

కాజీపేట అర్జున్: ఏ చిన్నపాటి వాన కురిసినా రోడ్డపై నీళ్లు నిలుస్తాయి. వచ్చిపోయే వాహనాలతోపాటు పాదచారులకూ నరకమే. అదే భారీ వర్షాలు కురిస్తే రోడ్డపై నీళ్లతోపాటు లోతట్టు ప్రాంతాలు ముంపునకు గురవుతుంటాయి. ఇలాంటి పరిస్థితికి చెక్ పెట్టేందుకు తొడ్పడే 'పోరస్ ఆస్ఫాల్ట్' రోడ్డు, పేవ్‌మెంట్ల నిర్మాణంపై వరంగల్ నిట్ నివుణులు పరిశోధన చేస్తున్నారు. నీరు నిలవకుండా ఎప్పటికప్పుడు ఇంకిపోయే ఈ తరహా రోడ్డను.. విదేశాల్లో పలుచోట్ల పార్కింగ్ స్థలాలు, ఉద్యానవనాలు వంటి చోట్ల ఇప్పటికే వినియోగిస్తున్నారు. దీనిని మన పరిస్థితులకు అనుగుణంగా అభివృద్ధి చేయడంపై నిట్ సివిల్ విభాగం ట్రాన్స్‌పోర్ట్ డివిజన్ ప్రొఫెసర్ ఎస్.శంకర్, పీహెచ్‌డీ స్కాలర్ గుమ్మడి చిరంజీవి పరిశోధన చేస్తున్నారు. 'పోరస్ ఆస్ఫాల్ట్' రోడ్డు/పేవ్‌మెంట్లతో నీరు నిల్వ ఉండకపోవడం వల్ల దోమలు, ఇతర కీటకాలు వృద్ధి చెందవని.. రోగాలు ప్రబలకుండా ఉంటాయని వారు చెప్తున్నారు.


నిట్‌లో 'పోరస్ ఆస్ఫాల్ట్' కాంపిల్

ఎప్పటికప్పుడు నీటిని పీల్చేసుకుని..

- సురక్షితమైన ప్రయాణానికి వీలు కల్పించే తారు, సీసీ రోడ్డు మాదిరిగానే 'పోరస్ ఆస్ఫాల్ట్' రోడ్డు ఉంటుంది. సాధారణంగా తారు, సీసీ రోడ్డను నాలుగు దశల్లో మట్టి, కంకర, తారు లేదా సిమెంట్ వినియోగించి నిర్మిస్తారు. ఇవి పూర్తిగా గట్టి పొరలా ఉండిపోయి.. లోతట్టు ప్రాంతాల్లో నీళ్లు నిలుస్తాయి.
- 'పోరస్ ఆస్ఫాల్ట్ పేవ్‌మెంట్/రోడ్డును 16 దశల్లో వేర్వేరుగా నిర్మిస్తారు. వివిధ పరిమాణాల్లో ఉన్న కంకరను వినియోగిస్తారు. రోడ్డు దృఢంగా ఉంటూనే.. పెద్ద సంఖ్యలో చిన్నచిన్న రంధ్రాలు ఏర్పడేలా చూస్తారు. నీటి ప్రవాహానికి తగినట్టుగా రంధ్రాలు ఉండేలా చూస్తారు.
- వర్షాలు పడినప్పుడు ఈ రోడ్డు నీటిని పీల్చుకుని భూగర్భంలోకి పంపేస్తాయి. వెంట వెంటనే నీళ్లు ఇంకిపోవడం వల్ల నిల్వ ఉండటం, ముంపునకు కారణం కావడం మంటివి ఉండవు.
- పట్టణాల్లో ఇలాంటి రోడ్డు/పేవ్‌మెంట్లను నిర్మించినప్పుడు వాటి దిగువ నుంచి నీళ్లు డ్రైనేజీలోకి వెళ్లిపోయేలా ఏర్పాట్లు చేస్తారు. దానితో ఎంతగా వానపడ్డా నీళ్లు నిలవవు.

ముంపు నివారణ కోసం..



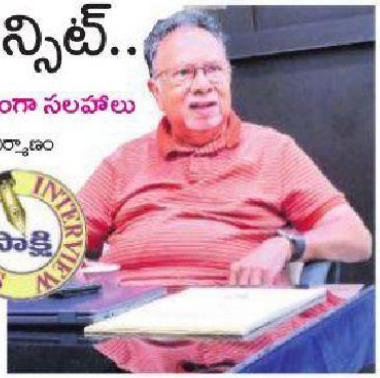
నిట్ వరంగల్ క్యాంపస్‌లో తొలుత పోరస్ ఆస్ఫాల్ట్ రోడ్డును 50 మీటర్ల మేర ఏర్పాటు చేయనున్నాం. దానిని పరిశీలించి అవసరమైన మార్పులు చేస్తాం. గ్రేటర్ వరంగల్‌లో వాన ముంపును నివారించేందుకు ఈ విధానాన్ని అందజేస్తాం. సైడ్ డ్రెయిన్స్ లేని ప్రాంతాల్లో, ముంపునకు గురయ్యే ప్రాంతాల్లో ఈ రోడ్డను వేయడం వల్ల ఎంతో ప్రయోజనం ఉంటుంది. - శంకర్, ప్రొఫెసర్, సివిల్ విభాగం

సాక్షి Sun, 03 April 2022
https://epaper.sakshi.com/c/67210059

టార్గెట్.. ట్రాన్సిట్..

2040 ట్రాన్సిట్ ఓరుగల్లే లక్ష్యంగా సలహాలు

- ప్రజా రవాణాతోనే మెరుగైన సమాజ నిర్మాణం
- 50 ఏళ్లుగా ట్రాన్స్‌పోర్ట్ రంగంలో సూచనలు
  ట్రాఫిక్ సెన్స్‌తో ఇంధన ఆదా, సురక్షిత ప్రయాణం
- 'సాక్షి'తో అట్లాంటిక్ ట్రాన్స్‌పోర్టేషన్ ఇంజనీర్స్ సంస్థ అధ్యక్షుడు డాక్టర్ మూర్తి బీఏ.బొండాడ



కాజీపేట అర్బన్: మెరుగైన ప్రజా రవాణా వ్యవస్థకు ఓరుగల్లు లక్ష్యంగా నిట్ వరంగల్ వేదిక కానుంది. టార్గెట్-2040 ట్రాన్సిట్(రవాణా) కోసం మున్సిపల్, కుడా అధికారులకు సలహాలు, సూచనలు అందజేసేందుకు యూఎస్ గవర్నమెంట్ సౌజన్యంతో ఫుల్‌బ్రైట్ సంస్థ, నిట్ వరంగల్ అనుసంధానంగా ఫుల్‌బ్రైట్ స్పెషల్ ప్రోగ్రాం చేపట్టనున్నారు. ఈ మేరకు అట్లాంటిక్ ట్రాన్స్‌పోర్టేషన్ ఇంజనీర్స్ సంస్థ అధ్యక్షుడు డాక్టర్ మూర్తి బీఏ.బొండాడ 'సాక్షి'తో శనివారం తన మనోభావాలను పంచుకున్నారు. కాజీపేట నుంచి వరంగల్ పరకు గల 12 కిలో మీటర్ల నిడివిని తొలుత అధ్యయనానికి తీసుకున్నారు. ట్రాన్సిట్ ఓరుగల్లుగా తీర్చడమే లక్ష్యంగా యూఎస్ నుంచి నిట్ వరంగల్‌లో 42 రోజులపాటు ఇంటర్న్‌షిప్ ప్రోగ్రాం చేపట్టారు. ఆ వివరాలన్నీ ఆయన మాటల్లోనే...

కాకినాడ నుంచి యూఎస్‌లోని ఫ్లోరిడా వరకు..

ఏపీలోని కాకినాడకు చెందిన నేను కాకినాడలో ఉన్నత విద్య పూర్తి చేశాను. పీఆర్ కళాశాలలో సివిల్ ఇంజనీరింగ్ పూర్తి చేసి.. ఆంధ్రా, కడప, అనంతపురం పాలిటెక్నిక్ కళాశాలల్లో ప్రొఫెసర్‌గా సేవలందించాను. త్రివుట్ ఐటీ ఖరగ్‌పూర్‌లో సిటీ ప్లానింగ్‌లో పని చేస్తున్న తరుణంలోనే 1969లో కాకినాడ నుంచి యూఎస్‌లోని ఫ్లోరిడాకు ప్రయాణం ప్రారంభించాను. ట్రాన్స్‌పోర్ట్ అండ్ ట్రాఫిక్ ఇంజనీరింగ్‌లో మాస్టర్, పీహెచ్‌డీ పూర్తి చేశాను. 1972 నుంచి 2022 వరకు అమెరికాలోని పలు ప్రాంతాలకు ట్రాన్స్‌పోర్ట్ రంగంలో యూఎస్ గవర్నమెంట్‌కు సూచనలు అందజేస్తున్నాను.

లాంగ్ రేయిన్ ట్రాన్స్‌పోర్ట్ విధానంతో...

అమెరికాలో ప్రతి ఇంటికి కారు ఉంటుంది. ప్రజా రవాణా వ్యవస్థ(బస్సు) సౌకర్యం ఉన్నా వినియోగం తక్కువ. దీన్ని మెరుగుపర్చేందుకు లాంగ్ రేయిన్ ట్రాన్స్‌పోర్ట్ విధానంపై సూచనలు అందజేస్తూ.. పర్యవేక్షణ కొనసాగిస్తున్నా. ప్రస్తుతం వివిధ రకాల వాహనాలపై ప్రయాణం చేసే వారిని అధ్యయనం చేస్తున్నా. 30 ఏళ్లకు నాటి జనాభాకు అనుగుణంగా లాంగ్ రేయిన్ ట్రాన్స్‌పోర్ట్ విధానంతో మెరుగైన రవాణా, ప్రయాణ వ్యవస్థ సాధ్యమవుతుంది.

ట్రాఫిక్ సెన్స్ కల్పించాలి...

పాలకులు ప్రజా రవాణా సౌకర్యం కల్పించాలి. రహదారులపై సైకిల్ ట్రాక్, వాకింగ్ ట్రాక్, బస్సు, కారు, టూ వీలర్లకు అనుగుణంగా మార్కింగ్ ఏర్పాటు చేయాలి. ఆయా మార్కింగ్‌లకు అనుగుణంగా ప్రయాణం చేసేలా ట్రాఫిక్ సెన్స్ కల్పించాలి. తద్వారా సురక్షితమైన ప్రయాణంతోపాటు ఇంధనం ఆదా అవుతుంది. వాహన కాలుష్యం తగ్గుతుంది.

అమెరికాలో సిటీ యాక్ట్...

అమెరికాలో కాళ్లు లేకున్నా కారు మాత్రం ఉంటుంది. ఇంటికో కారుండటం వల్ల పార్కింగ్, ట్రాఫిక్ సమస్య ఏర్పడుతుంది. దీంతో కంప్లీట్ సిటీ యాక్ట్ పేరిట సైకిల్ ట్రాక్, వాకింగ్ ట్రాక్, బస్సు, కారు, టూవీలర్ ట్రాక్ ఏర్పాటు చేస్తున్నారు. ఎక్కువగా కారు ట్రాక్‌లను గతంలో ఏర్పాటు చేయగా.. ప్రస్తుతం వాటిని తొలగించి కంప్లీట్ సిటీ యాక్ట్ అమలు చేస్తున్నారు.

26న కుడా అధికారులతో...

నిట్ వరంగల్ విద్యార్థులతో 42 రోజులపాటు ఇంటరాక్ట్ అవడంతోపాటు అధ్యయనం చేయిస్తా. ఈనెల 19న రాష్ట్రస్థాయిలో ట్రాఫిక్, కుడా, మున్సిపల్ అధికారులతో సమావేశం ఏర్పాటు చేసి సూచనలు, సలహాలు స్వీకరిస్తాం. ఈనెల 26న కుడా అధికారులతో బేటీ అయిన తర్వాత ట్రాన్సిట్ ఓరుగల్లుకు సూచనలు చేస్తా.

అందరికీ అనుగుణంగా ప్రజా రవాణా వ్యవస్థ

సామాన్యుడి నుంచి ఉన్నత స్థాయి వారికి అనుగుణంగా ప్రజా రవాణా వ్యవస్థను అందజేయాలి. ఇందుకోసం బస్సులు పెంచాలి. ప్రజా అవసరాలకు అనుగుణంగా బస్సులను కారు మాదిరిగా ఆకర్షణగా, స్వాపులు పెంచడం వల్ల ప్రతి ఒక్కరూ ఎక్కేందుకు ఆసక్తి చూపుతారు. కారు, టూవీలర్ కంటే బస్సు ప్రయాణం సురక్షితం. దీంతో ప్రజలకు ఇంధనం ఆదా.. ప్రభుత్వానికి ఆదాయం పెరుగుతుంది. ప్రభుత్వాలు ప్రత్యేక నిధులు కేటాయించి ట్రాఫిక్ సెన్స్‌ను పెంచేందుకు ట్రాక్‌లు, ప్రజా రవాణాకు బస్సు సౌకర్యం పెంచాలని ఆశిద్దాం.

సాక్షి Sun, 10 July 2022
https://epaper.sakshi.com/c/69086931









Members of Institute Information Advisory Committee (IIAC)

Sl. No.	Department	Name of In charge of Department Information	Designation	Mobile number	E-mail
1	ADVISOR (QA&AA)	Dr. S. Srinivasa Rao	Professor	8332969313	Advisor_qaaa@nitw.ac.in sneni@nitw.ac.in
2	ASSOCIATE DEAN (ACADEMIC AUDIT)	Dr. K. Thangaraju	Professor	8332969720 8332969476	asd_aa@nitw.ac.in
3	CIVIL	Dr. R. Ramesh Nayaka	Assistant Professor	9962262909	rameh.n@nitw.ac.in
4	ELECTRICAL	Dr. T. VinayKumar	Assistant Professor	9885281148	vinaykumar@nitw.ac.in
5	MECHANICAL	Dr V.P. Chandramohan	Professor	8332969329	vpcm80@nitw.ac.in
6	ECE	Dr. G. Arun Kumar	Assistant Professor	9477304602	g.arun@nitw.ac.in
7	M&M	Dr. G. Brahma Raju	Associate Professor	8332969389	gbraju@nitw.ac.in
8	CHEMICAL	Dr. Sampath Kumar	Assistant Professor	8497968889	pskr@nitw.ac.in
9	CSE	Dr. Sangharatna G	Assistant Professor	7013306805	sanghu@nitw.ac.in
10	BIOTECH	Dr. Soumya Lipsa Rath	Assistant Professor	7978293479	slrath@nitw.ac.in
11	MATHEMATICS	Dr. Y. Srinivasa Rao	Assistant Professor	9494776866	ysr@nitw.ac.in
12	PHYSICS	Dr. Jayalakshmi	Associate Professor	8332969477	jayalakshmiv@nitw.ac.in
13	CHEMISTRY	Dr.K. Hari Prasad	Associate Professor	9550803036	harikokatla@nitw.ac.in
14	SOM	Dr. P. R. C. Gopal	Assistant Professor	9843716992	prcgopal@nitw.ac.in
15	HUMANITIES& SOCIAL SCIENCES	Dr. Madhumathi P.	Assistant Professor	9943401929	madhumathi.p@nitw.ac.in
16	Centre for Career Planning & Development	Dr. MJ Devidson	Head, (CCPD)	9490165357	ccpd_hod@nitw.ac.in
17	General Coordinator-I	Dr. S. Vidyasagar	Associate Professor	9490164976 8332969463	vidyasagars@nitw.ac.in
18	General Coordinator -II	Dr. T. Rahul	Assistant Professor, SOM	8978264848	rahult@nitw.ac.in

NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL

TELANGANA

ANNUAL ACCOUNTS FOR THE YEAR 2021-22

NATIONAL INSTITUTEOF TECHNOLOGY, WARANGAL
CONSOLIDATED BALANCE SHEET AS AT 31-03-2022

(Amount in Rupees)

SOURCES OF FUNDS	SCHEDULE	Current Year	Previous Year
Corpus / Capital Fund	**1**	7,454,140,780	6,536,016,324
Designated / Earmarked / Endowment Funds	**2**	1,018,386,229	977,921,270
Current Liabilities & Provisions	**3**	516,153,072	888,623,868
TOTAL		**8,988,680,081**	**8,402,561,462**
APPLICATION OF FUNDS			
Fixed Assets	**4**		
-- Tangible Assets		4,397,266,611	4,403,002,761
-- Intangible Assets		40,384,757	19,091,933
-- Capital Work in progress		-	-
Investments	**5**		
-- Long Term		-	-
-- Short Term		742,624,039	743,795,144
Investments - Others	**6**	-	-
Current Assets	**7**	3,415,410,500	2,950,049,786
Loans, Advanes & Deposits	**8**	392,994,174	286,621,838
TOTAL		**8,988,680,081**	**8,402,561,462**
Significant Accounting Policies	**23**		
Contingent Liabilities and Notes to Accounts	**24**		

NATIONAL INSTITUTE OF TECHNOLOGY, WARANGAL

SCHEDULES FORMING PART OFBALANCE SHEET AS AT 31-03-2022

SCHEDULE 1- CORPUS FUND / CAPITAL FUND	COLLEGE	RESEARCH	TOTAL
Balance as at the beginning of the year	6,505,554,232	30,462,092	6,536,016,324
Add: Contributions towards Corpus / Capital Fund	126,004,544	-	126,004,544
Add: Contributions from TLC (Research)	67,820,222	-	67,820,222
Add: Grants from UGC, GOI and State Government to the			-
extent utilized for capital expenditure	-	-	-
Add: Assets purchased out of Earmarked Funds	-	-	-
Add: Assets purchased out of Sponsored Projects where			-
ownership vests in the institution	-	-	-
Add: Assets Donated / Gifts Received	-	-	-
Add: Other Addition	410,772,448	-	410,772,448
Add: Excess of Income over expenditure transferred from			-
income & Expenditure Account	277,939,623	35,587,619	313,527,242
	7,388,091,069	**66,049,711**	**7,454,140,780**
Ded: Unutilized Capital Grants	-	-	-
Ded: Deficit of Incover over Expenditure transerred from			
income & Expenditure Account & PF Withdrawl	-	-	-
Balance at the year end	**7,388,091,069**	**66,049,711**	**7,454,140,780**

SCHEDULE 3 - CURRENT LIABILITIES & PROVISIONS	COLLEGE	RESEARCH	TOTAL
A. CURRENT LIABILITIES			
1. Deposits from staff			
--- Security Deposit for Staff Quarters	64,794	-	64,794
2. Deposits from students			
--- Lab and Library Deposit	20,127,625	-	20,127,625
--- Hostel Caution Money Deposit	446,664	-	446,664
--- NIT Co-operative Stores Deposit	6,618,304	-	6,618,304
3. Sundry Creditors			
a) For Goods & Services	-	-	-
b) Others	-	-	-
4. Deposits - others (including EMD, Security deposit)			
--- EMD / Security Deposit	23,280,036	-	23,280,036
--- Other Deposit	8,906,598	-	8,906,598
--- Deposit for Rent and other service charges	2,000	-	2,000
--- ICC R&D Account	11,000	-	11,000
5. Statutory Liabilities(GPF, TDS, WC TAX, CPF, GIS, NPS):			
a) Overdue	-	-	-
b) Others			
--- Sales Tax	294,218	-	294,218
--- Profession Tax	615,702	-	615,702
--- Income Tax	2,230,164	-	2,230,164
--- LIC (SSS)	36	-	36
--- GLIS	343	-	343
--- Staff Contribution for NPS Scheme	(184,223)	-	(184,223)
--- Labour Commissioner (CESS)	792,563	-	792,563
--- Provident Fund Subscription	27,623	-	27,623

--- EPF	528,899	-	528,899
--- Seignorage Charges	303,924	-	303,924
--- Statutory Liabilities	-	220,426	220,426
--- GST - TDS	482,584	-	482,584
--- ICC - GST	3,152,399	-	3,152,399
7. Other Current Liabilities:			
a) Salaries	-	-	-
b) Receipts against sponsored projects	-	271,957,048	271,957,048
c) Recpt against sponsored fellowships & scholarships	762,420	-	762,420
d) Unutilised Grants	70,368,084	-	70,368,084
e) Grants in advance	-	-	-
f) Other funds	-	-	-
g) Other liabilities	-	-	-
--- Other Liabilities - Advances / FDD / LC Suspense	-	-	-
--- Outstanding Liabilities	105,143,842	-	105,143,842
TOTAL (A)	**243,975,599**	**272,177,474**	**516,153,072**
B. PROVISIONS			
1. For Taxation	-	-	-
2. Gratuity	-	-	-
3. Superannuation/ Pension	-	-	-
4. Accumulated Leave Encashment	-	-	-
5. Trade Warranties/ Claims	-	-	-
6. Others (Specify)	-	-	-
Security Services	-	-	-
TOTAL (B)	-	-	-
TOTAL (A+B)	**243,975,599**	**272,177,474**	**516,153,072**

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

INVESTMENTS FROM EARMARKED/ ENDOWMENT FUNDS	COLLEGE	RESEARCH	TOTAL
A. Plan Grants: Government of India			
Balance B/f	481,140,532	-	481,140,532
Add: Receipts during the year	126,004,544	-	126,004,544
Total(a)	607,145,076	-	607,145,076
Less: Refunds	-	-	-
Less: Utilized for Revenue Expenses	-	-	-
Less: Utilized for Capital Expenses	205,611,631	-	205,611,631
Less: Prior period adjustment	331,165,361		331,165,361
total(b)	536,776,992	-	536,776,992
Unutilized carried forward (a-b)	70,368,084	-	70,368,084
B. UGC Grants: Plan			
Balance B/f	-	-	-
Receipts during the year	-	-	-
Total(a)	-	-	-
Less: Refunds	-	-	-
Less: Utilized for Revenue Expenses	-	-	-
Less: Utilized for Capital Expenses	-	-	-
total(b)	-	-	-
Unutilized carried forward (a-b)	-	-	-
C. UGC Grants Non Plan			
Balance B/f	-	-	-
Receipts during the year	-	-	-
Total(a)	-	-	-
Less: Refunds	-	-	-
Less: Utilized for Revenue Expenses	-	-	-
Less: Utilized for Capital Expenses	-	-	-
total(b)	-	-	-
Unutilized carried forward (a-b)	-	-	-
D. Grants from State Govt.			
Balance B/f	-	-	-
Receipts during the year	-	-	-
Total(a)	-	-	-
Less: Refunds	-	-	-
Less: Utilized for Revenue Expenses	-	-	-
Less: Utilized for Capital Expenses	-	-	-
Less: Prior period adjustment	-		-
total(b)	-	-	-
Unutilized carried forward (a-b)	-	-	-
Grand Total (A+B+C+D)	**70,368,084**	**-**	**70,368,084**

SCHEDULE - 4 - FIXED ASSETS	COLLEGE	RESEARCH	TOTAL
Land	1	-	1
Site Development	-	-	-
Buildings	3,747,153,309	-	3,747,153,309
Roads & Bridges	12,058,394	-	12,058,394
Tubewells & Water Supply	-	-	-
Sewarage & Drainage	-	-	-
Electrical Installation and Equipment	17,000	-	17,000
Plant & Machinery	-	-	-
Scientific & Laboratory Equipment	543,230,863	-	543,230,863
Office Equipment	-	-	-
Audit Visual Equipment	-	-	-
Computers & Peripherals	39,870,892	-	39,870,892
Furniture, Fixtures & Fittings	47,515,381	-	47,515,381
Vehicles	1,427,145	-	1,427,145
Lib Books & Scientific Journals	5,993,625	-	5,993,625
Small Value of assets	1	-	1
Tota (A)	**4,397,266,611**	**-**	**4,397,266,611**
Capital Work in progress (B)	-	-	-

Intangible Assets	COLLEGE	RESEARCH	TOTAL
Computer Software	726,107	-	726,107
E-Journals	39,658,650	-	39,658,650
Patents	-	-	-
Total (C)	40,384,757	-	40,384,757
Grand Total(A+B+C)	**4,437,651,368**	**-**	**4,437,651,368**
PREVIOUS YEAR			

SCHEDULE 5 - INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS	COLLEGE	RESEARCH	TOTAL
1. In Central Government Securities	-	-	-
2. In State Government Securities	-	-	-
3. Other Approved Securities	-	-	-
4. Shares	-	-	-
5. Debentures and Bonds	-	-	-
6. Term Deposits with Banks	682,624,039	-	682,624,039
7. Others (to be specified)	60,000,000	-	60,000,000
TOTAL	**742,624,039**	**-**	**742,624,039**

SCHEDULE 6 - INVESTMENTS - OTHERS	COLLEGE	RESEARCH	TOTAL
1. In Central Government Securities	-	-	-
2. In State Government Securities	-	-	-
3. Other Approved Securities	-	-	-
4. Shares	-	-	-
5. Debentures and Bonds	-	-	-
6. Others (to be specified)	-	-	-
TOTAL	**-**	**-**	**-**

SCHEDULE 7 - CURRENT ASSETS	COLLEGE	RESEARCH	TOTAL
1. Stock:			
a) Stores and Spares			
--- Stores and Spares	-	-	-
--- Loose Tools	-	-	-
--- Publications	-	-	-
--- Laboratory chemicals, consumables and glassware	-	-	-
--- Building Material	-	-	-
--- Electrical Material	-	-	-
--- Stationery	-	-	-
--- Water supply material	-	-	-
2. Sundry Debtors:			
a) Debts outstanding for a period exceeding six months	-	-	-
b) Others			
--- LC Suspense	3,386,798	-	3,386,798
--- FDD's	19,624,179	-	19,624,179
--- Fee Receivable	-	-	-
--- Plan Grant and Non Plan Grant Receivable	-	-	-
3. Cash and Bank Balances			
a) Cash Balance in hand(incl cheques / drafts and imprest)			
- Main Cash Balance	-	-	-
- Petty Cash Balance	-	-	-
- Imprest with department	590,000	-	590,000
b) With Scheduled Banks:			
- In Current Accounts	698,057,564	-	698,057,564
- In Term Deposit Accounts - **STDR**	1,555,629,030	173,322,381	1,728,951,411
- In Savings Accounts	856,990,774	107,809,774	964,800,548
c) With Non-Scheduled banks:			
- In Current Accounts	-	-	-
- In Term Deposit Accounts	-	-	-
- In Savings Accounts	-	-	-
4. Post Office- Savings Accounts	-	-	-
TOTAL	**3,134,278,345**	**281,132,155**	**3,415,410,500**

SCHEDULE 8 - LOANS, ADVANCES & DEPOSITS	COLLEGE	RESEARCH	TOTAL
1. Advances to employees (Non-interest bearing):			
a) Salary	-	-	-
b) Festival	-	-	-
c) LTC	1,932,846	-	1,932,846
d) Others (to be specified)	-	-	-
2. Long Term Advances to employees (Interest bearing)			
a) Vehicle loan	-	-	-
b) Home Loan	-	-	-
c) Others (to be specified)	-	-	-
3. Advances and other amounts recoverable in cash or in kind or for value to be received:			
a) On Capital Account	-	-	-
b) To Suppliers	-	-	-

c) Others	-	19,026,452	19,026,452
4. Prepaid Expenses			
a) Insurance	-	-	-
b) Other Expenses	-	-	-
5. Deposits			
a) Telephone	27,200	-	27,200
b) Lease Rent	-	-	-
c) Electricity	10,429,651	-	10,429,651
d) AICTE, if applicable	-	-	-
e) Others(to be specified)			
--- Deposit with Other Department (As per Annexure)	457,990	-	457,990
--- Other Dept / Contractors including CPWD	255,345,888	-	255,345,888
6. Income Accrued:			
a) On Investments from Earmarked/ Endowment Funds	29,603,788	-	29,603,788
b) On Investments- Others	11,074,486	2,187,983	13,262,469
c) On Loans and Advances	-	-	-
d) Others (includes income due unrealized)	26,877,560	-	26,877,560
7. Other Current Assets receivable from UGC / sponsored projects			
a) Debit balances in Sponsored Projects	149,735	35,880,595	36,030,330
b) Debit balances in Sponsored Fellowship & Scholarship	-	-	-
c) Grants Recoverable	-	-	-
d) Other receivables from UGC	-	-	-
8. Claims Receivable	-	-	-
TOTAL	**335,899,144**	**57,095,030**	**392,994,174**

NATIONAL INSTITUTEOF TECHNOLOGY, WARANGAL
CONSOLIDATED INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2022

Income	SCHEDULE	Current Year	Previous Year
Academic Receipts	**9**	466,009,899	406,204,662
Garnts / Subsidies	**10**	1,877,979,000	1,997,272,000
Income from Investments	**11**	117,625,081	68,473,922
Interest Earned	**12**	-	-
Other Income	**13**	174,443,683	24,448,458
Prior Period Income/Adjustment	**14**	-	-
TOTAL (A)		**2,636,057,663**	**2,496,399,042**
EXPENDITURE			
Staff Payments & Benefits (Establishment Expenses)	**15**	1,434,094,669	1,328,730,613
Academic Expenses	**16**	388,218,424	361,420,284
Administrative and General Exp	**17**	125,400,155	112,413,209
Transportation expenses	**18**	1,998,376	1,990,051
Reparis & Maintenance	**19**	117,455,346	84,190,537
Finance Cost	**20**	-	-
Depreciation	**4**	238,365,602	203,452,947
Other Expenses	**21**	388,161	7,648,208
Prior Period Expenses	**22**	16,609,688	1,282,917,741
TOTAL (B)		**2,322,530,421**	**3,382,763,590**
Balance being excess of Income over Expenditure (A-B)		313,527,242	(886,364,548)
Transfer to / from Designated Fund		-	-
Building Fund		-	-
Others if Any - Transfer to IRG		-	-
Balance being surplus (Deficit) carried to General Fund		**313,527,242**	**(886,364,548)**
Notes on Accounts	**22**		

NATIONAL INSTITUTE OF TECHNOLOGY, WARANGAL

SCHEDULES FORMING PART OF CONSOLIDATED INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR 2021 - 22

SCHEDULE 9- ACADEMIC RECEIPTS

FEE FROM STUDENTS	COLLEGE	RESEARCH	TOTAL
A. Academic			
1.Tution fee	437,799,249	-	437,799,249
2. Admission fee	27,673,500	-	27,673,500
3. Enrolment fee	-	-	-
4. Library Admission fee	-	-	-
5. Laboratory fee	-	-	-
6. Art & Craft fee	-	-	-
7. Registration fee	-	-	-
Foreign Students	-	-	-
PG Students	-	-	-
8. Syllabus fee	-	-	-
9. College Resources Fund	-		-
TOTAL (A)	**465,472,749**	**-**	**465,472,749**
B. Examinations			
1. Admission Test fee	-	-	-
2. Annual Examination fee	-	-	-
3. Marksheet, Certificate fee	-	-	-
4. Entrance Examination Fee	-	-	-
TOTAL (B)	**-**	**-**	**-**
C. Other fees			
1. Identity Card fee	537,150	-	537,150
2. Fine/ Miscellaneous fee	-	-	-
3. Medical fee	-	-	-
4. Transportation fee	-	-	-
5. Hostel fee	-	-	-
TOTAL (C)	**537,150**	**-**	**537,150**
D. Sale of Publications			
1. Sale of Admission forms	-	-	-
2. Sale of Syllabus and Question paper, etc.	-	-	-
3. Sale of Prospectus including admission forms	-	-	-
TOTAL (D)	**-**	**-**	**-**
E.Other Academic Receipts			
1. Registration fee for workshops, programmes	-	-	-
2. Registration fees (Academic Staff College)	-	-	-
TOTAL (E)	**-**		**-**
GRAND TOTAL (A+B+C+D+E)	**466,009,899**	**-**	**466,009,899**

SCHEDULE 10 - GRANTS / SUBSIDIES (IRREVOCABLE GRANTS RECEIVED)	COLLEGE	RESEARCH	TOTAL
Balance B/f	-	-	-
Add: Receipts during the year	1,877,979,000	-	1,877,979,000
Total	1,877,979,000	-	1,877,979,000
Less: Refunded to UGC	-	-	-
Balance	1,877,979,000	-	1,877,979,000
Less: Utilized for Capital Expenditure (A)	-	-	-
Balance	1,877,979,000	-	1,877,979,000
Less: Utilized for Revenue Expenditure (B)	1,877,979,000	-	1,877,979,000
TOTAL	-	-	-

SCHEDULE 11- INCOME FROM INVESTMENTS	COLLEGE	RESEARCH	TOTAL
1. Interest			
a) On Govt. Securities	-	-	-
b) Other Bonds/ Debentures	-	-	-
2. Interest on Term Deposits	77,488,889	34,263,400	111,752,289
3. Income accrued but not due on Term Deposits / Interest bearing advances to employees	-	-	-
4. Interest on Savings Bank Accounts	4,160,412	1,712,380	5,872,792
4. Others (Specify)	-	-	-
TOTAL	**81,649,301**	**35,975,780**	**117,625,081**

SCHEDULE 12- INTEREST EARNED

Particulars	COLLEGE	RESEARCH	TOTAL
1. On Savings Accounts with Scheduled Banks	-	-	-
2. On Loans			
a) Employees / Staff	-	-	-
b) Others	-	-	-
3. On Debtors and Other Receivables	-	-	-
TOTAL	**-**	**-**	**-**

SCHEDULE 13- OTHER INCOME

A.Income from Land & Building	COLLEGE	RESEARCH	TOTAL
1. Hostel Room Rent	12,532,650	-	12,532,650
2. License fee	2,966,408	-	2,966,408
3. Hire Charges of Auditorium/Play ground/Convention Centre,etc.	-	-	-
4. Electricity Charges recovered	14,354,933	-	14,354,933
5. Water Charges recovered	85,260	-	85,260
Total (A)	**29,939,251**	**-**	**29,939,251**
B. Sale of Institute's Publications	**-**	**-**	-

C. Income from from holding events			
1.Gross Receipts from annual function/sports caenival	-	-	-
Less : Direct Expenditure incurred on the annual function/sports carnival	-	-	-
2. Gross Receipts from fetes	-	-	-
Less : Direct Expenditure incurred on the fetes	-	-	-
3. Gross Receipts for educational tours	-	-	-
Less : Direct Expenditure incurred on the tours	-	-	-
4. Others (to be specified and separately disclosed)	-	-	-
TOTAL(C)	**-**	**-**	**-**
D. Others			
1. Income from Consultancy	2,845,053	-	2,845,053
2. RTI Fees	-	-	-
3. Income from Royalty	-	-	-
4. Sale of application form (recruitment)	-	-	-
5. Misc. receipts (Sale of tender form, waste paper, etc.)	-	-	-
6. Profit on Sale/ Disposal of Assets:	-	-	-
a) Owned Assets	-	-	-
b) Assets acquired out of grants, or received free of cost	-	-	-
7. Grants / Donations from Institutions, Welfare Bodies and International Organizations	-	-	-
8. Others			
--- Rent from Guest House	1,104,741	-	1,104,741
--- Other Miscelleneous Income	140,554,638	-	140,554,638
TOTAL(D)	**144,504,432**	**-**	**144,504,432**
GRAND TOTAL (A+B+C+D)	**174,443,683**	**-**	**174,443,683**

SCHEDULE 14- PRIOR PERIOD INCOME

Particulars	**COLLEGE**	**RESEARCH**	**TOTAL**
1. Academic Receipts	-	-	-
2. Income from Investments	-	-	-
3. Interest Income	-	-	-
4. Income & Expenditure Appropriation A/c (Prior Period Adjustment)	-	-	-
5. Other Income	-	-	-
TOTAL	**-**	**-**	**-**

NATIONAL INSTITUTE OF TECHNOLOGY, WARANGAL

SCHEDULES FORMING PART OF CONSOLIDATED INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR 2021 - 22

SCHEDULE 15- STAFF PAYMENTS & BENEFITS	**COLLEGE**	**RESEARCH**	**TOTAL**
a) Salaries and Wages	896,271,766	-	896,271,766
b) Allowances and Bonus - Bonus for Non Teaching Staff	-	-	-
c) Contribution to Provident Fund	-	-	-
d) Contribution to Other Fund (Specify)	-	-	-
e) Staff Welfare Expenses	23,819,531	-	23,819,531
f) Retirement and Terminal Benefits	405,495,210	-	

			405,495,210
g) LTC facility	7,391,991	-	7,391,991
h) Medical facility	-	-	-
i) Children Education Allowance	8,218,120	-	8,218,120
j) Honorarium	-	-	-
k) Others (Specify)	-	-	-
--- Amenities to Staff & Students	-	-	-
--- EL Encashment	512,996	-	512,996
--- Overtime Allowance	-	-	-
--- Leave Encashment	19,382,090	-	19,382,090
--- Arrears of Salary	-	-	-
--- Daily wage / consolidated / Outsourcing charges	73,002,965	-	73,002,965
TOTAL	**1,434,094,669**	**-**	**1,434,094,669**
SCHEDULE 16- ACADEMIC EXPENSES	**COLLEGE**	**RESEARCH**	**TOTAL**
a) Laboratory Expenses	-	-	-
b) Field work/ Participation in Conferences	-	-	-
c) Expenses on Seminars / Workshops	924,521	-	924,521
d) Payment to Visiting Faculty - Contingency for Spl Faculty & Allowances	24,631,163	-	24,631,163
e) Examination	-	-	-
f) Student Welfare expenses	-	-	-
g) Admission expenses	-	-	-
h) Convocation expenses	-	-	-
i) Publications	-	-	-
j) Stipend/ means-cum-merit scholarship	362,662,740	-	362,662,740
k) Subscription expenses	-	-	-
l) Others (Specify)	-	-	-
--- Professional Development Allowance	-	-	-
TOTAL	**388,218,424**	**-**	**388,218,424**
SCHEDULE 17- ADMINISTRATIVE AND GENERAL EXPENSES	**COLLEGE**	**RESEARCH**	**TOTAL**
A. Infrastructure			
a) Electricity and Power	19,686,439	-	19,686,439
b) Water charges		-	6,800,423

	6,800,423		
c) Insurance	-	-	-
d) Rent, Rates and Taxes (including property tax)	1,031,776	-	1,031,776
B. Communication	-	-	-
e) Postage and telegram	-	-	-
f) Telephone, Fax and Internet Charges	2,167,979	-	2,167,979
C. Others	-	-	-
g) Printing and Stationary (Consumption)	1,146,906	-	1,146,906
h) Travelling and Conveyance Expenses	7,315,194	-	7,315,194
i) Hospitality	-	-	-
j) Auditor's Remuneration	490,000	-	490,000
k) Professional Charges - Legal Charges	682,900	-	682,900
Balance C/d	**39,321,617**	**-**	**39,321,617**
Balance B/d	39,321,617	-	39,321,617
l) Advertisement and Publicity	1,919,219	-	1,919,219
m) Magazines and Journals	-	-	-
n) Others (Specify)	-	-	-
--- DOC - Contingent Expenses	10,231,948	-	10,231,948
--- Security Staff Salaries (Temporary Staff)	39,393,514	-	39,393,514
--- Conservancy Charges	12,998,557	-	12,998,557
--- Guest House Charges	1,485,646	-	1,485,646
--- Other Miscelleneous Expenses	20,049,654	-	20,049,654
--- Interest on Provident Fund	-	-	-
TOTAL	**125,400,155**	**-**	**125,400,155**

SCHEDULE 18- TRANSPORTATION EXPENSES	**COLLEGE**	**RESEARCH**	**TOTAL**
1. Vehicles (owned by educational institution)			
a) Running Expenses	1,989,731	-	1,989,731
b) Repairs and Maintenance	-	-	-
c) Insurance Expenses	8,645	-	8,645

2. Vehicles taken on Rent/ Lease	-	-	-
a)Rent/ Lease Expenses	-	-	-
3. Vehicle (Taxi) hiring expenses	-	-	-
TOTAL	**1,998,376**	**-**	**1,998,376**
SCHEDULE 19- REPAIRS AND MAINTENANCE	**COLLEGE**	**RESEARCH**	**TOTAL**
a) Building		-	116,594,797
b) Furnitures and Fixtures	-	-	-
c) Plant and Machinery	-	-	-
d) Office Equipment	860,549	-	860,549
e) Computers	-	-	-
f) Laboratory & scientific equipment	-	-	-
g) Audit Visual Equipment	-	-	-
h) Cleaning Material & Services	-	-	-
i) Book binding charges	-	-	-
j) Gardening	-	-	-
k) Estate Maintenance	-	-	-
l) Others (Specify)	-	-	-
TOTAL	**117,455,346**	**-**	**117,455,346**
SCHEDULE 20- FINANCE COSTS	**COLLEGE**	**RESEARCH**	**TOTAL**
a) Bank Charges	-	-	-
b) Others (Specify)	-	-	-
TOTAL	**-**	**-**	**-**
SCHEDULE 21- OTHER EXPENSES	**COLLEGE**	**RESEARCH**	**TOTAL**
a) Provision for Bad and Doubtful Debts/ Advances	-	-	-
b) Irrecoverable Balances Written-off	-	-	-
c) Grants / Subsidies to other Institutions / Organizations	-	-	-
c) Others (Specify)	-	388,161	388,161
TOTAL	**-**	**388,161**	**388,161**
SCHEDULE 22- PRIOR PERIOD EXPENSES	**COLLEGE**	**RESEARCH**	**TOTAL**
1. Establishment Expenses	-	-	-
2. Academic Expenses	-	-	-
3. Administrative Expenses	-	-	-
4. Transportation Expenses	-	-	-

5. Repairs & Maintenance	-	-	-
c) Other Expenses - Industrial Consultancy Centre	16,609,688	-	16,609,688
TOTAL	**16,609,688**	**-**	**16,609,688**

NATIONAL INSTITUTE OF TECHNOLOGY, WARANGAL

CONSOLIDATED RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31-03-2022

(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	1,434,094,669	1,328,730,613
--- Main Cash Book	-	-	b) Academic Expenses	388,218,424	361,420,284
--- Petty Cash Book	-	-	c) Administrative Expenses	125,400,155	112,413,209
--- Imprest with Departments	330,000	330,000	d) Transportation Expenses	1,998,376	1,990,051
--- Fee Account (Cash)	-	-	e) Repairs & Maintenance	117,455,346	84,190,537
			f) Prior Period Expenses	-	-
b) Bank Balances					
			II. Payments made against Earmarked / Endowment Funds		
--- In Current Accounts	474,707,608	312,145,233			
--- In Deposit Accounts	-	-	--- Earmarked Fund	204,959,162	180,023,116
--- Savings Account (others)	34,031,157	95,525,363	--- Endowment Fund	2,530,742	545,560
--- Fee Bank A/c(Current)	119,743	1,732,548	--- PF Subscription		-
			III. Payments against Sponsored Projects / Schemes	134,261,112	168,725,107
--- EMD (Current)	13,939	13,566			
--- Kotak Mahindra Bank(Current)	4,885,738	2,092,764			
			IV. Payments against Sponsored Felllowships / Scholarships	-	-
II. Grants Received					
a) From Govt. of India					
			V. Investments and Deposits made		
--- Towards Capital Fund	126,004,544	60,000,000			
--- Towards Revenue Exp	1,877,979,000	1,997,272,000	a) Out of Earmarked / Endowments funds	-	80,000
--- L/Yr Receivable	-	-	b) Out of Own funds	180,430,131	-
b) From State Government	-	-			
			VI. Term Deposits with Scheduled Banks	2,103,413,337	1,326,587,159
c) From Other Sources - TLC	-	32,400,000			
			VII. Expenditure on Fixed Assets and Capital Works - in - Progress		
III. Academic Receipts (As per Annexure)	485,499,854	410,950,112			
			a) Fixed Assets	205,611,631	2,944,296,404
IV. Receipts against Earmarked / Endowment Fund			b) Capital Work - in - Progress	-	-
--- Earmarked Fund	245,786,296	215,921,520			
--- Endowment Fund	-	80,000			
V. Receipts against Sponsored Projects / Schemes	295,522,155	82,834,602	**VIII. Other Payments including statutory payments**		
			--- Statutory Liabilities	282,427,784	240,388,421

VI. Receipts against Sponsored Fellowships and Scholarships	-	-	**IX. Refunds and Grants**	-	-
VII. Income on Investments from					
--- Earmarked / Endowment Funds	2,577,140	489,252	**X. Deposits and Advances**		
--- Other Investments	-	-	--- Other Deposits	37,940,209	10,914,617
			--- Advances Accounts	178,468,860	194,697,119
VIII. Interest received on					
--- Bank Deposits	111,752,289	68,473,922	**XI. Other Payments**		
--- Loand and Advances	-	-			
--- Savings Bank Account	5,872,792	-	--- Outstanding Liabilities	90,368,127	90,070,600
			--- Purchases Accounts	40,433,729	24,363,187
IX. Investment encashed	-	-	--- Transfer to IRG	-	-
			--- RS Suspense & Interest Transfer	388,161	8,408,078
X. Term Deposits with Scheduled Banks encashed	2,960,471,784	940,844,102	--- Prior Period Items	484,554,012	
			--- Outstanding Receivable	26,877,560	
XI. Other Income (including PPI)			--- Intrest receivable on STDR's	2,187,983	
--- Income from L & B	16,603,799	1,034,587	**XII. Closing Balances**		
--- Other Income	138,349,929	18,668,421	a) Cash in hand		
			--- Main Cash Book	-	-
XII. Deposits & Advances			--- Petty Cash Book	-	-
--- Other Deposits	16,933,107	18,609,661	--- Imprest with Departments	590,000	330,000
--- Advances Accounts	14,471,966	1,640,766,673	--- Fee Account (Cash)	-	-
XIII. Miscelleneous Receipts including Statutory Receipts			**b) Bank Balances**		
--- Statutory Liabilities	263,091,901	239,842,494	--- In Current Accounts	685,108,246	474,707,608
--- Miscelleneous Receipts	-	-	--- In Deposit Accounts	-	-
XIV. Any Other Receipts			--- Savings Account (Others)	108,465,235	34,031,157
--- Purchase Accounts	40,765,027	21,472,072	--- Fees Bank account (Current a/c)	556,512	119,743
--- SBI Deposit for const of bldg	-	-	--- EMD A/c	14,320	13,939
--- Outstanding Liabilities	105,143,842	90,368,127	--- Kotak Mahindra Bank (Fee a/c)	216,835,313	4,885,738
--- Work in progress	-	1,340,065,228	--- Indian Overseas Bank-SB	639,500,000	-
--- Prior Period Items	484,554,012		--- Kotak Mahindra Bank - CA	12,378,486	-
	7,705,467,621	**7,591,932,247**		**7,705,467,621**	**7,591,932,247**

NATIONAL INSTITUTEOF TECHNOLOGY, WARANGAL

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2022

(Amount in Rupees)

INCOME	**SCHEDULE**	**General Fund**	**Total**	**Previous Year**
Academic Receipts	**9**	466,009,899	466,009,899	406,204,662
Garnts / Subsidies	**10**	1,877,979,000	1,877,979,000	1,997,272,000
Income from Investments	**11**	81,649,301	81,649,301	66,370,772
Interest Earned	**12**	-	-	-
Other Income	**13**	174,443,683	174,443,683	24,448,458
Prior Period Income/adjustment	**14**	-	-	-
TOTAL (A)		**2,600,081,883**	**2,600,081,883**	**2,494,295,892**
EXPENDITURE				
Staff Payments & Benefits (Establishment Expenses)	**15**	1,434,094,669	1,434,094,669	1,328,730,613
Academic Expenses	**16**	388,218,424	388,218,424	361,420,284
Administrative and General Exp	**17**	125,400,155	125,400,155	112,413,209
Transportation expenses	**18**	1,998,376	1,998,376	1,990,051
Reparis & Maintenance	**19**	117,455,346	117,455,346	84,190,537
Finance Cost	**20**	-	-	-
Depreciation	**4**	238,365,602	238,365,602	203,452,947
Other Expenses	**21**	-	-	-
Prior Period Expenses	**22**	16,609,688	16,609,688	1,282,917,741
TOTAL (B)		**2,322,142,260**	**2,322,142,260**	**3,375,115,382**
Balance being excess of Income over Expenditure (A-B)		277,939,623	277,939,623	(880,819,490)
Transfer to / from Designated Fund		-	-	-
Building Fund		-	-	-
Others if Any - Transfer to IRG		-	-	-
Central Stores			-	-
Building Material			-	-
Balance being surplus (Deficit) carried to General Fund		**277,939,623**	**277,939,623**	**(880,819,490)**
Notes on Accounts	**22**			

NATIONAL INSTITUTE OF TECHNOLOGY, WARANGAL

RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31-03-2022

(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	1,434,094,669	1,328,730,613
--- Main Cash Book	-	-	b) Academic Expenses	388,218,424	361,420,284
--- Petty Cash Book	-	-	c) Administrative Expenses	125,400,155	112,413,209
--- Imprest with Departments	330,000	330,000	d) Transportation Expenses	1,998,376	1,990,051
--- Fee Account (Cash)	-	-	e) Repairs & Maintenance	117,455,346	84,190,537
			f) Prior Period Expenses	-	-
b) Bank Balances					
			II. Payments made against Earmarked / Endowment Funds		
--- In Current Accounts	474,707,608	312,145,233			
--- In Deposit Accounts	-	-	--- Earmarked Fund	204,959,162	180,023,116
--- Savings Account (others)	638,058	620,996	--- Endowment Fund	2,530,742	545,560
			III. Payments against Sponsored Projects / Schemes		
--- Fee Bank A/c(Current)	119,743	1,732,548		-	-
--- EMD (Current)	13,939	13,566			
--- Kotak Mahindra Bank	4,885,738	2,092,764			
			IV. Payments against Sponsored Felllowships / Scholarships	-	-
II. Grants Received					
a) From Govt. of India					
--- Towards Capital Fund	126,004,544	60,000,000	**V. Investments and Deposits made**		
--- Towards Revenue Exp	1,877,979,000	1,997,272,000	a) Out of Earmarked / Endowments funds	-	80,000
			b) Out of Own funds	-	-
b) From State Government	-	-			
c) From Other Sources(TLC)	-	32,400,000	**VI. Term Deposits with Scheduled Banks**	2,103,413,337	1,326,587,159
III. Academic Receipts (As per Annexure)	485,499,854	410,950,112	**VII. Expenditure on Fixed Assets and Capital Works - in - Progress**		
			a) Fixed Assets	205,611,631	2,944,296,404
IV. Receipts against Earmarked / Endowment Fund			b) Capital Work - in - Progress	-	-
--- Earmarked Fund	245,786,296	215,921,520			
--- Endowment Fund	-	80,000			
V. Receipts against Sponsored Projects / Schemes	-	-	**VIII. Other Payments including statutory payments**		
			--- Statutory Liabilities	262,615,783	240,248,122
VI. Receipts against Sponsored Fellowships and Scholarships	-	-			
			IX. Refunds and Grants	-	-
VII. Income on Investments from					
--- Earmarked / Endowment Funds	2,577,140	489,252	**X. Deposits and Advances**		
--- Other Investments	-	-	--- Other Deposits	37,940,209	10,914,617
			--- Advances Accounts	105,828,854	187,728,640
VIII. Interest received on					
--- Bank Deposits	77,488,889	66,370,772	**XI. Other Payments**		
--- Loand and Advances	-	-			

--- Savings Bank Account	4,160,412	-	--- Outstanding Liabilities	90,368,127	90,070,600
			--- Purchases Accounts	40,433,729	24,363,187
IX. Investment encashed	-	-			
			--- Prior Period Items	484,554,012	-
X. Term Deposits with Scheduled Banks encashed	2,810,873,922	940,844,102	--- Outstanding receivables	26,877,560	
XI. Other Income (including PPI)					
--- Income from L & B	16,603,799	1,034,587			
--- Other Income	138,349,929	18,668,421			
XII. Deposits & Advances			**XII. Closing Balances**		
--- Other Deposits	16,933,107	18,609,661	a) Cash in hand		
--- Advances Accounts	12,054,340	1,603,395,337	--- Main Cash Book	-	-
			--- Petty Cash Book	-	-
XIII. Miscelleneous Receipts including Statutory Receipts			--- Imprest with Departments	590,000	330,000
--- Statutory Liabilities	262,469,255	239,420,887	--- Fee Account (Cash)	-	-
			--- EMD	-	-
XIV. Any Other Receipts			**b) Bank Balances**		
--- Purchase Accounts	40,765,027	21,472,072	--- In Current Accounts	685,108,246	474,707,608
--- SBI Deposit for const of bldg	-	-	--- In Deposit Accounts	-	-
--- Outstanding Liabilities	105,143,842	90,368,127	--- Savings Account (Others)	655,461	638,058
--- Work in progress	-	1,340,065,228	--- Fees Bank account (Current a/c)	556,512	119,743
--- Prior Period Items	484,554,012	-	--- Indian Overseas Bank - SB	639,500,000	-
			--- Kotak Mahindra Bank -Current A/c	12,378,486	
			--- EMD A/c	14,320	13,939
			--- Kotak Mahindra Bank - SB A/c	216,835,313	4,885,738
	7,187,938,453	**7,374,297,185**		**7,187,938,453**	**7,374,297,185**

NATIONAL INSTITUTEOF TECHNOLOGY, WARANGAL
TECHNICAL EDUCTION QUALITY IMPROVEMENT PROGRAMME - III
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2022

INCOME	**SCHEDULE**	**Current Year**	**Previous Year**
Academic Receipts	**9**	-	-
Garnts / Subsidies	**10**	2,802,750	10,460,119
Income from Investments	**11**	-	-
Interest Earned	**12**	-	-
Other Income	**13**	-	255,025
Prior Period Income	**14**	-	-
TOTAL (A)		**2,802,750**	**10,715,144**
EXPENDITURE			
Staff Payments & Benefits (Establishment Expenses)	**15**	657,000	673,857
Academic Expenses	**16**	-	-
Administrative and General Exp	**17**	2,462,250	9,787,294
Transportation expenses	**18**	-	-
Reparis & Maintenance	**19**	-	-
Finance Cost	**20**	-	-
Depreciation	**4**	-	-
Other Expenses	**21**	-	-
Prior Period Expenses	**22**	-	-
TOTAL (B)		**3,119,250**	**10,461,151**
Balance being excess of Income over Expenditure (A-B)		(316,500)	253,993
Transfer to / from Designated Fund		-	-
Building Fund		-	-
Others if Any		-	-
Balance being surplus (Deficit) carried to General Fund		**(316,500)**	**253,993**
Notes on Accounts	**22**		

NATIONAL INSTITUTE OF TECHNOLOGY, WARANGAL

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME - III

RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31-03-2022

. (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	657,000	673,857
b) Bank Balances			b) Academic Expenses	-	
--- SBI NITW Current A/c	3,087,429	2,833,436	c) Administrative Expenses	2,462,250	9,787,294
			d) Transportation Expenses	-	-
II. Grants Received			e) Repairs & Maintenance	-	-
a) GOI - MHRD Capital Grant	-	-	f) Prior Period Expenses	-	-
b) GOI - MHRD Towards Advances	-	30,000			
b) GOI - MHRD Revenue Grant	2,802,750	10,460,119	**II. Payments made against Earmarked / Endowment Funds**		
III. Academic Receipts	-	-	--- Earmarked Fund	-	-
			--- Endowment Fund	-	-
IV. Receipts against Earmarked / Endowment Fund	-	-	**III. Payments against Sponsored Projects / Schemes**	-	-
V. Receipts against Sponsored Projects / Schemes	-	-	**IV. Payments against Sponsored Felllowships / Scholarships**	-	-
VI. Receipts against Sponsored Fellowships and Scholarships	-	-	**V. Investments and Deposits made**		
			a) Out of Earmarked / Endowments funds	-	-
VII. Income on Investments from			b) Out of Own funds	-	-
--- Earmarked / Endowment Funds	-	-			
--- Other Investments	-	-	**VI. Term Deposits with Scheduled Banks**	-	-
VIII. Interest received on			**VII. Expenditure on Fixed Assets and Capital Works - in - Progress**		
--- Bank Deposits	-	-	a) Fixed Assets	-	-
--- Loand and Advances	-	-	b) Capital Work - in - Progress	-	-
--- Savings Bank Account	-	-			
IX. Investment encashed	-	-	**VIII. Other Payments including statutory payments**		
X. Term Deposits with Scheduled Banks encashed	-	-	**IX. Refunds and Grants**	-	-
XI. Other Income (including PPI)			**X. Deposits and Advances**	-	-
--- Income from L & B	-	-	--- EMD	-	-
--- Other Income			--- Advances Accounts	210,000	30,000
-- Sale of Tender Schedule	-	-	--- NPIU - Adjustment of Advance	-	30,000
-- Training / Regn Fee Coll	-	255,025	**XI. Other Payments**		
			--- Professional Tax	4,050	4,200
			--- TDS	120,728	-
XII. Deposits & Advances			**XII. Closing Balances**		

--- EMD	-	-	a) Cash in hand		
--- Advances Accounts	210,000	30,000	b) Bank Balances		
--- NIT Warangal	-	-	--- SBI NITW Current A/c	2,770,929	3,087,429
XIII. Miscelleneous Receipts including Statutory Receipts	120,728	-			
XIV. Any Other Receipts	4,050	4,200			
	6,224,957	**13,612,780**		**6,224,957**	**13,612,780**

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME - III

BALANCE SHEET AS AT 31-03-2022

(Amount in Rupees)

SOURCES OF FUNDS	**SCHEDULE**	**Current Year**	**Previous Year**
Corpus / Capital Fund	**1**	2,770,567	3,087,067
Designated / Earmarked / Endowment Funds	**2**	-	-
Current Liabilities & Provisions	**3**	362	210,000
TOTAL	**-**	**2,770,929**	**3,297,067**
APPLICATION OF FUNDS			
Fixed Assets	**4**		
-- Tangible Assets		-	-
-- Intangible Assets		-	-
-- Capital Work in progress		-	-
Investments	**5**		
-- Long Term		-	-
-- Short Term		-	-
Investments - Others	**6**	-	-
Current Assets	**7**	2,770,929	3,087,429
Loans, Advanes & Deposits	**8**	-	209,638
TOTAL		**2,770,929**	**3,297,067**
Significant Accounting Policies	**23**		
Contingent Liabilities and Notes to Accounts	**24**		

NATIONAL INSTITUTE OF TECHNOLOGY, WARANGAL

PROVIDENT FUND ACCOUNT

RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31-03-2022

. (Amount in Rupees)

RECEIPTS	Current Year	Previous Year	PAYMENTS	Current Year	Previous Year
Opening Balances:			**GPF Advance / Withdrawn**	58,068,090	28,429,039
a) Cash in hand	-	-			
b) Bank Balances			**CPF Advance / Withdrawn**	-	-
--- SBI SB Account	17,608,436	6,688,783			
			NPS Tier - II	42,212,439	36,345,198
G P F Subscription	35,335,587	39,255,047			
			University Contribution Withdrawl	59,097,304	50,867,059
C P F Contribution	-	-			
			Term Deposits with Scheduled Banks	153,750,336	-
C P F University Contribution(NPS)	57,430,832	50,607,298			
			Bank Charges / Misc Charges	-	-
NPS Tier II Account	41,022,088	36,147,865			
			Closing Balances		
Term Deposits with Scheduled Banks encashed	167,003,055	-	a) Cash in hand	-	-
			b) Bank Balances		
Interest Received			--- SBI SB Account	5,576,941	17,608,436
a) Interest on STDR's	-	-			
b) Interest on SB Account	305,112	550,739			
	318,705,110	**133,249,732**		**318,705,110**	**133,249,732**

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31-03-2022

. (Amount in Rupees)

EXPENDITURE	Current Year	Previous Year	INCOME	Current Year	Previous Year
Interest credited to			Interest Earned on Investements inclu-	305,112	550,739
--- GPF Account	16,149,999	19,254,287	ding Savings Bank Account		
			Add: Interest accrued on 03/2022	16,292,593	7,800,900
--- CPF Account	-	-	Add: Interest received during the year	-	10,482,468
			Add: Tax recovered on Interest - Refund	-	-
--- University Contribution (NPS)	-	-	to be obtained		
--- NPS Tier - II Account	-	-	Less: Interest accrued for 03/2021	-	-
Bank Charges / Miscelleneous Exp	-	-			
Excess of Income over Expenditure	447,706	-	Excess of Expenditure over Income	-	420,180
	16,597,705	**19,254,287**		**16,597,705**	**19,254,287**

BALANCE SHEET AS AT MARCH 31, 2022

. (Amount in Rupees)

LIABILITIES	Current Year	Previous Year	ASSETS	Current Year	Previous Year
GPF:			**Investments**	326,147,197	329,348,869
Opening Balance	350,731,908	320,651,613			
Less: Subscription for March 2021	-	-	**Interest accrued as on March, 2022**	14,042,446	7,800,900
Add: Subscriptions in the year	35,335,587	39,255,047			
Add: Subscriptions for March 2022	-	-	**Subscription Due for March, 2022**		
Add Interest Credited	16,149,999	19,254,287	--- GPF	-	-
Less: Advance / withdrawl	(58,068,090)	(28,429,039)	--- CPF	-	-
Add: GPF Advance (adj)	1,312,700				
Closing Balance	345,462,104	350,731,908	--- UC due to CPF	-	-
			--- NPS - II	-	-
CPF:					
Opening Balance	-	-	Tax recovered from interest on investme-	-	-
Less: Subscription for March 2021	-	-	nts pending refund from Income tax dept		
Add: Subscriptions in the year	-	-			
Add: Subscriptions for March 2022	-	-	**Cash at Bank**		
Add Interest Credited	-	-	--- SBI SB Account	5,576,941	17,608,436
Less: Advance / withdrawl	-	-			
Closing Balance	-	-			
NPS Tier- II Account			GPF Advance Receivable	1,312,700	
Opening Balance	1,394,849	1,592,182			
Less: Subscription for March 2021	-	-			
Add: Subscriptions in the year	41,022,088	36,147,865			
Add: Subscriptions for March 2022	-	-			
Add Interest Credited	-	-			
Less: Advance / withdrawl	(42,212,439)	(36,345,198)			
Closing Balance	204,498	1,394,849			
University Contribution (NPS):					
Opening Balance	2,438,370	2,698,131			
Less: Subscription for March 2021	-	-			
Add: Subscriptions in the year	57,430,832	50,607,298			
Add: Subscriptions for March 2022	-	-			
Add Interest Credited	-	-			
Less: Advance / withdrawl	(59,097,304)	(50,867,059)			

Closing Balance	771,898	2,438,370			
Interest Reserve					
Opening Balance	193,078	613,258			
Add: Excess of Income over Exp	447,706	(420,180)			
ClosingBalance	640,784	193,078			
	347,079,284	**354,758,205**		**347,079,284**	**354,758,205**

RESEARCH SCHEMES ACCOUNT

RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31-03-2022

(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	0	0
b) Bank Balances			b) Academic Expenses	0	0
--- SBI NITW SB A/c	33,393,099	94,904,367	c) Administrative Expenses	0	0
			d) Transportation Expenses	0	0
II. Grants Received			e) Repairs & Maintenance	0	0
a) GOI - MHRD Grants	0	0	f) Prior Period Expenses	0	0
b) GOI - MHRD COE Grants	0	0			
			II. Payments made against Earmarked / Endowment Funds		
III. Academic Receipts	0	0	--- Earmarked Fund	0	0
			--- Endowment Fund	0	0
IV. Receipts against Earmarked / Endowment Fund	0	0	**III. Payments against Sponsored Projects / Schemes**	134,261,112	168,725,107
V. Receipts against Sponsored Projects / Schemes	295,522,155	82,834,602	**IV. Payments against Sponsored Felllowships / Scholarships**	0	0
VI. Receipts against Sponsored Fellowships and Scholarships	0	0	**V. Investments and Deposits made**		
			a) Out of Earmarked / Endowments funds	0	0
VII. Income on Investments from			b) Out of Own funds	180,430,131	0
--- Earmarked / Endowment Funds	0	0			
--- Other Investments	0	0	**VI. Term Deposits with Scheduled Banks**	0	0
VIII. Interest received on			**VII. Expenditure on Fixed Assets and Capital Works - in - Progress**		
--- Bank Deposits	34,263,400	2,103,150	a) Fixed Assets	0	0
--- Loans and Advances	0	0	b) Capital Work - in - Progress	0	0
--- Savings Bank Account	1,712,380	0			
IX. Investment encashed	0	0	**VIII. Other Payments including statutory payments**		
X. Term Deposits with Scheduled Banks encashed	149,597,862	0	--- Income Tax	216,200	23,999
XI. Other Income (including			--- Professional Tax	151,350	116,300

PPI)					
--- Income from L & B	0	0	--- GST / TDS	19,444,451	0
--- Other Income			**IX. Refunds and Grants**	0	0
			X. Deposits and Advances		
XII. Deposits & Advances			--- NIT Warangal	0	0
--- NIT, Warangal	0	0	--- Advances Accounts	1,732,166	6,968,479
--- Advances Accounts	2,357,776	37,371,336	--- FDD	0	0
--- FDD / LC Suspense / PBG	59,850	0	--- LC Suspense Account	70,907,840	0
XIII. Miscelleneous Receipts including Statutory Receipts			**XI. Other Payments**	0	0
			--- Interest transfer to Research		
--- Income Tax	184,299	91,967	Projects	388,161	7,648,208
--- Professional Tax	146,350	119,500	--- RS Suspense Account	0	759,870
			--- Interest receivable on IOBSB	2,187,983	
--- Miscelleneous Receipts	0	0	**XII. Closing Balances**		
--- GST / TDS	291,997	210,140	a) Cash in hand	0	0
XIV. Any Other Receipts	0	0	**b) Bank Balances**		
			--- SBI NITW SB A/c - Research	50,958,161	33,393,099
			--- SBI NITW SB A/c - SERB	56,851,613	0
	517,529,168	**217,635,062**		**517,529,168**	**217,635,062**

NATIONAL INSTITUTEOF TECHNOLOGY, WARANGAL
RESEARCH SCHEMES ACCOUNT
BALANCE SHEET AS AT 31-03-2022

(Amount in Rupees)

SOURCES OF FUNDS	**SCHEDULE**	**Current Year**	**Previous Year**
Corpus / Capital Fund	**1**	66,049,711	30,462,092
Designated / Earmarked / Endowment Funds	**2**	-	-
Current Liabilities & Provisions	**3**	272,177,474	225,006,591
TOTAL		**338,227,185**	**255,468,683**
APPLICATION OF FUNDS			
Fixed Assets	**4**		
-- Tangible Assets		-	-
-- Intangible Assets		-	-
-- Capital Work in progress		-	-
Investments	**5**		
-- Long Term		-	-
-- Short Term		-	-
Investments - Others	**6**	-	-
Current Assets	**7**	281,132,155	175,883,211
Loans, Advanes & Deposits	**8**	57,095,030	79,585,472
TOTAL		**338,227,185**	**255,468,683**
Significant Accounting Policies	**23**		
Contingent Liabilities and Notes to Accounts	**24**		

NATIONAL INSTITUTEOF TECHNOLOGY, WARANGAL
RESEARCH SCHEMES ACCOUNT
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2022

INCOME	SCHEDULE	Current Year	Previous Year
Academic Receipts	**9**	0	0
Garnts / Subsidies	**10**	0	0
Income from Investments	**11**	35,975,780	2,103,150
Interest Earned	**12**	0	0
Other Income	**13**	0	0
Prior Period Income	**14**	0	0
TOTAL (A)		**35,975,780**	**2,103,150**
EXPENDITURE			
Staff Payments & Benefits (Establishment Expenses)	**15**	0	0
Academic Expenses	**16**	0	0
Administrative and General Exp	**17**	0	0
Transportation expenses	**18**	0	0
Reparis & Maintenance	**19**	0	0
Finance Cost	**20**	0	0
Depreciation	**4**	0	0
Other Expenses	**21**	388,161	7,648,208
Prior Period Expenses	**22**	0	0
TOTAL (B)		**388,161**	**7,648,208**
Balance being excess of Income over Expenditure (A-B)		35,587,619	-5,545,058
Transfer to / from Designated Fund		0	0
Building Fund		0	0
Others if Any		0	0
Balance being surplus (Deficit) carried to General Fund		**35,587,619**	**-5,545,058**
Notes on Accounts	**22**		

SCHEDULE: 23

SIGNIFICANT ACCOUNTNG 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 All revenues and Expenses are accounted on accrual basis including interest received on bank deposits and government grants.

2.2 Rent collected from Post Office and Shops are accounted on Cash Basis.

3. FIXED ASSETS AND DEPRECIATION

3.2 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.

3.3 During the year, the Institute capitalized an amount of Rs.20.56 crores.

3.4 Fixed assets are valued at cost. Depreciation on fixed assets during the year has been provided in the books of accounts on straight line method at the rates prescribed by MHRD.

3.5 Further arrears of depreciation for the year 2020-21 amounting to Rs.1.66 crores for the year 2020-21 was provided in the books of accounts during the year and shown under prior period expenses as per the AG audit observation on annual accounts during the year 2020-21.

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**

Provision towards retirement benefits has not been made.

6. **INVESTMENTS: - Nil -**

7. **Earmarked / Endowment Funds:** During the year, the Institute has received an amount of Rs.111.79 crores towards various Earmarked / Endowment Funds and expenditure of Rs.49.34 crores was spent during the year.

8. **CORPUS FUND / OTHER FUNDS.** The closing balance of Corpus / Capital fund to the end of March-2022 is Rs.677.15 crores.

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:**

The Institute has made investments separately and interest on such earmarked funds is Rs.350.23 lacs earned during the year.

11. **SPONSORED PROJECTS:** During the year, an amount of Rs.29.55 crores were received against various research scheme from various agencies and incurred an amount of Rs.13.42 crores towards execution of various research projects.

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.

13. **LAND:**

Total land under the control of NITW is 248 acres. Out of the total land available with the Institute, land given on lease to the following departments / entities.

a) Land admeasuring 4000 Sq. mtrs leased to TSNPDCL, Warangal
b) Land admeasuring 1446 Sq. mtrs leased to DGM, BSNL, Warangal
c) Land admeasuring 1255 Sq. mtrs leased to SBI, NIT Branch.
d) Land admeasuring 816 Sq. mtrs leased to Superintendent of Post Office, Hanamakonda
e) Land admeasuring 1750 Sq. mtrs leased to Commissioner, GWMC.

f) Land admeasuring 510.26 Sq. mtrs leased to District Educational Officer, Warangal
g) Balance of land available with NIT, Warangal

SCHEDULES 24: CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS:

ITEMS TO BE COVERED IN THIS SCHEDULE ARE LISTED BELOW

A. CONTINGENT LIABILITIES:

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

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 isrequired to be disclosed -- Nil ---
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	6792
(ii)	No of teachers	321
(iii)	Collection on account of building fund and expenditure thereof	Nil
(iv)	Collection for sports activities and expenditure thereof	Amount Collected : Rs.59,39,000/- Expenditure incurred : Rs.2,30,087/-
(v)	Collection for co-curricular activities and expenditure thereof	Amount Collected : Rs.8,61,550/- Expenditure incurred : Rs.31,722/-
(vi)	Collection on account of development charges and expenditure thereon	Nil
(vii)	Collection for medical expenses and expenditure thereon	Amount Collected : Rs.62,76,500/- Expenditure incurred : Rs.6,92,135/-

(viii)	Compliance with statutory dues like EPF and ESI	Complied
(ix)	Salary structure of teachers	

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

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

4. The accounting entries passes in the accounts of the Institute pertains to earlier years as per AG Audit comments on annual accounts for the year 2020-21 and shown separately in Receipts and Payments Account of Rs. 48,45,54,012/-

5. During the year, the Institute has transferred the balances in various funded accounts as on 31.03.2021 amounting to **Rs. 7,47,82,810/-** as per the AG Audit Advice. Further the Institute has also transferred an amount of **Rs.2,57,10,703/-** from Research Accounts – Overhead Charges to Institute Accounts. These amounts were included in the miscellaneous income head of the Institute.

6. Further the debit balances appearing under Funded Accounts namely ST & SC Sub-Plan amounting to **Rs.73,61,163/-** was included in the miscellaneous expenses.

No.PDA(C)/CEA/Unit-1/NITW/SAR 2021-22 / 2022-23/ 58 **Date:31/10/2022**

सेवा में

सचिव,
भारत सरकार,
शिक्षा मंत्रालय

महोदय,

ववषय: Separate Audit Report on the Accounts of the National Institute of Technology, Warangal, for the year 2021-22.

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Separate Audit Report on the Accounts of the National Institute of Technology, Warangal, for the year 2021-22., Annexure thereof and one copy of the Annual Accounts for the year 2021-22, 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.

भवदीय,

संल:यथोपरर

Sd/-

Principal Director of Audit (Central)

No.PDA(C)/CEA/Unit-1/NITW/SAR 2021-22 / 2022-23/59 **Date:31/10/2022**

Copy to Prof. N.V. Ramana Rao, Director, National Institute of Technology, Warangal, along with one copy of Annual Accounts for the year 2021-22 (English version), with a request to furnish Hindi version of the approved Annual Accounts 2021-22 (2 sets), to this Office.

संल:यथोपरर

Ch.V.Sai Prasad

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

Separate Audit Report of the Comptroller and Auditor General of India on the Accounts of National Institute of Technology, Warangal, for the year ended 31 March 2022

We have audited the attached Balance Sheet of National Institute of Technology, Warangal (NITW), as at 31 March 2022, 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, read with Section 22(2) of the National Institutes of Technology Act, 2007. These financial statements are the responsibility of the Institute's 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 as required, in so far as it appears from our examination of such books.

iv. We further report that:

A. Consolidated Balance Sheet

A.1. Sources of Funds

A.1.1 Corpus/Capital Fund - ₹745.41 crore

A.1.1.1 Works worth ₹ 5.98[1] crore pertaining to electrical installations were completed during the year. However, the same were not capitalized. This resulted in understatement of Capital Fund and Fixed Assets to the extent of ₹5.98 crore. This also resulted in understatement of depreciation to the extent of ₹ 1.46[2] crore.

A.1.1.2 Current Liabilities & Provisions – ₹51.62 crore

A.1.1.2.1 An amount of ₹3.12 crore was shown as expenditure under various sponsored projects (Schedule 3(a)) out of which ₹2.453 crore was invested during the year. Incorrect depiction of investments as project expenditure resulted in understatement of Current Liabilities & Provisions and also understatement of Investments.

A.1.1.2.2 An amount of ₹64.04 lakh pertaining to the Institute Overhead charges (Sl.No.41 of Schedule 3(a) Sponsored Projects) was shown under current liabilities instead of booking under the Head Income. This resulted in overstatement of Current Liabilities & Provisions to the extent of ₹64.04 lakh and understatement of Income to the same extent.

A.2 Application of Funds

A.2.1 Fixed Assets- ₹443.77 crore

A.2.1.1 An amount of ₹2.12 crore[4] pertaining to capital expenditure was treated as revenue and shown under "Repairs & Maintenance" (Schedule-19). This resulted in understatement of Fixed Assets to the extent of ₹2.12 crore thereby understatement of Capital Fund to the same extent. This also resulted in understatement of Depreciation of ₹8.14 lakh[5].

A.2.1.2 An amount of ₹59,46,175 incurred towards procurement of Storage Array etc. not added to Fixed assets. This resulted in understatement of Fixed Assets to the extent of ₹59,46,175 and thereby understatement of Capital Fund to the same extent. Depreciation was also understated by ₹8.45 lakh (₹6,39,120 and ₹2,06,293)

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[1] providing of Sub-Station Equipment and DG Set for essential supply and solar PV Generation, Electrical Works worth ₹.3,20,00,000; Providing Air Conditioning and Visual System in Conference Hall of Material &Metallurgical Engineering Department Buildings and Chemical Engineering Department Building worth

₹1,45,36,000; Providing one 250 KVA DG Set near Indoor Sub-station at STPI Centre, one 250 KVA DG Setnear Main Sub-station at Institute Canteen and one 500 KVA Dry Type Sub-station worth ₹1,03,81,785; and Providing LAN wiring to Student Hostel Blocks-6, 7 & 8 worth ₹ 28,98,939

[2] ₹93,07,200 and ₹53,12,288

[3] mentioned at Sl.Nos. 237,287,288,.291,302,305,306,318, 320 & 414 of Schedule-3(a) of ₹2,44,65,038

[4] Providing SS Railing Pipes over the parapet wall in Academic Building of ₹13,20,140; Construction of FacultyClusters of ₹.22,63,276; Renovation of Ganga & Godavari Kitchens worth ₹.22,10,380; Excavation of earth, laying cable amounting to ₹12,94,298; Supply & installation of street lighting, cables, poles, etc. of

₹1,17,17,860; and Renovation of Electrical Engineering Department Lab (Old Physics Building) worth

₹.24,06,418.

[5] ₹.1,15,876 and₹ 6,98,736

A.2.1.3 Assets worth ₹92.036 lakh purchased from the Sponsored Project Funds was not capitalised. This resulted in understatement of Fixed Assets and also Capital Fund to the same extent. Depreciation was also understated by ₹7.647 lakh.

A.2.1.4 An amount of ₹12.41 lakh transferred to Research Project Fund from the Departmental Plan Grants for setting up of Liquid Nitrogen Plant was incorrectly capitalized without completion of the Plant. This resulted in overstatement of Fixed Assets and Capital Fund by ₹12.41 lakh each. Depreciation was also overstated by ₹99,280.

A.2.1.5 An amount of ₹2,19,388 incurred towards consumables (Ti6A14V powder) was incorrectly classified under Scientific & Laboratory Equipment (Fixed Assets-Schedule 4). Misclassification of revenue expenditure as capital resulted in overstatement of Fixed Assets to the extent of ₹2.19 lakh and overstatement of Capital Fund of the same extent. Depreciation was also overstated by ₹89,983.

A.2.1.6 This does not include an amount of ₹28,99,889 pertaining to advance payment towards e-Journals, which was erroneously accounted for as revenue expenditure under Students Library Fee - Designated/Earmarked/Endowment Funds (Schedule-2) . This resulted in understatement of Fixed Assets and Capital Fund by ₹28,99,889.

A.2.2 Capital-work-in-progress – Nil

A.2.2.1 As per Form-65 submitted by CPWD, an amount of ₹1,79,48,879 was incurred towards various works during the year 2021-22. However, the same was not exhibited under Works-in-Progress. This resulted in understatement of Works-in-Progress (Schedule-4) and overstatement of Loans, Advances and Deposits to the extent of ₹1.79 crore.

A.2.3 Current Assets – ₹341.54 crore

A.2.3.1 Fixed Deposits amounting of ₹75,00,000 pertaining to Training and Placement Centre were not included in Annual accounts. This resulted in understatement of investments by ₹75.00 lakh and overstatement of Cash and bank balance to the same extent.

A.2.3.2 An amount of ₹4,25,169 being Closing balance of Kotak Mahindra Bank account pertaining to Kalam Guest House was not included in annual accounts. This should be account for in accounts.

B. Income & Expenditure account

[6] ₹.84,86,852 and ₹7,16,394

[7] ₹.7,06,668 and ₹.57,311

B.1 Expenditure – ₹232.25 crore

B.1.1. Expenditure of ₹3.948 crore incurred towards purchase of various other category items were misclassified as falling under "Scientific & Laboratory Equipment" with a rate of depreciation of 8 per cent. This resulted in understatement of depreciation by ₹47.159 lakh and expenditure by the same extent.

C. General

1. Investments as per Annual accounts (Schedule 5) was ₹74,26,24,039. However, on physical verification of FDs, the same was arrived at ₹73,56,62,250. The difference needs reconciliation.

2. Investments pertaining to Research fund as per annual accounts of for the year ended 31.03.2022 was ₹17,33,22,3813. However, on physical verification of FDs, the same was arrived at ₹17,47,32,869. The difference needs to be reconciled.

3. Tuition Fee amounting to of ₹88,30,550 receivable from Final Year UG and PG Students was not accounted for in annual accounts and accounting policy to this effect was not disclosed in Notes on accounts.

4. The following differences found in respect of Interest earned and accrued interest on Investment shown as per annual accounts and as per ledgers needs reconciliation.

Schedule No	Item	As per annual accounts (₹)	As per ledger (₹)
Schedule 8	Interest earned and accrued interest on Investment	4,28,66,257	2,94,55,030
Schedule 11	Interest earned and accrued interest on Investment	11,17,52,289	8,20,32,609
Schedule 13	Other miscellaneous income	14,05,54,638	14,05,54,257

5. Income from investment to be shown was ₹2,50,85,055. However as per schedule 11 the same was shown at ₹2,45,09,691. The discrepancy needs reconciliation.

[8] ₹3,20,36,396 and ₹73,30,428

[9] ₹38,09,764 and ₹9,05,401

6. The following amounts under "Current Liabilities & Provisions" have been shown pending for more than five years (commented in previous SARs). The Institute has neither taken initiation for settlement of the pending liabilities nor disclosed under Schedule-24 "Notes on Account".

Current Liabilities & Provisions	As per Schedule-3 statement (₹)	Outstanding since
Deposits from staff for Staff Quarters	64,794	2016-17
Lab & Library Deposits	2,01,27,625	2016-17
Hostel Caution Money Deposit	4,46,664	2016-17
Deposit for rent and other service charges	2,000	2016-17
ICC R&D Account	11,000	2016-17
Sales Tax	2,94,218	2017-18
Seignorage Charges	3,03,924	2017-18

7. Schedule-23 (Significant Accounting Policies)

(1) Para 7 - Earmarked/Endowment funds: The amounts received and expended during the year 2021-22 were disclosed as ₹11.79 crore and ₹49.34 crore respectively. However, the same as per annual Accounts were ₹17.66 crore and ₹16.86 crore- Schedule-2 (Designated/Earmarked/Endowment Funds). Further, Interest on such earmarked funds was exhibited as ₹3.50 crore whereas the same as per Schedule-2 was ₹3.24 crore. This needs correction.

(2) Corpus Fund/Other Funds: The closing balance of Corpus/Capital Fund to the end of March-2022 was shown at ₹677.15 crore whereas as per Schedule-1, the same was shown at ₹738.81 crore. This needs correction.

8. Provision for Retirement of Gratuity, Leave Encashment and Superannuation Pension for the Employees of the Institute was not made as per AS 15.

9. As per utilization certificate unadjusted advances to CPWD was mentioned as ₹9,90,54,329 whereas the ledger balance against CPWD advances was ₹15,11,52,329. However, as per Form-65 submitted by CPWD, the total deposits were mentioned as ₹10,12,60,007 against which an amount of ₹1,79,48,879 was shown as Incurred towards works for the year 2021-22 leaving a balance amount of ₹9,13,35,605. These differences need reconciliation.

10. TEQIP Programme

(i) Fixed assets procured from the TEQIP funds have not been transferred to the Main College Account though TEQIP Programmes were closed (as detailed below). Further, fixed assets procured were misclassified into various category of Assets.

Programme	Date of Closure of the Programme	Assets available under this programme (₹)
TEQIP-I	Details of closure of this programme was not made available to audit.	17,24,52,821
TEQIP-II	11.12.2018	8,90,04,289
TEQIP-II CoE	11.12.2018	1,89,04,353
TEQIP-III	31.01.2022	2,98,76,977 (Total amount of Fixed Assets procured was exhibited in Annual Accounts)

(ii) The Institute did not furnish the details of Fixed Assets procured under TEQIP-I programme and the date of closure of the Programme. No physical verification of the Assets has been done so far, even though the above programmes were closed.

(iii) An amount of ₹27,70,279.50 (under Current Account No.37583198741 of SBI, NIT Branch, Warangal) pertaining to TEQIP-III fund was not transferred to the Main Account even though the Programme was closed during the year 2021-22 (i.e. on 31.01.2022).

11. Details of current asset of ₹2,30,10,977 (₹33,86,798 + ₹1,96,24,179) towards sundry debtors under LC suspense and FDDs exhibited under Schedule 7 were not furnished to audit for verification

12. No action has been taken in respect of Comments included in SAR / Management Letter for the year 2020-21

(i) Negative balances in outstanding advances due from various sections/departments pertaining to the year 2020-21 were not rectified. The same negative balances were carried forward in the Annual Accounts for the year 2021-22.

(ii) Statutory Liabilities such as GST-TDS, ICC-GST, Lab & Library Deposits, Hostel Caution Money Deposit etc pending which are more than five years have to be reconciled and either remitted into Government Account or taken to receipt while making a note under Schedule-24 Notes on Account. In this regard, the Institute did not initiate action and pending for further process.

(iii) The Institute did not reconcile the amounts mentioned at Sl.Nos.177, 178, 262, 288, 318 and 320 pertaining to research projects. The same has not been reconciled during the year 2021-22 also.

(iv) The Institute did not rectify earlier observation with regard wrong depiction of amount of ₹1,44,76,575 against Sponsored Fellowship/Scholarship. During the year 2021-22 also, the Institute has depicted receipt of ₹1,14,98,406 and expenditure of ₹1,180,89,832 (Page 73) under "Other Scholarships" instead of "Receipts against Sponsored Fellowships & Scholarships".

(v) The Institute did not make any provision towards payment of Retirement of Gratuity, Leave Encashment and Superannuation Pension as AS 15

(vi) The Institute did not reconcile the discrepancy of ₹6.49 crore of Corpus Fund and stated that it is under process.

(vii) No action taken in respect of comment A.2.1.(2020-21) - transfer of ₹6.78 lakh pertaining to SPARC-Overhead & Contingency, to the Head of Income.

D. Lack of Response

Draft SAR was issued to the Institute on 29.9.2022 with a request to furnish replies within 10 days. However, as replies have not been received till date (27.10.2022), even after issuance of reminders to the Institute.

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, Warangal through a Management letter issued separately for remedial/corrective action.

F. Grants-in-aid

Out of total Grants-in-aid of ₹200.4010 crore received during the year and previous year unutilized balance of ₹181.17 crore, totaling to ₹381.57 crore, the Institute utilized a sum of ₹208.3611 crore, leaving a balance of ₹173.21 crore unutilized as on 31 March 2022.

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

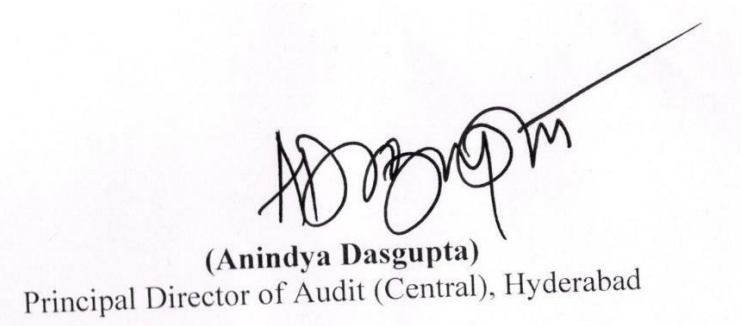
[10] Grants Received: Capital – ₹12.60 crore, Revenue – ₹187.80 crore Total = ₹.200.40 crore

[11] Expenditure Capital – Schedule – 3(C) ₹20.56 crore, Revenue – Schedule- 10 – ₹187.80 crore

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 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, Warangal, as at 31 March 2022; 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

NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL

TELANGANA - 506004



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TELANGANA – 506004

Website: https://www.nitw.ac.in