RAISONI GROUP
a vision beyond

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G H RAISONI INSTITUTE OF ENGINEERING AND TECHNOLOGY, NAGPUR

(Approved by AICTE, New Delhi and Recognized by DTE, Maharashtra)
An Autonomous Institute Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University
Accredited by NAAC with A+ Grade

Engineering | Management | Law | Schools | Other Courses
NAGPUR PUNE JALGAON AMRAVATI CHHINDWARA

RAISONI GROUP OF INSTITUTIONS

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Department of Mechanical Engineering



GEAR UP
NEWSLETTER
2023-24

Vol. XII, Issue I

GEAR UP
NEWSLETTER
2023-24

A SNEAK PEEK INSIDE THIS ISSUE

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Vision and Mission of Institute

Vision of the Institute

To achieve excellent standards of quality education by keeping pace with rapidly changing technologies and to create technical manpower of global standards with capabilities of accepting new challenges.

Mission of the Institute

MI 1 : Our efforts are dedicated to impart quality and value based education to raise satisfaction level of all stakeholders.

MI 2 : Our strength is directed to create competent professionals.

MI 3 : Our endeavor is to provide all possible support to promote research and development activities.

Vision and Mission of Department

Vision of the Department

To create excellence in the field of Mechanical Engineering by imparting quality education so as to develop our students to be capable of facing technological challenges.

Mission of the Department

MI 1 : To impart quality teaching–learning and assessment process that ensures attainment of program outcomes

MI 2 : To provide quality, innovative, and industry-relevant education that develops competent and professional mechanical engineers with strong fundamentals and problem-solving skills.

MI 3 : To promote experiential and research-oriented learning through projects, internships, industry interaction, use of modern engineering tools, and to inculcate professional ethics, teamwork, communication skills, and lifelong learning to address societal and global challenges.

About the Institute

- G H Raisoni Institute of Engineering & Technology, Nagpur (GHRIET) was established in the year 2008 and is affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur. It is recognized by All India Council for Technical Education (AICTE) and is accredited by NAAC with A+ grade with a score of 3.5 in 4 point scale. GHRIETN has made its mark in the world of education by enlightening minds and empowering ambitions.
- GHRIET has become the center of learning in a short span of time. It offers a plethora of courses to suffice the educational needs of undergraduate and post graduate students. It makes sure to catalyze innovative and original thinking in the students in order to frame their success journey. Continuous evaluation, maintaining world-class standards and alterations are pursued after regular intervals in the curriculum to go hand in hand with the needs of the industry.
- Care is taken to inculcate the principles of excellence, leadership, optimism and values in students' life through education empowered with knowledge and vision. The institute has a well-organized library, laboratories and spacious class rooms.

Director's Desk



Dr. Vivek Kapur
Director, GHRIET Nagpur

Dear All

Greetings from the Director’s Office!

I am pleased to know that Department of Mechanical Engineering has published the Newsletter 2023-24 (ODD Sem)

I congratulate them for the efforts taken to exhibit the activities/achievements carried out by the department towards excellence.

It is a document highlighting the efforts of the students as well as faculty. This newsletter will help them in continuing their activities/ efforts in achieving the milestones set by them in the coming time.

About the Department

- The most diverse of the engineering fields, Mechanical Engineering influences almost all facets of our life and involves several specializations. It lies at the crossroads of all the engineering disciplines. Mechanical Engineering deals with a wide variety of scientific and technological challenges, in the field of design, manufacturing, power generation, control and automation, computer simulation, environment protection, building services, aerospace and many more.
- Mechanical Engineering Department of GHRIET not only harvests scholars to design machines that are safe, reliable, and efficient, but also make aware of latest manufacturing technology to manufacture products. The department has well equipped laboratories and workshop facilities with modern sophisticated equipment. The state-of-art is learned to create skilled personal using latest machineries like 3D Printing, CNC, Robotics & High-end Software. Objective of the undergraduate program is to prepare the manpower that is globally best. The department seeks an opportunity to play a major role in producing employable engineers. We strive to ensure that all our undergraduate students have a strong education with teaming and leadership skills, involvement in student activities, and the practical background and internship experience. We believe that emphasizing these areas will make our students well qualified to take leadership roles in the future.

HOD's Desk



Mr. Tejpal C Parshiwanikar
HoD, ME, GHRIET Nagpur

It's a matter of great satisfaction to bring forth the newsletter of the Mechanical Engineering Department for the session 2023-24 (ODD Sem). The purpose of the newsletter is to make everyone aware with the activities carried out throughout the year and to acquaint all with the achievements of the students and faculty.

This is our small venture and I believe this will help us in identifying the areas which we need to improve. It will help us in providing proper guidance to our budding engineers.

I appreciate the efforts put forth by the editorial board to bring out this Newsletter.

Advisory Board

Dr. Vivek Kapur
Director, GHRIET, Nagpur

Mr. Tejpal C Parshiwanikar
HoD, ME Dept, GHRIET, Nagpur

Mr. Nilesh C. Kanojiya
ME Dept. Academic Incharge,
GHRIET, Nagpur

Editorial Board

Dr. Manish Gupta
Dr. Nilesh Kanojiya
Krishna Sedani (7th sem)
Kshitij Farkade (7th sem)
Swayam Taywade (5th sem)

Major Events / Dept. Activities

Recognition as Ph. D. Research Center

RTMNU has given approval to Department of Mechanical Engineering, GHRIET as "Place for Higher Learning & Research (Ph. D.)", from session 2023-24 vide letter no. RTMNU/CDS/2023/4359 dated 27th March 2023.

RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY

(Established by Government of Central Provinces Education Department by Notification No.513 dated the 1st August1923 & presently a State University governed by Maharashtra Public Universities Act, 2016(Mah. Act No.VI of 2017)

COLLEGE DEVELOPMENT SECTION

Jamnalal Bajaj Administrative Building, Mahatma Jotiba Phule Educational Campus, Campus to Ambazari T-Point Road Nagpur-440033
Phone No-0712-2522390, Fax No. 0712-2555701, Email ID : infoarcollege@gmail.com

No.RTMNU/CDS/2023/ 4359
Date : 27 /03/2023

To,

The Principal,
G. H. Raisoni Institute of Engineering Technology,
Shradha Park B- 37/39/1, MIDC,
Hingna- Wadi Link Road,
Nagpur-440016

Subject:- Your Application for Recognition as "Place for Higher Learning and Research".
Reference:- 1)Your Application dated 07/10/2020

Sir/Madam,

With reference to the above cited subject, this is to inform you that your application for Recognition as place for Higher Learning and Research has been processed, as per the provisions of Section 111(7) of Maharashtra Public Universities Act, 2016 and Direction 11 of 2023.

A committee constituted by the Board of Deans has verified the infrastructural facilities, academic, administrative and financial standards of your Institute.

The report, so submitted by the committee was considered and approved by the Board of Deans and thereafter by the Hon'ble Vice Chancellor.

Accordingly, **G.H. Raisoni Institute Of Engineering Technology, Shraddha Park B- 37/39/1, MIDC, Hingna- Wadi Link Road, Nagpur,** is being granted recognition as "Place for Higher Learning and Research" to the following Department.

Sr. No.	Name of the Department	Intake
1.	**Mechanical Engineering,**	As per Provision in clause 11 of Direction 11 of 2023
2.	**Civil Engineering**	
3.	**Electronics and Telecommunication Engineering**	

The "Recognition" so granted, shall be for a period of "Five Years" from the date of issuance of this communication.

You are also requested to submit six monthly progress report of your research centre to the undersigned.

(Dr. Raman Madne)
Deputy Registrar

Experts/ Guest Lecture



Expert Lecture on topic: "Intelligent Fault Detection of Mechanical System- A Case Study" by Dr. Prasad V Kane, Assistant Professor, Mechanical Engineering, VNIT Nagpur, 5th Sept. 2023.



Expert Lecture on topic "Product Development" by Mr. Ashutosh Raole, Product Design Engineer, Metal Fabric (LLC), UAE on dated 15th Sept 2023.



Expert Lecture on "Industrial Robotics, Automation & its Future Opportunity" by Robotics Dept., RTMNU, Nagpur on dated 11th Oct 2023.

Experts Seminars/Workshop / Carrier Guidance Programme for Students







GATE Exam Awareness Program conducted by IIT Bombay on 29th September 2023



Alumina Interaction of Mr. Prashant Patel, Asst. Manager, Kamathgiri Steels Pvt. Ltd, Raipur on 16th Aug 2023



Expert Seminar on "Solar Energy, Applications and Opportunity" by Mr. Ajinkya Nagmote, Director, Solectric Energy, Nagpur on 22nd July 23

Skill Training Programme/ Visit for Students Under MOU









Skill Training Programme on CATIA Software for Student from 18-26 July 2023 by CIPET, Chandrapur

Skill Training Programme / Workshop / Seminar / Lecture for Students







5 Days Skill Training Programme on “Latest Trends in Renewable Energy” in collaboration with Solectrik Energy, Nagpur for the students of B. Tech. of Mechanical Engineering from 18th-22nd July 2023



5 Days Skill Training Programme on “Fundamental of Design Engineering with Hands on Practices” in Collaboration with, CADD Centre Nagpur for the students of B. Tech. of Mechanical Engineering from 18th-22nd July 2023

Industrial Visit for Students



Industrial Visit for 5th Sem students at Suguna Food Industries Pvt. Ltd., Hinganghat, Wardha, on 25th September 2023



Industrial Visit at “Mahanand Dairy, Refrigeration & Cold Storage Plant, Nagpur", for the students of B. Tech. 7th semester under subject Refrigeration and Air Conditioning, MIDC, Hingna on 11th Sept 2023.





Industrial Visit for 3rd Sem students at JSW Steel Coated Product Limited, Kalmeshwar, Nagpur, on 1st and 2nd August 2023.

Faculty Development Programme

3 Days Faculty Development Programme (Self-Funded) On “Introductory FDP on Universal Human Values (UHV)” From 5th to 7th October, 2023 Supported by All India Council for Technical Education (AICTE)





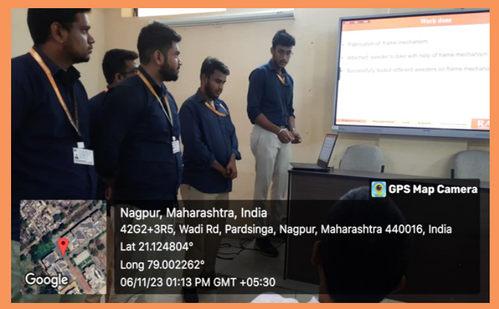


Project Activities

"Project Quality Assurance Initiative" for B. Tech. Final Year Students









Invited Expert Mr. Gajanan Sharma, Technical Trainer/Incharge, Ashok Leyland, Bhandara, Maharashtra on 04th Nov 2023

Forum Activity

Mechanical Engineering Students

Forum Installation of Mechanical Engineering Students Association (MESA), Institution of Engineers of India (IEI) Student Chapter and Teachers day Celebration 5th Sept 2023.











Departmental Certificate (IEI Student Chapter)


003218

440016/GHRI/MC

The Institution of Engineers (India)

is pleased to establish Students' Chapter at the

Department of Mechanical Engineering

G H Raisoni Institute of Engineering & Technology

Nagpur, Maharashtra

Issued on : 14 Jun 2023
Valid up to : 13 Jun 2024

SECRETARY & DIRECTOR GENERAL

Music Club Activity







Teachers Day Celebration by Music Club on 05th Sept 2023

"Box Cricket Tournament" under MESA for the students of GHRIET on 4th Nov. 2023. Total 25 teams were participated.













3 D Printing Club Activity

Skill Development programme on "3 D Printing"
Session on “Introduction of 3D Printing” for 1st Year Students of GHRIET, Nagpur.









Extension Activity

Parents-Teacher Meet - 16th Sept 2023









Faculty / Students Achievement

Odd Sem 2023-24

- **Copyright– 02** (Awarded), **03** (Awaited)
- **Journal Publication – 01 (SCI), Under Review 02 (SCI)**
  Faculty Involved – Dr. Royal Madan, Dr. Ritesh Sambare and Mr. Nilesh C Kanojiya
- **Conference Participation/Publication – 01 (SCOPUS)**
  Faculty Involved – Dr. Royal Madan
- **Patent Granted to Faculty – 03 (Design)**
  Faculty Involved – Dr. Achal Shahare, Dr. Royal Madan, Dr. Ritesh Sambare and Mr. Nilesh C Kanojiya
- Mr. Pratik Dhage **invited and appointed as an expert under UHV** subject for the 1st year induction programme at J D College (Autonomous) and RKNCE (Autonomous) Nagpur by **NCCIP, AICTE.**
- Mr. Pratik Dhage facilitated as **Active SPOC at IIT Bombay in NPTEL SPOC** for GHRIET Nagpur. Also Received certificate of participation as SPOC GHRIET.
- **Attended** 03 FDP/STTP (4 Staff), 01 Workshop (3 Staff), 1 Seminar (8 Staff), NPTEL Certification (3 Staff) Organized by AICTE, NAAC, IIT, NIT, Govt. Institutes, Private Institutes etc.
- **B. Tech Final Year Project Title** "Development And Fabrication of Mechanical Mechanism for Waste Storage System used in NMC Vehicle" **got selected under Maharashtra Student Innovation Challenge-2023.**
- **B. Tech Final Year Project Title** "Development And Fabrication of Mechanical Mechanism for Waste Storage System used in NMC Vehicle" **got 1st Prize in the Project Competition** held at GHRIET, Nagpur, organized by AI Dept.
- Department **Box Cricket Student Team wins** intercollege tournament held at YCCE Nagpur.
- 50 + students has **participated** in various events conducted by Government & Private Institutions.
- FDP on Inculcating Universal Human Values in Technical Education (5-7 Oct 2023, 3 days,58 staff** attended, Offline)
- **Participation in Tech Webinars & Poster Competition (National Level)**
  (Innovathon 2023, 9 Nov 2023: 16 students participated; Tech Poster Comp, 19 Oct 2024: 2 **students participated**
- **No. of students have participated in various events conducted by Govt & Pvt Institutes. (25+ students** in national events like IIC Regional Meet (13 Dec 2023, 5 students), Anvention-2024 etc., organized by AICTE, Ministry of Education)

Faculty Achievement







INTELLECTUAL PROPERTY INDIA

ORIGINAL

पेटेंट कार्यालय, भारत सरकार — The Patent Office, Government Of India

डिजाइन के पंजीकरण का प्रमाण पत्र | Certificate of Registration of Design

डिजाइन सं. / Design No.	:	390930-001
तारीख / Date	:	24/07/2023
पारस्परिकता तारीख / Reciprocity Date*	:	
देश / Country	:	

प्रमाणित किया जाता है कि संलग्न प्रति में वर्णित डिजाइन को *SOLAR WATER DISTILLATION APPARATUS* से संबंधित है, का पंजीकरण, श्रेणी 23-01 में 1.Mr. Nilesh Charanlal Kanojiya 2. Dr. Achal Shankarrao Shahare 3.Dr. Ritesh Krishna Sambare के नाम से उपर्युक्त संख्या और तारीख में कर लिया गया है।

Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class 23-01 in respect of the application of such design to *SOLAR WATER DISTILLATION APPARATUS* in the name of 1.Mr. Nilesh Charanlal Kanojiya 2. Dr. Achal Shankarrao Shahare 3.Dr. Ritesh Krishna Sambare.

डिजाइन अधिनियम, 2000 तथा डिजाइन नियम, 2001 के अध्यधीन यथामति के अनुसरण में।
In pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.

जारी करने की तिथि / Date of Issue: 03/10/2023

नियंत्रक महा-न्यायाधीश और महानिदेशक
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The reciprocity date (if any) which has been allowed and the name of the country. Copyright in the design will subsist for ten years from the date of Registration, and may under the terms of the Act and Rules, be extended for a further period of five years. This Certificate is not for use in legal proceedings or for obtaining registration abroad.



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क्रम सं/ Serial No. : 138669

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सत्यमेव जयते

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डिजाइन के पंजीकरण का प्रमाण पत्र | Certificate of Registration of Design

डिजाइन सं. / Design No. : 380834-001

तारीख / Date : 06/03/2023

पारस्परिकता तारीख / Reciprocity Date* :

देश / Country :

प्रमाणित किया जाता है कि संलग्न प्रति में वर्णित डिजाइन जो *SOLAR WATER DISTILLATION SYSTEM* से संबंधित है, का पंजीकरण, श्रेणी 23-99 में 1.Mr. Pratik V Dhage 2. Dr Siddharth S Chakrabarti 3.K Rachananjali 4.Dr. A. Bhaskaran 5.Dr .Muthuraman Subbiah 6.Dr Mohammed Asef Iqbal 7.Dr.S.Boobalan 8.Mr. Parth Mukul Gupta 9.Dr. V.Kannan के नाम में उपर्युक्त संख्या और तारीख में कर लिया गया है।

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डिजाइन अधिनियम, 2000 तथा डिजाइन नियम, 2001 के अधीन प्रावधानों के अनुसरण में।
In pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.

जारी करने की तिथि Date of Issue : 07/06/2023

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The reciprocity date (if any) which has been allowed and the name of the country. Copyright in the design will subsist for ten years from the date of Registration, and may under the terms of the Act and Rules, be extended for a further period of five years. This Certificate is not for use in legal proceedings or for obtaining registration abroad.



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क्रम सं/ Serial No. : 140553

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सत्यमेव जयते

पेटेंट कार्यालय, भारत सरकार The Patent Office, Government Of India

डिजाइन के पंजीकरण का प्रमाण पत्र | Certificate of Registration of Design

डिजाइन सं. / Design No. : 382648-001

तारीख / Date : 31/03/2023

पारस्परिकता तारीख / Reciprocity Date* :

देश / Country :

प्रमाणित किया जाता है कि संलग्न प्रति में वर्णित डिजाइन जो *APPARATUS TO MEASURE VARIABLE SPEED-INDUCED STRAINS IN ROTATING STRUCTURES* से संबंधित है, का पंजीकरण, श्रेणी 10-04 में 1.Dr. Lakshman Sondhi 2. Mr. Sanjay Kumar Singh 3.Dr. Sanjay Yadav 4.Dr. Ravi Kumar Gupta 5.Dr. Royal Madan 6.Dr. Shubhankar Bhowmick 7.Dr. Pratap B Deshmukh 8.Dr. Lokesh Singh के नाम में उपर्युक्त संख्या और तारीख में कर लिया गया है।

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डिजाइन अधिनियम, 2000 तथा डिजाइन नियम, 2001 के अधीन प्रावधानों के अनुसरण में।
In pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.

जारी करने की तिथि Date of Issue : 26/10/2023

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The reciprocity date (if any) which has been allowed and the name of the country. Copyright in the design will subsist for ten years from the date of Registration, and may under the terms of the Act and Rules, be extended for a further period of five years. This Certificate is not for use in legal proceedings or for obtaining registration abroad.