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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

Department of Mechanical Engineering



GEAR UP
NEWSLETTER
2023-24

Vol. XIII, Issue II

G H RAISONI INSTITUTE OF ENGINEERING AND TECHNOLOGY, NAGPUR

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Engineering | Management | Law | Schools | Other Courses
NAGPUR PUNE JALGAON AMRAVATI CHHINDWARA
RAISONI GROUP OF INSTITUTIONS

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 Mechanical Engineering Department has published the Newsletter Newsletter 2022-23 (EVEN 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 (EVEN 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 (8th sem)
Kshitij Farkade (8th sem)
Swayam Taywade (6th sem)

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 August 1923 & 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@ymail.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



Seminar on topic "Carrier after Engineering by Top Ranker Institute, Nagpur" by Mr. Abhishek Soni, on 18th April, 2024



Expert lecture on the topic "Overview of CFD" under the course "Fluid Mechanics and Hydraulic Machines" for all the B. Tech. students on 5th April 2024 by Dr. Rajendra Prasad Soni, Assistant Professor, VNIT, Nagpur.

Skill Training Programme / Workshop for Students





5 Days Skill Development Programme On "Innovation in Automobile Engineering & its Future" From 2nd to 6th January 2024 Supported by Ashok Leyland, STC Workshop, MIDC Hingna.





One Day Skill Training Programme on "CNC Part Programming" at Indo-German Tool Room, Nagpur on 22nd April 2024

Skill Training Programme / Visit for Students Under MOU



Skill Training Programme, Topic “Plastic Materials & Modern Plastic Processing Techniques” at Central Institute of Petrochemicals Engineering & Technology (CIPET), Chandrapur

Industrial Visit



Industrial Visit at “Dinshaws Dairy Pvt. Ltd., MIDC Butibori ", for the students of B. Tech. 4th and 6th semester on 10th February 2024.



Industrial Visit for 6th Semester students at Sunflag Iron & Steel Company Ltd., Bhandara, Maharashtra, on 2nd March 2024.

Alumni Interaction



Topic “Opportunities in Gaming Industries for Engineers” by Mr. Nikhil Mahto (2022 batch), on 18th April 2024, working as Game Tester at Keywords Studios PLC at Nagpur.



Topic “Opportunities in IT industries for a Mechanical Engineer” by Mr. Swapnil Pimple (2023 batch), on 12th April 2024, working as Systems Engineer at Phone Pe Company at Pune

Departmental Other Activities





Organized Hands on Training on “Refrigeration & Air Conditioning System” for Non-Teaching Staff on 23/03/2024

Forum Activity

TECHKRUNCH -2023

2 Days National Level Technical Fest Organized "MECHOVATION" Under "TECHKRUNCH-2024"

16th & 17th Feb. 2024

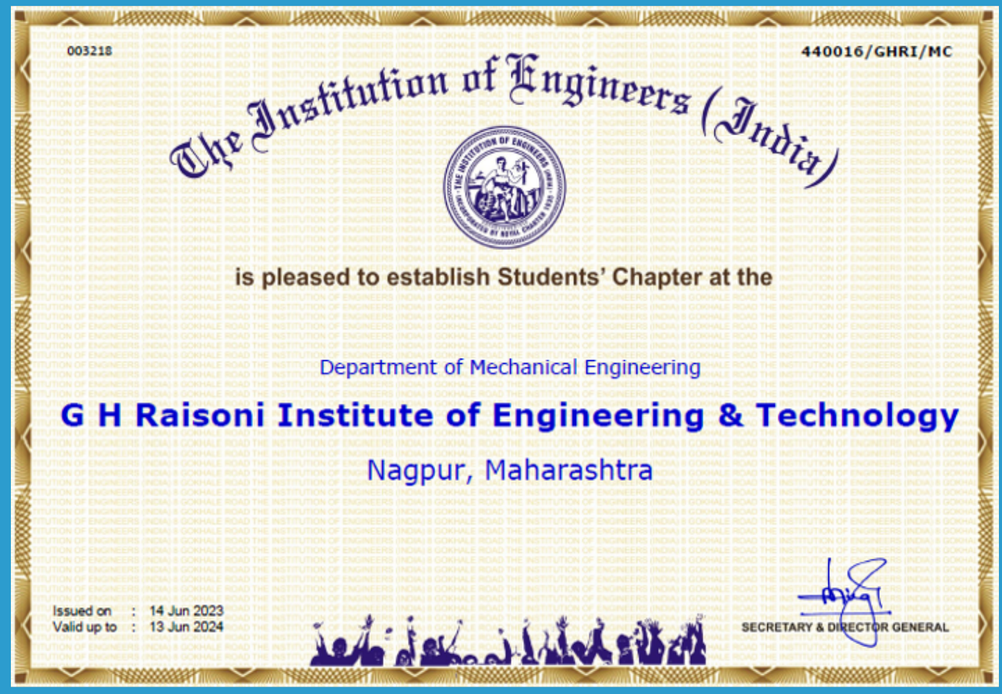






Total 5 events were organized viz. Project Competition, Paper Presentation, Design Making Competition, Debate Competition and BGMI LAN gaming. Total 228 students from various institutes had participated in the technical fest.

Departmental Certificate (IEI Student Chapter)



Extension Activity

Parents-Teacher Meet









College Activities for Students

Celebration of “Maharashtra Utsav-2024” On 21/02/2024











Departmental Activities for Students

Adventure Camp for Students on 16/03/2024











Departmental Activities for Students

National Youth Day Celebration at Swami Vivekananda Smarak, Ambazari, Nagpur 12 January 2024





Faculty / Students Achievement

Students Achievements Even Sem 2023-24





Mr. Krishna Kirtikumar Sedani, Akash Nageshwar, Md Raza, and Devanshu Chintole, the students of B. Tech 8th Semester, having UG Project, titled "Development and Fabrication of Mechanical Mechanism for Waste Storage System used in NMC Vehicles" has earned the prestigious title of Nagpur District level Winners in the Maharashtra Students Innovation Challenge-2023 (Initiative by Govt. of India), Under the guidance of Dr. Nilesh C Kanojiya.

Receiving the certificate and a cheque prize of Rs. 1 lac on the auspicious occasion of Republic Day, January 26, 2024, from Shri. Devendra Gangadharrao Fadnavis, Deputy Chief Minister of Maharashtra, and in the presence of Shri. Amitesh Kumar, Commissioner of Police, Nagpur City.

Faculty / Students Achievement

Even Sem 2023-24

- **Copyright Submitted –** 01 (Submitted), 04 (Registered)
- **Journal Publication – 01 (SCI), Under Review 01 (SCI)**
  Faculty Involved – Dr. Ritesh Sambare and Dr. Nilesh C Kanojiya
  Title published paper 'Productivity enchantement techniques for tubular solar still—A review'. Environ Prog Sustainable Energy. 2024;e14345. doi:10.1002/ep.14345
- **Conference Participation/Publication – 03 (NIT/Private Institute)**
  Faculty Involved – Dr. Nilesh C Kanojiya, Dr. Ritesh K Sambare, Mr. Pratik Dhage
- **Patent Granted/ Registered by faculty – 01 (Design)**
  Faculty Involved – Dr. Ritesh Sambare and Dr. Nilesh C Kanojiya
- **Reviewer Certificate – 06 research paper (Elsevier, Tayler & Francis, Springer), 01 Conference Paper**
  Faculty Involved – Dr. Nilesh C Kanojiya and Dr. Ritesh K Sambare
- Dr. Jaygovind Verma **invited as an expert in 5 day FDP on "AI & ML applications in industries"** (Hybrid Mode) organized by Anand International College of Engineering, Jaipur, Rajasthan from 15-19 April 2024.
- Mr. Pratik Dhage invited as an expert under UHV subject to deliver lecture for 1st year students at Polytechnic, GHRIET Nagpur and One week workshop on UHV for MBA Students of GHRIMR & GHRSBM.
- 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** 02 FDP/STTP (2 Staff), 01 Workshop (3 Staff), 1 Seminar (8 Staff) Organized by AICTE, NAAC, IIT, NIT, Govt. Institutes, Private Institutes etc.
- **BOS member of other Institute – 03**
  Faculty Involved – Dr. Tejpal C Parshiwanikar at KDK College of Engineering Nagpur
  – Dr. Achal S Shahare
  – Dr. Arvind Mahalle
- Mr. Pratik Dhage **invited as an observer under** 3-day Introductory UHV (Universal Human Values) Workshop, appointed by AICTE at Faculty of Engineering and Technology, DMIHER, Sawangi, Wardha from 15-17 May 2024.





Extracts from the Register of Copyrights

प्रतिलिप्यधिकार कार्यालय, भारत सरकार | Copyright Office, Government Of India

Diary Dated 19/01/2024

1.	रजिस्ट्रेशन क्रमांक Registration Number	L-141654/2024
2.	आवेदक का नाम एवं पता एवं राष्ट्रीयता Name, address and nationality of the applicant	TRIBAL C. P.ARSHWAMUKAL , G H RAISONI INSTITUTE OF ENGG. & TECH., GHRAISONI PARK, S. NO.39/1,MIDC, MINDHAL- WADI LOOP, ROAD, NAGPUR-440016 INDIAN ARVIND K. MANDALE , G.H RAISONI INSTITUTE OF ENGG. & TECH., GHRAISONI PARK, S. NO.39/1,MIDC, MINDHAL- WADI LOOP, ROAD, NAGPUR-440016 INDIAN
3.	कृति का कर्ता होने का दावा का आधार Nature of the applicant's interest in the copyright of the work	OWNER
4.	कृति का वर्ग और प्रकार का विवरण Class and description of the work	LITERARY/ DRAMATIC WORK
5.	कृति का शीर्षक Title of the work	DESIGN & FABRICATION OF TWO WHEEL CUTTER MACHINE
6.	कृति की भाषा Language of the work	ENGLISH
7.	यदि आवेदक कृति का स्वामी नहीं है तो स्वामी के नाम, पता एवं राष्ट्रीयता तथा स्वामित्व के दावे का आधार एवं दस्तावेज, यदि कोई हो If the applicant is not the owner of the work, name, address and nationality of the owner and if the claim is document, date of tax document	TRIBAL C. P.ARSHWAMUKAL , G H RAISONI INSTITUTE OF ENGG. & TECH., GHRAISONI PARK, S. NO.39/1,MIDC, MINDHAL- WADI LOOP, ROAD, NAGPUR-440016 INDIAN ARVIND K. MANDALE , G.H RAISONI INSTITUTE OF ENGG. & TECH., GHRAISONI PARK, S. NO.39/1,MIDC, MINDHAL- WADI LOOP, ROAD, NAGPUR-440016 INDIAN
8.	क्या कृति का प्रकाशन हुआ है या अप्रकाशित है Whether the work is published or unpublished	UNPUBLISHED
9.	यदि कृति का प्रकाशन हुआ है तो प्रकाशन का वर्ष, माह तथा देश, यदि प्रकाशन भारत में नहीं हुआ है तो प्रकाशन का वर्ष, माह तथा देश का नाम Year, month and country of publication, if published in India, year of first publication. If not published in India, year of first publication in any country	N.A.
10.	यदि कृति का प्रकाशन हुआ है तो प्रकाशन के सभी पश्चात्वर्ती संस्करणों के प्रकाशन का वर्ष, माह तथा देश Years and countries of subsequent publications, if any, and current, addresses and nationalities of the publishers	N.A.
11.	यदि कृति के प्रकाशन के समय विशेष अधिकार के स्वामी से भिन्न कोई व्यक्ति आवेदक है तो आवेदक के पक्ष में अधिकार के हस्तांतरण की प्रकृति का विवरण If the author is not the first owner of any of the rights comprising the copyright in the work at the time of publication, the nature of assignment or transmission of rights comprising the copyright	TRIBAL C. P.ARSHWAMUKAL , G H RAISONI INSTITUTE OF ENGG. & TECH., GHRAISONI PARK, S. NO.39/1,MIDC, MINDHAL- WADI LOOP, ROAD, NAGPUR-440016 INDIAN ARVIND K. MANDALE , G.H RAISONI INSTITUTE OF ENGG. & TECH., GHRAISONI PARK, S. NO.39/1,MIDC, MINDHAL- WADI LOOP, ROAD, NAGPUR-440016 INDIAN
12.	यदि आवेदक अन्य व्यक्ति से भिन्न है तो आवेदक के नाम, पता एवं राष्ट्रीयता तथा अन्य व्यक्ति के नाम, पता एवं राष्ट्रीयता का विवरण जिसके पक्ष में अधिकार का हस्तांतरण किया गया है Name, address and nationality of the author, if not applicant, and name, address and nationality of other persons, if any, authorized to assign or license all rights comprising the copyright	N.A.
13.	यदि कृति एक साहित्यिक कृति है और उसमें कंप्यूटर प्रोग्राम शामिल है तो क्या कंप्यूटर प्रोग्राम कृति का एक अभिन्न अंग है और क्या वह स्वतंत्र उपयोग के लिए है, यदि हाँ तो कृति का नाम, उद्देश्य और कार्यक्षमता का विवरण If work is a literary work, whether computer programme is an integral part of the work and whether it is for independent use, if yes, name, purpose and functionality of the work	N.A.
14.	यदि कृति एक साहित्यिक कृति है और उसमें कंप्यूटर प्रोग्राम शामिल है तो क्या कंप्यूटर प्रोग्राम कृति का एक अभिन्न अंग है और क्या वह स्वतंत्र उपयोग के लिए है, यदि हाँ तो कृति का नाम, उद्देश्य और कार्यक्षमता का विवरण If work is a literary work, whether computer programme is an integral part of the work and whether it is for independent use, if yes, name, purpose and functionality of the work	N.A.
15.	यदि कृति एक कला कृति है तो क्या वह डिजाइन अधिनियम 2000 के अंतर्गत पंजीकृत है, यदि हाँ तो विवरण If work is an Artistic work, whether it is registered under the Designs Act 2000, if yes give details	N.A.
16.	यदि कृति एक कला कृति है तो क्या डिजाइन अधिनियम 2000 के अंतर्गत पंजीकृत है, यदि हाँ तो विवरण If work is an Artistic work, capable of being registered as a design under the Designs Act 2000, whether it has been applied article through an industrial process and, if so, the number of it is reproduced	N.A.
17.	आवेदन की तारीख, यदि कोई हो Date of Application	19/01/2024
18.	प्राप्ति की तारीख Date of Receipt	19/01/2024

Controller of Copyrights



पंजी. क्र. Regd. No. OBE-9/2023-2024/5473 आई.डी. क्र. ID No. TP-3803

राष्ट्रीय तकनीकी शिक्षक प्रशिक्षण एवं अनुसंधान संस्थान, भोपाल
(शिक्षा मंत्रालय, भारत सरकार)

National Institute of Technical Teachers' Training and Research, Bhopal
(Ministry of Education, Govt. of India)

प्रमाणपत्र
Certificate
यह प्रमाणपत्र

आज़ादी का अमृत महोत्सव

को इस संस्थान द्वारा आयोजित लघु अवधि प्रशिक्षण कार्यक्रम में भाग लेने पर प्रदान किया जाता है।

This certificate is awarded to
DR ACHAL S SHAHARE
G H RAISONI INSTITUTE OF ENGINEERING AND TECHNOLOGY,NAGPUR

for participating in a short term training programme conducted by this institute.

प्रशिक्षण विषय : Programme Title : OUTCOME-BASED EDUCATION AND ACCREDITATION

अवधि/Duration : 08-01-2024 to 12-01-2024

स्थान/Venue : Online

समन्वयक Coordinator

निदेशक Director

दिनांक/Date : 23-02-2024