

R. N. G. Patel Institute of Technology -
RNGPIT, Bardoli



E - NEWS LETTER

Mechanical Engineering Department

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2. Dr. V. K. Joshi
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Vision

To establish a holistic teaching-learning eco-system with a vision to generate quality Mechanical Engineering professionals to contribute for economic growth of the society and the nation.

Mission

1. To ensure effective and efficient teaching methods for sound fundamentals.
2. To impart technical skill through effective collaboration and specialised Training.
3. To use modern equipments, software and technology for effective learning.
4. To develop creative dynamic technocrats, entrepreneurs and leaders.

1. FROM THE DESK OF THE PRINCIPAL



Dear students and faculty members,

It is my privilege to warmly welcome you into the great institution dedicated to the cause of top quality technical education with the goal of “Taking you to for the future endeavors through technology”.

Our management has dedicated this institute to improve technical excellence, ethical values and overall development of student’s community of especially remote area and the nation as a whole.

At RNGPIT, we provide undergraduate degree programme in five branches i.e. Chemical Engg., Mechanical Engg., Electrical Engg., Civil Engg., and Computer Science and Engg. We also provide three years full time graduate course i.e. Bachelor of Vocation (B.Voc) in Software Development, B.Voc in Production Technology and B.Voc in Refrigeration & Air-Conditioning.

The exemplary infrastructural facilities, the team of highly qualified and dedicated faculty and the panorama of vivifying landscapes of vast Sardar Campus will surely take you to enviable heights in your capabilities and achievements.

If you obsess over whether you are making the right decision, you are basically assuming that the universe will reward you for one thing and punish you for another.

Dr. L. B. Chaudhari
Principal, R. N. G. Patel Institute of
Technology –RNGPIT, Bardoli



2. FROM THE DESK OF THE HOD



Dear students and their parents,

With great pleasure I introduce you to the Department of Mechanical Engineering of R. N. G. Patel Institute of Technology.

In today's fast-changing world with ever-growing challenges of limited resources and rapid climate changes, a new generation of Mechanical Engineers nurtured with necessary skills and innovative spirit is needed. Our attempt is to provide our students with a cheerful, productive and satisfying experience at all levels of their programme of studies so that they can explore the amazing world of Mechanical Engineering.

Our department features state-of-the-art infrastructure including well-developed laboratories for core courses like Fluid Mechanics, Fluid Power, Dynamics of Machinery, Internal Combustion Engine, Refrigeration and Air-conditioning, Basics of Mechanical Engineering etc. It also features a full-fledged workshop which can hone to students' knowledge and hands-on skills related to manufacturing. Students can learn modern software related to drafting, modelling and analysis, which are nowadays a pre-requisite in industry.

Dr. K. B. Rathod,
Head of Mechanical Engg. Dept.,
RNGPIT

3. Department Profile

The department has an excellent industrial interaction and contributes to the industry by regular interaction and sharing knowledge and ideas. Keep itself up to date with the latest development and trends in the field and with dedicated faculty of highly qualified and experienced members in all streams of mechanical engineering. The department has developed laboratories for Basics of Mechanical Engineering, Fluid Mechanics, Metallurgy, Fluid power Engineering, Mechanical Measurements & Metrology, Internal Combustion Engine, Refrigeration and Air Conditioning, Production Technology, Heat and Mass Transfer, Dynamics of Machine, CAD/CAM, Automobile engineering with well-equipped workshop.

Program Educational Objectives

- Potential to apply the basic and advanced knowledge of Mechanical Engineering along with interdisciplinary subjects to build a successful career.
- To inculcate proficiency skills/trainings among students to excel either in higher education or mechanical industries.
- Ability to identify, develop and engage in contemporary engineering practices with modern tools to solve engineering related issues.
- To exhibit confidence, motivation & innovative ideas to complex problems to become an entrepreneur/leader.

Program Specific Outcomes

- Graduate will be able to solve real life problems by using computer aided engineering (CAE) tools of design, analysis, manufacturing and assembly of products.
- Graduates will be able to apply their knowledge and skills of manufacturing, design, thermal and fluids for the industrial growth.



4. Department Activities

(a) Industrial Visits:

- Mechanical Engineering Department organised industrial visit at Kakrapar Atomic Power Station, Anumala for the final year mechanical students (Mech. 15 A & B) on 25/09/2018 & 26/09/2018 for the subject power plant engineering.



- Mechanical Engineering Department organised industrial visit at Hydro Power Plant, Ukai for the third year mechanical students (Mech. 16 A & B) on 26/09/2018 for the subject fluid power engineering.



- Mechanical Engineering Department organised industrial visit at Em Tech & Nova Tech. Engg., Navsari for the second year mechanical students (Mech. 17 A & B) on 30/08/2018 & 31/08/2018 for the subject MP - I.



- Mechanical Engineering Department organised industrial visit at Shree Ambica Auto Sales & Service, Kamrej for the final year mechanical students (Mech. 15 a & B) on 12/02/2019 for the subject Automobile Engineering.



- Mechanical Engineering Department organised industrial visit at Sumul Dairy, Surat for the third year mechanical students (Mech. 16 A & B) on 26/03/2019 & 27/03/2019 for the subject refrigeration and air conditioning.



- Mechanical Engineering Department organised industrial visit at Great White Global Pvt. Ltd., Valsad for the second year mechanical students (Mech. 17 A & B) on 19/03/2019 & 20/03/2019 for the subject manufacturing process II.



(b) Expert Speech:

- Mechanical Engineering Department organised a expert speech on a topic quality engineering for the final year mechanical students (Mech. 15 A & B) on 27/03/2019 for the subject quality engineering.



- Mechanical Engineering Department organised a expert speech on a topic awareness of measuring instruments for the second year mechanical students (Mech. 17 A & B) on 09/04/2019 for the subject mechanical measurement and metrology.



- Mechanical Engineering Department organised a expert speech on a topic digitalization of manufacturing using Solid Works & 3 D Printer for the all the students of mechanical engg. on 15/02/2019.

(c) Faculty Achievements :

1. Dr. V. K. Joshi has been selected as Member of review committee and appointed as a Technical Session Chair at Multi- disciplinary International Conference GTUICON2019 in engineering theme Science Revolution through Engineering & Technical Research organised by GTU.
2. Dr. V. K. Joshi has presented a research paper on “Computer Aided Design for Component of Centrifugal Process Pump” at Multi- disciplinary International Conference GTUICON2019 in engineering theme Science Revolution through Engineering & Technical Research organised by GTU. ISBN: 978-93-5351-069-5.
3. A paper entitled “Theoretical analysis of heat transfer with and without liquid fuel evaporative cooling for heat recirculating combustor” from doctoral research work of Dr. J. B. Chaudhari has been accepted in Journal of The Institution of Engineers (India): Series C (Springer).
4. Dr. J. B. Chaudhari has published a paper on “Experimental Study on Heat Transfer in Fin Type Geometry”, Recent Innovation in Chemical Engineering 18-19 Jan,2019,organised at RNGPIT Bardoli sponsored by GUJCOST & DST.
5. Prof. Mitul Patel have successfully completed e-yantra TASK BASED TRAINING and secured CLASS A award, also our faculty team came TOP in TBT challenge all over India which was



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conducted by IIT, Bombay and sponsored by MHRD.

6. Prof. Sapan H. Joshi and Prof. Chintan V. Parekh have published a paper on “Utilisation of waste heat Energy” in VCRS in RICHE-2019.
7. Prof. Sapan H. Joshi and Prof. Chintan V. Parekh have published a paper on “Review paper on an oscillating water column wave energy converter” in RICHE-2019.
8. Prof. Chirag Desai has presented a paper on Review of critical success factors and challenges in implementing Kaizen in small and medium scale Industries in Recent Innovation in Chemical Engineering 18-19 Jan, 2019, RNGPIT Bardoli (In Association with GUJCOST & DST).
9. Prof. Chirag Desai has presented a paper on Review on case study concerning 5S Method impact in an automobile company Recent Innovation in Chemical Engineering 18-19 Jan, 2019, RNGPIT Bardoli (In Association with GUJCOST & DST).

(d) Student Achievements :

1. Mechanical 15 students Hardik Gandhi, Jay Gandhi, Nirav Panchal, Jenish Panchal and Ahir Jay have been selected for the SSIP grant through the GTU, based upon the screening. On a project entitled “Design of Water Floating machine for garbage cleaning and rescue using IOT” under the Guidance of Prof. Mitul D. Patel.
2. Mudaliyar Pradip Shekharbhai has won a
 - Surat district Shotokan karate championship in 2018 and also won Isska

Gujarat state shotokan karate championship held in 2018.

- 11th All India open Shito Ryu karate championship held in 2019.
 - God medals in kata and kumite in 11th gujarat state shotokan karate championship 2019 at Anand.
3. Roy Jigar R. has secured First Rank in Ek Patriya Abhiyan in kala mahakumbh 2018 by government of gujarat, At gandhinagar.
 4. Virpariya Harsh and Ahuja Shreyash have won event held on Robot arm design in 21st ISTE National Student Convection in 2019 at bhagwan mahavir college, Surat.
 5. Ladani parth, Gupta Ashish, Mistry Rohan, Gouda Narendra and Mahyavanshi Swapnil have been selected for Patent of Project work For the SSIP grant through GTU, based on a Screening. On Project entitled “Design Analysis and Fabrication of Drum Lifter and Tilter” under the Guidance of Prof. Tejas A. Patel.

(e) Visvesmruti 2018:

Sr. No.	Event Name	Group	Participant
1.	Model Presentation	14	47
2.	Paper Presentation	24	48
3.	Poster Presentation	14	28
4.	Junkyard War	45	180
5.	Lathe War	20	39
6.	Arcania	89	348
Total		206	690



Sardar Vallabhbhai Patel Society Managed

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(f) GTU Result Analysis:

➤ **Winter 2017:**

Sr No.	Class	No. of Students	% Pass
1	Mechanical 14	143	88.81
2	Mechanical 15	141	63.12
3	Mechanical 16	141	37.59
4	Mechanical 17	101	52.48



➤ **Summer 2018:**

Sr No.	Class	No. of Students	% Pass
1	Mechanical 14	143	99.3
2	Mechanical 15	141	76.6
3	Mechanical 16	134	70.15
4	Mechanical 17	97	74.23

(g) Training & Placement Detail:

- The campus recruitment drive for “M/s Vish Super Hard and Advance Material Pvt. Ltd., (VISHAAM),Surat” for the post of Assistant Engineer

Date: 5th April, 2019

Batch: Mechanical 2014

Company Profile: - The Company is into manufacturing of Diamond and Gems, Component manufacturing for production and Export Sales Production.

Note: Total 23 students appeared for the campus.