

January-April
2024



AYDTI NEWSLETTER

"TRUSTED TO DELIVER EXCELLENCE"

Mechanical Engineering Department

Approved by



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Managed By: The SSVMS, Surat.



About Institute:

A. Y. Dadabhai Technical Institute (AYDTI) is a premier polytechnic institute located in Kosamba, Surat District, offering top-notch technical education to students aspiring to excel in engineering and technology. Established under the management of The Suratee Sunni Vohra Muslim Education Society (Reg No: F-14), AYDTI is dedicated to fostering innovation, skill development, and academic excellence.

Institute Vision

To impart globally competitive education to all its students, enabling them to fulfill effectively the technological and socio-economic needs of society in a sustainable manner.

Department Vision

To groom self-esteem and creative human potential by enhancing their technical skills to make them market-ready in the field of mechanical engineering.

Institute Mission

- Develop technical human resources by imparting state-of-the-art skill-based training programs tailored to regional and global needs.
- Nurture innovation and entrepreneurship among faculty and students, creating opportunities for meaningful and long-term interaction with academia and industries.
- Ensure effective and transparent governance in all aspects of the institute's functioning to benefit its stakeholders.

Department Mission

- To educate and mentor students to excel as professionals by imparting them core knowledge of mechanical engineering.
- Nurture students with innovation and entrepreneurship skills to develop divergent thinking respond productively to the needs of the industries and society.
- Constantly strive to good governance in technical and soft skill, along with ethics and humanities.

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- Industrial Visits
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About Trust

"The Suratee Sunni Vohra Muslim Education Society"

The Suratee Sunni Vohra Muslim Education Society was established in 1947 by the elders of Vohra community who are visionary, well-wishers and think tankers. During the independence of India, the first priority was education which only can uplift the community.

From 1947, the society has made continuous progress, initially starting with providing monetary help to the poor and needy students in the form of education scholarship, now days the society is trying it's best for the various activities and charities under various heads.

With the great vision of our elders, initiative by JANAB AAZAMBHAI DADABHAI and huge donation in the form of Land at Kosamba (7 Vingha) by DR. G. I. MOTALA and his family the dream became true in the form of A.Y. Dadabhai Technical Institute, Kosamba.

A. Y. Dadabhai Technical Institute (Polytechnic) the First Muslim managed Polytechnic in Gujarat state start from August 2008, approved by A.I.C.T.E (All India Council for Technical Education) Government of India and affiliated with Gujarat Technological University, Ahmedabad.



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: Messages :

Mr. M. M. Dalchawal
Director
A. Y. Dadabhai Technical
Institute

It gives me immense pleasure to congratulate the Diploma Mechanical Engineering Department on the launch of their inaugural newsletter. This is a truly significant and forward-thinking initiative for A. Y. Dadabhai Technical Institute.

In today's dynamic world, effective communication and knowledge sharing are paramount. This newsletter will serve as a vital platform to showcase the remarkable talents and innovative projects of our students and faculty.

This endeavor perfectly aligns with our institute's commitment to fostering a vibrant academic environment that encourages excellence, collaboration, and continuous learning.

I look forward to seeing the impactful stories and achievements that will undoubtedly fill the pages of this newsletter. It's a testament to the growth and progress we continue to make here at A. Y. Dadabhai Technical Institute.

Dr. D V Patel
Principal
A. Y. Dadabhai Technical
Institute

It fills me with immense pride and optimism to witness the inauguration of the Diploma Mechanical Engineering Department's newsletter. This is a commendable initiative and a significant step forward for A. Y. Dadabhai Technical Institute.

A newsletter isn't just a collection of articles; it's a vibrant chronicle of our collective journey, a showcase of talent, and a platform for sharing knowledge and innovation.

This newsletter will foster a stronger sense of unity and intellectual curiosity within our institute. It's a testament to the department's proactive spirit and commitment to excellence.

My heartfelt congratulations to the Head of Department, the faculty, and especially the students, for bringing this wonderful vision to fruition. I eagerly anticipate reading about your successes and insights on the issues to come.

Prof. K H Patel
Head of Department
Mechanical Engineering
Department

It's with immense pleasure and pride that I announce the inauguration of our Diploma Mechanical Engineering Department's own newsletter. This initiative marks a significant milestone for us, providing a dedicated platform to showcase the remarkable achievements of our students and faculties, share departmental news, and highlight the exciting advancements in the field of mechanical engineering.

I believe this newsletter will foster a stronger sense of community within our department, encourage knowledge sharing, and inspire innovation. It's a testament to our collective dedication and hard work.

Congratulations to everyone involved in bringing this vision to life. I look forward to see our newsletter flourish as a vibrant hub of information and inspiration for years to come.





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Co-Curricular Activities

Co-curricular activities play a crucial role in shaping well-rounded engineers at A. Y. Dadabhai Technical Institute. These activities, including technical clubs, workshops, competitions, and industrial projects, provide students with opportunities to apply theoretical knowledge in real-world scenarios. They enhance creativity, teamwork, and leadership skills, essential for success in the field of mechanical engineering.



3 Days Workshop on
Campus to Corporate
Date: 26,27, 28 Feb. 2024

"Energy Conservation
Awareness" Workshop
by GEDA
Date: 12 February 2024



NPTEL local Chapter
Awareness Workshop
Date: 6 January 2024

Workshop on
Adopting Good Practice for
Conserving Water, Energy &
Reducing E-Waste
Date: 18 January 2024





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"PRAKALP"
20/4/2024



The
Project
Competition



"Passion
Creates
Opportunity"



Thalassemia Test
Date: 14 Feb. 2024

Blood Donation Camp
Date: 14 Feb. 2024





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Industrial Visits:

Industrial visits play a crucial role in bridging the gap between theoretical knowledge and practical application for Diploma Mechanical Engineering students at A. Y. Dadabhai Technical Institute. These visits provide hands-on exposure to real-world manufacturing processes, machining techniques, and modern engineering practices.



Dormer Tools India Pvt. Ltd. Ankleshwar.
(06-04-2024)

System Engitech Pvt. Ltd., Ankleshwar
(01-04-2024)



Centre for Skilling & Technical Supports (CSTS) (29-02-2024)

System Engitech Pvt. Ltd., Ankleshwar
(01-04-2024)





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Expert Lecture:

Expert lectures serve as a vital component of learning for Diploma Mechanical Engineering students at A. Y. Dadabhai Technical Institute. These sessions offer students an invaluable opportunity to gain insights from industry professionals, researchers, and academicians who bring real-world expertise into the classroom. By attending expert lectures, students stay updated with the latest advancements, industry trends, and innovative engineering solutions.

Concept of Parametric Modeling Software- Solidworks"
(04-03-2024)



"New Digital Technology"
by Mr. Dinanath Akela
(08-04-2024)

Result Analysis:

EXAM	SEMESTER	RESULT DATE	NO OF STUDENTS APPEARED	NO OF STUDENTS PASSED
Winter-2023	5th	22 February 2024	40	15
	3rd	22 March 2024	57	11
	1st	12 April 2024	39	7



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"RANBHUMI" - The Sports Event.

A.Y. Dadabhai Technical Institute, Kosamba has organized the "RANBHUMI-2024" sports event from 5th Feb-2024 to 9th Feb-2024 for the overall development of students.



"Sports teach you character. It teaches you to play by the rules. It teaches you to know what it feels like to win and lose - it teaches you about life."



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Faculty Trainings:

SRLNO.	Name of staff	FDP/SWAYAM/NPTEL Course	Organised Institute/Organization	No.Of Days	Mode (Online/Offline)	FDP date
1	MR. PRANAY. J. SURTI	NPTEL E-AWARENESS WORKSHOP	NPTEL	1 DAY	ONLINE	02/01/2024
2	MR.SAURABH A. KAPADIA	NPTEL E-AWARENESS WORKSHOP	NPTEL	1 DAY	ONLINE	02/01/2024
3	MR. YOGESH A. SAKPAL	NPTEL E-AWARENESS WORKSHOP	NPTEL	1 DAY	ONLINE	02/01/2024
4	MR.RITESH S. PATEL	NPTEL E-AWARENESS WORKSHOP	NPTEL	1 DAY	ONLINE	02/01/2024
5	MR. VISHAL R. CHAUHAN	NPTEL E-AWARENESS WORKSHOP	NPTEL	1 DAY	ONLINE	02/01/2024
6	MR. MAHESH G. KATARIYA	NPTEL E-AWARENESS WORKSHOP	NPTEL	1 DAY	ONLINE	02/01/2024
7	MR. DEVEN I. SURTI	NPTEL E-AWARENESS WORKSHOP	NPTEL	1 DAY	ONLINE	03/01/2024
8	MR. MAULIK S. KHALASI	NPTEL E-AWARENESS WORKSHOP	NPTEL	1 DAY	ONLINE	03/01/2024
9	MR. RITESH S PATEL	NPTEL E-AWARENESS WORKSHOP	NPTEL	1 DAY	ONLINE	03/01/2024
10	MR. UMANG S. DESAI	NPTEL E-AWARENESS WORKSHOP	NPTEL	1 DAY	ONLINE	03/01/2024
11	MR. PRANAY. J. SURTI	NPTEL WORKSHOP	NPTEL	1 DAY	OFFLINE	10/02/2024
12	MR. YOGESH A. SAKPAL	NPTEL WORKSHOP	NPTEL	1 DAY	OFFLINE	10/02/2024
13	MR. KAMLESH H. PATEL	FINITE ELEMENT ANALYSIS(FEA)	THE INSTITUTION OF ENGINEERS (SOUTH GUJARAT LOCAL CENTRE)	1 DAY	OFFLINE	24-02-2024
14	MR. PRANAY. J. SURTI	FINITE ELEMENT ANALYSIS(FEA)	THE INSTITUTION OF ENGINEERS (SOUTH GUJARAT LOCAL CENTRE)	1 DAY	OFFLINE	24-02-2024
15	MR.SAURABH A. KAPADIA	FINITE ELEMENT ANALYSIS(FEA)	THE INSTITUTION OF ENGINEERS (SOUTH GUJARAT LOCAL CENTRE)	1 DAY	OFFLINE	24-02-2024
16	MR. MAULIK S. KHALASI	FINITE ELEMENT ANALYSIS(FEA)	THE INSTITUTION OF ENGINEERS (SOUTH GUJARAT LOCAL CENTRE)	1 DAY	OFFLINE	24-02-2024
17	MR. KAMLESH H. PATEL	BASICS OF CNC LATHE & MILLING TECHNIQUES	CIPET	1 DAY	OFFLINE	29-02-2024
18	MR. PRANAY. J. SURTI	BASICS OF CNC LATHE & MILLING TECHNIQUES	CIPET	1 DAY	OFFLINE	29-02-2024
19	MR.SAURABH A. KAPADIA	BASICS OF CNC LATHE & MILLING TECHNIQUES	CIPET	1 DAY	OFFLINE	29-02-2024
20	MR.DEVEN I. SURTI	BASICS OF CNC LATHE & MILLING TECHNIQUES	CIPET	1 DAY	OFFLINE	29-02-2024

Article: Manufacturing in the Digital Era

The term “digital transformation” refers to the use of technology to change a business model fundamentally. It is not just about implementing new technology but rather about rethinking and redefining the business to take full advantage of the opportunities presented by digital technologies.

In manufacturing specifically, digital transformation is not just about automating the factory floor with robotics, but optimizing the entire supply chain, improving product development, and creating a more responsive and personalized customer experience.

- **Are lean and KAIZEN™ methodologies going to be replaced by digital technologies?**

Lean manufacturing is a set of principles and techniques that focus on minimizing waste and maximizing efficiency in manufacturing operations. KAIZEN™, as a broader concept, meaning change for the better, is a proven approach to creating continuous improvement every day in all areas of an organization, and with the involvement of everyone. These concepts are timeless and broad enough to fit different contexts, so they are impossible to replace.

Mr. P.J. Surti
Lecturer Mech.Dept.