

A.Y. DADABHAI TECHNICAL INSTITUTE, KOSAMBA (Polytechnic)

Kosamba-Mahuvej Road, Kosamba, Dist. – Surat.

Managed By: The Suratee Sunni Vohra Muslim Education Society, Surat.



Report

On

Induction Program

1st Year Students (Academic Year: 2022-23)



Date: 23-09-2022 to 04-10-2022

Time: 8:30am to 2:30pm.



A.Y. Dadabhai Technical Institute (Polytechnic)
Kosamba-Mahuvej Road, Kosamba, Dist. – Surat.
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Mechanical Engineering Department



Induction Program Summary Report (2022-2023)



Vision of Department:

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

Mission of Department:

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

Program Educational Objectives (PEOs):

1. Successfully practice or apply the principles of Mechanical Engineering in a variety of employment areas.
2. Achieve profession success with an understanding and appreciation of ethical behavior, social responsibility, and diversity, both as individuals and in team environments with environment awareness.
3. Pursue continued life-long learning through professional practice, further graduate education or other training programs in engineering science or other professional fields.

Program Specific Outcomes (PSOs):

1. The mechanical engineers will be able to comprehend and apply the concept of CAD/CAM in engineering industries.
2. The Mechanical Engineers will be able to work in manufacturing industry in the field of Operations, Maintenance & Installations.

Program Outcomes (POs):

1. **Basic and Discipline specific knowledge:** Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.
2. **Problem analysis:** Identify and analyze well-defined engineering problems using codified standard methods.
3. **Design/ development of solutions:** Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.
4. **Engineering Tools, Experimentation and Testing:** Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.
5. **Engineering practices for society, sustainability and environment:** Apply appropriate technology in context of society, sustainability, environment and ethical practices.
6. **Project Management:** Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.
7. **Life-long learning:** Ability to analyze individual needs and engage in updating in the context of technological changes.

Facilities and infrastructure:



Seminar Hall



Mechanical Workshop



CAM Lab



Board Room for Campus Interview

DAY - 1 (Friday): Date: 23-09-2022

Session-1 Topic: Orientation Programme

Session-2 Know Your Institute

Session-3 Know Your Department

The Day 1 commenced with the formal welcoming of the fresher with their respective parents/guardians by **Prof. K. H. Patel, HOD Mechanical Engineering**.

With the help of a PowerPoint presentation, the gathering was introduced to the various departments of the institution, their respective HODs, faculty members and general orientation about the college was.

During the session the students were explained in detail on the various infrastructure, laboratories, department library, student associations, curricular and extracurricular activities, clubs, their importance in a student's life.

The session concluded with explaining the code of conduct and guidelines for maintaining highest the discipline at AYDTI and summary of the performance of alumni. Finally, the session ended with a warm wish to all the students' good luck for their journey ahead.



DAY - 2 (Saturday): Date: 24-09-2022

Session-1 Topic: Details of programme & Curriculum

A well-crafted curriculum serves as a reference to ensure that students are on the right track. Its components are designed to develop concepts, from a basic level to increasingly complex topics or skills. **Mr. S. A. Kapadia** senior lecturer of Department started the session on Curriculum by welcoming all the students for their wonderful journey that is yet to begin in AYDTI campus of Mechanical Engineering Department. I assured them that this journey will turn up into a glorious chapter in their lives.

The three years curriculum was explained to them in detail. Highlighted the importance of each subject. Make a tour with the curriculum starting from marvelous Mathematics crossing Engineering Drawing to Manufacturing Engineering, Thermal Engineering and other Multi-Disciplinary subjects. The students listened the session very eagerly and interestingly.



Session-2 Topic: Universal Human Values

Professional Ethics:

Mr. Vishal Chauhan of Mechanical Engineering Department has explored the importance of Professional ethics that govern the behavior of a person or group in a business environment. Like values, professional ethics provide rules on how a person should act towards other people and institutions in such an environment.



Ethical principles underpin all professional codes of conduct. Ethical principles may differ depending on the profession; for example, professional ethics that relate to medical practitioners will differ from those that relate to lawyers or real estate agents.

However, there are some universal ethical principles that apply across all professions, including:

- Honesty
- Trustworthiness
- Loyalty
- Respect for others
- Adherence to the law
- Doing good and avoiding harm to others
- Accountability.

Session-3 Topic: Physical Activity / Sports

The session regarding the importance of sports and the facilities available in AYDTI has been initiated by welcoming the first-year students conducted by **Mr. Keyur V Modi**, Lab Assistant – Mechanical engineering Department. He explained how the physical activity ensures healthy growth and development in young people and what are sports facilities available in the college such as Volley ball courts, Badminton court(outdoor), and Cricket and Indoor games (Caroms, Chess, Table Tennis). All the students are motivated towards the importance of sports /physical activity in a student life.



The students are also been introduced to the importance of immunity and mental strength and doing regular physical activity is proven to help prevent and manage non communicable diseases. To make a person healthy, sports are a very good option to consider. At the end of the session, we take them to play ground and conducted some events.

DAY - 3 (Monday): Date: 26-09-2022

Session-1 Topic: Familiarization with Mechanical Department. Evaluation and Grading system of GTU.

Mr. Vishal Chauhan has addressed the 1st Year Students on the occasion of the Induction Programme regarding Evaluation System and Grading System for integrated assessment of student's performance through examinations. The featured points discussed are as follows:

- Marks distribution -theory and lab
- Internal exam
- External exam
- Evaluation procedure for theory courses
- Award of grades
- Declaration of results
- Supplementary examination
- Documents- marks sheet,
- Student portal



Session-2 Topic: Scholarships

Mr. Mahesh Kataria has briefly explained about the SC ST OBC Scholarship which is run by the Government of India and the state governments to help students pursue their studies at different levels. The centrally-funded scholarships are sponsored by the Government of India and disbursed by different states while the state-funded scholarships are sponsored and disbursed by respective state governments only. An **SC ST OBC Scholarship** offers suitable financial assistance to SC/ST/OBC candidates at both pre-metric and post-metric levels of study.



Session-3 Topic: Language Lab.

Mr. Pratik Solanki of Science & Humanity Department explains that The English language Lab established to facilitate classroom engagement and interaction via computer-based exercises and activities to maximize proficiency in language components (vocabulary and pronunciation) and in language skills (listening, speaking, reading and writing). English language lab has the facility for 20+1 users with Oral Talk software and provides course materials.

A blended methodology of language teaching is adopted in the language lab with the teacher explaining the language concepts, guiding the students through the different modules and then the students proceeding to practice them individually at their own computer systems in the lab.

Session-4 Topic: Cultural, Curricular, Co-curricular & Extra-Curricular Activities:

Mr. M.S. Khalasi addressed about the topic, and the importance of curricular (like seminar programs, internships, case studies etc.), CO-curricular (like debates, group discussions, quizzes, etc.) and extracurricular activities (like dancing, singing, sports etc.) are discussed.

- Along with the academic activities, active immersion into co-curricular and extracurricular activities is essential to strengthen the positivity. Necessities of these activities are explained and its indispensable role in the resume is discussed.

- Main agenda of this program is to explore the aptitudes of students in different activities. To build the positive forte in courage, personality development, team work, intellectuality, forming capabilities and social awareness.
- Also discussed about the importance of Committee Members and their roles and how the events should be organized by the students itself.



DAY - 4 (Tuesday): Date: 27-09-2022:

Session-1 Topic: Expert Lecture

A Motivational Lecture delivered by **Mr. Javed Karodiya** who is **Sr. Teacher** at Mota Varachha High School, Surat. Some of the glimpses of his motivated word are as follows. The world has changed a lot, but one thing has not. Our commitment to your education remains strong.

It is challenging to work by yourself; you will miss your classmates, you will miss your teachers, you will miss your textbooks.



But remember you are not alone. As a Teacher we are here for you every step of the way. Sometimes you will be having a bad day, and you will need to pick yourself up and keep moving forward—set goals. Learn to appreciate your success.

You are smarter than you know, braver than you imagine and more determined than you realize. Every day, try to do a little bit better than you did yesterday.

Tough times never last, but tough people do. It takes courage to keep trying. Every step you take, every day will move you closer to your goal. Believing you can is half the battle. The more you learn, the more confident you will become.

Your biggest challenge will be staying focused and staying diligent about your learning.

Session-2 Topic: Outcome based Education-OBE

Mr. P. J. Surti, senior lecturer of Department energized the session by introducing the students with the concept of Outcome-Based Education (OBE). OBE is a student-centric teaching and learning methodology in which the course delivery, assessment are planned to achieve stated objectives and outcomes. It focuses on measuring student performance i.e. outcomes at different levels.



OBE makes students more employable by equipping them with knowledge and skills as required by the employers. This framework helps in building learner competencies and makes students life-long Learners.

The session commenced with the explanation of the Department Vision and Mission Program Educational Objectives (PEOs), Program specific outcomes (PSOs) and Program Outcomes (POs) were elaborated. The process of framing Course outcomes (each unit is mapped to one course outcome), CO-PO mapping was also described with examples.

Session-3 Topic: Language Lab

Language lab practical session conducted by **Mr. Pratik Solanki**.



Session-4 Topic: Literacy Activity

Literary activities such as debates, declamations, group discussions, poetry writing and recitation, short-story writing, quiz contests, interactive/lecture sessions, etc. Through these activities, literary coordinators (student and teacher) reach out to language and literature lovers and try to create a space for sharing emotions and thoughts.



Miss. N D Lad explores the benefits of such activities. At the individual level, the students have been greatly benefitted by their performance/participation in the events. They have also acquired some highly valued skills in professional field, such as effective communication, leadership skills, and interpersonal communication skills.

DAY – 5 (Wednesday): Date: 28-09-2022

Session-1 Topic: Industrial Visit

Towards the end of the two weeks program, First year students are taken on a visit to one of the leading Industry "**Mahavir Steel**" which is located at Kosamba. The main objective of the visit is to familiarize students with the working environment, discipline, skill level to be required, working in group etc.



DAY - 6 (Thursday): Date: 29-09-2022

Session-1 Topic: Yoga / Pranayama (Breathing techniques) stress and relaxation techniques

Mrs. Parul elaborated with the importance of yoga. Yoga is the hype of the moment in the fitness world. But fortunately, this ancient discipline is something more than just a passing trend. Its roots are really ancient, and the modern evolution that we know is certainly different from its original nature. It remains, though, the desire for many people to approach this meditative discipline so fascinating which can help us find that difficult balance and give us that physical and mental energy so important to deal with our daily routine.



Parul Madam has explained Objectives & Outcomes of Yoga, Importance of yoga, Benefits of Yoga practice, Flexibility & Mobility Asanas, Surya Namaskara Asanas, Sitting Asanas, Immunity boosting asanas and Stress Management and relaxation technics.

The goal is a balanced life, with time for work, relationships, relaxation, and fun - and the resilience to hold up under pressure and meet challenges head on.

Session-2 Topic: Awareness about MOOC

Mr. Y. A. Sakpal, senior lecturer in Department has been given information about projects like mini projects, Internship projects, Main projects. The points like evaluation of projects i.e Rubrics and the way of allocating projects, the way of allocating project guides, duration of the project, viva- voce, and selecting best project are explained in detail to the students.

Students were explored in digital marketing and shared something informative and valuable sources for e-learning platforms. The given is the list of sources:

1. Udemy	3. Swayam-NPTEL	5. edX
2. Coursera	4. Udacity	

Given directions on how to choose an online course based on cost, personal development, public course, or for academic purpose. Also described some varieties of collaborative learning techniques: seminar, group projects, case study discussions, debate and web “treasure hunts”, compilations. Explained categories for E- learning tools such as Distribution (E-mail, Virtual Classroom, Blogs), Presentation (Text Chat, Online Environment), Communication (Discussions, Journals), Content-Based (Wiki) and Productivity.



Finally, outlined advantages and disadvantages of choosing an online course: time, cost, location, consistency and accessibility were listed as advantages and cheating, topic fit, mental disconnect, limited teacher interaction, social learning, equipment and technical frustrations are listed as drawbacks.

Session-3 Topic: General Quiz Competition

Cultural Committee of Institute has organized Group Activities and Talent Presentation. This includes a better way to develop and retain top talents. These activities improve awareness to develop presentation skills, overcome stage fears, identify different talents and improve them. Recognize their strengths and weaknesses and present their thoughts about the progressive changes occurring due to pandemic situations both in favorable terms and negative terms which provided a platform to show their skills. Prizes were distributed to students who presented their talents.



Quiz Competition

DAY - 7 (Friday): Date: 30-09-2022:

Session-1 Topic: Expert Lecture

Mr. Keyur Chauhan gives detailed information about the recent trends in today's Industry. He also provide the knowledge to the students about need of computer aided Design and Manufacturing in the industry.



Session-2 Topic: Universal Human Values

Mr. P J Surti of Mechanical Engineering Department has explored the importance of UHV. For a happy and successful life it is important to know, explore, verify and practice universal human values, and professional ethics.

A human society is composed of families living together in a relationship of mutual fulfillment. Such a society would make effort for a common, humane goal, which can be articulated as Happiness in every individual (through right understanding and right thought) Prosperity in every family (through production of more than required physical facility by way of labor, using cyclic and mutually enriching natural processes) Fearlessness in society (through clarity and



practice of justice in human- human relationship) Co-existence in nature/existence (through ensuring all processes are in harmony with the natural/existential laws) The key is the development of right understanding and right thought in every individual by way of humane education; and, of course, the practice of living accordingly. As a whole, this can be called humane education. This is both, the expectation from as well as the responsibility of the parents/elders,

teachers and responsible people/systems of the society.

KEY OBJECTIVES:

- To help the student to see the need for developing a holistic perspective of life.
- To sensitize the student about the scope of life – individual, family, society and nature/existence.
- Strengthening self-reflection.
- To develop more confidence and commitment to understand, learn and act accordingly.

Session-3 Topic: Indoor & Outdoor Games





DAY – 8 (Saturday): Date: 01-10-2022:

Session-1 Topic: Awareness about Anti-ragging Cell

Mr. S.A. Kapadia has made aware to the students about what is ragging and action taken against students involved in ragging?

Any disorderly conduct whether by words spoken or written or by an act which has the effect of teasing, treating or handling with rudeness a fresher or a junior student.

A student indulging in ragging can be;

- Expelled from the Institution
- Banned from the hostel
- His/hers Scholarship can be withdrawn
- Debarred from Examinations
- Denied Admission to any Institution
- Prosecuted for Criminal Action
- Face action of institution filing FIR with local police against those who rag/abet ragging



He also told to the students;

- We Have Zero Tolerance Policy For Ragging.
- Say No To Ragging Don't Be A Mute Spectator To Ragging.
- Report Ragging Incidents Immediately.
- Contact Anti Ragging Committee Or Any Teacher.

Session-2 Topic: Technical Society & T.P.O.

Mr. Ritesh Patel, Dept. TPO energizes the session with various career opportunities available for the students after completion of their program. The students were appraised on various jobs profiles such as a Design engineer, Q.C engineer, Manufacturing, and what it takes to be successful professional and alternative options like pursuing higher studies, alternative career paths like being a tech-based entrepreneur.



He also addressed the students with Personality Development & Leadership Skills. Personality development includes activities that improve awareness and identity, develop talents and potential, build human capital and facilitate employability, enhance quality of life and contribute to the realization of dreams and aspirations.

Leadership is a function of knowing yourself, having a vision that is well communicated, building trust among colleagues, and taking effective action to realize your own leadership potential.

Session-3 Topic: Drawing Competition

The cultural committee organized drawing competition based on theme **75th Independence Day**.



Drawing Competition

Winners: Talent presented by the students in Drawing

Sr. No.	Name of the Student
1.	Mishra Virendra Manishbhai
2.	Kher Shaktisinh Mahendrasinh
3.	Shaikh MO. Sufiyan N.

DAY - 9 (Monday): Date: 03-10-2022

Session-1 Topic: Mathematics Quiz



Session-2 Topic: Awareness about SSIP

Mr. Umang Desai, SSIP Co-ordinator has very well explained the key objectives of SSIP.

Key Objectives:

The Student Startup & Innovation Policy of Government of Gujarat aims to create an integrated, state-wide, university-based innovation ecosystem to support innovations and ideas of young students and provide a conducive environment for optimum harnessing of their creative pursuit.



1. Developing student centric Innovation and Pre-incubation Ecosystem for Students (IPIES).
2. Creating environment for creativity to flourish and an end-to-end support system in educational institutions to allow ample support to ideas for better execution.
3. Build internal capacity of educational institutions and key components of the innovation ecosystem to enable deployed processes to make sustainable impact at scale.
4. Create pathways for mind to market by harnessing and handholding projects/ research/ innovation/ ideas of students in Gujarat.
5. Creating and facilitating sectorial and regional innovation efforts in state around educational institutions.
6. Create a common platform to showcase, support and upscale innovations for motivating stakeholders as well as for an opportunity to create value for money and value for many.
7. Leverage public system initiatives at state and central level, academia, industries and by other ecosystem stakeholders / domain experts and institutions to make an inclusive effort.

Session-3 Topic: Tree Plantation & Swatchch Bharat Mission

Mr M S Khalasi created awareness among the students regarding Cleanliness and its benefits. Under this programme, all the 1st year students participate in the part of the induction programme. As a part of this Swacha Bharath, we have to clean the college premises.



Some of the students did the dusting in the department and others went to the playground and started picking wrappers lying scattered there. After collecting them they threw them into the dustbins. After doing this job for 1 hour, we all assembled in the playground and gave appreciation in the form of pens.

DAY - 10 (Tuesday): Date: 04-10-2022

Session-1 Topic: English Quiz

Online quiz competition conducted through “KAHOOT” app.



Session-2 Topic: Tour to common amenities of the college

Mr. Deven I Surti started session with warm welcome and the introduction to me and later I discussed about the common amenities of the college like Central library, first year laboratories (Chemistry and Physics), sports room and gymnasium, cafeteria, playground and department laboratories.

Later I took all the students to chemistry lab, where **Mr. Ashish Ghariya, lecturer of Chemistry**, introduced about the first year chemistry laboratory experiments.

Later I took them to Workshop where **Mr. Jaydev Solanki, Instructor Dept. of Mechanical Engineering** addressed the students about the 3 types of lab experiments Carpentry, Tinsmith & Fitting.

Later I took them to Physics laboratory where **Mr. Ayaz shaikh, lecturer of Physics**, introduced about first year laboratory experiments and the evaluation process. Later I took them to central library and I addressed about the facilities available and the process of utilizing the books, online links, journals, newspapers and internet. Later I took them to sports room, cafeteria and playground. Later I took them to the laboratories available with the department and discussed about the labs conducting in each laboratory and the configurations of systems.



Session-3 Topic: Motivational Movies




Schedule and No. of Students Participated in Induction Program:

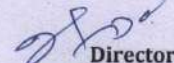
A.Y. DADABHAI TECHNICAL INSTITUTE, KOSAMBA. MECHANICAL ENGINEERING DEPARTMENT SCHEDULE - INDUCTION PROGRAM

Week: 01					Semester: 1 st
TIME	23-09-2022 FRIDAY	24-09-2022 SATURDAY	26-09-2022 MONDAY	27-09-2022 TUESDAY	28-09-2022 WEDNESDAY
08:30 to 09:30	Orientation programme	Details of Programme & Curriculum (SAK)	Familiarization with Mechanical Department. Evaluation & Grading System of GTU (VRC)	Expert Lecture- 1 (Javed Karodiya)	Mahaveer Steel Industries
09:30 to 10:30					
10:30 to 11:30		U.H.V. (VRC)	Scholarships (MGK)	OBE (PJS)	
RECESS					
12:30 to 01:30	Know Your Institute	Physical Activity (KVM)	Language Lab. (PPS)	Language Lab. (PPS)	Visit to Local Area & Industry
01:30 to 02:30	Know Your Department		Cultural Activity (MSK)	Literacy Activity (N.D. Lad)	
Total No. of Participants	58	55	58	56	56

Week: 02					
TIME	29-09-2022 THURSDAY	30-09-2022 FRIDAY	01-10-2022 SATURDAY	03-10-2022 MONDAY	04-10-2022 TUESDAY
08:30 to 09:30	Awareness about YOGA	Expert Lecture- 2 (Keyur Chauhan)	Awareness about Anti Ragging Cell (SAK)	Maths Quiz (MAP)	English Quiz (MAP)
09:30 to 10:30			U.H.V. (PJS)	Technical Society & T.P.O. (RSP)	Awareness about SSIP (USD)
10:30 to 11:30	Awareness about MOOC (YAS)				
RECESS					
12:30 to 01:30	General Quiz Competition (USD, VRC)	Indoor & Outdoor Games (Sports Committee)	Drawing Competition (Cultural Committee)	Plantation & Swachhta Mission (MSK)	Motivational Movies (YAS)
01:30 to 02:30					
Total No. of Participants	58	59	59	60	60


 Sign of H.O.D.




 Director