A. Y. Dadabhai Technical Institute, Kosamba

Report

ON

VISIT AT

TOPS TECHNOLOGY

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Organized by

Computer Department

A. Y. Dadabhai Technical Institute, Kosamba

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REPORT ON INDUSTRIAL VISIT TO TOPS TECHNOLOGY

A.Y. Dadabhai Technical Institute, Kosamba focuses on the overall growth of the students. Computer Department arranges many activities during the semester to improve the Students performance in every category like Elocution Competition, Quiz Competition and also Fun activities. Students must be familiar with the practical terms which are covered in their curriculum. So the Visit can make them understand how the theories work actually in the real world.

The Computer Engineering Department of A. Y. Dadabhai Technical Institute, Kosamba, organized a one-day industrial visit to **TOPS Technology**, Surat, to provide students with hands-on exposure to the latest trends in **software development, AI, automation, and emerging technologies**.

This visit was designed to help students understand **real-world industry applications** in fields such as software engineering, artificial intelligence (AI), the Internet of Things (IoT), cybersecurity, digital marketing, and automation. The interactive sessions at **TOPS Technology** enabled students to explore job opportunities, industry expectations, and the latest technological advancements.Total 71 students of 4th semester and 4 staff members went for visit.

Objectives of the Visit

The primary objectives of this industrial visit were:

1. To introduce students to industry trends in software development, automation, and AI.
2. To explore car designing, development, and automation in the modern era.
3. To understand job opportunities created by AI and how students can develop the necessary skills.
4. To learn about future technologies such as blockchain, cloud computing, and cybersecurity.
5. To gain insights into process automation, robotics, and 3D manufacturing.
6. To understand IoT applications such as Alexa, smartwatches, and home automation.
7. To explore AI tools like ChatGPT, DeepSeek, and Gemini, and their impact on various industries.
8. To understand Software Development Life Cycle (SDLC) and the role of Business Analysts.
9. To learn about 3D printing, Augmented Reality (AR), and Digital Marketing.

Here is a summary of the key takeaways from the visit:

1. Car Designing and Development
Students were introduced to the process of car designing and development, covering:

- How software and hardware work together in modern cars.
- The importance of car automation and how AI plays a role in autonomous driving.
- Different stages of car testing and safety measures implemented in the automobile industry.

2. How to Get a Job in the AI Era
The industry experts shared insights on:
- The essential skills required to get jobs in AI, automation, and software development.
- The demand for cybersecurity experts, cloud engineers, and data scientists.
- How students can build a career in manufacturing, design, and development.

3. Process Automation and Robotics
 Students learned how AI is revolutionizing industries through robotics, 3D printing, and automation:
- Industrial robots are used in manufacturing and assembly lines.
- 3D printing technology is transforming product development and prototyping.
- AI-driven automation in restaurants is enhancing customer experience.

4. The Future of Emerging Technologies
Experts discussed technologies shaping the future, including:
- Cybersecurity – Protecting digital assets from cyber threats.
- Data Science & AI – How data is analyzed and used to build intelligent systems.
- Blockchain – Its role in securing transactions and digital identities.
- Cloud Computing – How businesses are migrating to cloud-based solutions.

5. Internet of Things (IoT) Applications
Students explored IoT applications like:
- Alexa and Smart Home Devices – AI-powered voice assistants.
- Smartwatches and Wearables – Data collection and real-time monitoring.

6. AI Tools and Data Manipulation
Experts demonstrated AI tools like:
- ChatGPT, DeepSeek, and Gemini – How AI is used in content generation and automation.
- Data Manipulation – How AI processes and interprets data for decision-making.

7. Software Development Life Cycle (SDLC) & Business Analysis
The session covered:
- The importance of SDLC in software engineering.
- The role of Business Analysts (BA) in identifying software requirements.
- How a Software Requirement Specification (SRS) document is created.

8. 3D Printing and Augmented Reality (AR)
Students learned how:
- 3D printing is used in prototyping, healthcare, and automobile industries.
- Augmented Reality is transforming gaming, retail, and virtual training.

9. Digital Marketing and AI
The session concluded with insights into:
- How AI is changing digital marketing strategies.
- The role of big data and analytics in understanding consumer behaviour.

Interaction with Industry Experts

The visit ended with an interactive Q&A session, where students asked questions related to How to get started with AI and Machine Learning. The best programming languages for AI, software development, and cyber security. Certifications and courses required to enter the tech industry. How AI is influencing job markets and creating new career opportunities. Experts from TOPS Technology provided valuable insights and encouraged students to build practical projects, gain hands-on experience, and pursue relevant certifications to enhance their job prospects.

Overall, The visit to TOPS Technology, Surat, was an eye-opening experience for students. It provided insights into industry practices, future technologies, and career opportunities. The interactive sessions, live demonstrations, and expert talks helped students understand how AI, software development, and automation are transforming industries.

This visit successfully motivated students to explore advanced technologies, pursue relevant certifications, and work on innovative projects to build a strong career in the tech industry.