TECHNOLOGY EDUCATION & RESEARCH INSTITUTE

(Approved by AICTE & State Government, Affiliated to Kurukshetra University/HSBTE/CBSE)
Accredited by International Accreditation Organization USA, Remote Centre of IIT Bombay
(A Unit of Gyankund Trust To Educate and To Serve)
9th Milestone, Kaithal Road, Kurukshetra, Haryana-136119
Website: www.terii.in, Email: registrar@terii.in, Helpline: 9996783008

Ref: No TERii/2025/113 **Dated 01.10.2025**

Office Order

The **Institution Industry Cell** is hereby constituted with the following members:

1. Dr. Rakesh Dhiman — Chairman
2. Er. Pardeep Sadyan — Cordinator-Institute
3. Mr. Sourabh Sharma — Cordinator-Institute
4. Mr. N K Sikka — Cordinator-Industry
5. Mr. Satyawan — Cordinator-Industry
6. Mr. Krishan Kumar — Cordinator-Industry

Registrar

REGISTRAR
Technology Education & Research
Institute KURUKSHETRA

OBJECTIVES

1. To synchronize the quality of education to meet the current trends and needs of industry.
2. To produce employable students i.e., “Industry-Ready students.”
3. To create adequate facilities for upgrading knowledge of professional engineers and technologists to meet the growth and developmental needs of the current industry.
4. To integrate industrial training and other inputs to develop students.

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5. To share the experience and expertise between institutions and industry for mutual benefits.
6. To improve students, faculty, infrastructure, pedagogy in line with the industry's requirements.
7. To arrange industrial visit, internships for students and guest faculty from industry experts.

FUNCTIONS

1. College/Industry Institute Interaction cell continuously encourage students to undergo internship during semester vacation to synchronize the quality of education to meet the current trends and needs of industry
2. To arrange the guest lectures by experts from industry frequently to make the students familiar with latest industrial practices so that they become “Industry-Ready students.
3. To organize the industrial visits for students and staff to learn the latest industrial practices.
4. To send the students for Industrial Training Programs to train them in the latest technologies.

Registrar

REGISTRAR
Technology Education & Research
Institute KURUKSHETRA

INDUSTRIAL VISIT REPORT

Technology Education and Research Integrated Institutions (TERii)
Visit to DLF Limited Office, Gurugram
Date: 15 July 2025

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1. Introduction

Technology Education and Research Integrated Institutions (TERii) organized an industrial visit to the corporate office of DLF Limited in Gurugram on **15 July 2025** for students from various programs. The visit was conducted under the guidance of **Mr. Rajesh Kumar** and **Mr. Aryan Sharma, Assistant Professors**, who ensured smooth coordination and academic engagement.

The primary objective of this visit was to provide students with practical exposure to the **real estate industry**, one of the fastest-growing sectors in India. The visit aimed to help students understand how large real estate companies operate, manage projects, and deliver residential and commercial developments.

Industrial visits play a crucial role in bridging the gap between theoretical knowledge and real-world application. According to Kolb (1984), experiential learning enhances students' understanding by enabling them to learn through direct interaction and observation. This visit provided students with valuable insights into corporate operations, project management, and real estate business strategies.

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2. Objectives of the Visit

The key objectives of the visit were:

- To understand the functioning of the real estate industry
- To study project planning, development, and execution
- To analyze marketing and sales strategies in real estate
- To observe customer relationship management practices
- To understand legal and regulatory aspects of real estate
- To bridge the gap between academic knowledge and industry practices
- To enhance students' managerial and analytical skills
- To explore career opportunities in the real estate sector

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3. About the Organization

DLF Limited is one of India's leading real estate developers, known for its residential, commercial, and retail projects. Headquartered in Gurugram, the company has played a significant role in transforming urban infrastructure in India.

Key features of the company include:

- Large-scale residential and commercial developments
- Strong brand reputation in real estate
- Focus on innovation and quality construction
- Advanced project management techniques
- Customer-centric approach

DLF has contributed significantly to the development of modern urban spaces in India.

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4. Overview of the Real Estate Industry

The real estate industry involves the development, sale, and management of land and buildings. It includes:

- Residential projects
- Commercial properties
- Retail developments
- Infrastructure projects

The industry plays a vital role in economic growth and employment generation. It is influenced by factors such as urbanization, investment trends, and government policies.

According to Kotler & Keller (2016), marketing and customer satisfaction are key elements in real estate success, as buying property involves long-term investment decisions.

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5. Detailed Visit Experience

5.1 Introduction to Company Operations

Students were introduced to the organizational structure and business model of DLF Limited.

5.2 Project Planning and Development

Students learned how real estate projects are planned, including land acquisition, design, and execution.

5.3 Marketing and Sales Strategies

The company’s marketing techniques, branding strategies, and customer engagement practices were explained.

5.4 Customer Relationship Management (CRM)

Students observed how companies maintain long-term relationships with clients through effective communication and service.

5.5 Legal and Regulatory Aspects

Insights were provided into legal procedures, approvals, and compliance requirements in real estate projects.

5.6 Use of Technology

Modern technologies such as digital platforms, virtual tours, and data management systems are used for efficient operations.

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6. Corporate Work Environment

Students experienced a professional corporate environment, observing:

- Office structure and teamwork
- Communication and coordination among departments
- Use of digital tools and software
- Professional behavior and work culture

This exposure helped students understand corporate expectations and workplace dynamics.

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7. Role of Faculty Coordinators

The visit was successfully organized under the guidance of:

- **Mr. Rajesh Kumar**
- **Mr. Aryan Sharma, Assistant Professor**

Their contributions included:

- Planning and organizing the visit
- Coordinating with company officials
- Guiding students during the visit
- Ensuring discipline and active participation

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8. Learning Outcomes

The visit resulted in the following learning outcomes:

- Understanding of real estate business operations
- Knowledge of project planning and execution
- Insight into marketing and customer management
- Awareness of legal and regulatory processes
- Exposure to corporate work culture
- Enhanced communication and analytical skills

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9. Challenges Observed

Students identified several challenges in the real estate industry:

- High investment and financial risks
- Regulatory complexities
- Market fluctuations
- Customer expectations and competition
- Project delays and cost management

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10. Suggestions and Recommendations

Based on observations, the following suggestions are made:

- Adoption of sustainable construction practices
- Increased use of digital marketing strategies
- Improved customer engagement systems
- Efficient project management techniques
- Focus on affordable housing initiatives

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11. Conclusion

The industrial visit to the DLF Limited office in Gurugram on **15 July 2025** was highly informative and beneficial for the students of TERii.

The visit successfully achieved its objectives by providing practical exposure to the real estate industry and corporate operations. It helped students connect theoretical knowledge with real-world applications and enhanced their understanding of business practices.

Overall, the visit was an enriching experience that contributed significantly to students' academic and professional development.

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12. References

- Kolb, D. A. (1984). *Experiential Learning*. Prentice Hall.
- Kotler, P., & Keller, K. L. (2016). *Marketing Management*. Pearson Education.
- DLF Limited Official Resources

INDUSTRIAL VISIT REPORT

Technology Education and Research Integrated Institutions (TERii)

Visit to Tech Mahindra, Mohali

Date: 20 July 2025

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1. Introduction

Technology Education and Research Integrated Institutions (TERii) organized an industrial visit to Tech Mahindra, Mohali, on **20 July 2025** for students of various programs. The visit was conducted under the guidance of **Ms. Priyanka (Assistant Professor)** and **Ms. Pooja Sharma**, who ensured smooth coordination and effective learning during the visit.

The primary aim of this visit was to provide students with practical exposure to the **Information Technology (IT) industry**, one of the fastest-growing sectors globally. Tech Mahindra is a leading IT company known for providing digital transformation, consulting, and business solutions.

Industrial visits play a vital role in enhancing students' practical knowledge and understanding of industry practices. According to Kolb (1984), experiential learning helps students gain deeper insights through direct observation and interaction. This visit helped students understand how IT companies operate, manage projects, and deliver services to clients worldwide.

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2. Objectives of the Visit

The main objectives of the visit were:

- To understand the functioning of an IT company
- To learn about software development and IT services
- To observe project management and team coordination
- To understand client handling and service delivery models
- To gain knowledge of emerging technologies such as AI, cloud computing, and cybersecurity
- To bridge the gap between theoretical learning and industry practices
- To enhance technical and professional skills
- To explore career opportunities in the IT sector

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3. About the Organization

Tech Mahindra is a leading multinational IT services and consulting company. It is part of the Mahindra Group and operates in multiple countries, providing services in areas such as software development, business process outsourcing, and digital transformation.

Key features of the company include:

- Global presence and client base
- Expertise in emerging technologies
- Focus on innovation and digital solutions
- Strong emphasis on customer satisfaction
- Advanced IT infrastructure and work environment

The company plays a significant role in the global IT industry.

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4. Overview of the IT Industry

The Information Technology industry is a major contributor to economic growth and innovation. It includes:

- Software development
- IT services and consulting
- Data management and analytics
- Cybersecurity
- Cloud computing

The IT industry is rapidly evolving with advancements in technology and increasing demand for digital solutions.

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5. Detailed Visit Experience

5.1 Introduction to Company Operations

Students were introduced to the company's structure, services, and global operations.

5.2 Software Development Process

Students learned about the stages of software development, including planning, coding, testing, and deployment.

5.3 Project Management

Insights were provided into how projects are managed using agile methodologies and team collaboration.

5.4 Client Interaction and Service Delivery

Students observed how IT companies interact with clients and deliver customized solutions.

5.5 Emerging Technologies

Information was shared about new technologies such as artificial intelligence, cloud computing, and cybersecurity.

5.6 Corporate Work Environment

Students experienced a professional office environment, including teamwork, communication, and use of modern tools.

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6. Corporate Culture and Work Environment

The visit provided insights into:

- Professional work culture
- Team collaboration
- Time management and productivity
- Use of digital tools and platforms
- Employee engagement and workplace ethics

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7. Role of Faculty Coordinators

The visit was successfully organized under the guidance of:

- **Ms. Priyanka (Assistant Professor)**
- **Ms. Pooja Sharma**

Their roles included:

- Planning and organizing the visit
- Coordinating with company officials
- Guiding students during the visit
- Ensuring discipline and participation

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8. Learning Outcomes

The visit provided the following learning outcomes:

- Understanding of IT industry operations
- Knowledge of software development processes
- Insight into project management and teamwork
- Awareness of emerging technologies
- Exposure to corporate work culture
- Enhanced communication and analytical skills

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9. Challenges Observed

Students identified several challenges in the IT industry:

- Rapid technological changes
- High competition
- Managing client expectations
- Data security concerns
- Work pressure and deadlines

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10. Suggestions and Recommendations

Based on observations, the following suggestions are made:

- Continuous learning and skill development
- Adoption of advanced technologies
- Strengthening cybersecurity measures
- Improving work-life balance for employees
- Enhancing innovation and research

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11. Conclusion

The industrial visit to Tech Mahindra, Mohali, on **20 July 2025**, was highly informative and beneficial for the students of TERii.

The visit successfully achieved its objectives by providing practical exposure to IT industry operations and enhancing students' understanding of modern technologies. It helped bridge the gap between theoretical knowledge and real-world applications.

Overall, the visit was an enriching experience that contributed significantly to students' academic and professional development.

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12. References

- Kolb, D. A. (1984). *Experiential Learning*. Prentice Hall.
- IT Industry Reports and Case Studies
- Tech Mahindra Official Resources

INDUSTRIAL VISIT REPORT

Technology Education and Research Integrated Institutions (TERii)

Visit to Panipat Thermal Power Plant, Haryana

Date: 25 July 2025

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1. Introduction

Technology Education and Research Integrated Institutions (TERii) organized an industrial visit to the Panipat Thermal Power Plant, Haryana, on **25 July 2025** for students of **B.Tech, BBA, MBA, and BCA programs**. The visit was conducted under the guidance of faculty members to provide students with practical exposure to power generation processes and industrial operations.

The primary aim of this visit was to help students understand how electricity is generated in a thermal power plant using coal as a primary fuel. Thermal power plants are a major source of electricity in India and play a vital role in meeting the energy demands of the country.

Industrial visits are essential for bridging the gap between theoretical knowledge and practical application. According to Kolb (1984), experiential learning enhances students' understanding by allowing them to learn through real-life experiences. This visit provided students with valuable insights into large-scale energy production and industrial management.

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2. Objectives of the Visit

The main objectives of the visit were:

- To understand the functioning of a thermal power plant
- To study electricity generation processes
- To observe coal handling and combustion systems
- To understand turbine and generator operations
- To analyze safety and environmental practices
- To bridge the gap between theoretical learning and practical exposure
- To enhance technical and managerial knowledge
- To explore career opportunities in the power sector

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3. About the Organization

The Panipat Thermal Power Plant is one of the major power generation units in Haryana. It contributes significantly to electricity supply in the region and supports industrial and domestic energy needs.

Key features include:

- Large-scale electricity generation capacity
- Use of coal as primary fuel
- Advanced machinery and control systems
- Focus on operational efficiency
- Implementation of environmental safety measures

The plant plays a crucial role in ensuring a stable power supply.

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4. Overview of Thermal Power Generation

Thermal power generation involves converting heat energy into electrical energy. The main steps include:

- Burning coal to generate heat
- Converting water into steam
- Using steam to rotate turbines
- Generating electricity through generators

This method is widely used due to its ability to produce large amounts of electricity efficiently.

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5. Detailed Visit Experience

5.1 Coal Handling System

Students observed how coal is transported, stored, and supplied to the boiler.

5.2 Boiler Section

The boiler converts water into high-pressure steam using heat from burning coal.

5.3 Turbine Operation

Steam rotates the turbine, converting thermal energy into mechanical energy.

5.4 Generator Section

The generator converts mechanical energy into electrical energy.

5.5 Cooling System

Cooling towers are used to condense steam back into water for reuse.

5.6 Control Room

Students visited the control room where plant operations are monitored and controlled.

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6. Safety and Environmental Measures

The plant follows strict safety protocols:

- Use of protective equipment
- Fire safety systems
- Pollution control mechanisms
- Ash disposal systems
- Regular monitoring of emissions

These measures ensure safe and environmentally responsible operations.

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7. Role of Faculty Members

Faculty members played a key role in organizing and supervising the visit. They ensured:

- Proper coordination with plant authorities
- Student safety and discipline
- Active participation and learning
- Clarification of student queries

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8. Learning Outcomes

The visit resulted in the following learning outcomes:

- Understanding of power generation processes
- Knowledge of coal-based energy systems
- Insight into turbine and generator operations
- Awareness of industrial safety practices
- Exposure to large-scale plant operations
- Enhanced technical and analytical skills

9. Challenges Observed

Students identified several challenges:

- Environmental pollution due to coal usage
- High operational and maintenance costs
- Waste management issues
- Dependence on non-renewable energy sources
- Need for sustainable energy solutions

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10. Suggestions and Recommendations

Based on observations, the following suggestions are made:

- Adoption of cleaner energy technologies
- Reduction of emissions through advanced systems
- Integration of renewable energy sources
- Improved waste management practices
- Continuous training of staff

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11. Conclusion

The industrial visit to the Panipat Thermal Power Plant, Haryana, on **25 July 2025**, was highly informative and beneficial for the students of TERii. It provided valuable insights into electricity generation and industrial operations.

The visit successfully bridged the gap between theoretical knowledge and practical exposure, helping students understand real-world energy systems. Overall, it was an enriching experience that contributed to students' academic and professional development.

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12. References

- Kolb, D. A. (1984). *Experiential Learning*. Prentice Hall.
- Power Generation Industry Reports
- Government Energy Resources

INDUSTRIAL VISIT REPORT

Technology Education and Research Integrated Institutions (TERii)
Visit to Power Grid Corporation of India Limited Office, Kurukshetra
Date: 26 July 2025

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1. Introduction

Technology Education and Research Integrated Institutions (TERii) organized an industrial visit to the Power Grid Corporation of India Limited (POWERGRID) office in Kurukshetra on **26 July 2025**. The visit was conducted under the guidance of **Ms. Priya Sharma**, who ensured proper coordination and academic engagement throughout the visit.

The main objective of the visit was to provide students with practical exposure to the **power transmission sector**, which plays a crucial role in delivering electricity from generating stations to distribution networks. Unlike power generation plants, POWERGRID focuses on transmitting electricity efficiently over long distances using advanced technologies.

Industrial visits are an important part of experiential learning. According to Kolb (1984), knowledge is best acquired through experience and observation. This visit helped students understand the functioning of transmission systems, grid management, and modern electrical infrastructure.

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2. Objectives of the Visit

The key objectives of the visit were:

- To understand the role of power transmission in the electricity sector
- To study the functioning of grid systems and substations
- To observe high-voltage transmission systems
- To understand load management and power distribution
- To learn about safety measures in electrical systems
- To bridge the gap between theoretical knowledge and practical application
- To enhance technical and analytical skills
- To explore career opportunities in the power sector

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3. About the Organization

Power Grid Corporation of India Limited (POWERGRID) is a leading public sector enterprise responsible for power transmission across India. It operates a vast network of transmission lines and substations, ensuring efficient and reliable electricity supply.

Key features of POWERGRID include:

- Extensive transmission network across India
- Use of high-voltage transmission systems
- Advanced grid management technologies
- Focus on efficiency and reliability
- Commitment to safety and sustainability

The organization plays a vital role in maintaining the stability of the national power grid.

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4. Overview of Power Transmission

Power transmission involves the transfer of electricity from power plants to substations and distribution systems. It includes:

- High-voltage transmission lines
- Substations for voltage regulation
- Grid management systems
- Load balancing techniques

Efficient transmission is essential to minimize power losses and ensure a stable supply of electricity.

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5. Detailed Visit Experience

5.1 Introduction to Grid Operations

Students were introduced to the basic concepts of power transmission and grid management.

5.2 Substation Operations

Students observed how substations regulate voltage levels and ensure smooth power flow.

5.3 High-Voltage Transmission Systems

The functioning of transmission lines and towers was explained, highlighting their importance in long-distance power transfer.

5.4 Load Management

Students learned how electricity demand is managed and balanced across regions.

5.5 Monitoring and Control Systems

Advanced control systems used for monitoring grid performance were demonstrated.

5.6 Safety Measures

Safety protocols and precautions followed in handling high-voltage equipment were explained.

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6. Safety and Environmental Measures

The organization follows strict safety standards:

- Use of protective equipment
- Safety training for employees
- Regular inspection of equipment
- Environmental protection measures

These ensure safe and efficient operation of transmission systems.

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7. Role of Faculty Coordinator

The visit was successfully organized under the guidance of **Ms. Priya Sharma**, who:

- Coordinated with POWERGRID officials
- Guided students during the visit
- Ensured discipline and safety
- Encouraged interactive learning

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8. Learning Outcomes

The visit resulted in the following learning outcomes:

- Understanding of power transmission systems
- Knowledge of grid management and substations
- Insight into load balancing techniques
- Awareness of electrical safety practices
- Exposure to real-world power infrastructure
- Enhanced analytical and technical skills

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9. Challenges Observed

Students identified several challenges:

- Transmission losses
- Maintenance of high-voltage equipment
- Managing fluctuating demand
- Environmental concerns
- Infrastructure development costs

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10. Suggestions and Recommendations

Based on observations, the following suggestions are made:

- Adoption of smart grid technologies
- Reduction of transmission losses
- Increased use of renewable energy integration
- Strengthening infrastructure
- Continuous training and development

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11. Conclusion

The industrial visit to the Power Grid Corporation of India Limited office in Kurukshetra on **26 July 2025** was highly informative and beneficial for the students of TERii.

The visit successfully achieved its objectives by providing practical exposure to power transmission systems and enhancing students' understanding of electrical infrastructure. It helped bridge the gap between theoretical knowledge and real-world application.

Overall, the visit was an enriching experience that contributed significantly to students' academic and professional development.

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12. References

- Kolb, D. A. (1984). *Experiential Learning*. Prentice Hall.
- Power Transmission Industry Reports
- Power Grid Corporation of India Limited Official Resources

INDUSTRIAL VISIT REPORT

Technology Education and Research Integrated Institutions (TERii)
Visit to Bharti Airtel Office, Shahbad (Haryana)
Date: 30 July 2025

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1. Introduction

Technology Education and Research Integrated Institutions (TERii) organized an industrial visit to the Bharti Airtel office located in Shahbad, Haryana, on **30 July 2025**. The visit was conducted for students of various programs to provide them with practical exposure to the **telecommunication industry**, which is one of the fastest-growing sectors in India.

The primary aim of the visit was to help students understand the functioning of telecom networks, customer service operations, and digital communication technologies. Airtel is one of India's leading telecom service providers, offering services such as mobile communication, broadband, and digital solutions.

Industrial visits play a vital role in bridging the gap between theoretical knowledge and practical application. According to Kolb (1984), experiential learning helps students gain a deeper understanding through direct interaction and observation. This visit provided valuable insights into telecom operations and service management.

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2. Objectives of the Visit

The key objectives of the visit were:

- To understand the functioning of the telecom industry
- To study mobile network operations and communication systems
- To observe customer service and support operations
- To learn about broadband and digital services
- To understand the role of technology in communication
- To bridge the gap between theory and practical knowledge
- To enhance technical and managerial skills
- To explore career opportunities in the telecom sector

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3. About the Organization

Bharti Airtel is one of India’s largest telecommunications companies, providing services across multiple countries. It offers mobile services, broadband, digital TV, and enterprise solutions.

Key features of the company include:

- Wide network coverage
- Advanced telecom infrastructure
- Strong customer base
- Focus on digital innovation
- Efficient service delivery systems

Airtel has played a significant role in transforming communication and connectivity in India.

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4. Overview of the Telecommunication Industry

The telecommunication industry is essential for modern communication and connectivity. It includes:

- Mobile network services
- Internet and broadband services
- Digital communication platforms
- Enterprise communication solutions

With the advancement of technology, the telecom industry has evolved rapidly, introducing services like 4G, 5G, and fiber broadband.

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5. Detailed Visit Experience

5.1 Introduction to Telecom Operations

Students were introduced to the basic functioning of telecom services and network systems.

5.2 Network Infrastructure

Students learned about telecom towers, signal transmission, and network coverage.

5.3 Customer Service Operations

The visit included insights into how customer queries and issues are handled efficiently.

5.4 Broadband and Digital Services

Students observed how internet services are provided and managed.

5.5 Technology and Innovation

Information was shared about new technologies such as 5G, fiber networks, and digital platforms.

5.6 Corporate Work Environment

Students experienced a professional office environment and learned about teamwork and communication.

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6. Corporate Culture and Work Environment

The visit provided insights into:

- Professional work culture
- Team collaboration and coordination
- Use of digital tools and communication systems
- Time management and productivity
- Customer-oriented approach

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7. Role of Faculty Members

Faculty members played an important role in organizing the visit. They ensured:

- Proper coordination with Airtel officials
- Student discipline and safety
- Active participation and engagement
- Clarification of concepts and queries

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8. Learning Outcomes

The visit resulted in the following learning outcomes:

- Understanding of telecom operations
- Knowledge of network infrastructure
- Insight into customer service management
- Awareness of digital communication technologies

- Exposure to corporate work culture
- Enhanced communication and analytical skills

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9. Challenges Observed

Students identified several challenges in the telecom industry:

- Network congestion and signal issues
- High competition among telecom companies
- Rapid technological changes
- Customer expectations
- Data security concerns

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10. Suggestions and Recommendations

Based on observations, the following suggestions are made:

- Expansion of network infrastructure
- Improvement in customer service systems
- Adoption of advanced technologies
- Strengthening data security measures
- Continuous innovation in services

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11. Conclusion

The industrial visit to the Bharti Airtel office in Shahbad, Haryana, on **30 July 2025**, was highly informative and beneficial for the students of TERii.

The visit successfully achieved its objectives by providing practical exposure to telecom operations and enhancing students' understanding of communication technologies. It helped bridge the gap between theoretical knowledge and real-world applications.

Overall, the visit was an enriching experience that contributed significantly to students' academic and professional development.

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12. References

- Kolb, D. A. (1984). *Experiential Learning*. Prentice Hall.

- Telecommunication Industry Reports
- Bharti Airtel Official Resources

INDUSTRIAL VISIT REPORT

Technology Education and Research Integrated Institutions (TERii)
Visit to Infinity Store, Kurukshetra
Date: 22 April 2025

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1. Introduction

Technology Education and Research Integrated Institutions (TERii) organized an industrial visit to the Infinity Store on **22 April 2025** for the students of **Bachelor of Business Administration (BBA)** and **Master of Business Administration (MBA)** programs. The visit was conducted under the supervision and academic guidance of **Dr. Sonika Mehta, Assistant Professor**, who played a key role in planning and executing this educational activity.

The objective of organizing such visits is to expose students to real-world business environments and provide them with firsthand experience of how theoretical concepts are implemented in practical situations. The retail industry, being one of the most dynamic and customer-driven sectors, offers immense learning opportunities for management students. Infinity Store, as a modern organized retail outlet, provided an ideal platform for students to observe business operations in action.

In today's competitive and fast-changing economic environment, classroom learning alone is not sufficient. Students must be equipped with practical knowledge, problem-solving skills, and industry awareness. Industrial visits serve as a bridge between academic learning and professional practice, allowing students to gain insights into operational processes, customer engagement strategies, and managerial decision-making.

According to Kolb's Experiential Learning Theory (1984), knowledge is created through the transformation of experience. This visit aligned perfectly with this concept by enabling students to learn through observation, interaction, and analysis. It also helped in developing critical thinking, analytical abilities, and a deeper understanding of retail management.

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2. Objectives of the Visit

The industrial visit was organized with several academic and professional objectives in mind:

- To provide practical exposure to the functioning of the retail industry
- To understand the concept of organized retailing and modern trade practices
- To analyze how a retail store operates efficiently under one roof with multiple product categories
- To study store layout, product placement, and visual merchandising techniques
- To understand inventory management and stock control systems

- To observe customer behavior and service strategies in a real-time environment
- To examine billing systems, digital payments, and technological integration
- To enhance students' understanding of marketing, sales, and operational strategies
- To bridge the gap between theoretical knowledge and practical implementation
- To encourage students to explore career opportunities in the retail sector

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3. About the Organization

The Infinity Store is a prominent retail outlet in Kurukshetra that operates on the concept of **organized retailing**, offering a wide range of products under one roof. The store caters to diverse customer needs by providing groceries, household items, personal care products, packaged foods, and daily essentials.

The key features of the store include:

- Wide product assortment
- Efficient store layout and design
- Customer-friendly environment
- Modern billing and inventory systems
- Competitive pricing strategies

Infinity Store reflects the transformation of traditional retailing into a more structured and customer-oriented format. It focuses on delivering value, convenience, and satisfaction to customers.

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4. Overview of the Retail Industry

The retail industry is one of the largest contributors to economic growth and employment generation. In India, the retail sector has evolved significantly due to urbanization, rising income levels, technological advancements, and changing consumer preferences.

Retailing can be broadly classified into:

- **Organized Retail** (supermarkets, malls, retail chains)
- **Unorganized Retail** (local kirana stores, street vendors)

Organized retail, as observed in Infinity Store, emphasizes efficiency, standardization, and customer satisfaction. It integrates advanced technologies such as barcode systems, inventory software, and digital payment methods.

According to Kotler & Keller (2016), retailing involves all activities related to selling goods or services directly to consumers for personal use. Modern retailing focuses not only on selling products but also on creating a unique shopping experience.

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5. Detailed Visit Experience

5.1 Store Layout and Infrastructure

Students observed that the store was designed strategically to ensure smooth movement of customers. Different sections were clearly categorized, making it easy for customers to locate products.

5.2 Product Assortment and Categorization

Products were arranged systematically into categories such as groceries, personal care, beverages, and household items. This categorization helps improve customer convenience and increases sales efficiency.

5.3 Visual Merchandising

Visual merchandising techniques such as attractive displays, lighting, and promotional banners were used effectively to attract customer attention and influence purchasing decisions.

5.4 Inventory Management

Students learned about stock management processes, including tracking inventory levels, restocking, and maintaining product availability. Efficient inventory management helps reduce losses and improve profitability.

5.5 Billing and Payment Systems

The store uses modern billing systems with barcode scanners and supports multiple payment methods, including cash, cards, and digital payments. This ensures quick and error-free transactions.

5.6 Customer Service Practices

Staff members were observed assisting customers politely and efficiently. Good customer service plays a crucial role in building customer loyalty and satisfaction.

5.7 Technology Integration

The store uses technology for inventory tracking, billing, and customer management, highlighting the importance of digital transformation in retail.

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6. Role of Faculty Coordinator

The visit was successfully organized under the leadership of **Dr. Sonika Mehta, Assistant Professor**. Her role included:

- Planning and organizing the visit
- Coordinating with the store management
- Guiding students during the visit
- Encouraging interactive learning
- Ensuring discipline and smooth execution

Her efforts contributed significantly to making the visit educational and impactful.

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7. Learning Outcomes

The industrial visit provided several valuable learning outcomes:

- Practical understanding of retail operations
- Knowledge of merchandising and store management techniques
- Insight into customer behavior and buying patterns
- Understanding of inventory and supply chain management
- Exposure to real-world marketing and sales strategies
- Improved communication and observational skills
- Awareness of career opportunities in retail management

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8. Challenges Observed in Retail Industry

During the visit, students identified several challenges faced by retail businesses:

- Managing large inventories efficiently
- Handling customer expectations and complaints
- Competition from e-commerce platforms
- Maintaining consistent product quality
- Managing peak-hour customer flow
- Adapting to technological changes

These challenges highlighted the complexity of managing a retail business.

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9. Suggestions and Recommendations

Based on observations, the following suggestions can be made:

- Increasing digital engagement and online presence
- Enhancing promotional strategies to attract more customers
- Improving inventory forecasting systems
- Providing regular staff training for better customer service
- Implementing loyalty programs to retain customers

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10. Conclusion

The industrial visit to the Infinity Store, Kurukshetra, on **22 April 2025**, was a highly enriching and educational experience for the students of BBA and MBA programs at TERii.

The visit successfully fulfilled its objectives by providing practical exposure to retail operations and enhancing students' understanding of business concepts. It helped bridge the gap between theoretical knowledge and practical application, preparing students for future professional challenges.

Overall, the visit was insightful, informative, and beneficial, contributing significantly to the academic and professional development of the students.

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11. References

- Kolb, D. A. (1984). *Experiential Learning: Experience as the Source of Learning and Development*. Prentice Hall.
- Kotler, P., & Keller, K. L. (2016). *Marketing Management*. Pearson Education.
- Fayolle, A., & Gailly, B. (2015). Entrepreneurship education and training. *Journal of Small Business Management*.

Industrial Visit Report

Technology Education and Research Integrated Institutions (TERii)
Visit to Nestlé India Plant, Samalkha (Panipat)

1. Introduction

Technology Education and Research Integrated Institutions (TERii) organized an industrial visit to the Nestlé India Plant located in Samalkha, Panipat, on **2 April 2025**, for the students of **BBA, MBA, and BCA programs**. The primary purpose of this visit was to provide students with meaningful exposure to real-world industrial operations, corporate management practices, and advanced manufacturing techniques used in a leading multinational organization.

The visit was carefully planned as part of the institution's commitment to experiential learning, enabling students to observe and understand how theoretical knowledge is applied in practical settings. By visiting a reputed FMCG manufacturing unit, students were able to gain insights into production processes, quality control systems, supply chain management, and organizational structure. Such exposure helps students develop a clearer understanding of how businesses operate in a competitive and dynamic environment.

Furthermore, the industrial visit offered students an opportunity to interact with industry professionals, allowing them to learn about current industry trends, technological advancements, and workplace expectations. It also helped in enhancing their professional awareness, communication skills, and readiness for future career opportunities.

Industrial visits are considered an essential component of modern education, as they play a significant role in bridging the gap between theoretical concepts taught in classrooms and their practical implementation in real-life situations. According to experiential learning theory, knowledge is created through the transformation of experience, making such visits highly valuable for students' academic and professional development (Kolb, 1984).

2. Objectives of the Visit

The main objectives of the visit were:

- To provide practical exposure to industrial operations and manufacturing processes.
- To understand the organizational structure and working of a multinational company.
- To observe quality control, production, and supply chain management systems.
- To enhance knowledge of corporate culture and professional environment.
- To connect classroom learning with real-world industry practices.

3. About the Company

Nestlé India is one of the leading FMCG companies in India, known for its high-quality food and beverage products. The Samalkha plant in Panipat is a major production unit equipped with advanced technology and strict quality control systems.

The company emphasizes safety, hygiene, and sustainability, providing an excellent learning platform for students.

4. Visit Experience

During the visit, students were taken on a guided tour of the plant where they observed:

- Automated production and packaging lines
- Quality testing and assurance processes
- Inventory management and logistics systems
- Safety measures and hygiene practices followed in the plant

Students also interacted with company officials, gaining valuable insights into industrial operations, management strategies, and career opportunities.

The visit helped students understand how large-scale industries maintain efficiency, productivity, and quality standards.

5. Faculty Coordination

The visit was conducted under the supervision and guidance of:

- **Mr. Rajan Sharma**, Assistant Professor
- **Ms. Pooja Moun**, Assistant Professor

Their coordination ensured smooth execution and effective learning throughout the visit.

6. Learning Outcomes

The visit resulted in the following learning outcomes:

- Practical understanding of manufacturing and industrial processes
- Knowledge of supply chain and quality management systems
- Exposure to corporate work culture and professional practices
- Enhanced analytical and observational skills
- Better awareness of career opportunities in FMCG and IT sectors

Experiential learning activities like industrial visits play a key role in enhancing student skills and knowledge (Fayolle & Gailly, 2015).

7. Conclusion

The industrial visit to Nestlé India, Samalkha, Panipat, on **2 April 2025**, was highly informative and beneficial for the students of TERii. It successfully fulfilled its objectives by providing practical exposure and industry insights.

Overall, the visit was an enriching experience that will help students apply their academic knowledge in real-world scenarios and prepare for future professional challenges.

8. References

- Kolb, D. A. (1984). *Experiential Learning: Experience as the Source of Learning and Development*. Prentice Hall.
- Fayolle, A., & Gailly, B. (2015). Entrepreneurship education and training. *Journal of Small Business Management*.
- Nestlé India Official Website

INDUSTRIAL VISIT REPORT

Technology Education and Research Integrated Institutions (TERii)
Visit to Verka Milk Plant, Mohali
Date: 1 May 2025

1. Introduction

Technology Education and Research Integrated Institutions (TERii) organized an industrial visit to the Verka Milk Plant located in Mohali on **1 May 2025** for students of management and computer application streams. The visit was conducted under the guidance of **Ms. Preety Choudhary, Assistant Professor**, who ensured proper coordination and academic relevance of the visit.

The purpose of this industrial visit was to provide students with practical exposure to the dairy processing industry, allowing them to understand how milk and milk-based products are processed, packaged, and distributed on a large scale. The dairy industry is a vital part of the Indian economy, contributing significantly to employment and food supply chains.

Industrial visits are an essential component of modern education as they provide students with experiential learning opportunities. According to Kolb (1984), learning through experience enhances understanding and retention. This visit helped students observe real-time industrial processes and connect them with their academic knowledge.

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2. Objectives of the Visit

The major objectives of the visit were:

- To understand the functioning of the dairy processing industry
- To study milk collection, processing, and packaging systems
- To observe quality control and hygiene standards
- To understand supply chain and distribution systems
- To learn about cold storage and preservation techniques
- To analyze operational efficiency in a large-scale plant
- To bridge the gap between theoretical learning and industrial practices

- To explore career opportunities in the dairy and food processing sector

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3. About the Organization

Verka is a well-known dairy brand operated under the Punjab State Cooperative Milk Producers' Federation (MILKFED). It is recognized for producing high-quality milk and dairy products such as butter, ghee, paneer, curd, and ice cream.

The Mohali plant is one of the major production units equipped with advanced machinery and follows strict hygiene and quality standards. The organization focuses on:

- Maintaining product quality
- Ensuring food safety
- Efficient supply chain management
- Customer satisfaction

Verka has established itself as a trusted brand in the dairy industry due to its commitment to quality and innovation.

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4. Overview of the Dairy Industry

The dairy industry in India is one of the largest in the world and plays a crucial role in rural development and economic growth. India is the largest producer of milk globally, and the dairy sector contributes significantly to the GDP.

Key features of the dairy industry include:

- Large-scale milk production and processing
- Use of advanced technologies for preservation
- Strict quality control and hygiene standards
- Cold chain logistics for distribution

According to FAO reports and industry studies, dairy processing involves multiple stages such as collection, pasteurization, homogenization, packaging, and distribution.

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5. Detailed Visit Experience

5.1 Milk Collection and Reception

Students learned how raw milk is collected from various sources and transported to the plant. At the reception unit, milk undergoes initial testing to ensure quality.

5.2 Quality Testing

The milk is tested for:

- Fat content
- Purity
- Adulteration

Only high-quality milk is accepted for further processing.

5.3 Pasteurization Process

Pasteurization is a crucial step where milk is heated to a specific temperature to kill harmful bacteria while preserving nutritional value.

5.4 Homogenization

This process ensures uniform consistency of milk by breaking down fat particles, preventing cream separation.

5.5 Packaging

Students observed automated packaging systems where milk is packed in pouches and other containers under hygienic conditions.

5.6 Cold Storage

Milk and dairy products are stored in cold storage units to maintain freshness and extend shelf life.

5.7 Distribution System

The final products are distributed through a well-managed supply chain to various markets and retail outlets.

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6. Hygiene and Safety Measures

The Verka plant follows strict hygiene protocols:

- Use of sterilized equipment
- Workers wearing protective uniforms
- Regular cleaning and sanitization

- Quality checks at every stage

Food safety standards are maintained to ensure consumer health and satisfaction.

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7. Role of Faculty Coordinator

The visit was organized under the supervision of **Ms. Preety Choudhary, Assistant Professor**, who played a vital role in:

- Planning and organizing the visit
- Coordinating with plant authorities
- Guiding students during the visit
- Encouraging interaction and learning

Her efforts ensured that the visit was informative and well-structured.

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8. Learning Outcomes

The visit provided the following learning outcomes:

- Understanding of dairy processing techniques
- Knowledge of quality control systems
- Insight into supply chain and logistics
- Awareness of hygiene and food safety standards
- Practical exposure to industrial operations
- Enhanced analytical and observational skills
- Better understanding of career opportunities in the dairy sector

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9. Challenges Observed

Students observed several challenges in the dairy industry:

- Maintaining product freshness
- Managing cold chain logistics
- Ensuring consistent quality
- Handling large-scale production efficiently

- Meeting high consumer demand

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10. Suggestions and Recommendations

Based on observations, the following suggestions are made:

- Adoption of more advanced automation technologies
- Expansion of digital tracking systems
- Increased focus on sustainable packaging
- Strengthening cold chain infrastructure
- Enhancing customer awareness programs

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11. Conclusion

The industrial visit to the Verka Milk Plant, Mohali, on **1 May 2025**, was highly educational and beneficial for the students of TERii. It provided valuable insights into dairy processing, quality management, and industrial operations.

The visit successfully bridged the gap between theoretical learning and practical exposure, helping students understand the real-world functioning of the dairy industry. Overall, it was an enriching experience that contributed significantly to students' academic and professional development.

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12. References

- Kolb, D. A. (1984). *Experiential Learning*. Prentice Hall.
- FAO (Food and Agriculture Organization) Reports on Dairy Industry
- Verka Official Resources

INDUSTRIAL VISIT REPORT

Technology Education and Research Integrated Institutions (TERii)

Visit to Panipat Refinery, Haryana

(Operated by Indian Oil Corporation Limited)

Date: 1 June 2025

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1. Introduction

Technology Education and Research Integrated Institutions (TERii) organized an industrial visit to the Panipat Refinery, Haryana, on **1 June 2025**, one of the largest oil refineries in India operated by Indian Oil Corporation Limited. The visit was conducted for students of **B.Tech, BBA, MBA, and BCA programs** under the supervision of **Mr. Rajesh Kumar (HOD)**.

The main purpose of this visit was to provide students with practical exposure to refinery operations, petroleum processing techniques, and industrial safety practices. Oil refineries play a vital role in converting crude oil into useful products such as petrol, diesel, LPG, and petrochemicals, which are essential for everyday life and industrial development.

Industrial visits are an important component of modern education as they help bridge the gap between theoretical knowledge and practical application. According to Kolb (1984), experiential learning enhances students' understanding by allowing them to learn through direct experience. This visit enabled students to gain firsthand knowledge of refinery processes and industrial management systems.

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2. Objectives of the Visit

The key objectives of the visit were:

- To understand the functioning of an oil refinery
- To study crude oil refining processes and product formation
- To observe industrial safety measures and environmental practices
- To analyze large-scale industrial operations
- To understand supply chain and distribution systems
- To bridge the gap between theoretical learning and practical exposure

- To enhance technical and managerial knowledge
- To explore career opportunities in the petroleum and energy sector

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3. About the Organization

Indian Oil Corporation Limited (IOCL) is one of India's leading public sector enterprises in the oil and gas industry. The Panipat Refinery is one of its most advanced and largest refineries, equipped with modern technology and high production capacity.

Key features include:

- Advanced refining technologies
- High processing capacity
- Strong focus on safety and sustainability
- Integrated petrochemical units
- Efficient distribution network

The refinery plays a crucial role in meeting the growing energy demands of the country.

---

4. Overview of the Petroleum Industry

The petroleum industry is essential for economic development and industrial growth. It includes:

- **Upstream:** Exploration and extraction
- **Midstream:** Transportation and storage
- **Downstream:** Refining and distribution

The Panipat Refinery operates in the downstream sector, converting crude oil into usable products. Efficient refining and distribution are critical for ensuring energy security.

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5. Detailed Visit Experience

5.1 Introduction to Refinery Operations

Students were introduced to refinery operations, including plant capacity and product output.

5.2 Crude Oil Distillation

Students observed fractional distillation, where crude oil is separated into different components based on boiling points.

5.3 Processing Units

Various units such as distillation, cracking, and reforming units were explained in detail.

5.4 Storage and Distribution

Large storage tanks and pipeline systems were observed for efficient product handling.

5.5 Automation and Technology

Advanced control systems ensure smooth and safe operations within the refinery.

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6. Safety and Environmental Measures

The refinery maintains strict safety protocols:

- Use of protective equipment
- Fire safety systems
- Emergency response mechanisms
- Pollution control systems

Environmental sustainability is ensured through waste management and emission control practices.

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7. Role of Faculty Coordinator

The visit was conducted under the guidance of **Mr. Rajesh Kumar (HOD)**, who:

- Organized and coordinated the visit
- Guided students throughout the tour
- Ensured discipline and safety
- Facilitated interaction with industry professionals

---

8. Learning Outcomes

Students gained:

- Knowledge of refinery processes
- Understanding of industrial safety practices
- Exposure to large-scale operations
- Insight into petroleum supply chains
- Improved analytical and technical skills

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9. Challenges Observed

- Handling hazardous materials
- Maintaining efficiency in large-scale operations
- Environmental concerns
- High operational costs
- Increasing energy demand

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10. Suggestions and Recommendations

- Adoption of eco-friendly technologies
- Strengthening environmental measures
- Enhancing automation systems
- Integration of renewable energy sources
- Continuous workforce training

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11. Conclusion

The industrial visit to the Panipat Refinery, Haryana, on **1 June 2025**, was highly informative and beneficial for the students of TERii. It provided valuable insights into refinery operations and industrial management.

The visit successfully bridged the gap between theoretical knowledge and practical exposure, preparing students for future careers in the energy sector.

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12. References

- Kolb, D. A. (1984). *Experiential Learning*. Prentice Hall.
- Indian Oil Corporation Limited Official Resources
- Petroleum Industry Reports

INDUSTRIAL VISIT REPORT

Technology Education and Research Integrated Institutions (TERii)
Visit to National Dairy Research Institute, Karnal
Date: 5 July 2025

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1. Introduction

Technology Education and Research Integrated Institutions (TERii) organized an industrial visit to the National Dairy Research Institute, Karnal, on **5 July 2025** for students of **B.Tech, BBA, and BCA programs**. The visit was conducted under the guidance of **Dr. Pooja Bhardwaj**, who ensured effective coordination and academic relevance throughout the program.

The primary aim of this visit was to provide students with practical exposure to dairy research, advanced processing technologies, and innovations in the field of dairy science. NDRI is one of the premier institutes in India dedicated to dairy research, education, and development, making it an ideal place for students to gain industry-oriented knowledge.

Industrial visits are an important aspect of academic learning, as they help students understand how theoretical concepts are applied in real-world situations. According to Kolb (1984), experiential learning enhances knowledge through direct experience and observation. This visit enabled students to gain insights into modern dairy technologies and research methodologies.

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2. Objectives of the Visit

The main objectives of the visit were:

- To understand the role of research institutes in the dairy industry
- To gain knowledge of advanced dairy processing technologies
- To study milk production, preservation, and quality control
- To observe modern laboratory techniques and research practices
- To understand innovation and development in dairy products
- To bridge the gap between academic knowledge and practical exposure
- To explore career opportunities in dairy research and technology

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3. About the Organization

The National Dairy Research Institute (NDRI), Karnal, is one of India's leading institutes in the field of dairy science and technology. It operates under the Indian Council of Agricultural Research (ICAR) and plays a vital role in research, education, and extension activities related to dairy development.

Key features of NDRI include:

- Advanced research laboratories
- Training and educational programs
- Dairy production and processing units
- Focus on innovation and sustainable practices
- Contribution to national dairy development

NDRI has significantly contributed to improving milk production, quality, and processing techniques in India.

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4. Overview of the Dairy Research Sector

The dairy research sector focuses on improving milk production, processing technologies, and product development. It plays a crucial role in enhancing the efficiency and sustainability of the dairy industry.

Key areas of dairy research include:

- Milk quality and safety
- Product innovation (cheese, yogurt, dairy beverages)
- Animal nutrition and breeding
- Processing and preservation technologies

Research institutes like NDRI help in developing new technologies that improve productivity and product quality.

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5. Detailed Visit Experience

5.1 Introduction to NDRI Facilities

Students were introduced to various departments and facilities within the institute, including research labs and dairy processing units.

5.2 Dairy Processing Units

Students observed how milk is processed into various dairy products such as butter, cheese, and curd using advanced machinery.

5.3 Quality Control Laboratories

The visit included exposure to laboratories where milk and dairy products are tested for quality, safety, and nutritional value.

5.4 Research and Development Activities

Students learned about ongoing research projects aimed at improving dairy production and product innovation.

5.5 Animal Husbandry Practices

Insights were provided into cattle management, feeding practices, and breeding techniques used to enhance milk production.

5.6 Technological Innovations

Modern equipment and technologies used in dairy processing and research were demonstrated to students.

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6. Hygiene and Safety Measures

NDRI maintains strict hygiene and safety standards:

- Clean and sanitized processing units
- Use of protective clothing in labs
- Regular quality checks
- Safe handling of equipment and materials

These measures ensure high standards of research and production quality.

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7. Role of Faculty Coordinator

The visit was successfully organized under the guidance of **Dr. Pooja Bhardwaj**, who played an important role in:

- Planning and organizing the visit
- Coordinating with institute authorities

- Guiding students during the visit
- Encouraging interaction and learning

Her efforts ensured that students gained maximum knowledge from the visit.

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8. Learning Outcomes

The visit provided the following learning outcomes:

- Understanding of dairy research and processing technologies
- Knowledge of quality control and testing methods
- Insight into innovation in dairy products
- Awareness of animal husbandry practices
- Exposure to real-world research environments
- Enhanced analytical and observational skills

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9. Challenges Observed

Students observed certain challenges in the dairy research sector:

- Maintaining consistency in milk quality
- High cost of research and development
- Need for advanced technology adoption
- Ensuring sustainability in dairy production
- Managing large-scale operations

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10. Suggestions and Recommendations

Based on observations, the following suggestions are made:

- Increased investment in research and development
- Adoption of advanced digital technologies
- Focus on sustainable and eco-friendly practices
- Strengthening industry–research collaboration

- Enhancing training programs for students

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11. Conclusion

The industrial visit to the National Dairy Research Institute (NDRI), Karnal, on **5 July 2025**, was highly informative and enriching for the students of B.Tech, BBA, and BCA programs at TERii.

The visit successfully achieved its objectives by providing practical exposure to dairy research and advanced technologies. It helped students connect theoretical knowledge with real-world applications and broadened their understanding of the dairy sector.

Overall, the visit was a valuable learning experience that contributed significantly to students' academic and professional development.

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12. References

- Kolb, D. A. (1984). *Experiential Learning*. Prentice Hall.
- Indian Council of Agricultural Research (ICAR) Reports
- National Dairy Research Institute Official Resources

INDUSTRIAL VISIT REPORT

Technology Education and Research Integrated Institutions (TERii)

Visit to Rajiv Gandhi Thermal Power Plant, Hisar (Haryana)

Date: 05/07/2025

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1. Introduction

Technology Education and Research Integrated Institutions (TERii) organized an industrial visit to the **Rajiv Gandhi Thermal Power Plant**, Hisar, Haryana, for students of **B.Tech, BBA, MBA, and BCA programs**. The visit was conducted under the guidance of **Mr. Rajan Sharma, Assistant Professor**, and **Ms. Tanu, Assistant Professor**, who ensured proper coordination and effective learning throughout the visit.

The main objective of this visit was to provide students with practical exposure to power generation processes, especially thermal energy production. Thermal power plants play a crucial role in electricity generation by converting heat energy into electrical energy. This visit helped students understand how large-scale energy production units operate efficiently.

Industrial visits are an integral part of academic learning, as they help students bridge the gap between theoretical knowledge and real-world applications. According to Kolb (1984), experiential learning enhances understanding through direct observation and experience. This visit provided students with valuable insights into the functioning of thermal power plants.

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2. Objectives of the Visit

The key objectives of the visit were:

- To understand the working of a thermal power plant
- To study electricity generation processes
- To observe coal handling and combustion systems
- To understand turbine and generator operations
- To analyze safety measures and environmental practices
- To bridge the gap between theoretical and practical knowledge
- To enhance technical and managerial skills
- To explore career opportunities in the power and energy sector

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3. About the Organization

The **Rajiv Gandhi Thermal Power Plant** is one of the major thermal power stations in Haryana. It plays a significant role in generating electricity for the state and surrounding regions.

Key features of the plant include:

- Large-scale electricity generation capacity
- Use of coal as the primary fuel
- Advanced machinery and control systems
- Focus on efficiency and reliability
- Environmental management systems

The plant contributes significantly to meeting the energy demands of the region.

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4. Overview of Thermal Power Generation

Thermal power plants generate electricity by converting heat energy into electrical energy. The process involves:

- Burning coal to produce heat
- Converting water into steam
- Using steam to rotate turbines
- Generating electricity through generators

Thermal power is one of the most widely used sources of electricity in India due to its reliability and large-scale production capability.

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5. Detailed Visit Experience

5.1 Coal Handling System

Students observed how coal is transported, stored, and fed into the boiler. Proper coal handling ensures efficient combustion.

5.2 Boiler Section

The boiler converts water into high-pressure steam using heat generated from burning coal.

5.3 Turbine Operation

High-pressure steam rotates the turbine, converting thermal energy into mechanical energy.

5.4 Generator Section

The turbine drives the generator, which converts mechanical energy into electrical energy.

5.5 Cooling System

Cooling towers are used to condense steam back into water for reuse in the system.

5.6 Control Room

Students visited the control room, where operations are monitored and controlled using advanced systems.

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6. Safety and Environmental Measures

The plant follows strict safety and environmental protocols:

- Use of protective equipment
- Fire safety systems
- Pollution control measures
- Ash disposal systems
- Regular monitoring of emissions

These measures ensure safe and sustainable operations.

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7. Role of Faculty Coordinators

The visit was successfully organized under the guidance of:

- **Mr. Rajan Sharma, Assistant Professor**
- **Ms. Tanu, Assistant Professor**

They played a vital role in:

- Planning and organizing the visit
- Coordinating with plant authorities
- Guiding students throughout the visit
- Ensuring discipline and safety
- Encouraging interactive learning

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8. Learning Outcomes

The visit resulted in the following learning outcomes:

- Understanding of thermal power generation
- Knowledge of coal-based energy systems
- Insight into turbine and generator operations
- Awareness of industrial safety practices
- Exposure to large-scale power plant operations
- Enhanced technical and analytical skills

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9. Challenges Observed

Students identified several challenges:

- Environmental pollution due to coal usage
- High operational costs
- Maintenance of large machinery
- Waste management (ash disposal)
- Dependence on non-renewable energy sources

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10. Suggestions and Recommendations

Based on observations, the following suggestions are made:

- Adoption of cleaner energy technologies
- Reduction of emissions through advanced filters
- Integration of renewable energy sources
- Improved waste management systems
- Continuous training of workforce

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11. Conclusion

The industrial visit to the Rajiv Gandhi Thermal Power Plant, Hisar, was highly informative and beneficial for the students of TERii. It provided practical insights into power generation processes and industrial operations.

The visit successfully bridged the gap between theoretical knowledge and practical exposure, helping students understand the real-world functioning of thermal power plants. Overall, it was an enriching experience that contributed to students' academic and professional development.

12. References

- Kolb, D. A. (1984). *Experiential Learning*. Prentice Hall.
- Power Generation Industry Reports
- Rajiv Gandhi Thermal Power Plant Official Resources

INDUSTRIAL VISIT REPORT

Technology Education and Research Integrated Institutions (TERii)

Visit to Yamunanagar Sugar Mill, Haryana

Date: 10 July 2025

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1. Introduction

Technology Education and Research Integrated Institutions (TERii) organized an industrial visit to the **Yamunanagar Sugar Mill**, Haryana, on **10 July 2025** for students of **BCA, MCA, BBA, and B.Tech programs**. The visit was conducted under the guidance of **Ms. Priya Sharma, Ms. Bindu, and Ms. Komal**, who ensured proper coordination and smooth execution of the visit.

The primary objective of this visit was to provide students with practical exposure to the sugar manufacturing industry and help them understand the processes involved in converting raw sugarcane into refined sugar. The sugar industry plays a vital role in India's agro-based economy and contributes significantly to employment and industrial growth.

Industrial visits are an important part of experiential learning, allowing students to observe real-world applications of theoretical concepts. According to Kolb (1984), learning through experience enhances understanding and retention. This visit enabled students to gain firsthand knowledge of industrial operations, production processes, and management systems.

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2. Objectives of the Visit

The main objectives of the visit were:

- To understand the functioning of the sugar manufacturing industry
- To study the process of sugar production from sugarcane
- To observe machinery and equipment used in sugar mills
- To understand quality control and production management
- To analyze supply chain and distribution systems
- To bridge the gap between theory and practical knowledge
- To enhance students' technical and managerial skills
- To explore career opportunities in agro-based industries

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3. About the Organization

The **Yamunanagar Sugar Mill** is a well-known agro-based industrial unit engaged in the production of sugar and related by-products. The plant processes large quantities of sugarcane and produces refined sugar along with by-products such as molasses and bagasse.

Key features of the mill include:

- Large-scale sugar production capacity
- Use of modern machinery and processing techniques
- Efficient handling of raw materials
- Production of valuable by-products
- Contribution to local economy and employment

The mill plays a crucial role in supporting farmers and promoting industrial development in the region.

---

4. Overview of the Sugar Industry

The sugar industry is one of the most important agro-based industries in India. It involves the processing of sugarcane into sugar and other products.

Key stages in sugar production include:

- Collection and transportation of sugarcane
- Crushing and extraction of juice
- Clarification and purification
- Evaporation and crystallization
- Centrifugation and drying

The industry also produces by-products such as ethanol, molasses, and bagasse, which are used in various applications.

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5. Detailed Visit Experience

5.1 Sugarcane Handling and Crushing

Students observed how sugarcane is transported to the mill and crushed to extract juice.

5.2 Juice Extraction and Purification

The extracted juice undergoes purification to remove impurities and improve quality.

5.3 Evaporation Process

The juice is heated to remove excess water, converting it into a thick syrup.

5.4 Crystallization

Sugar crystals are formed through controlled cooling and processing.

5.5 Centrifugation and Drying

Crystals are separated from molasses and dried to produce refined sugar.

5.6 By-products Utilization

Students learned about the use of by-products such as bagasse (used as fuel) and molasses (used in alcohol production).

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6. Safety and Hygiene Measures

The sugar mill follows strict safety protocols:

- Use of protective equipment
- Proper machinery handling procedures
- Fire safety systems
- Clean and hygienic working conditions

These measures ensure safe and efficient operations.

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7. Role of Faculty Coordinators

The visit was successfully organized under the guidance of:

- **Ms. Priya Sharma**
- **Ms. Bindu**
- **Ms. Komal**

Their roles included:

- Planning and organizing the visit
- Coordinating with industry officials
- Guiding students during the visit
- Ensuring discipline and safety
- Facilitating interactive learning

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8. Learning Outcomes

The visit provided the following learning outcomes:

- Understanding of sugar manufacturing processes
- Knowledge of industrial machinery and operations
- Insight into agro-based industry management
- Awareness of by-product utilization
- Enhanced analytical and observational skills
- Exposure to real-world industrial environments

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9. Challenges Observed

Students identified several challenges:

- Seasonal availability of raw materials
- Managing large-scale production
- Environmental concerns
- Waste management
- Maintaining consistent product quality

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10. Suggestions and Recommendations

Based on observations, the following suggestions are made:

- Adoption of eco-friendly technologies
- Improved waste management systems
- Increased use of automation
- Efficient utilization of by-products
- Strengthening supply chain management

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11. Conclusion

The industrial visit to the Yamunanagar Sugar Mill, Haryana, on **10 July 2025**, was highly informative and beneficial for the students of TERii. It provided valuable insights into sugar production and industrial management.

The visit successfully bridged the gap between theoretical knowledge and practical exposure, helping students understand real-world industrial processes. Overall, it was an enriching experience that contributed to students' academic and professional growth.

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12. References

- Kolb, D. A. (1984). *Experiential Learning*. Prentice Hall.
- Agro-Based Industry Reports
- Yamunanagar Sugar Mill Industry Resources