



REPORT

Details of Activity:

Name of the Activity	Traffic Management		
Date & Time	28/03/2025 2:15 Pm To 3:15 Pm	Department / Committee	Civil Engineering
Venue	Chatrapati Shivaji Maharaj Chowk, Palghar	No. of Participants	14
Nature of Activity	Site Visit	Mode of Activity	Offline Mode
Name of Activity In-charge	Mr. Basavaraj Nyamagoud	Name of Activity Coordinator	Mr. Basavaraj Nyamagoud
Name and Affiliation of Resource person			

Activity Information:

Objectives	<p>1) To understand the functioning of traffic signal systems: Observe how traffic lights are controlled, their phasing, cycle length, and coordination.</p> <p>2) To study the traffic flow at intersections: Analyze vehicle and pedestrian movements during different times of the day, especially peak hours.</p> <p>3) To observe traffic control devices in use: Identify the use of signs, road markings, signals, and other traffic control measures in place.</p> <p>4) To evaluate the effectiveness of traffic management strategies: Understand how traffic congestion, delays, and road safety are addressed through planning and infrastructure.</p> <p>5) To learn about the role of traffic police and surveillance systems: See how traffic enforcement is supported through personnel and technologies like CCTV cameras.</p> <p>6) To relate theoretical concepts with practical implementation: Apply classroom knowledge of traffic volume studies, signal design, and intersection design in a real-world scenario.</p> <p>7) To assess pedestrian facilities and safety features Examine the provision of pedestrian crossings, footpaths, and their interaction with vehicular traffic.</p> <p>8) To identify challenges and limitations in current traffic systems Note issues such as signal timing inefficiencies, unauthorized parking, or poor signage, and think about possible improvements.</p>
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Target Audience	TE Students of Civil Engineering Department
Methodology	<ol style="list-style-type: none">1) Pre-Visit Planning:<ul style="list-style-type: none">• The visit was scheduled and approved as part of the academic curriculum for the Traffic Engineering course.• Students were briefed by faculty members on what to observe and record during the visit.• Basic knowledge of traffic signals, control devices, and traffic flow patterns was revised before the visit.2) On-Site Observation:<ul style="list-style-type: none">• The team observed traffic movement at the junction during different time intervals.• Real-time traffic behavior including signal timing, pedestrian movement, vehicle flow, and congestion levels were noted.• Special attention was given to the synchronization of signals and the presence of manual traffic control (if any).3) Interaction with Traffic Personnel:<ul style="list-style-type: none">• Students interacted with traffic police and other personnel managing the site to understand operational aspects.• Information was gathered on how traffic violations are handled and how the surveillance system works.4) Data Collection and Documentation:<ul style="list-style-type: none">• Photographs and videos were taken for reference and analysis.• Key observations such as lane discipline, use of traffic signs, and pedestrian safety measures were recorded.• Notes were taken regarding the technology used (e.g., sensors, timers, cameras).5) Post-Visit Analysis:<ul style="list-style-type: none">• Observations were discussed in groups and compared with theoretical concepts from class.• Strengths and weaknesses of the current traffic management system were identified.• Suggestions for possible improvements were discussed under faculty guidance.
Outcomes	<ol style="list-style-type: none">1) Enhanced Understanding of Traffic Signal Systems: Students gained practical knowledge of how traffic signals operate, including signal phasing, cycle time, and coordination at a busy junction.2) Real-Time Observation of Traffic Flow: By observing peak and non-peak hour traffic, students were able to study how traffic volume affects signal operation and flow efficiency.3) Awareness of Traffic Control Measures: The visit helped students identify various traffic control devices such as signs, markings, pedestrian crossings, and surveillance systems.



	<p>4) Interaction with Field Personnel: Discussions with traffic police and other personnel provided insights into ground-level traffic enforcement and the challenges they face.</p> <p>5) Practical Application of Classroom Concepts: The visit bridged the gap between theoretical learning and real-world implementation, helping students connect their academic knowledge to actual traffic engineering practices.</p> <p>6) Critical Thinking and Problem Identification: Students were encouraged to critically analyze the traffic system, identify potential issues like signal delays or pedestrian safety concerns, and suggest improvements.</p>
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SWOT Analysis of the Event:

Strength	Weakness	Opportunity	Threats
<ul style="list-style-type: none"> • Well-Functioning Traffic Signals: Automated signals were observed to be functional and properly phased for different directions and pedestrian crossings. • CCTV Surveillance: Presence of surveillance cameras enhances traffic monitoring and supports enforcement of traffic rules. • Traffic Personnel Support: Traffic police present during peak hours helped in managing traffic flow and emergencies. • Clear Road Markings and Signage: Lane markings, 	<ul style="list-style-type: none"> • Limited Pedestrian Facilities: Pedestrian infrastructure such as footpaths and signals may be insufficient or not adequately followed by users. • Manual Intervention Required: Heavy dependence on traffic police during peak hours suggests that the automated system might not handle all conditions effectively. • Lack of Adaptive Signal Systems: The signal system observed was timer-based rather than sensor-based, which can lead to delays during low-traffic periods. • Unauthorized Parking: Occasional encroachment and illegal parking near the intersection affect traffic movement. 	<ul style="list-style-type: none"> • Implementation of Smart Traffic Systems: Introducing sensor-based or adaptive signal controls could optimize traffic flow. • Public Awareness Campaigns: Educational programs can improve adherence to road rules, especially pedestrian safety. • Upgrading Infrastructure: Enhancing footpaths, signage, and adding countdown timers at signals can improve user experience and safety. • Integration with Urban Mobility 	<ul style="list-style-type: none"> • Rapid Urbanization: Increasing traffic volume due to urban growth can lead to congestion if not addressed proactively. • Non-Compliance by Road Users: Lack of discipline among some drivers and pedestrians could reduce the effectiveness of traffic systems. • Weather Conditions: Heavy rains or fog may impact signal visibility and traffic flow, especially in monsoon season. • System Failures: Power outages or technical failures in the signal

directional signs, and pedestrian crossings were visible and mostly in good condition.		Plans: The junction can be developed further under smart city or traffic decongestion initiatives.	systems can disrupt traffic management.
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Geo-Tagged Photo



Proofs & Documents Attached (Tick mark the proofs attached):

✓	Notice / Brochure		Feedback Form
✓	Attendance list		Feedback Analysis
✓	Photos		Media News Details
✓	Certificate		Any Other

Prepared By		Checked By
Name & Dated Signature of Coordinator	Name & Dated Signature of Head/Committee In charge	Name & Dated Signature of IQAC Coordinator
Mr. Basavaraj Nyamagoud		

Date of Activity: 28/03/2025



St. John College of Engineering and Management

Autonomous Institute

(A Christian Religious Minority Institution)

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Date of Report Submission:

Reason for delay if any:

Approved By

Principal Signature

Date: 28/03/2025