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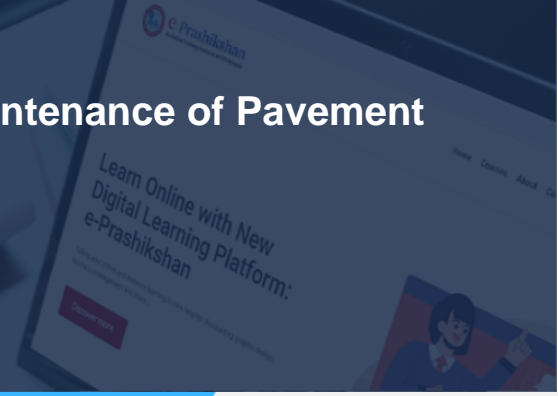
**CEEE-3/2025-2026**

**Structural Evaluation and Maintenance of Pavement**

**23-06-2025 to 27-06-2025**

**NITTTR Bhopal**

<https://erp.nitttrbpl.ac.in/poc2025/?id=regCEEE-3>



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## Rationale

Pavements form the backbone of any transportation network, and their performance significantly influences road safety, user comfort, and economic efficiency. Over time, pavements deteriorate due to environmental factors, material fatigue, and traffic loading. Proper structural evaluation and timely maintenance are critical to ensure their longevity and cost-effectiveness. This short-term training programme is designed to equip professionals, engineers, and researchers with knowledge and practical tools for assessing pavement conditions, interpreting evaluation data, and applying effective maintenance strategies. The course bridges the gap between theoretical understanding and real-world application, aligning with current practices and technological advancements in pavement management.

## Programme Outcomes

- i. Explain the fundamental concepts of pavement structure and failure mechanisms.
- ii. Apply non-destructive testing techniques for pavement evaluation.
- iii. Analyze structural capacity and performance using field and lab data.
- iv. Develop strategies for routine and preventive maintenance.
- v. Design maintenance and rehabilitation plans based on evaluation outcomes.
- vi. Incorporate sustainability and cost-efficiency in pavement maintenance planning.

## Programme Content

Flexible, rigid, and composite pavement, Pavement distress types and causes, Factors affecting pavement performance, Non-destructive testing methods: Falling Weight Deflectometer (FWD), Ground Penetrating Radar (GPR) & Benkelman Beam Deflection, Interpreting field data from evaluation tools, Preventive vs corrective maintenance, Selection criteria for maintenance techniques, Materials and methods for pavement maintenance.

## Target Group

Faculty of Civil Engineering and allied disciplines

## Coordinator & Co-Faculty

Dr. Subrat Roy

Professor

Department of Civil and Environmental Engineering Education

[sroy@nitttrbpl.ac.in](mailto:sroy@nitttrbpl.ac.in)

Expert



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**National Institute of Technical Teachers' Training and Research (NITTTR)**  
(Deemed to be university under distinct category), Ministry of Education, Government of India,  
Shamla Hills, Shanti Marg, Bhopal-462002 (M.P.)

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