



This 5-day course is specially designed to give a complete coverage on important issues on road infrastructure planning, design, materials used and development under sustainable conditions. The course also aims to cover issues and challenges in both flexible and rigid pavements. Mixed traffic flow is highly complex in nature. Hence emphasis will be given on traffic operations and demand modelling considering wide variations in road geometric and traffic flow parameters. Traffic data collection has been a major challenge in India, thus demonstration on development of new techniques with driving behavior under autonomous era has been included. In the last decade special emphasis is being given on traffic management during construction of road projects. So, road safety audit and evaluation of audit implementation will be presented elaborately.

## Course Coverage

- Sustainability in Road Infrastructure Development
- Flexible Pavement Design: IRC Method
- Concrete Pavement: Issues and Challenges
- Traffic flow and demand analysis under mixed traffic conditions
- Operational analysis of motorized and non-motorized mode of transportation
- Advances in Traffic Data Collection Methodology: Autonomous Driving Era.
- Traffic management and Construction Zone Safety for Road Projects; Road Safety Audit and Evaluation of Audit

### Key Speakers

Prof. Satish Chandra, Director CSIR-CRRI, Delhi  
Prof. K.S. Reddy, IIT Kharagpur  
Prof. Mahabir Panda, NIT Rourkela  
Prof. Manoranjan Parida, IIT Roorkee  
Dr. S. Velmurugan, Chief Scientist, CSIR-CRRI  
Prof. B. Maitra, IIT Kharagpur  
Prof. S. Maitra, IIT Kharagpur  
Prof. A. K. Maurya, IIT Guwahati  
Prof. Umesh Chandra Sahoo, IIT Bhubaneswar  
Prof. Prasanta Kumar Bhuyan, NIT Rourkela

### Chairman and Convener

**Prof. C. R. Patra**

Head, CE Dept. & TEQIP III Coordinator

### Patron

**Prof. Animesh Biswas**

Director, NIT Rourkela

**NATIONAL INSTITUTE OF TECHNOLOGY  
ROURKELA**

**Announces Online Short-Term  
Course**

*on*

**ADVANCES IN  
TRANSPORTATION  
ENGINEERING  
(ATE 2020)**

**23<sup>rd</sup> – 27<sup>th</sup> September 2020**

**Sponsored By:**



**Coordinators**

**Prof. Prasanta Kumar Bhuyan  
Prof. Mahabir Panda**



**Organized By:**

**Department of Civil Engineering  
NATIONAL INSTITUTE OF TECHNOLOGY  
ROURKELA – 769008**



## Introduction

After economic liberation from early 1990's, traffic has been increasing very fast on Indian roads. Thus, the demand for road infrastructures is also increasing. The supply (road infrastructure) is not able to meet the demand. Therefore, proper planning, design and development of road infrastructures are essential components for a country like India to grow in a sustainable manner. The issues and challenges involved in using new construction materials and applying new design techniques for both flexible (bituminous) and rigid (cement concrete) pavements need to be assessed over time. Infrastructure development using less polluting locally available material can fulfil our need for sustainability. With ever increase in number of vehicles, road accidents are increasing thus causing huge loss to the nation. Traffic management during construction is a major challenge in India and the issue can be aptly addressed by development and implementation of new technologies. Road safety audit has become a popular stand-alone method for all major highway projects, however safety audit itself needs evaluation by experts from the related field. In order to address the above issues a huge amount of reliable data sets is required for analysis, modelling and prediction purpose. Automated data collection techniques can fulfil this requirement. Autonomous driving is another emerging area in its development stage before full scale implementation.

## Online Registration Form

Webinar registration has been done through online. Please follow the link for online registration.

<https://forms.gle/yJuV76nq7qjGxDw47>

## Online Account Details

Account No: 37537622247

Account Name: DIRECTOR NIT  
ROURKELA

IFSC No: SBIN0002109

Branch: State Bank of India, NIT Campus  
Rourkela

## Venue

The course will be organized by the Department of Civil Engineering at the National Institute of Technology (NIT), Rourkela. It is one of the premier national level institutions for technical education in the country and is funded by the Government of India. NIT Rourkela was established as Regional Engineering College (REC) Rourkela on 15 August 1961. It is situated at the eastern end of Rourkela steel city, beyond Sector-1 over an area of 650 acres of land. NIT Rourkela has twenty one academic departments which offer B.Tech, M.Tech and PhD programs in various areas of engineering and technology. More than 360 faculties and 6000 students are involved in the teaching learning process. The Institute is a participant of the Technical Education Quality Improvement Programme-III of Government of India.

## Registration

| Category   | Registration Fee in INR |
|--|-------------------------|
| Faculty Members from Engineering Institutes                | 600/-                   |
| Engineers from Industry/ Scientists from R&D Organizations | 1000/-                  |
| Research Scholars/ PG & UG Student                         | 400/-                   |

## Important Dates

**Last Date of Online Registration: 21/09/2020**

**Webinar: 23/09/2020 to 27/09/2020**

## Contact Us

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