



राष्ट्रीय प्रौद्योगिकी संस्थान कालिकट
National Institute of
Technology Calicut



AICTE Training and Learning (ATAL) Academy Sponsored
Faculty Development Programme on
PM GatiShakti Thrust Areas

STRATEGIC MANAGEMENT IN RAIL AND ROAD TRANSPORTATION SYSTEM

March 06
to
March 10,
2023



Organised by
Centre of Excellence in Logistics and Supply Chain Management
National Institute of Technology Calicut
NIT Campus P.O, Kozhikode – 673601, Kerala
<https://nitc.ac.in/coelscm/>

Coordinator | Co-Coordinator
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CENTRE OF EXCELLENCE IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT, NIT CALICUT

The Centre of Excellence in Logistics and Supply Chain Management (CoELSCM) has been launched at NIT Calicut focusing on the Logistics Human Resource Development and Capacity Building to the realization of the objectives of the PM Gati Shakti scheme.

This Centre of Excellence is a multidisciplinary centre that works across various research groups such as Industrial Engineering, Transportation Engineering, Remote Sensing and Geospatial Technology, Construction Management, and Cyber Security. Faculty members of NIT Calicut in the above research groups and their research team will be a part of this centre. This team will focus on new and emerging technologies with multidisciplinary and translational research relevant to achieving the objectives of the PM Gati Shakti scheme to improve the operational efficiency of the supply chain and minimize logistics costs. The centre has initiated steps in disseminating advanced knowledge and promote digitisation, analytics, IoT applications, Artificial Intelligence and Machine Learning applications among the practising professionals in the organizations involved in the logistics sector and will share the best practices. More about the centre is available at <https://nitc.ac.in/coelscm/>

MISSION, VISION, AND OBJECTIVES OF THE CENTRE OF EXCELLENCE

Mission: Create an association between academia and industry to promote cutting-edge research, knowledge creation, ground breaking innovations and capacity-building programmes in the Indian logistics and supply

chain sector in order to make it effective and efficient.

Vision: To transform Indian logistics and supply chain sector to boost the Indian economy's transformation into a global economic power.

OBJECTIVES

- Strengthen research in the area of logistics and supply chain sector focusing on capacity building to promote PM Gati Shakti Scheme.
- Enhance competitiveness of the Indian transportation and logistics industry
- Build a platform for knowledge creation and exchange in the logistics and supply chain domain.
- Establish research collaborations with professional bodies, academic institutions and industries for formulating innovative solutions in logistics and supply chain domain.

ABOUT THE INSTITUTE AND CALICUT CITY

The Institute was initially established as Calicut Regional Engineering College (CREC), which was the forerunner to the present National Institute of Technology, Calicut (NITC) in 1961. NIT Calicut is one of the pioneering engineering institutions of the country, which has contributed many outstanding engineers in India and abroad. It offers eleven UG programs, Thirty PG programmes, and doctoral programmes in various fields of Science, Technology, Engineering, Management, Planning and Business Administration. Calicut is a major knowledge Hub of Kerala and is the hometown of many institutions of national importance including NITC, IIMK, DOEACC, CWRDM etc. Calicut is connected by direct trains/road/air to all major cities in India. NITC is located about 22 kilometers north-east of Calicut City.

PROGRAMME DURATION AND PEDAGOGY

The Online Faculty Development Programme is for a period of one week and will focus on concepts/theory/research avenues/ emerging trends in the strategic management in rail and road transportation system.

Minimum 80% attendance is mandatory for issuing the certificate. Assessments will be made every day and an overall assessment on the concluding day of the FDP.

Expected Outcome:

Comprehensive faculty training on the strategic management in rail and road transportation system. The aim of this programme is to introduce the management concepts in efficient management of rail and road systems. An overview of the transportation systems in India and its contribution to the Indian economy will be highlighted. The issues in the road transportation sector with specific emphasis on safety and capacity will be explained. The details of freight demand estimation and modelling of freight demand will be emphasised. The use of Intelligent Transportation Systems (ITS) in solving the problems associated with rail and road transport systems will be discussed. The programme will also cover the marketing Strategies for freight traffic on Indian Railways, Railway Operations Management and Models for Rail Freight Car Fleet Management.

At the end of the programme, the participant will be able to

1. Identify the challenges associated with rail and road transportation systems in India;
2. Develop solutions to solve the problems associated with rail and road transportation systems;
3. Estimate the demand for freight transported using rail and road transport systems;
4. Identify the use of ITS in solving the freight transport related problems in India.

COURSE CONTENTS

The course will cover the following topics related to strategic management in rail and road transportation system.

I. Introduction

- Overview of Transportation Systems
- National Road Transport Policy
- National Rail Transport Policy

- Overview of Freight Sector in India
- Transport System and Economic Development in India
- Issues in Freight Transportation: Capacity, Resilience and Energy and Environmental Issues
- Multimodal Freight Terminals
- Urban Logistics

II. Road Transportation

- Road based transport systems
- Issues in road based transport: Emphasis on Capacity and Safety
- Freight Demand Estimation
- Freight Demand Modelling
- Emerging Technologies: ITS

III. Rail Transportation

- Railway Operations Management
- Marketing Strategies for Freight Traffic on Indian Railways
- Models for Rail Freight Car Fleet Management

RESOURCE PERSONS

The sessions for the programme will be offered by faculty members from IITs, IIMs, NITs, Practising Engineers and other renowned persons working in the field. There is no registration fee for the participants.

REGISTRATION

Those interested should first Sign Up to the ATAL portal, using the given link, after entering the mandatory details: <https://atalacademy.aicteindia.org/signup>. After logging-in to your profile, choose the tab "FDPs/CPDPs/Workshops" in your personal profile, on the left side of the dashboard. Using the drop down option in the field "Select Type", choose "Others". Moreover, using the drop down option in the field "Select Month", choose "All". The details of this FDP will be displayed. Click on the "+" button on the right side of the panel, to apply for this FDP, on or before **March 01, 2023**. There is no registration fee for the participants. Certificates will be provided after the successful completion of FDP. For the registration link, please scan the QR Code below.



**For more details,
CONTACT**

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