

**Five Day (Online) Faculty Development Programme on
“India’s Strategic Transport Infrastructure Development Projects and Programs”**

August 16 - 20, 2021

ATAL Workshop ID - 1003

Organised by



Department of Civil Engineering

National Institute of Technology Karnataka, Surathkal

Post-Srinivasnagar, Mangalore - 575 025

Dakshina Kannada District, Karnataka

Sponsored by



AICTE Training And Learning (ATAL) Academy

About ATAL

All India Council for Technical Education (AICTE) through its newly established AICTE Training And Learning (ATAL) Academy have started unique faculty development programs in various thrust areas of modern technology. ATAL Academy successfully conducted 5 days face to face 190 FDP (Faculty Development programs) in nine thrust areas for A/Y 2019-20 and approximately 10000 faculty members, Research scholars and PG students participated. The training programs were well received throughout the country with participation from premier institutions like IITs, NITs, IIITs. The coordinators who were behind the programs were also highly qualified from IITs, NITs, IIITs. Post COVID-19, ATAL Academy has gone totally online from registration of faculty members to certificate disbursement mechanism through the portal. In 2020-21, 1000 online FDP are being conducted and more than one lakh participants have already participated including faculty, Research Scholar, PG students, CBSE teachers and Industry persons. The online FDP of 20-21 has been recognized as a world record by the World Book of Record, London. It is also important that FDP sessions are recorded and available on the portal so that anyone can learn in future.

About the Institute

National Institute of Technology Karnataka (NITK), Surathkal has established itself as one of the top technological institutions in India & is declared as an Institute of National Importance under the NIT Act 2007. Since its inception in 1960 as the Karnataka Regional Engineering College (KREC), the institute is considered a premier centre engaged in imparting quality technological education and providing support to research and development activities. The institute has a long tradition of research for several decades in both traditional and modern areas of engineering and science. In the recent India Ranking-2020 announced by the National Institutional Ranking Framework (NIRF), NITK secured 13th position in the Engineering Discipline and 33rd position in the Overall category. Another academic distinction of the institute is that the National Board of Accreditation (NBA) has granted accreditation to all the nine undergraduate programmes and 18 postgraduate programmes offered by the institute.

About the Department

The Department of Civil Engineering offers an undergraduate programme in Civil Engineering; five postgraduate programmes in the streams of Construction Technology and Management, Environmental Engineering, Geotechnical Engineering, Structural Engineering, and Transportation Engineering; research programmes leading to master and doctoral degrees. The Department has well-experienced faculty, skilled technical staff and well-equipped laboratories. It is a recognized QIP centre for the training of faculty from other

engineering colleges and polytechnics. The Department has always been at the forefront in taking up R&D initiatives and Industrial Consultancy assignments.

Patrons

Prof. Karanam Uma Maheshwar Rao, Director, NITK Surathkal.

Prof. Ananthanarayana V. S., Deputy Director, NITK Surathkal.

Advisory Committee

Prof. U. Sripathi Acharya, Dean (Research and Development), NITK Surathkal.

Prof. B.R.Jayalekshmi, Professor and Head, Department of Civil Engineering, NITK Surathkal.

Organising Committee

Faculty Members, Department of Civil Engineering, NITK Surathkal.

Coordinator

Dr. Suresha S.N., Associate Professor, Department of Civil Engineering, NITK Surathkal.

Email Id: sureshasn@nitk.ac.in

About the FDP

The faculty development programme (FDP) titled “India’s Strategic Transport Infrastructure Development Projects and Programs” was designed under the main thrust area ‘Engineering’ and sub-thrust area ‘Strategic Civil Infrastructure’.

The government of India, in the recent past, initiated a number of strategic infrastructure development projects and programs connected to roads, railways, airports, ports and harbours, and inland waterways. The following section summarises some of the important strategic transport infrastructure development projects initiated by some of the ministries of the Government of India.

The ***Ministry of Road Transport and Highways***, under the **Bharatmala Pariyojana**, has taken up a detailed review of the National Highways network with a view to developing the road connectivity to Border areas, development of Coastal roads including road connectivity for Non-Major ports, improvement in the efficiency of National Corridors, development of Economic Corridors, Inter Corridors and Feeder Routes along with integration with Sagarmala, etc. The ***Ministry of Indian Railways*** has come up with a draft **National Rail Plan** with a vision “To develop capacity, infrastructure and enhance rail freight share ahead of the demand. Develop capacity by 2030 that will cater to growing demand up to 2050”. The ***Ministry of Ports, Shipping and***

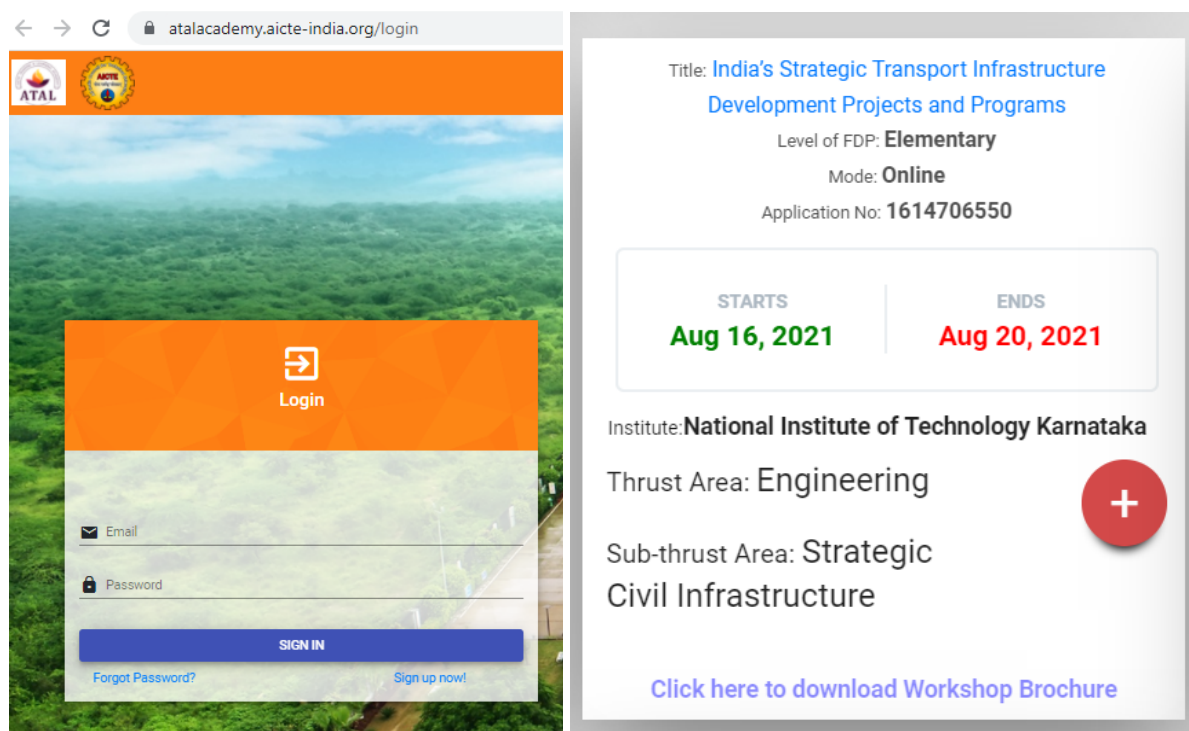
Waterways initiated the ambitious **Sagarmala Programme** which aims to promote port-led development in the country. The programme broadly consists of five components (i) Port Modernization & New Port Development, (ii) Port Connectivity Enhancement, (iii) Port-linked Industrialization, (iv) Coastal Community Development, and (v) Promotion of Coastal Shipping & Inland Waterways in India. The union government through its Ministry of Rural Development gave impetus to improve the road network in rural areas. The **Prime Minister Gram Sadak Yojana (PMGSY) - Phase III** envisages consolidation of the existing Rural Road Network by up-gradation of existing through Routes and Major Rural Links that connect habitations to (i) Gramin Agricultural Markets (GrAMs) (ii) Higher Secondary Schools, and (iii) Hospitals. The **National Civil Aviation Policy** of the *Ministry of Civil Aviation* is aimed to “enhance regional connectivity through fiscal support and infrastructure development”. In support of Civil Aviation, the NITI Ayog Strategy for New India @75 proposed the following measures (i) enhancement of aviation infrastructure, (ii) increase investment in the sector through financial and infrastructure support, (iii) address shortage of skilled manpower, (iv) promote air cargo growth, (v) ease the regulatory environment for airports, and (vi) prioritize aviation safety.

In view of the above, it is important to have effective communication of various nation-building activities among all the important stakeholders. The impetus is also on capacity building in this area of specialisation. The Faculty members who are engaged in teaching courses related to infrastructure engineering, especially civil infrastructure needs to have up-to-date knowledge of various strategic infrastructure development projects and programmes in the country, and the knowledge of the same needs to be disseminated to the would-be Engineering graduates. Hence, the proposed FDP is aimed to impart knowledge on various ongoing and proposed strategic transport infrastructure development projects and programmes in the country. The specific objectives of the FDP are as follows:

1. To impart the knowledge of various road projects, programmes and policies including Bharathmala, SARDP, PMGSY-III, Green Highway Policy.
2. To impart the knowledge of four-stage transport planning.
3. To bring awareness to new materials for sustainable road/highway development.
4. To introduce the concepts of road safety audit and highway capacity assessments.
5. To bring awareness on the Maritime developmental activities, particularly on demand-capacities of major ports of India, various projects under the Sagarmala Program, and inland waterways.
6. To bring awareness on the preparation of detailed project reports and the role of project management consultants in road projects.
7. To impart the knowledge of guidelines for the design of bus rapid transit systems for Indian cities.
8. To impart the knowledge of planning and design of rural roads.
9. To bring awareness to the national rail plan with a focus on high-speed rail (HSR) network, high-density network (HDN), highly utilized networks (HUN), and dedicated freight corridor (DFC).

Participation

The FDP is offered online mode and open to all the faculty members of the AICTE approved institutions, research scholars, PG Scholars, participants from Government, Industry (Bureaucrats/Technicians/Participants from Industry etc.). The total number of seats available is 200 and the participation from the NITK is restricted to 30%. To apply for the FDP, interested participants have to register online at <https://atalacademy.aicte-india.org/login>.



The image shows a screenshot of the login page for the FDP (Faculty Development Program) on the website atalacademy.aicte-india.org/login. The page features a green background with a forest image. The login form includes fields for Email and Password, a 'SIGN IN' button, and links for 'Forgot Password?' and 'Sign up now!'. To the right of the login form is a summary card for the FDP. The card displays the title 'India's Strategic Transport Infrastructure Development Projects and Programs', the level 'Elementary', the mode 'Online', and the application number '1614706550'. It also shows the start date 'Aug 16, 2021' and the end date 'Aug 20, 2021'. The institute is 'National Institute of Technology Karnataka', the thrust area is 'Engineering', and the sub-thrust area is 'Strategic Civil Infrastructure'. A red circular button with a white plus sign is located next to the sub-thrust area. At the bottom of the card is a link to 'Click here to download Workshop Brochure'.

The FDP starts on 16th August 2021 and ends on 20th August 2021. There will be 14 sessions, with each one of two hours duration. One session on any one of them on the following mental & emotional development, stress management, meditation, human values and ethics, health and happiness etc or IKS (Indian Knowledge System) which may be conducted by any spiritual social organizations/Individuals like Art of living or similar organization to promote FIT INDIA Movement and /or (IKS) knowledge about glory of ancient Indian achievements in the various field across the country.

A test shall be conducted by the coordinator at the end of the program. The certificates shall be issued to those participants who have attended the program with a minimum of 80% attendance and scored a minimum of 60% marks on the test. You may also visit the frequently asked question page to explore further. Participants have to make sure that they have the required hardware (Personal computer/Tablet/Smartphone), updated software, and good uninterrupted internet connectivity for the online FDP. It is planned to use any video conferencing solutions like Google Meet or MS Teams or any other similar free tools.

Schedule

Session No.	Particulars of Session	Date	Start Time	MS Teams Link
1.	Strategic Transport Infrastructure Needs and India Transport -Salient points from NITI Ayog Strategy@75 by Dr. Suresha S.N., NITK	16/08/2021	9:00	
-	AICTE Combined Inauguration of FDPs	16/08/2021	11:00	
2.	Importance of Four-stage Transportation Planning by Dr. Varghese George, NITK	16/08/2021	14:30	
3.	Highway Development in India: Major Projects, Programs, and Policies by Dr. Suresha S.N., NITK	17/08/2021	9:00	
4.	Use of New Materials for Sustainable Highway/Road Construction by Dr. A. Veeraraghavan, IITM	17/08/2021	11:15	
5.	An Overview of Manual on Road Safety Audit by Dr.Sreekumar M., NITK	17/08/2021	14:30	
6.	Preparation of Detailed Project Report and Role of PMC in Road Projects by Er. T.R.Lokesh	18/08/2021	9:00	
7.	An Introduction to Indo-Highway Capacity Manual by Dr.Mithun Mohan	18/08/2021	11:15	
8.	Maritime Sector of India: Major Ports, Inland Waterways, Sagarmala by Dr. Suresha S.N., NITK	18/08/2021	14:30	
9.	An Overview of National Rail Plan, and Future of India's Civil Aviation Sector by Dr. Suresha S.N., NITK	19/08/2021	9:00	
10.	Guidelines for the Design of Bus Rapid Transit Systems for Indian Cities by Dr. Raviraj H.M, NITK	19/08/2021	11:15	
11.	Planning and Design of Rural Roads by Dr.A.U.Ravi Shankar, NITK	19/08/2021	14:30	
12.	PMGSY Phase - III and PMGSY Public Database by Dr.Suresha S.N., NITK	20/08/2021	9:00	
13.	Road Safety Audit Case Studies and Hands-on Experience by Dr. Ningappa A.	20/08/2021	11:15	
14.	A Session on FIT INDIA Movement by Shri Shivaram, NITK	20/08/2021	14:30	
	Online Test (Duration: 45 Minutes)	20/08/2021	16:30	

Resource Persons (Experts)

Dr. A. Veeraraghavan, Professor, Department of Civil Engineering, Indian Institute of Technology Madras.

Dr. A. U. Ravi Shankar, Professor, Department of Civil Engineering, NITK Surathkal.

Dr. Varghese George, Professor, Department of Civil Engineering, NITK Surathkal.

Dr. Suresha S.N., Associate Professor, Department of Civil Engineering, NITK Surathkal.

Dr. Raviraj H.M., Assistant Professor, Department of Civil Engineering, NITK Surathkal.

Dr. Sreekumar M., Assistant Professor, Department of Civil Engineering, NITK Surathkal.

Dr.Mithun Mohan, Assistant Professor, Department of Civil Engineering, NITK Surathkal.

Er. T.R.Lokesh, Executive Director, Infra Support Engineering Consultants Pvt. Ltd., Bangalore.

Dr. Ningappa A., former Research Scholar, NITK, Surathkal.