

❖ Overview of the Course:

Transportation sector substantially impacts the natural, built and human environment. Emissions of criteria pollutants and greenhouse gases from the use of fossil fuels have profound impact on human health and the environment. This course will provide an overview and understanding of the basic science behind various physical and operational elements of the transportation sector. The course also provides in-depth coverage of regulatory environments that govern planning, engineering, management and modeling aspects of transportation and air quality. Topics also include control and management of noise from transportation sources and an overview of smart-growth principles that will govern the transportation projects of the 21st century.

❖ Course Objectives:

1. Develop a thorough understanding of transportation and air quality issue as demonstrated by:
 - Outlining the fundamental nature of the impacts of air pollutants
 - Summarizing the clean air regulations and their implications on transportation projects
 - Explaining the impacts of the vehicle, the fuel, weather and travel activity on air quality
 - Identifying various control measures and their effectiveness in managing air quality
 - Defining “conformity” and outlining the role of conformity process in managing air quality
2. Develop working knowledge of transportation air quality modeling using such models as EPA’s MOVES
3. Identify the global warming issues and the role played by transportation sources
4. List basics of environmental policy and outline a typical environmental impact statement of transportation project
5. Acquire basic knowledge on noise impacts of highway transportation
6. Describe elements of sustainable transportation, smart growth, livability concepts in transportation

❖ International Faculty:

Dr. Venigalla is an expert in quantitative methods for transportation planning, air quality, traffic operations, and traffic simulation. His skills include transportation systems analysis encompassing travel demand modeling, traffic simulation, network analysis, and ITS related modeling. He has developed and applied numerous computer models for transportation planning and traffic engineering problems. His research work in transportation air quality has received national acclaim. He is registered professional engineer in the Commonwealth of Virginia.

Mohan Venigalla brings over 30 years of industry, research and teaching experience to Masons programs. Prior to joining Mason, **Dr. Venigalla** most recently served as a Senior Transportation Systems Engineer in Wilbur Smith Associates Transportation Modeling Group, located in Columbia, SC. **Dr. Venigalla** earned his doctorate from the University of Tennessee in 1994. His research has been exceptional. **Dr. Mohan** was the 1992 Student of the Year, as awarded by the US Department of Transportation. In 1996, he received the Pyke Johnson Award from the National Research Council for the best research paper in transportation planning. After receiving his Ph.D., **Dr. Venigalla** served as a Transportation Systems Engineer at the Volpe National Transportation Systems Center in Cambridge, MA, working in both the ITS and Air Quality groups.

❖ Eligibility Criteria:

- Executives, engineers and researchers from Industries, service and government organizations including R&D laboratories.
- Student at all levels (B.Tech / M.Plan / M.Arch / M.Tech/ Ph.D) or faculty from reputed academic institutions and technical universities.

❖ How to Process:

Stage-1: Web Portal Registration:

Visit <http://www.gian.iitkgp.ac.in/GREGN/index> and create login User ID and Password. Fill up the blank registration form and do web registration by paying Rs. 500/- online through Net Banking / Debit / Credit card.

This provides the user with life time registration to GIAN portal and enroll in any number of GIAN courses offered.

❖ Stage-2: Course Registration:

Login to the GIAN portal with the user ID and Password already created in Step 1. Click on Course Registration option at the top of Registration Form. Select the Course titled “Transportation and The Environment” from the list and click on Save option. Confirm your registration by clicking on Confirm Course.

❖ Course Fee (Excluding Lodging & Boarding):

- **For Students from India :** **Rs.1000/-**
- **For Faculty/Scientists/Industry from India**
 - Faculty (Internal & External) & Scientists from R&D Labs Participation **Rs. 2000/-**
 - Persons working in Industry/ Consultancy firms **Rs. 5000/-**
- **For Participants from abroad**
 - Students **USD 50**
 - Faculty/ Scientists/Persons from Industry & Consultancy firms **USD100**

The above fee includes all instructional materials, computer use for tutorials, free internet facility, session tea & snacks. The participants from industry / research organisations / academic institutions will be provided with twin sharing accommodation on payment basis in the Institute Visitors’ Block / DASA Hostel subject to the availability. Students from other institutes will be provided accommodation in Student Hostels, on payment basis.

○ Lodging and Boarding Charges:

- Students **Rs.1000/-**
- Industry/Faculty/Scientists **Rs.4000/-**

❖ Selection and Mode of Payment:

Selected candidates will be intimated through e-mail. They have to remit the necessary course fee to the Bank as per the details given below. Outstation participants requiring accommodation and boarding facilities have to pay Rs. 1000/- (students)/ Rs 4000/- (Industry/Faculty/Scientists/) in addition to the course fee.

Account Name GIAN NITW
Account No. 62447453600
Bank State Bank of India
Branch NIT Branch (NIT Campus)
Branch Code 20149
IFSC SBIN0020149
MICR Code 506004011
SWIFT Code SBININBB018

Candidates registering early will be given preference in short listing process. For any queries regarding registration of the course, please contact the Course Coordinator:

Prof. CSRK Prasad
Principal Coordinator
Transportation Division,
Department of Civil Engineering,
NIT, Warangal - 506 004 India
Voice: 91-870-2462117(O)
Cell: 91-9440 347 348
E-mail: csrknitw@nitw.ac.in
csrknitw@yahoo.com

Dr. S. Shankar
Co - Coordinator
Transportation Division
Department of Civil Engineering,
NIT, Warangal - 506004, Telangana
Tel: 0870 -2462119 (O)
Cell: +91 9849102935
Email: ss@nitw.ac.in

❖ About GIAN Programme:

Ministry of Human Resource Development (MHRD), Government of India (GoI) has launched an innovative program titled "Global Initiative of Academic Networks (GIAN)" in higher Education, in order to garner the best international experience. As part of this, internationally renowned Academicians and Scientists are invited to augment the Country's academic resources, accelerate the pace of quality reforms and elevate India's scientific and technological capacity to global excellence.

❖ About the Institute and Warangal:

National Institute of Technology, Warangal (NITW) (formerly known as RECW) is, the first among 31 NITs, established in 1959. Over the years, the Institute has established itself as a premier Institution in imparting technical education of a very high standard, leading to B.Tech, M.Sc, MCA, MBA, M.Tech and Ph.D. programmes in various specializations of Science, Management and Engineering streams. Warangal is known for its rich historical and cultural heritage. It is situated at a distance of 140 km from Hyderabad. Warangal is well connected by rail and road. National Institute of Technology, Warangal campus is 3 km away from Kazipet railway station and 12 km away from Warangal railway station.

❖ About the Department:

The Department of Civil Engineering offers B.Tech programme in Civil Engineering, 7 M.Tech programmes including Transportation Engineering and PhD programme. The Department is a recognized QIP centre since 1978. The Department has well established and well equipped laboratories. The Department has experienced faculty engaged in teaching, research, capacity building activities and industry extension services. Faculty members represent several policy making and professional bodies. The Department has liaison with reputed industries and R&D organizations.

Transportation Engineering program was introduced in the year 1968. This is the first Institution in India to have started a full-fledged M.Tech Degree Program in Transportation Engineering under the able guidance of Prof. Martin Ekse of Washington State University, USA, Prof. V.V. Sylyanov of Moscow Automobile and Road Construction Institute, USSR, and other distinguished experts in India.



A Five Day GIAN Course on **Transportation and the Environment**

August 06 – 10, 2018

Call for Registration and Participation

International Faculty

Prof. Mohan Venigalla

**Civil, Environmental and Infrastructure Engineering
Department, George Mason University,
Fairfax, VA, USA**

Course Coordinators

**Prof. CSRK Prasad
Dr. S. Shankar**

**Transportation Division
Department of Civil Engineering
National Institute of Technology
Warangal, Telangana- 506004**