#### STEPS FOR REGISTRATION

Please follow the steps below for registering in the GIAN program: "EFFECTIVE ROAD SAFETY PRACTICES"

**Step 1:** Register at the GIAN portal using the link: <u>http://www.gian.iitkgp.ac.in/</u> and by clicking on 'Course Registration/ Participant Login.'

**Step 2:** It shall state –'Registration to the portal is one time affair and will be valid for life time of GIAN. Once registered in the portal, an applicant will be able to apply for any number of GIAN courses as and when necessary. One time non-refundable fee of 500 /- INR will be charged for this service.

Step 3: Once done with registration, please select the course "EFFECTIVE ROAD SAFETY PRACTICES" from the list of courses and confirm it.

Step 4: Send the copy of registration details from GIAN website to *gian.roadsafety@gmail.com.* 

\*Confirming the course via email is mandatory.

Last Date of Registration: June 30, 2018

#### REGISTRATION FEE

Students	2000 /- INR	
Academician	5000 /- INR	
Participants from Industry/	10000 / INP	
Research Organizations	10000 /- INK	
Participants from abroad	\$ 250 USD	

Fee includes lunch, tea and snacks on all workshop days. Accommodation can be arranged by extra payment.

#### SELECTION AND MODE OF PAYMENT

Selected candidates will be intimated through e-mail. For payment please consider any of the following options: **1.** DD in the favour of "**Director, SVNIT-CCE, Surat**"

- Payable at Surat
- 2. Bank Transfer

Account Name	Director, SVNIT - CCE
Account No	37030749143
Bank	State Bank of India
Branch	SVRCET Surat
Branch Code	003320
IFSC Code	SBIN0003320
MICR Code	395002012
SWIFT Code	SBININBB260

In case of any queries, please feel free to contact the Course coordinators.

#### COURSE COORDINATOR

Dr. Shriniwas S. Arkatkar Civil Engineering Department, SVNIT, Ichchhanath, Surat, Gujarat, Pin – 395007. E-mail: <u>sarkatkar@ced.svnit.ac.in</u> Phone: 0261-2201825 (O) Mobile: 08140252777

#### INTERNATIONAL FACULTY

Prof. Srinivas S. Pulugurtha Graduate Program Director, Department of Civil & Environmental Engineering, The University of North Carolina, USA



Prof. Pulugurtha is currently working as faculty & Graduate Program Director of the Department of Civil & Environmental Engineering at The University of North Carolina at Charlotte (UNC Charlotte). He also directs the Infrastructure, Design, Environment and Sustainability (IDEAS) Center on UNC Charlotte campus. He teaches graduate as well as undergraduate courses and conducts research in the area of transportation engineering.

Prof. Pulugurtha has experience working in diverse fields of transportation. They include transportation safety, intelligent transportation systems (ITS), transportation system planning, traffic operations, geographic information systems (GIS) applications, Internet applications, and, artificial intelligence (AI) techniques and operations research applications. His experience and knowledge in computer modelling and adaptation of emerging technologies is germane to development of tools and techniques for quantitative analysis of transportation systems to support decision making.

Dr. Pulugurtha was involved in 72 sponsored projects (7.8M+ dollars in funding) as a principal or co-principal investigator. He has authored/co-authored more than 200 peer reviewed journal papers, conference papers, and research reports. He has made over 150 technical presentations at international, national, regional, and local conferences / meetings. His research accomplishments were recognized with three "best research paper" awards. Furthermore, he advised and mentored 14 Ph.D. students, over 50 M.S. students, and several undergraduate students. He was recognized with the UNC Charlotte College of Engineering Graduate Teaching Award in 2010 for his accomplishments as a mentor, advisor and teacher.

Prof. Pulugurtha is professionally very active and a member of several professional organizations, including ASCE, ITE and TRB. He served as the member of several technical committees, including Chairing ASCE T&DI Planning, Economics, and Finance Committee from 2007 to 2016.



# **EFFECTIVE ROAD SAFETY PRACTICES** Prevention is better than Cure



#### INTERNATIONAL FACULTY

Prof. Srinivas S. Pulugurtha Professor and Graduate Program Director Department of Civil & Environmental Engineering The University of North Carolina at Charlotte, USA

#### **COURSE COORDINATOR**

Dr. Shriniwas Arkatkar Assistant Professor Civil Engineering Department S. V. National Institute of Technology Surat 395007, Gujarat, India

#### HOST INSTITUTE

PG SECTION IN TRANSPORTATION ENGINEERING AND PLANNING CIVIL ENGINEERING DEPARTMENT SARDAR VALLABHBHAI NATIONAL INSTITUTE OF TECHNOLOGY SURAT-395007, GUJARAT, INDIA

## **EFFECTIVE ROAD SAFETY PRACTICES**

### **Prevention is better than Cure**

#### **OVERVIEW OF THE COURSE**

To improve the economic competitiveness and the quality of life of citizens, India has made significant investment in the construction and expansion of its transportation network in the last two decades. This expansion is planned to continue in the future. Considering this backdrop, road safety is a critical and high priority issue in India. As per the Ministry of Road Transport and Highways (MORTH) statistics, between 1970 and 2012, the number of road crashes increased by 4.3 times with fatalities and injuries increasing by 9.5 times and 7.3 times, respectively. Despite losing over 3% of National Gross Domestic Product (GDP) each year from road traffic injuries and fatalities, India is yet to have a comprehensive Road Safety and Injury Prevention policy, program or plan of action. Researchers and practitioners concluded that i) the lack of reliable crash data, and, ii) the lack of understanding of crash causal factors (largely due to inadequate data) are the major challenges faced in India. The situation arises with very few resources being utilized into understanding and preventing road traffic injuries/fatalities, than required. The lack of action also results from the lack of coordination among the stakeholders as well as from the lack of initiative to improve education of road users, upgrade highway design, and strengthen enforcement mechanisms. To change the status quo, the main goal is to establish a systematic crash data collection system involving traffic police and hospitals, leading to in-depth crash investigation and formulation of suitable policies and interventions.

Hence, it is highly imperative to enhance safety and improve the quality of life of the general public. Enhancing safety is a daunting task and often warrants a multi-dimensional approach involving Engineering, Enforcement, and Education (3-Es). The Engineering module includes design, operation, and maintenance, as well as human (driver) factors, statistical analysis, traffic control and superseding public policies. The safety improvement process involves analyzing large data sets to identify problem areas, provide proactive recommendations and prioritization, and evaluate the effectiveness of the safety improvement projects. Overall, the course is aimed at building capacity of stakeholders while identifying research needs for better practices in India.

#### **COURSE OBJECTIVES**

The primary objectives of the course are:

- Exposing the participants to the fundamentals of the state-of-the-art and the state of practice in road safety programs and evaluation;
- Building in confidence and capability amongst the participants to develop skills to understand crash data and safety related issues using analytical tools and techniques;
- Describing the basic theoretical and practical aspects of road safety programs and evaluation;
- Providing exposure to identify safety problems, hotspots (high crash zones/ locations), and potential safety countermeasures;
- Providing exposure to practical problems and their solutions, through case studies and live discussions on road safety programs; and,
- Enhancing the capability of the participants and developing skills to evaluate the effectiveness of safety improvement projects.



The institute was initially established as Sardar Vallabhbhai Regional College of Engineering & Technology in 1961 and was upgraded as a National Institute of Technology with the status of 'Deemed University' on October 4, 2002. Sardar Vallabhbhai National Institute of Technology (SVNIT) is one of the pioneering engineering institutions of the country, which has contributed by producing many outstanding engineers in India and abroad. It offers seven UG programs, eighteen PG programs, and a Ph.D. program in all disciplines of engineering and applied sciences. Special attention is also given to interdisciplinary researches.

#### **ABOUT THE DEPARTMENT**

The Department of Civil Engineering is one of the pioneering departments of the Institute. The department has highly qualified faculty members engaged in teaching, research, and development with the aim of achieving excellence in their fields. Department also offers PG and Ph.D. programs in the following areas:

- Transportation Engineering and Planning
- Environmental Engineering
- Water Recourses Engineering
- Urban Planning
- Construction Technology & Management (in the pipeline)

The major strength of the department is its multidisciplinary activities like R&D, Consultancy, and Testing.



**COURSE COORDINATOR** 

Dr. Shriniwas S. Arkatkar is currently working as an Assistant Professor in the Department of Civil Engineering at SVNIT Surat. Prior to joining SVNIT Surat, he has worked in the Department of Civil Engineering at BITS Pilani, Rajasthan. He has more than 10 years of experience in teaching, research, and consultancy in the field of traffic and transportation engineering. Before joining BITS, he pursued his Ph.D. at the Transportation Engineering Division. Department of Civil Engineering, IIT Madras. He obtained his undergraduate degree in the area of Civil Engineering in the year 1999 and post graduate degree in the area of Urban Planning in the year 2001, from Visvesvaraya National Institute of Technology (VNIT), Nagpur, India.

Dr. Arkatkar has published more than 150 research papers in the international / national journals and conference proceedings. He has also published one research monograph. He has experience, working in diverse fields of transportation. They include: traffic flow modelling, traffic Safety, intelligent transportation systems (ITS), transportation planning, traffic operations, and traffic simulation applications. He is actively involved currently as Executive Secretary, Transportation Research Group of India (TRG) and as member of SIGs of WCTRS, Indian Roads Congress (IRC), Governing Council member in the Institute of Urban Transport (IUT), MoUD. His research activities were acknowledged with two "best research paper" awards. He is also actively involved in guiding research scholars: Ph.D. and PG students on different topics of traffic and transportation planning.