Swami Keshavanand Institute of Technology, Management & Gramothan

Department of Civil Engineering

### REPORT

#### RTU (ATU) TEQIP-III sponsored Students Workshop on

#### "Design of Traffic Engineering Facilities"

The department of Civil Engineering, Swami Keshvanand Institute of Technology. Management & Gramothan, Jaipur in association with Rajasthan Technical University, Kota organised a RTU (ATU) TEQIP-III sponsored five day students workshop on "*Design of Traffic Engineering Facilities*" from December 25<sup>th</sup> – 29<sup>th</sup>, 2020. More than 750 participants have registered for this workshop from various academic institutes and organisations.

## Design of Traffic Engineering Facilities (DTEF-2020)



The inaugural session on 25<sup>th</sup> December 2020 was graced by the presence of Chief Guest Hon`ble Vice Chancellor RTU Prof. (Dr.) R.A. Gupta, Guest of Honour Prof. (Dr.) Dhirendra Mathur, RTU Event Coordinator Prof. (Dr.) A.K. Dwivedi, Guest Speaker Dr. Ankit Gupta, (IIT-BHU), Director (SKIT) Sh. Jaipal Meel, Principal (SKIT) Prof.(Dr.) Ramesh Kumar Pachar, Mrs. Pooja Jain (Dy Head, Civil Department) and others.

Prof. (Dr.) R.A. Gupta envisaged the importance of Artificial Intelligence in the field of Civil Engineering. He also briefed that internship & projects also play a vital role for engineering graduates. Prof. (Dr.) Dhirendra Mathur talked about the initiatives taken under the aegis of TEQIP-III and future planning. He also said that this workshop will definitely enhance the understanding of Traffic Engineering. Prof. (Dr.) A.K. Dwivedi gave a brief about the event.

In first session, Dr. Ankit Gupta from IIT BHU initiated his lecture by giving a brief introduction about the Basics of Traffic Engineering and the role of a traffic engineer. He laid stress on the basic difference between a traffic manager and a traffic engineer who is more responsible for design of various infrastructural facilities in urban city. Dr. Gupta specially discussed the case of Jaipur city and taught students about various models that they can use in the redesigning and reshaping of the congested places. He also discussed about the importance of relevant IRC codal provisions. He discussed about the job opportunities and the need of traffic engineers in the developing country like India.

During the second session of day one Prof. (Dr.) Rajat Rastogi from IIT Roorkee delivered his presentation on 'Design of Pedestrian Facilities'. He explained the concepts for the design of foot over bridges, subways and other facilities that are essential for the vulnerable road users. He laid stress on the importance of taking pedestrians on priority during the design of transport infrastructure facilities. He added that just widening the roads won't solve the traffic issues rather proper design with stakeholder consultation and perception study would result in the improvement of smart cities.

The distinguished speakers covered relevant topics like "Traffic Studies" and "New Technologies in Road Safety" on second day 26<sup>th</sup> December, 2020. The first session of day second in the workshop was conducted by Ms. Akshika Joshi from Teckkonnect, Gurugram. She took her session on various traffic studies explaining the need for traffic study. She also discussed the various types of studies that can be carried in a congested city like Jaipur and how the data can be analysed using various softwares. She laid stress on the observations to be taken by a traffic engineer at the end. She discussed various case studies of Imphal, Manipur.

## Design of Traffic Engineering Facilities (DTEF-2020)



The second session of the day was conducted by Dr Shrinivas S Arkatkar Associate Professor SVNIT Surat. He discussed the importance of multidisciplinary approach towards solving the issues related to road safety. He discussed about the artificial intelligence, data mining and other techniques that can help traffic engineers to solve the problems related to traffic. He also motivated the students for higher studies related to the transportation engineering domain. Speaker emphasized to make part to Traffic Engineer as Traffic Consultant in policy making.

The first session of third day (27<sup>th</sup> December, 2020) was conducted by Mr. Anirudh Mathur on "Traffic Control Devices." He explained the various types of traffic control devices and how they can be used for enhancing the safety aspects.

The second session of third day was conducted by Mr. Prateek Tak from AECOM, Mumbai on Parking Management Techniques for Mixed use Development. He discussed about the types of parking and how to select the specific type. He also discussed the case study of industrial parking structure at Bhiwadi.

The first session of fourth day (28<sup>th</sup> December, 2020) was conducted by Prof. Akhilesh Maurya from IIT, Guwahati on Traffic Intersection: Planning, Design and Innovation. He explained about the importance of Intersection Design and its various elements. The reduction of conflicts at an intersection and hassle free traffic movement was focussed more.

The second session of day four was conducted by Dr. Ankit Kathuriya from IIT Jammu on 'Design of Bus Rapid Transit System: A brief Overview.' Dr Ankit briefed about the various design aspects and specifications related to Buses plying on the road. He said that all the infrastructures should be designed according to safety and comfort of the users.

# Design of Traffic Engineering Facilities (DTEF-2020)



The first session of day five (29<sup>th</sup> December,2020) was conducted by Mr Jacob George (Eminent Road Safety Expert, ICT Pvt. Ltd.) on 'Road Safety Engineering: A Doable Intervention to Enhance Safety.' He explained the concepts of visibility funnel, safe junction design, crash detection and crash prevention. Mr. Jacob added 'Accidents are not accidental, there is always a contributory factor.' The various case studies of black spots in Jaipur city were highlighted and he motivated the young engineering students to take up the task converting these accident spots into safe places by engineering interventions.

He added the majority intersection of India are like playgrounds and they need proper designing.

In the second session of day five Mr Albin Tharakan (Engineer iRAP India) delivered his talk on 'iRAP Star Ratings and Safe Road Investment Plan.' He discussed about Indian Road Assessment Planning Software which can play a vital role in assessing the safety defects and suggesting measures to solve them. He added the using the technology would help solving many cases of safer roads.

At the end valedictory session was conducted that was graced by the presence of Col. (Retd.) Vipul Vikram Mathur as guest of honour and Prof. (Dr.) A.K. Dwivedi, RTU Event Coordinator. Both the guests congratulated all the participants for showcasing their interest in the workshop. Mr. Anirudh Mathur (Host Event Coordinator), Dr. Lalit Kumar Gupta and Mr. Nishant Sachdeva welcomed all the guests and participants from across the country. He suggested that there is a great scope of working in the domain of traffic facility design in our cities and the outcomes of the workshop will help students in this direction. At the end, the vote of thanks was given by Ms. Pooja Jain, Deputy Head, Civil Engineering Department.