

CE 740 Traffic Engineering Lab-2017

Instructor: Prof. Tom V. Mathew

Course Objective: As the saying goes, seeing is believing and such is the case with traffic engineering. Observation of real traffic in real situations has always been the basis for this form of engineering. Research leading to the continuous improvement of traffic analysis techniques depends on the ongoing collection of data relating to traffic operation. These changes are reflected in collected data, which allow transportation engineers to refine the transportation system to meet the existing mobility desires of society as well as anticipated future needs. Without quality data collection and appropriate analysis, the transportation engineer cannot accomplish this task. The objective of this course is to provide step-by-step techniques for several traffic engineering data collection studies.

Contact Hour: 14:00-17:00 hours on Tuesday at the TSE Lab (5th Floor, VMCC) + Field Survey.

Ex. No.	Name of the Experiment	Date	In-charge
1	Study of Driver Testing Unit, Study of Driver Vision Screen Tester (TSE Lab)	25 th Jul 2017	Remya; Anu, Monalisa, Jithin
2	Spot Speed Study (campus)	1 st Aug 2017	Kritika; Jithin, Remya, Monalisa
3	Measure Travel time and Delay for congested corridor (Field)	8 th Aug 2017	Anu; Anna, Kritika, Monalisa
4	Moving Observer Method Study (Field)	22 nd Aug 2017	Jithin; Monalisa, Remya, Anu
5	License Plate Method of O-D Survey (campus)	29 th Aug 2017	Anu; Kritika, Anna, Jithin
6	Parking Usage Survey (campus)	5 th Sep 2017	Monalisa; Kritika, Remya, Jithin
7	Acceleration deceleration characteristics of vehicles (Field)	19 th Sep 2017	Anna; Remya, Monalisa, Kritika
8	Intersection Volume Study (Field)	26 th Sep 2017	Monalisa; Jithin, Anna, Anu
9	Saturation Flow Measurement (Field)	3 th Oct 2017	Jithin; Anu, Anna, Kritika
10	Intersection Delay Measurement (Field)	10 th Oct 2017	Kritika; Anu, Remya, Monalisa
11	Gap Acceptance Study at Uncontrolled Intersection (Field)	17 th Oct 2017	Monalisa; Anna, Kritika, Jithin
12	Pedestrian Behaviour Study (Field)	24 th Oct 2017	Jithin; Anu, Remya, Anna
	End Sem Exam (TSE Lab)	31 th Oct 2017	

Evaluation: Lab Participation, Report & Viva - 60%, End Sem Test/Viva – 40%.

Instructions:

- 1) Write a brief procedure of the experiment to be conducted before coming to the lab.
- 2) TAs will conduct a brief viva before the lab about the theory of the experiment to be conducted.
- 3) TAs will give a detailed instruction in the lab/field.
- 4) All the raw data entry sheets must be signed by TA before the end of the experiment.
- 5) Groups of five will be formed and everyone should submit the report before Thursday (5 PM) to the concerned TA.
- 6) TAs will evaluate the report and return it on Friday.
- 7) TAs will award marks out of 10 each for viva, participation in the experiment and report.
- 8) Lab manual and report template for each experiment will be provided. Students are encouraged to do additional reading from books/report/web.