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UMY

UNIVERSITAS
MUHAMMADIYAH
YOGYAKARTA



ROAD TRAFFIC SAFETY SUMMER SCHOOL 2023

**Master Program in Civil Engineering
(Road Traffic Safety Specialisation)
Universitas Muhammadiyah Yogyakarta**



TIME TABLE OF SUMMER SCHOOL 2023

Important Date	Agenda	Remarks
1 Feb – 31 March 2023	Preparation of Summer School Materials and Proposed Speakers	
31 March 2023	Finalisation of Materials and Confirmation of Speakers	
15 April 2023	Launching Flayer of Summer School on Road Traffic Safety	
15 April -15 June 2023	Dissemination Flayer and Information of Summer School	
15 June 2023	Official Opening Ceremony of Summer School	Vice Rector of UMY
15 April – 15 August 2023	Registration of Summer School Participants	CP: Mrs. Anita Rahmawati (Coordinator)
28 August – 8 September 2023	Implementation of Summer School in UMY	Coordinator:



PROGRAM PLAN

Day	Topic	Proposed Speaker(s)
1	Opening Day	Ministry of Transportation, European Union Representative
2	Introduction on Road Safety in EU and Asian Countries	Prof. Antonio (UPORTO) Dr. Noor Mahmudah (UMY)
	Introduction of Visum and Vissim Softwares	Dr. Sara Ferreira (UPORTO)
3	Transport Analysis using Visum Softwares	Dr. Sara Ferreira (UPORTO)
	Case Study of Transport Analysis	Dr. Noor Mahmudah (UMY)
4	Traffic Analysis using Vissim Software	Dr. Sara Ferreira (UPORTO)
	Case Study of Transport Analysis	Dr. Noor Mahmudah (UMY)
5	Group Work on Traffic Analysis using Software	Dr. Noor Mahmudah (UMY)
	Presentation of Traffic Analysis using Software	Dr. Sara Ferreira (UPORTO)
6	Field Trip to Road Project	



PROGRAM RUN DOWN

Day	Topic	Proposed Speaker(s)
7	Field Trip	
8	Human and Vehicle Factors	Ahmad Wildan (National Transportation Safety Committee)
	Road and Environment Factors	Dr. Noor Mahmudah (UMY)
9	Road Safety Audit / Inspection	Prof. Agus Taufik Mulyono
	Case Study of Accident Analysis using Vissim Software	Dr. Noor Mahmudah (UMY)
10	Field work on Road Safety Audit / Inspection and Reporting	Dr. Noor Mahmudah (UMY)



REFERENCES

No	Book / Regulation Title	Authors
1	Indonesian Road Safety Audit (Audit Keselamatan Jalan)	Directorate General of Highways Authority, 2015
2	Road Safety Audit	Austroad, 2017
3	Highways Safety Manual	AASHTO, 2010
4	Road Safety Handbook	Department of Transportation, USA, 2015
5	National General Plan for Road Traffic and Transport Safety (Rencana Umum Nasional Keselamatan Lalu Lintas dan Angkutan Jalan)	President Decree No. 1 the Republic of Indonesia, 2022
6	Rencana Umum Nasional Keselamatan Jalan 2011-2035 (National General Plan for Road Safety 2011-2035)	Ministry of Transportation the Republic of Indonesia, 2021
7	Global Plan: Decade of Action for Road Safety 2021 - 2040	World Health Organization and the United Nations Regional Commissions



Program Plan

☐ Day 1

- ✓ **Opening Day** : Keynote speaker session: To review the state of road safety in Indonesia and introduce participants for road safety strategies

☐ Day 2

- ✓ **Human Factor** : To introduce the participants to human perception and how visual information in road traffic is processed; to familiarize the participants with the patterns of road user's behavior and how they make decisions in different traffic situations and conditions; to introduce participants with safety risks related to distractions and to show contemporary research methods related to human factor and road safety.



☐ Day 3

- ✓ **Vehicle Factor** : To give an overview of current state-of-the-art technologies in vehicles aimed at increasing road safety; to provide basic knowledge of automated vehicles and related problems, and to give insight into the future trends related to connected and automated vehicles.

☐ Day 4

- ✓ **Road and Environment**: To familiarize participants with safety risks related to low visibility conditions; to extend participants' knowledge of safe road infrastructure; to evaluate the effect of different low-cost measures for traffic signaling on driver behavior and overall road safety; to familiarize participants with the basic concepts behind traffic lights.



☐ Day 5

- ✓ **Road and Environment** : To extend participants' knowledge of different concepts of safe road design; to introduce and elaborate the contemporary concept of self-explaining and forgiving roads; to present the application of a driving simulator in road design and safety analysis

☐ Day 6 & 7

- ✓ **FIELD – TRIP**



☐ Day 8

- ✓ **Accident Analysis:** To introduce participants to the methodologies of traffic accident analysis and expert evaluation based on actual data obtained in a crash test.

☐ Day 9

- ✓ **Road Safety Inspection :** To familiarize participants with the process of “black spots” identification based on a Croatian case study; to familiarize participants with the basic concepts and regulations related to road safety inspection in Indonesia and with the overall road safety inspection process; to introduce participants with road safety assessment program (iRAP) and its application worldwide as well as to with different measuring equipment and procedures for quality control of road elements and infrastructure



□ Day 10

- ✓ **Road Safety Inspection-Field Work** : To use the knowledge acquired in theoretical lectures to conduct a road safety inspection on a real road; to identify potential safety issues and discuss potential solutions based on group work.



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Thank you ..Assalamualaykum



**Local Project Team
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