

# Certificate Course on Road Safety and Road Safety Audit for NHAI Officers

12 – 26 September 2022

Venue:  
TRIP Centre, Lecture Hall (MS 901A)  
Main Building, IIT Delhi

## Programme

Literature available online Link -  
<http://tripp.iitd.ernet.in/publication/coursekit>

| <b>Day:1 – 12.09.2022 (Monday)</b>                            |   |               |
|---|---|---------------|
| 09.30 -10.00  | Welcome<br>Introduction<br>Course Details<br>Introduction of participants |               |
| <b>Session : Road Safety Scenario</b>                         |   |               |
| 10.00-11:30   | Road Traffic Injury National Trends and<br>Transport safety principles    | Geetam Tiwari |
| 11:30 – 12:00   | <b>TEA</b>  |               |
| 12:00 – 13:00   | International Road Safety Comparison                                      | Kavi Bhalla   |
| 13.00-14.30   | <b>LUNCH BREAK</b>  |               |
| <b>Session - Traffic Signs, Road Markings and Delineators</b> |   |               |
| 14:30-16:00   | Road Safety and Speed   | K R Rao       |
| 16:00 – 16:30   | <b>TEA</b>  |               |
|   | <b>End of day 1</b>   |               |

| <b>Day:2 – 13.09.2022 (Tuesday)</b>  |  |                               |
|--------------------------------------|--|-------------------------------|
| <b>Session : Crash Data Analysis</b> |  |                               |
| 10.00-11:00                          | Crash Data Recording and Analysis Part – I | Geetam Tiwari                 |
| 11:00 – 11:30                        | <b>TEA</b>                                 |                               |
| 11:30 – 12:30                        | Crash Data Analysis Part-II                | Rahul Goel                    |
| 12:30 – 13:00                        | Discussion                                 |                               |
| 13:00 – 14:30                        | <b>LUNCH BREAK</b>                         |                               |
| 14:30 – 16:00                        | Crash Data Analysis Part – III             | Rahul Goel / Vijay<br>Kovvali |
| 16:00 – 16:30                        | Discussion                                 |                               |
| 17:00 -                              | <b>TEA</b>                                 |                               |
|                                      | <b>End of day 2</b>                        |                               |

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| <b>Day:3 – 14.09.2022(Wednesday)</b>         |  |                     |
| <b>Session: Traffic Studies</b>              |  |                     |
| 10:00– 11:30                                 | Traffic Studies (Speed, Volume, Conflicts) | K R Rao / Sai Chand |
| 11:30 – 12:00                                | <b>TEA</b>                                 |                     |
| <b>Session: ITS and Black Spot Treatment</b> |  |                     |
| 12:00 – 13:00                                | ITS and Safety                             | Sai Chand           |
| 13:00 – 14:30                                | <b>LUNCH BREAK</b>                         |                     |
| 14:30 – 15:30                                | Highway Black Spot                         | S K Popli           |
| 15:30 – 16:00                                | <b>TEA</b>                                 |                     |
|  | <b>End of day 3</b>                        |                     |

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| <b>Day:4 - 15.09.2022 (Thursday)</b>            |   |               |
| <b>Session: Case studies and Highway Design</b> |   |               |
| 10:00 – 11:00                                   | Safety in Road Design – Highway Design Part-I | Geetam Tiwari |
| 11:00 – 11:30                                   | <b>TEA</b>                                    |               |
| 11:30 – 13:00                                   | Highway Design Safety Part –II                | Rahul Goel    |
| 13:00 - 14.30                                   | <b>LUNCH BREAK</b>                            |               |
| <b>Session: Case Studies on Traffic Studies</b> |   |               |
| 14: 30 - 15:30                                  | VRU Safety and Traffic Calming                | Geetam Tiwari |
| 15:30 – 16:00                                   | <b>TEA</b>                                    |               |
| 16:00 – 18:00                                   | Intersection and Roundabout Safety            | Sewa Ram      |
|   | <b>End of Day 4</b>                           |               |

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| <b>Day: 5 – 16.09.2022 (Friday)</b>   |   |                |
| <b>Session: Case Studies on Work Zone</b>   |   |                |
| 10:00 – 11:30   | Work Zone safety – case studies                                       | K.N. Jha       |
| 11:30 – 12:00   | <b>TEA</b>  |                |
| <b>Session : Bus Rapid Transit (BRT) and Its Impact On Pedestrian Movements</b>   |   |                |
| 12:00 – 13:00   | Bus Rapid Transit(BRT) and Public Transport Safety                    | Sandeep Gandhi |
| 13:00 – 14:30   | <b>LUNCH BREAK</b>  |                |
| <b>Session: Highway Access Permission norms, Highway Land Administrative rules, Highway Acts and MoRT&amp;H policy on Forgiving Roads</b> |   |                |
| 14:30 - 16:30   | Summary of Highway Land Administrative rules, Highway Acts and MoRT&H | SSLN Sarma     |
| 16:30   | <b>TEA</b>  |                |
|   | <b>End of Day 5</b>   |                |

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| <b>Day:6 - 17.09.2022 (Saturday)</b>                       |   |                 |
| <b>Session: Hill Road Safety</b>                           |   |                 |
| 10:00 – 11:30  | Hill Road Construction and Safety               | Girish Agarwal  |
| 11:30 – 12:00  | <b>TEA</b>                                      |                 |
| <b>Session: Road Side Hazard Management</b>                |   |                 |
| 12:00 – 13:00  | Road Side Hazard Management                     | SSLN Sarma      |
| 13:00 – 14:30  | <b>LUNCH BREAK</b>                              |                 |
| <b>Session: Legislation / Motor Vehicle Act</b>            |   |                 |
| 14:30 – 15:30  | Traffic Safety Legislations / Motor Vehicle Act | Girish Agarwal  |
| <b>Session: Non- Engineering Measures, and Trauma Care</b> |   |                 |
| 15.30 – 17:00  | Pre Hospital Care / Trauma Care                 | Mathew Varghese |
| 17:00  | <b>TEA</b>                                      |                 |
| <b>End of Day 6</b>  |   |                 |

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| <b>Day 7 - 18.09.2022 – (Sunday) FREE DAY</b> |
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| <b>Day:8 – 19.09.2022 (Monday)</b>                                  |                                       |               |
| <b>Session: Introduction to Intelligent Transport System</b>        |                                       |               |
| 10:00 – 11:30   | ITS and Highway Safety                | Sai Chand     |
| 11:30 – 12:00   | <b>TEA</b>                            |               |
| 12:00 – 13:00   | ITS and Data management – Road Safety | Vijay Kovvali |
| 13:00 – 14:00   | <b>LUNCH BREAK</b>                    |               |
| <b>Session : Enforcement and Road Safety</b>                        |                                       |               |
| 14:00 – 15:00   | Intersection design                   | Sewa Ram      |
| 15:00 – 16:00   | Enforcement and Road Safety           | Rahul Goel    |
| 16:00 – 16:30   | <b>TEA</b>                            |               |
| <b>Session: Approach and Methodology to Road Safety Audit (RSA)</b> |                                       |               |
| 16:30 – 17:30   | Highway work zone safety              | K R Rao       |
| <b>End of Day 8</b>   |                                       |               |

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| <b>Day: 9 – 20.09.2022 (Tuesday)</b>                        |  |  |
| <b>Session : Design Stage RSA: Case Study Presentation</b>  |  |  |
| 10:00 – 11:30   | Design Stage RSA: Case Study Presentation    | S.K. Popli                             |
| 11:30 – 12:00   | <b>TEA</b>                                   |  |
| <b>Session: Practical on Design Stage Road Safety Audit</b> |  |  |
| 12:00 – 13:30   | Design Stage Road Safety Audit Preparation   | S.K. Popli                             |
| 13:30 – 14:30   | <b>LUNCH BREAK</b>                           |  |
| 14:30 – 16:00   | Blackspot Inspection – signages and markings | Laxman Bisht                           |
| 16:00 – 16:30   | <b>TEA</b>                                   |  |
| 16:30 – 17:30   | Urban Audit Field Preparation                | G.Tiwari<br>Laxman Bisht<br>SSLN Sarma |
|   | <b>End of Day 9</b>                          |  |

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| <b>Day:10 – 21.09.2022 (Wednesday)</b>  |                                    |   |
| <b>Session: Road Safety Audit on Existing roads, Road Safety Audit (RSA) /Road Safety Inspection (RSI): Case Study Presentation</b> |                                    |   |
| 10:00 – 12:00   | Urban Road Safety Audit            | SSLN Sarma<br>Laxman Bisht<br>Debashis Ray<br>Neelabh Roy |
| 12:00 – 12:30   | <b>TEA</b>                         |   |
| 12:30 – 13:00   | Report preparation                 | Sai Chand / Vijay<br>Kovvali/ G Tiwari                    |
| 13:00 – 14:30   | <b>LUNCH BREAK</b>                 |   |
| 14:30 – 16:00   | Report Presentation and Discussion | Saichand / Vijay<br>Kovvali                               |
| 16:00   | <b>TEA</b>                         |   |
|   | <b>End of day 10</b>               |   |

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| <b>Day:11 – 22.09.2022 (Thursday)</b>                         |  |             |
| <b>Session: Site visit for Conduct of Road Safety Audit -</b> |  |             |
| 11:00 – 13:00   | <b>Visit to Sonapat Campus for Road Safety Audit</b> |             |
| 13:00 – 14:30   | <b>LUNCH BREAK</b>                                   |             |
| 14:30 – 16:00   | Field Audit Preparation                              | All Faculty |
| 16:00 – 16:30   | <b>TEA</b>   |             |
| 18:00 – 20:00   | <b>Night time Road Safety Audit</b>                  |             |
|   | <b>End of Day 11</b>                                 |             |

| <b>Day:12 – 23.09.2022 (Friday)</b> |   |
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| 07:00- 9:30                         | <b>Site visit for Conduct of Existing Stage Road Safety Audit (RSA) / Road Safety Inspection (RSI) and Construction Stage RSA</b> |
| 09:30 – 10:00                       | <b>Breakfast / Tea</b>  |
| 10:00 – 13:00                       | Audit report preparation  |
| 13:00 – 14:30                       | <b>LUNCH BREAK</b>  |
| 14:30 – 15:30                       | Report Presentation   |
| 15:30 – 16:00                       | <b>TEA</b>  |
| 16:00                               | <b>Return to IIT Delhi</b>  |
|                                     | <b>End of Day 12</b>  |

| <b>Day:13 – 24.09.2022 (Saturday) Written Exam and Presentation *</b> |   |
|---|---|
| 10:00 – 11:00   | Written Exam - 1  |
| 11:00 – 11:30   | <b>TEA</b>  |
| 11:30 – 12:30   | Written Exam - 2  |
| 13:00 – 14:30   | <b>LUNCH BREAK</b>  |
| 14:30 – 15:30   | <b>Submission of Practical Audit reports on Design Stage RSA, Construction Stage and Existing Stage RSA / RSI</b> |
| 15:30 – 16:00   | <b>TEA</b>  |
| 16:00 – 18:00   | RSA Report Presentation (Group 1, Group 2, Group 3 and Group 4)   |
|   | <b>End of Day 13</b>  |

**Day 14 - 25.09.2022 – (Sunday) FREE DAY**

| <b>Day 15 – 26.09.2022 (Monday)</b>             |  |                     |
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| <b>Session Interaction and Closing Ceremony</b> |  |                     |
| 10:00 – 11:00                                   | Road Safety Audit in the direction of Supreme Court Committee – outcome report | D B.Srinivas, DIMTS |
| 11:00 – 11:30                                   | <b>TEA</b>   |                     |
| 11:30 – 13:00                                   | Course Summary / Course Evaluation Feedback                                    |                     |
| 13:00 – 14:30                                   | <b>LUNCH BREAK</b>   |                     |
| 14:30 – 15:00                                   | Interaction with Participants Certificate distribution                         |                     |
|   | <b>TEA</b>   |                     |
|   | <b>End of Day 15</b>   |                     |

