



भारतीय राजमार्ग अभियन्ता अकादमी
(सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)
Indian Academy of Highway Engineers
(Ministry of Road Transport and Highways, Govt. of India)

No. IAHE/Trg./07/RSE&A(C)/2023-24

Dated: 02.01.2024

Office Memorandum

Subject: 15-days Certificate Course for Road Safety Auditors during 08th -22nd January 2024...

Sir/Madam,

15- Days Certificate Course on "Road Safety Auditors"

The Ministry of Road Transport and Highways (MORT&H) has issued guidelines making it mandatory to carry out road safety audit at Design, Construction and Operation stages of all National Highway projects. It is recognised that roads need careful road safety audit so as to build and maintain forgiving roads. However, there is acute shortage of trained and qualified road safety engineers and auditors in the country.


2. The Ministry of Road Transport and Highways has finalized the content for the 15-days certification mandatory course for becoming Road Safety Auditors. A tripartite agreement has been signed between the Ministry, Indian Roads Congress and various training imparting institutes including IAHE.

3. The fully residential 15-days course has been planned and scheduled to be held from **08th -22nd January 2024** as per the standard curriculum through class room lectures, field works and practical/demonstration aspects of learning combined with academic assignments. The course would be conducted over two consecutive weeks comprised of theory, practical and assignments. In this course, **maximum of 30 participants** would be considered and will be registered on first-come-first-serve basis. A brochure giving details including qualification & experience requirement for participants, course module & contents, evaluation criteria for certification, etc. along with registration form is enclosed herewith for necessary action.

4. **Course Fee:** The total cost of the 15-days course is Rs. 1,00,300/- [**Course Fee (Rs. 85,000/-) + GST 18% of Course Fee (Rs. 15,300/-)**]. The fee is inclusive of site visits, lodging and boarding of the participants in IAHE hostel.

5. **Assesment Criteria:** For successful completion of the course, the participant has to score minimum **75% marks** for certification (**10% weightage** for the attendance, **30% weightage** of for Audit Reports submitted by each participant, **15% weightage** for presentation given by each participant and **45% Weightage** for the Examination). **If any candidate fails to secure 75% overall marks, then he/she shall have to repeat the examination only (with the participants of next batch of 15-days certificate course) to secure 75% for getting the certificate. However, the candidate is not required to pay any additional Course Fee to the institute again. IAHE will not conduct separate exams for unsuccessful candidates.**

6. The intending participants are requested to send their nominations along with registration form and requisite amount of fee latest by **07.01.2024**


(Anil Kumar Meena)
Deputy Director
For Director, IAHE

कृपया ध्यान दें: सभी पत्राचार केवल निदेशक को पत्रानुसार द्वारा संबोधित किए जाएं।/Please note: All correspondence should be addressed to the Director by designation only

ए-5, इंस्टीट्यूशनल एरिया, सेक्टर-62, नोएडा (यूपी) - 201 301 (भारत) / A-5, Institutional Area, Sector-62, Noida (UP) - 201 301 (India)

दूरभाष /Telephone/ 0120-2975331/2

ईमेल/ Email: director-iahe@gov.in /Website/ वेबसाइट: iahe.org.in



15 Days Certification Course Schedule for Road Safety Auditors

Organized by

Indian Academy of Highway Engineers,
Ministry of Road Transport and
Highways, Govt. of India



Background: Road safety was never recognized as a major problem till the vehicle ownership boom in last 2-3 decades and wide-spread road network expansion for better mobility in India. With highest road fatalities in the world, India has recognized the social and health burden caused by this human tragedy, which costs the nation 2-3% of its GDP every year. It is also realized that the roads built with full compliance to standards also need careful road safety interventions, and therefore, the importance of road safety engineering and associated audits is understood. The curriculum in engineering colleges so far has not built in road safety engineering in any significant manner. Acute shortage of trained and qualified road safety engineers and auditors is felt since a long time to bring in the desired improvement in road safety scenario. Ministry of Road Transport and Highways (MORTH), Government of India (GOI) has taken several steps for improvement of road safety in the recent past. To bridge this gap and to develop well-versed road safety engineers and auditors, MORTH has supported the initiative by bearing more than 50% of the cost and starting a "Certified Road Safety Engineers and Auditors" six week programs organized by Indian Academy of Highway Engineers (IAHE) since 2015. The IAHE has so far conducted 7 such courses and trained 172 numbers of engineers since May 2016 to till date. However, the Ministry of Road Transport and Highways have finalized the content for the 15 days certification mandatory course for becoming Road Safety Auditors. A tripartite agreement has been signed between the Ministry, Indian Roads Congress and various training imparting institutes including IAHE. **The 15 days certification course by IAHE is scheduled from 08th -22nd January 2024.**

Objectives: The main objective of this certificate programme is to develop highway professionals as "Road Safety Auditors" who should be able to bring-in safety engineering elements in planning, design, construction, operation and maintenance stages systematically ensuring safety for the road users. They will also be used for the network in operation for identifying safety deficiencies and to suggest improvements based on thorough analysis & audit.

Delivery: The fully residential course has been planned to be delivered in 15 days as per the standard curriculum through class room lectures, field works and practical/demonstration aspects of learning combined with academic assignments. The course would be conducted without break over two consecutive weeks comprised of theory, practical and assignments. The participants will undergo a systematic, rigorous learning and evaluation process covering the adequate details from fundamentals to the advanced traffic engineering and road safety audit, making them a group of trained and skilled professionals, to be certified as "Road Safety Auditors" duly accredited by the Indian Roads Congress under the aegis of Ministry of Road Transport and Highways (MORTH), Government of India (GOI).

Strategy: This specially designed course shall be delivered with the help of Indian experts to bring-in the best safety practices around the world and sharing Indian experience. The specially designed and developed course materials with help of Australian experts and team of Indian experts would also be provided to the participants. During the delivery, Indian safety engineering and audit experts/faculty including experts from IITs/NITs and other

Institutions would be invited to participate in the programme for lectures, field audits and interaction and by sharing the best safety audit principles and practices.

Targeted Participants and Group Size: The highway engineers working in public & private sectors with following qualification & experience will be enrolled to undergo this certificate programme and may be considered as targeted participants. A maximum of 30 participants per programme would be considered for enrolment and the slots would be confirmed in order of receipt of nominations along with prescribed fee for confirmation. Being a residential programme, all the participants will have to stay in trainees hostel in IAHE campus. This is subject to the following of Covid-19 guidelines as applicable and in force by the Government of the State of Uttar Pradesh during the schedule. This will facilitate interaction and discussions amongst the participants themselves to accomplish daily assignments. All necessary facilities for lodging, boarding, recreational, DTH TV and dedicated Wi-fi net access facilities, etc. are available in the hostel.

Educational Qualification: Essential: Should be holders of minimum of a Civil Engineering Bachelor's Degree. **Desirable:** Post-Graduate Degree like M.Tech/M.E/PG Diploma etc. in Highway Engineering/ Transportation Engineering/ Traffic Engineering/Transport Planning/ Transportation Systems Engineering, Structural Engineering etc. **Experience:** Although not necessary preference shall be given to those having working experience either from highway agencies associated with road development or from academic institutions dealing traffic and highway engineering discipline or from highway engineering/design consultancy or contracting firms.

Course Fee: The total cost of the 15 days course is **Rs. 1,00,300/- [Course fee (Rs. 85, 000/-) + GST @18 % of Course Fee (Rs. 15,300/-)] per participants.** The fee is inclusive of site visits, lodging and boarding of the participants in IAHE hostel. The fee should be paid in favour of "Indian Academy of Highway Engineers" through local cheque/ PO/DD/transferred through ECS/RTGS in IAHE's, HDFC Bank, Saving Bank Account 50100630385906, Stellar IT Park, Sector -62, Noida Branch, IFSC Code: HDFC0002649, GSTIN: 09AABAI2196K1ZD, PAN No. AABAI2196K. The minimum qualifying marks are compulsory for getting course certificate. In case of leaving the programme at any stage, the fee deposited shall not be refunded back.

Schedule of the Course:

The Course shall be conducted at IAHE NOIDA campus from 08th -22nd January 2024.

Faculty: Faculty will be eminent practicing professionals in the field of road safety and audit from public and private sectors including experts of IITs/NITs.

Training Materials: International experts of repute from ARRB, IRF and other renowned Indian practicing Road Safety experts have developed a specially designed supporting course material to fulfill the requirements of certified safety engineers and auditors for India. The soft copy of the same will be shared along with lecture material of the faculties.

Evaluation for Certification:

There will be continuous evaluation or marking of the reports/assignments submitted by the participants as well as based on written and oral examinations at the end of course. For successful completion of the course, the participant has to score minimum **75%marks** for certification.

Certification/Accreditation: MORTH has declared IAHE as its authorized institution for issuance of certificate for 15 days course. A Certificate will be given to each successful participant, duly evaluated as prescribed, by the IAHE as an authorized institution of MORTH. This certification would necessarily be required to be produced by the individual professionals so as to get the accreditation by the Indian Roads Congress. The procedure for the accreditation shall be informed during the course.

IAHE shall maintain a register/record and database of all the participants including evaluation records for one year and certification who have successfully completed the Certification Course. IAHE shall maintain and will also keep updating the audit experiences/records of the certified professionals. All key personnel involved/to be involved in road safety audit on Road Projects should undergo this certification programme; and subsequently to allow only Certified "Road Safety Auditors" to undertake safety audit works for projects.

Day-wise Course contents

Day-1: 08.01.2024 (Monday)

Session 1: Road Safety Scenario : UN decade for Road Safety • Five Pillars of Road Safety Systems Approach • Haddon Matrix • Overview on Safety Scenario in India • Road Safety to be considered as public health problem • Main reasons for unsafe roads • International Comparison • Lessons to be learnt from actions taken in other countries such as Sweden, UK, Netherland, Japan, USA, Australia, New Zealand, etc. • Way Forward

Objectives: To understand and appreciate criticality of road safety and its needs

Suggested References: MoRT&H latest Report on Road Accidents in India Latest Global Status Report on Road Safety by WHO, Latest Report on road crash data published by National Crime Records Bureau (NCRB). Any other relevant literature / report pertaining to the road traffic crash data.

Session 2: Traffic Signs, Road Markings and Delineators: Details on relevant IRC codes/ guideline on traffic signs, pavement markings, work zone safety, road delineators. Safety barriers • MoRT&H Specifications - Relevant Portions of Section 800 • Emphasis of correctness and uniformity of traffic signs and markings in their configurations and placements • Examples of typical applications along with bad and correct practice

Objectives: To know the standard and practices prescribed by IRC Codes and applicable/ useful for Road Safety

Suggested References: All the relevant IRC Codes as well as ASSTHO Guidelines

Day -2 09.01.2024 (Tuesday)

Session 3: Safety in Road Design - Concept of hierarchical system of road network planning • Principles of Safe Design - Prevention by

Safety Audit and reduction by designing "forgiving Highways • Safe horizontal alignment and vertical profile • Geometric design and design parameters • Safety needs of all and different user groups • Take care of Driver Behavior and Errors • Wayside Amenities – Rest Areas, Truck Lay-by/ terminals • Speed Management (road hierarchy, signing, speed zoning, markings including those to create stereoscopic illusion) • Main safety considerations in designing two /four/Six lane Highways/ Expressways and Urban roads • Common mistakes to be avoided

Objectives: To equip participants on safe design of various categories of roads/ expressway

Suggested References: All the relevant IRC Codes/ Manuals as well as any relevant international manuals, standards, and guidelines, AASHTO Green Book and PIARC Road Safety Manual and Other Road Safety Manuals.

Session 4: Safety in Design of Intersections and Interchanges :

Classified Turning Movements at intersections - measurement and usage in design • Hierarchy of intersections • Design principles and safety considerations for various types of at - grade intersections • Grade separated intersections/interchanges - types and design principles • Urban Roads • IRC: SP 41and IRC:65 • Type Design of intersections on National Highways by MoRT&H, 1995 • Design of safe facilities for Public transport users and pedestrians at grade separated intersections., • Correct provision of signs, markings and delineators at different categories of intersections • Common mistakes to be avoided

Objectives: Participants to get guidance on safe design of intersection and interchange

Suggested References: All the relevant IRC Codes as well as any relevant international guidelines/ standards on intersections design and AAASHTO Green Book

Day 3: 10.01.2024 (Wednesday)

Session 5: Safety for VRUs and special needs of Persons with Disabilities (PwDs) :

Speed and vulnerability • Pedestrian priority for road categories • Physical Separation – service roads – Safe systems approach • Walking Facilities along roads – continuous and encumbrances free • Crossing facilities – at grade and grade separated • Special needs of Persons with Disabilities (PwDs) • Pedestrian facilities at intersections and interchanges • Facilities for cyclists • Facilities for public transport and for NMTs– bus bays • Traffic Calming in residential areas [IRC:99 (2018)] • Speed Management on Highways / Roads passing through urban areas [IRC:99 (2018)] • Human Factors related to Road Safety • Safety around the School Zones

Objectives: To understand and appreciate the Needs of VRUs and persons with disabilities (Special VRUs) and design the facilities suiting the above

Suggested References: All the relevant IRC Codes as well as any relevant international manuals/ standards/ guidelines.

Session 6: Crash Data Analysis and Black Spot Treatment:

Crash Data Recording and Reporting Format of MoRT&H prescribed in Dec. 2017 • Highlights of Ministry's Road Crash Reports with focus on causative factors • Black Spot Treatment – protocol, procedures, collision diagram, counter measures, case studies, before and after

studies • Basic strategies for road crash reduction through Single site treatment, Route action plan, Mass action Plan and Area wide schemes
Objectives: To understand the system for crash recording and analysis, use of collision diagram to assess the types of crashes, its Characteristics and possible countermeasures

Suggested References: Crash data yearly publication of MoRT&H and NCRB, Government of India; Latest Accident data recording and reporting prescribed by MoRT&H; Black Spot Manual of SWEDEN Roads - EU funded for TRACECA (Transport Corridor Europe-Caucasus Asia)

Session 7: Highway Access Permission norms, Highway Land Administrative rules, Highway Acts and MoRT&H policy on Forgiving Roads:

MoRTH Circulars relating to Access Permissions • The Control of National Highways (Land and Traffic) Act 2002 • MoRTH Policy on Forgiving Roads • Safety Initiatives of NHAI and MoRTH for reduction of Accidents in India

Objectives: To understand the Various circulars of MoRTH/NHAI regarding the Control of Highway Acts, access Permission norms, and Safety Measures taken up by MoRTH and NHAI

Suggested References: Control of National Highways (Land & Traffic) Act 2002, MoRTH/NHAI Circulars

Day 4: 11.01.2024 (Thursday):

Session 8: Crash Investigation and Remedial Measures:

Difference in Crash Data Analysis and Crash Investigation • Team Composition • Decide the criteria for listing of crash locations • List the crash locations to investigate • Analysis of data: Clustering of common factors • Collision diagram, • Inspect the site conditions • Finalize the assessment • Match the solutions to the problems • Prepare preliminary design • Establish the benefits and costs of the counter measures • The Crash Summary Report (Documenting the proposed solutions) • Implement the treatment • Monitor and Evaluate the treatment • Case studies

Objectives: To understand the methodology and relevance crash investigation for road safety.

Suggested References: PIARC Guidelines on Crash Investigation and other relevant literature

Session 9: Road Side Hazard Management: Use of Spot Speed measurement • Road Side Hazard Management • Crash Barrier requirements & placement • Fixed Hazards/Object Hazard Markers • Recovery Zone • Clear Zone • Speed Management

Objectives: To understand the importance of the road side Hazard Management, clear zone width and measures

Suggested References: All the relevant IRC Codes like IRC: 119 (2015) & IRC: 79 (2019) as well as any relevant international manuals/ standards/ guidelines and AASHTO Green Book

Day 5: 12.01.2024 (Friday)

Session 10: Case Studies on Traffic Studies : Case Study from actual Traffic studies and analysis from a complete DPR for road project • Concept of capacity and level of service with relevant manuals and IRC documents • Case study on how the traffic studies and analysis were used in design of road including intersection

Objectives: To understand the practice of traffic studies, analysis and usage in road link design and intersection.

Suggested References: All the relevant IRC Codes as well as ASSTHO Codes Case of any DPR of completed road project, Planning for Bypasses

Session 11: Safety of Hill Roads : Safety issues on Hill Roads • Hill roads Safety Measures • Land Slides Mitigation Measures • Slope Protection Measures • Drainage Issues in Hill Roads • Tunnel Safety in Hilly Terrain

Objectives: To understand special needs on safety on hill roads and their design requirements and standards

Suggested References: All the relevant IRC Codes as well as any relevant international manuals/ standards/ guidelines

Session 12: Bus Rapid Transit (BRT) and its impact on pedestrian movements: Safety Issues related to BRTS • Need for Provision of dedicated facility for Commuters

Objectives: To understand the importance of BRTS, Pros and Cons related to safety of Vulnerable Road Users

Suggested References: IRC: 124 (2017)

Day 6: 13.01.2024 (Saturday):

Session 13A: Non- Engineering Measures, Enforcement and Trauma Care : Amendments to Motor Vehicle Act relating to road safety • Presentations on First aid care, Trauma Care Centre and Emergency related to Road Safety

Session 13B: Presentation on allied areas relating to road safety issues: Basics of Asset Management and the benefits of Good pavement surface for Road Safety • Bridge Engineering issues related to road safety, safety aspects in Construction, Maintenance and Operations of Bridges

Objectives: Coverage on Amendments in Motor vehicles Act -2019, Trauma Care practices, Protection of Good Samaritan;

Suggested References: Motor Vehicle Act amendments and the aspects related to Trauma Care

Session 13C: Introduction to Intelligent Transportation Systems (ITS): Various components of Intelligent Transportation Systems (ITS) • Some details on the components related to road safety e.g. ATMS, ATIS, APTS, AVCS • Road map for ITS deployment

Objectives: To understand and appreciate the use of Intelligent Transport System (ITS) in road safety

Suggested References: Publications of FHWA/ US DoT and ITS World Congress proceedings

Day 7: 14.01.2024 (Sunday) Self-study and revision of learning during the week.

Day 8: 15.01.2024 (Monday) Session 14A: Approach and Methodology to Road Safety Audit (RSA): Origin of Road Safety Audit, • Definition of an audit and who does it • Difference between Road Safety Audit (RSA) & Road Safety Inspection (RSI) • Objectives of road safety audit • Audit is not – e.g. Redesign, exercise of crash analysis and investigation • Why audits are necessary • Independence of auditors • Costs and benefits • Some examples where audits have produced benefits •

Day 9: 16.01.2024 (Tuesday)

Session 14A: Approach and Methodology to Road Safety Audit (RSA): Origin of Road Safety Audit, • Definition of an audit and who does it • Difference between Road Safety Audit (RSA) & Road Safety Inspection (RSI) • Objectives of road safety audit • Audit is not – e.g. Redesign, exercise of crash analysis and investigation • Why audits are necessary • Independence of auditors • Costs and benefits • Some examples where audits have produced benefits •

Indian and International practices and documents, PIARC Guidelines

Objectives: Basics of Road Safety Audit

Suggested References: IRC: SP-88 (2019) “Manual on Road Safety Audit” (First Revision) and other International Road Safety Audit Manuals such as PIARC, UK, Australia, FHWA and ADB

Session 14B: Audit Procedure : A brief on type of projects be audited • Stages of Audit • Road Safety Audit (Feasibility stage, Design Stage, Construction Stage, Pre-Opening Stage and O& M Stage) • Process / key steps of Audit • Selection and Qualification of Audit Team • Responsibilities of client and Auditor • Sequence of steps • Client/Auditor Relationship • Commencement Meeting, checking of drawings and documents • Assessment of Risk and assigning the priority • Check List (different stages, road construction equipment, workers) • Report writing – site specific identification and suggested counter measures • Client response to audit report.

Objectives: Road Safety Audit and its stages, risk classifications

Suggested References: IRC: SP-88 (2019) “Manual on Road Safety Audit” (First Revision) and other International Road Safety Audit Manuals such as from PIARC, UK, Australia, FHWA and ADB

Session 15A: Design Stage RSA: Case Study Presentation: Design Stage Check List • Design Stage Road Safety Audit • Why audit at this stage • What can be and cannot be achieved at this stage • How to conduct the audit at this stage • Case Study for RSA at design stage

Objectives: Design Stage Road Safety Audit

Suggested References: IRC: SP-88 (2019) “Manual on Road Safety Audit” (First Revision) and other International Road Safety Audit Manuals such as from PIARC, UK, Australia, FHWA and ADB

Session 15B: Construction Stage RSA: Case Study Presentation • Construction Stage Road Safety Audit - Check List • Participants to be explained on identified stretch for WZ RSA

Objectives: Practical exercise initiation on Construction Stage Road Safety Audit

Suggested References: IRC: SP-88 (2019) “Manual on Road Safety” (First Revision) and other International Road Safety Audit Manuals such as from UK, Australia, FHWA and ADB

Session 15C: Road Safety Audit on Existing Road, Road Safety Audit(RSA) / Road Safety Inspection (RSI): Case Study Presentation: Road Safety Audit/ Inspection on Existing Road - Check List and Case Study Presentation • Discussion/ introduction on the identified stretch of the road where participants would do the exercise of Road Safety Audit on Existing Road

Objectives: Initiation of Practical on Road Safety Inspection

Suggested References: IRC: SP-88 (2019) “Manual on Road Safety” (First Revision) and other International Road Safety Audit Manuals such as from UK, Australia, FHWA, and ADB

In the concluding session of Day 8 (full day), a brief on the road sections to be visited on Day 9 covering Existing Road and Construction Stage RSA would be briefed by the Faculty.

Day 9: 16.01.2024 (Tuesday)

Session 16A: Practical / Site Visit for conduct of Existing Stage Road Safety Audit (RSA) /Road Safety Inspection (RSI)

- Pre requisites for Existing Stage RSA: Selection of suitable sites & arrangement of Logistics
- Site Visit (**Institute may combine the site visit for Work Zone RSA and O & M Stage RSA so that it gets completed in one day**) with Faculty as Mentor (Covering possibly Expressway / NH / SH /MDR /ODR located in the immediate vicinity including intersections and interchanges). Each group shall comprise maximum of 8 to10 participants only mentored by a faculty.
- Each participant should prepare a presentation on findings and recommendations emanated out of O & M Stage RSA / RSI. Participant may also start writing the Audit Report which is to be submitted on or before Day 14.

Session 16B: Practical / Site Visit for conduct of Construction Stage RSA

- Pre requisites for conduct of Construction Stage RSA: Selection of suitable sites & arrangement of Logistics
- **Conducting Construction Stage RSA with the help / guidance of the mentors;** Site Visit shall be only Group-wise guided by the Faculty as Mentor. The onus lies on the Training Institute to select a suitable construction site in the vicinity and arrange the logistics for transport, paper and pencil. Each group shall comprise a maximum of 8 to10 participants only mentored by a faculty.
- Each participant should prepare a presentation on findings and recommendations emanated out of Construction stage. Participant may also start writing the Audit Report which is to be submitted on or before Day 14.

Objectives: Practical on Construction Stage Road Safety Audit

Suggested References: IRC: SP-88 (2019) “Manual on Road Safety Audits” (First Revision), IRC: SP-55 (2014) and other International Road Safety Audit Manuals such as from UK, Australia, FHWA, ADB

Day 10: 17.01.2024 (Wednesday)

Session 17: Practical on Design Stage Road Safety Audit

- Discussions/ introduction on the identified project for design stage RSA exercise. Training Institute shall identify/ select the Project and make available a minimum of two copies of DPR for each group. Each Group comprises of 8-10 participants mentored by a faculty.
- Study/ examination of the Detailed Project Report Drawings by the participants in each group.
- **Conducting Design Stage RSA with the help / guidance of the mentors.** Each participant shall make a presentation (*as well as start preparing the report for submission on Day-14*) highlighting salient findings in front of Faculty. Each group shall comprise of 8 to 10 participants only mentored by a faculty. Any spill over work on report preparation may be completed after training hours.
- Each participant should prepare a presentation on findings and recommendations emanated out of Design Stage RSA. Participant may also start writing the Audit Report which is to be submitted on or before Day 14.

Objectives: Practical on Design Stage Road Safety Audit.

Suggested References: IRC: SP-88 (2019) “Manual on Road Safety Audit” (First Revision) and other International Road Safety Audit Manuals such as from UK, Australia, FHWA and ADB.

Day 11: 18.01.2024 (Thursday)

Session 18: Practical on preparation of Construction Stage RSA Report / Presentation

~*Preparation of presentation on Work Zone RSA with the help/ guidance of the mentors.* Each participant shall make a presentation (as well as start preparing the report for submission on Day-14) highlighting salient findings in front of Faculty. Each group shall comprise of 8 to 10 participants only mentored by a faculty. Any spill over work on report preparation may be completed after training hours.

Objectives: Practical Exposure on Construction Stage Road Safety Audit

Suggested References: IRC: SP-88 (2019) "Manual on Road Safety Audit" (First Revision), IRC: SP-55 (2014) and other International Road Safety Audit Manuals such as from UK, Australia, FHWA and ADB

Session 19: Pre-Opening Stage RSA: Case Study Presentation

- Pre Opening Stage Road Safety Audit - Check List
- Pre Opening Road Safety Audit - Case Study

Objectives: Identification and exposure on safety issues at Pre Opening Stage Road Safety Audit

Suggested References: IRC: SP-88 (2019) "Manual on Road Safety Audit" (First Revision) and other International Road Safety Audit Manuals such as from UK, Australia, FHWA and ADB

Session 20: Night Time Road Safety Audit

- Focus on Night time audit issues

Objectives: To understand the need for night time RSA

Suggested References: IRC: SP-88 (2019) "Manual on Road Safety Audit" (First Revision) and other International Road Safety Audit Manuals such as from UK, Australia, FHWA and ADB.

Session 21: Organizational Commitment towards Road Safety Audit

Objectives: To know about various organisations safety related organisational structure

Suggested References: IRC: SP-88 (2019) "Manual on Road Safety Audit" (First Revision) and other International Road Safety Audit Manuals such as from UK, Australia, FHWA and ADB.

Day 12: 19.01.2024 (Friday)

Session 22: Practical on preparation of O & M Stage RSA Report / Presentation including night time RSA: Conducting Existing Stage RSA / RSI with the help / guidance of the mentors.

Each participant shall make a presentation (as well as start preparing the report for submission on Day-14) highlighting salient findings emerged out of various sites visited by them in front of Faculty. Each group shall comprise of 8 to 10 participants only mentored by a faculty. Any spill over work on report preparation may be completed after training hours.

Objectives: Practical Exposure on Road Safety Inspection

Suggested References: IRC: SP-88 (2019) "Manual on Road Safety Audit" (First Revision) and other International Road Safety Audit Manuals such as from UK, Australia, FHWA, and ADB

Day 13: 20.01.2024 (Saturday)

Session 23: Open Book Written Exam carrying 45 % weightage

To assess the trainee's understanding and knowledge acquired over the aspects covered during the last two weeks

Session 24: Time allotted for completion of RSA reports for submission carrying another 45 % weightage

- Participant shall utilize the time available after the written exam on Day 13 for the completion of the following reports:
- Design Stage RSA Report: Weightage - 10 Marks for report + 5 Marks for presentation.
- Construction Stage Report: Weightage - 10 Marks for report + 5 Marks for presentation.
- Existing Stage RSA/RSI Report: Weightage - 10 Marks for report + 5 Marks for presentation. Submission of all the reports for evaluation to the faculty shall be on or before 5 pm on Day 14.

Day 14: 21.01.2024 (Sunday)-Submission of Practical Audit reports on Design Stage RSA, Construction Stage and Existing Stage RSA / RSI by each participant to the concerned institute by 12:00 pm

Day 15: 22.01.2023 (Monday)-Session 25: Interaction and Closing Ceremony

: Interaction with individual delegates by the mentors on all the submitted RSA Reports and giving inputs for value addition. • Getting Feedback from the delegates on the 15-day Certification Course • Closing Ceremony and Certificate distribution to those delegates who secure the **minimum overall percentage of 75 %.**

Assessment Criteria:

- 10 %** weightage for the attendance
- 30 %** weightage for 3 nos. of Audit Reports submitted by each participant
- 15 %** weightage for 3 nos. of presentation given by each participant
- 45 %** weightage for the Examination
- A minimum of **75 % overall marks** should be secured by each participant for getting the Certificate.
- The suggested timings for the above training program are from 10 am to 6 pm on all the days.
- If any candidate fails to secure 75 % overall marks, then he / she shall have to repeat the examination only (with the participants of next batch of 15-days certificate course) to secure 75 % for getting the certificate. However, the candidate is not required to pay any additional Course Fee to the concerned institute again. IAHE will not conduct separate exams for unsuccessful candidates.**

Note: The above suggested course curriculum topics for imparting lectures on Road Safety and Road Safety are only indicative to cover the core areas of road safety audit, road safety engineering and allied subjects. IAHE may make modifications in terms of topics / technologies/ concepts like "Fundamentals of Traffic Engineering or any other topics related to road safety can be added within the given timeframe.

About IAHE: IAHE (formerly NITHE), an apex institute of excellence, was established by the Ministry of Road Transport & Highways, Govt. of India in Jan, 1983, as a registered Society, to fulfill the needs for training of highway professionals. It organizes various types of training programmes at entry level and during the service at different levels for Central & State Governments., Public and Private sectors working in the road sector. IAHE promotes co-operation and foster exchange of knowledge, ideas and experience in the sphere of highway engineering among highway professionals in India and Abroad. Visit www.iahe.org.in for details.

Contact for details:

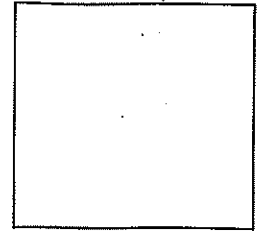
Indian Academy of Highway Engineers (IAHE), A-5, Institutional Area, Sector-62, NOIDA-201301 (UP)
Telephone: +91 120 240 5006
E-mail: trng.iahe-morth@nic.in

Shri Anil Kumar Meena,
Deputy Director, IAHE & Course Coordinator.
Email: anil.morth@gmail.com
Mob.:8376900599

Registration Form

Certificate Course on Road Safety Engineering and Audit

Organized by IAHE at Noida



S.No.	Particulars	To be filled by Applicant		
1.	Name in capital letters			
2.	Date of Birth (DOB) and Age	DOB:	Age: :	
3.	Designation			
4.	Office Address, Telephone and Email Ids			
	Address for correspondence, Telephone and Email Ids			
5.	Mobile Nos.			
6.	Sponsoring Authority and Organization (Name, Designation, Address, Contact no, Email Id, etc)			
7.	Educational qualification(s) from Graduation onwards			
S.No.	Degree/Exam. Passed	University/Institution	Year of passing	Class/Grade
i.				
ii.				
iii.				
iv.				
8.	Employment			
S.No.	Position Held	Period (From - To)	Ministry/Department/Organization	
i.				
ii.				
iii.				
iv.				
9.	Years of Experience in Highways and Road Safety			
10.	Place of stay during training if not staying in IAHE Hostel			
11.	Health History			
	a) Whether sound health	Yes / No		
	b) If not, are you suffering from any chronic disease/ disease which may hinder you from staying in hostel? If yes, please specify	Yes / No		
Signature of an Applicant		Signature of the Sponsoring Authority with Seal		
