Vehicle Homologation and Type Approval Course: UN Regulations, CoP Audits and Technical Services

29 November – 3 December 2026
Dubai - Five-star CBD venue



Vehicle Homologation and Type Approval Course: UN Regulations, CoP Audits and Technical Services

Ref: 1866_31384 **Date:** 29 November – 3 December 2026 **Location:** Dubai - Five-star CBD venue **Fees:** 19500 SAR

Introduction:

Vehicle homologation and type approval under UN Regulations, with CoP audits and technical services, is a 1-week course for homologation, compliance and production quality functions that ends with a Homologation and Market Approval Plan for a case vehicle programme. Launches slip when the regulation list is incomplete, witness tests fail, information documents contradict the build and series production drifts from the approved type. Nominees already prepare test evidence or approval files, and teaching is by case study on approval dossiers, test reports and audit records. CoreConcept Training Center delivers this vehicle homologation and type approval course.

Course Objectives:

- Map the applicable UN Regulations, approval levels and vehicle categories for a new vehicle type and record them in a regulation applicability matrix
- Plan type approval tests with a technical service, including test sample selection, worst-case variant choice and witness test scheduling
- Prepare information documents, test reports, approval communications and approval marks so that the approval file matches the vehicle as built
- Apply UN R100 electric power train safety and emissions and energy test requirements to the approval route of electric and combustion vehicles
- Run conformity of production assessments, control plans and approval extensions when the vehicle type, supplier parts or software change
- Build a Homologation and Market Approval Plan that sequences approvals, tests and export market submissions for a case vehicle programme

Target Audience:

- Homologation functions responsible for approval routes, regulation tracking and submissions for new vehicle types
- Vehicle compliance engineering functions responsible for showing that a design meets each applicable technical requirement
- Test and validation functions responsible for preparing samples and running witnessed approval tests
- Production quality functions responsible for conformity of production controls and audits at vehicle and component plants
- Standards body and technical service staff responsible for assessing approval files and witnessing tests
- Product and programme functions at EV start-ups responsible for market entry timing of a first vehicle

Course Outline:

Day 1: Type Approval Landscape, Vehicle Categories and Approval Routes

- Type Approval Versus Self-Certification Market Entry Models Compared
- WP.29 Agreements, Contracting Parties and Mutual Recognition Principle
- Whole Vehicle, System and Separate Component Approval Levels
- Vehicle Categories M, N and O and Their Approval Scope
- Current-State Review of a Case Programme Approval Status

Day 2: UN Regulations, IWVTA and the Approval Mark System

- UN Regulation No. 0 International Whole Vehicle Type Approval
- Regulation Series, Supplements and Transitional Provisions Tracking
- E-Mark Layout With Distinguishing Number and Approval Number
- Global Technical Regulations Versus UN Regulations Approval Effects
- Regulation Applicability Matrix Built for a Passenger Car

Day 3: Technical Service Test Planning, Witness Testing and Approval Files

- Technical Service Engagement, Test Programme and Witness Scheduling
- Worst-Case Variant Selection and Test Sample Justification
- UN R13-H Braking, R48 Lighting and R94 Collision Test Evidence
- Information Document Drafting Against the As-Built Specification
- Approval Communication and Certificate of Conformity Data Checks

Day 4: Electric Vehicle Safety, Emissions, Cyber Rules and CoP Risks

- UN R100 Electric Power Train Safety Requirements and Evidence
- UN R83 Emissions and R154 WLTP Test Procedure Planning
- UN R10 Electromagnetic Compatibility Test Planning for Electric Vehicles
- UN R155 Cyber Security and R156 Software Update Management Systems
- Conformity of Production Control Plan, Audits and Approval Extensions

Day 5: Case Study Building a Homologation and Market Approval Plan

- Case EV Programme Regulation Matrix and Approval Gap Review
- Case Witness Test Sequence and Technical Service Booking Plan
- Export Market Approval Route Comparison for Mutual Recognition Markets
- Case CoP Audit Findings and Corrective Extension Decisions
- Homologation and Market Approval Plan Completion and Defence

Skills You Will Gain:

- Regulation Applicability Mapping
- Approval Route Selection
- Technical Service Coordination
- Worst-Case Variant Justification
- Approval Dossier Preparation
- Electric Power Train Safety Assessment
- Conformity of Production Auditing
- Market Entry Approval Sequencing

Why Attend This Course:

- Deliver a Homologation and Market Approval Plan for a case vehicle programme to the head of homologation and the programme director
- Decide which approval level, test samples and technical service route fit each regulation on a new vehicle type
- Avoid failed witness tests, rejected information documents and invalid approvals caused by unreported production or software changes
- Share the regulation matrix, test plan template, dossier checklist and CoP audit sheet with engineering and quality colleagues

Conclusion:

Back at work, the participant hands the Homologation and Market Approval Plan to the head of homologation, the programme director and the production quality lead. They use it to fix the order of approvals and witness tests, book technical service capacity, freeze information documents before launch and decide which export markets to enter first under mutual recognition. After the first approval or extension under the plan, the unit should compare test pass rates, file rework and approval lead times with the plan and update the regulation matrix.

Frequently Asked Questions FAQ:

What should participants know before the vehicle homologation and type approval course?

Participants should already work in vehicle engineering, testing, quality or certification and read technical specifications and test reports. No prior approval file is required. Bringing an anonymised regulation list, test report or information document helps them apply the case studies to their own vehicle programme.

How does vehicle homologation and type approval differ from periodic vehicle inspection or vehicle assembly courses?

Vehicle homologation and type approval proves that a new vehicle type meets UN Regulations before sale and that production keeps matching it. Periodic inspection courses check vehicles already on the road, and assembly courses run body, paint and trim operations in a plant.

Why does vehicle type approval need conformity of production audits after the approval is granted?

An approval covers the type that was tested, not every vehicle built afterwards. Conformity of production audits confirm that series vehicles, supplier parts and software still match the approved specification, and they trigger an extension or new approval when something has changed.

What do participants take back from the vehicle homologation and type approval course?

Participants take back a Homologation and Market Approval Plan for a case vehicle programme, with a regulation applicability matrix, witness test sequence, dossier checklist, conformity of production audit sheet and export market route comparison they can adapt to their own vehicles.